

THE RELATIONSHIP BETWEEN ADMINISTRATIVE FUNCTION AND
POSITION ELIMINATION DURING PERIODS OF RETRENCHMENT AT
COMMUNITY COLLEGES

by

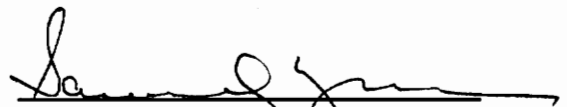
S. Scott Horner

Dissertation submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of
DOCTOR OF EDUCATION
in
Community College Education

APPROVED:



Daniel E. Vogler, Chairman



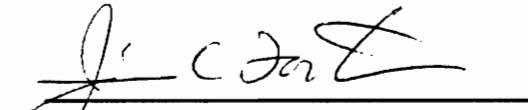
Samuel D. Morgan



R. Michael Chandler



David J. Parks



Jim C. Fortune

April 1993

Blacksburg, Virginia

C.2

LD
5655
V856
1993
H676
C.2

THE RELATIONSHIP BETWEEN ADMINISTRATIVE FUNCTION AND POSITION ELIMINATION DURING PERIODS OF RETRENCHMENT AT COMMUNITY COLLEGES

ABSTRACT

This was an investigation of organizational response to retrenchment in higher education. The presidents and deans of Washington State's 32 community and technical colleges were surveyed to measure the severity of, as well as the strategic and economic approaches taken to, the retrenchment. It was found that although there was a statistically significant association of .69 ($p > .05$) between colleges that viewed retrenchment as a serious threat and the pursuit of revenue enhancing options, there was also a statistically significant association of .87 ($p > .05$) between the use of strategic retrenchment plans and a decremental approach. These findings support those in the literature which hold that the political context in which retrenchment is carried out precludes implementation of strategies that are in the best long-term interests of the college. This investigation concludes that development of techniques for protection of administrators from retaliation by the college community during retrenchment episodes may be the most effective way to enhance college response.

Acknowledgments

As I sit on the peak of this accomplishment, the elevation no doubt seems higher to me than to others. Regardless of the relative height I could never have reached it without the support and assistance of many people. There are the people who were participants, those who guided me, those who provided support, and those who had to suffer through my efforts.

The list of participants starts with the Associate Deans and Directors at South Puget Sound Community College in Olympia, Washington who took the time to test pilot the survey and provide me with thoughtful and invaluable feedback. Next, I thank the Deans and Presidents of the Washington State Community and Technical Colleges, who were kind enough to respond to the survey and interested enough that many requested copies of the results. A final participant of note was Elizabeth Miller at the State Board office, who was generous with both her time and her data.

This work was guided in scope and depth by the faculty from whom I learned during my attendance at Virginia Tech. Two of them, Sam Morgan and David Parks, took the further step of serving on my committee and assisted Michael Chandler and Jimmie Fortune in providing focus and clarity to my efforts. In all categories of guidance I benefited from the unvarnished and forthright advice of my committee chairman, Dan Vogler. There is no question in my mind but that he was the perfect combination of skills and personality to ensure the dedication and enlightenment required for doctoral work.

Completing Research and Dissertation credits as an off-campus student was perhaps not the most effective method I could have chosen for this project. Even with all of the people who were willing and ready to

offer me a hand up, it was also useful to receive some prodding. Key among these invaluable prodders was my friend and study partner Tim Franklin, who blazed the trail in front of me and then returned to spur me on at a critical juncture. Just as valuable was my father-in-law Claire Abel, who over the months always noted that he didn't intend to push, but just wanted to know how I was progressing.

I can not go into enough historical detail here to adequately acknowledge the contribution of my parents, Sam and Eileen, who taught me to aspire to accomplishments such as this. Their willingness to provide whatever assistance might be necessary was a comfort to me. My children, Sam and Sarah, gave up a lot of quality time and made special efforts to be extra helpful over the past two years and I thank them for that. Finally, I want to acknowledge the assistance, motivation, encouragement, and support provided by my wife Sharon. Beyond her direct support in reading drafts of this document, and her indirect support in repeated bouts of virtual single parenthood, I do not recall that she ever questioned the rationale of my committing thousands of dollars and years of our lives to this task. Assents such as this can only be made with a strong partner at the other end of one's tether.

Table of Contents

Chapter 1: INTRODUCTION	1
Need for the study	1
Statement of the problem	4
Conceptual framework	5
Purpose and research questions	6
Delimitations	8
Limitations	9
Definitions	10
Assumptions	12
Organization of the study	12
Chapter 2: REVIEW OF THE LITERATURE	13
Classical administrative theory	13
Early higher education theory	17
Higher education 1978-1982 recession theory	22
Organizational theory	28
Private enterprise theory	38
Current higher education theory	42
Summary of salient findings	45
Chapter 3: RESEARCH DESIGN AND METHODOLOGY	48
Design of the study	49
Sample	50
Instrumentation	51
Pilot study	51

Data collection procedures	52
Method of analysis	53
Chapter 4: FINDINGS	55
What information is available on retrenchment in the literature of higher education?	55
What literature on retrenchment may be found in non-higher education literature?	56
What trends developed as the literature on retrenchment evolved during and after the 1978-1982 recession experience?	57
What prescriptions are found in organizational theory?	58
What prescriptions are found in administrative theory?	58
What prescriptions are found in psychological theory?	60
What is the severity of the retrenchment as understood by the college community?	62
Is the response to the contraction framed as a need for increased revenue or decreased expenses? ...	66
Are the cuts categorized as selective or across-the-board?	70
Are selective cuts focused on core or non-core areas?	71
Are selective cuts based on expediency or are they in furtherance of a long-range plan?	73
Do actual responses to environmental contraction vary from those proposed prior to reduction of resources?	77
What strategies are used by colleges to respond to	

reduced revenues and how do they differ by size, department, and district organizational type?	80
What percentage of cuts are allocated to each department?	81
What is the relative severity of cuts by department when expressed as a percentage of that department's previous year's budget?	82
Is there a relationship between the level of participation in the retrenchment process and allocation of cuts?	83
Are reductions in part-time personnel differentially distributed by program?	83
Are reductions in full-time personnel differentially distributed by department?	84
Summary of chapter four findings	86
Literature based	86
Data based	86
 Chapter 5: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	 89
Summary	89
Conclusions	91
Recommendations	93
 Reference List	 96
Appendix A Questionnaire	101
Appendix B Cover letter	103
Appendix C Follow-up letter	104
Appendix D Letter to presidents	105
Vita	108

LIST OF TABLES

Table 1	Variable Matrix	49
Table 2	Survey Response Rate	53
Table 3	Response to Severity of Retrenchment, Frequency by Response Type.	63
Table 4	Response to Severity of retrenchment, Central Tendency and Dispersion	64
Table 5	Severity of Retrenchment by Respondent's Position, Crosstabs Analysis	65
Table 6	Severity of Retrenchment by Respondent's Position	66
Table 7	Response to Economic Approach to Scarcity, Frequency by Response Type	67
Table 8	Response to Economic Approach to Scarcity, Central Tendency and Dispersion	68
Table 9	Economic Approach to Scarcity by Respondent's Position, Crosstabs Analysis	69
Table 10	Economic Approach to Scarcity by Respondent's Position, Means and Standard Deviation	70
Table 11	Reduction in Expenditures by Object	71
Table 12	FTE Staff Reductions by Program Area	72
Table 13	FTE Staff Reductions by Employee Type	73
Table 14	Response to Strategic Approach to Scarcity, Frequency by Response Type	74
Table 15	Response to Strategic Approach to Scarcity, Central Tendency and Dispersion	75
Table 16	Strategic Approach to Scarcity by Respondent's Position, Crosstabs Analysis	76

Table 17	Strategic Approach to Scarcity by Respondent's Position, Means and Standard Deviation	77
Table 18	Variance in Actual Versus Proposed Budget Reduction by Program Area and Expenditure Object	78
Table 19	Correlation Coefficient of Proposed Versus Actual Cuts by Expenditure Object	79
Table 20	Correlation Coefficient of Perceived Severity of Retrenchment, Economic Approach to Scarcity, and Strategic Approach to Scarcity	81
Table 21	Budget Reductions by Program Area	82
Table 22	FTE Staff Reductions by Program Area	84
Table 23	Full-Time FTE Reductions by Program	85

LIST OF FIGURES

Figure 1	A Typology of Decline and Some Human Resource Issues	32
Figure 2	Managerial Responses to conditions of Decline	33

Chapter 1

INTRODUCTION

Mintzberg (1973) made it clear that chief executives are pressed to act and the theories they apply to those decisions tend to be contingency theories. The college president, faced with budget reductions, will agonize over what areas should be cut, but the president typically doesn't have the leisure to investigate organizational theory for guidance. This study investigated the suggestions of theory and research as well as contrasted them with the actual results of retrenchment. The end product provides additional information for a president who is faced with taking action which involves retrenchment in the community college.

Need for the study

There appears to have been a consensus of informed opinion that the 1990s started as a period of reduced resources. The National Governor's Association said, "Fiscal conditions are the worst in a decade" (Blumenstyk & Cage, 1991, p. A1). Gerald H. Miller, executive director of the National Association of State Budget Officers, feared the condition would extend into the foreseeable future and warned, "States should brace themselves for more bad news and more cuts" (Cage & Blumenstyk, 1990, p. A1).

There also appears to have been general agreement as to the effect of this economic climate on higher education. Allen W. Ostar, president of the American Association of State Colleges and Universities, said that this is the worst of several economic downturns he has seen higher education weather (Cage, 1991a, p. A1). Jordan Ekurland, associate general secretary of the American Association of University Professors, agreed, saying "Not

since the early 1980s has higher education been in such dire straits" (Moony, 1991, p. A1). The Pew Higher Education research report, *The Other Side of the Mountain*, tended to side more with Ostar than Ekurland in the matter of severity: "The 1990s will probably turn out to be a period of unprecedented austerity for higher education" ("Cut staffs, but", 1991, p. A31). All of these effects can be summarized into a single recognition that, in the words of Kenneth Ashworth, "Higher education is grossly over-expanded in comparison with what the state is willing to spend" (Cage, 1991b, p. A16).

As has been shown in the past (Wattenbarger & Vader, 1986), community colleges have received a reduced percentage of state revenues, a smaller slice of a shrinking pie. That the 1990s will be no exception was reflected in the comments of Arthur Hauptman, a Washington DC based higher education economist who felt, "States face more competing demands on increasingly limited resources. Items like prisons and public elementary and secondary education are taking a bigger bite out of state budgets" ("Public colleges announce", 1991, p. C4). In addition, "Community colleges in many states have a history of losing budget battles to flagship universities, but in this year's politically volatile environment officials say they are especially vulnerable" (Cage, 1991c, p. A17). Or, as Governor Booth Gardner of Washington stated, "Basically, budgeting is fairly simple: You have to pay for K-12, prisons, and welfare. Community colleges get to compete with everyone else for what's left over" (B. Gardner, personal communication. February 12, 1990).

Examples of the consequences in 1991-92 include public universities in Florida, which increased full-time equivalent students by nearly 6,000 but were given "\$123 million less in state financing" (Blumenstyk & Cage,

1990, p. A1). During the same period tuition rates rose nearly one-third at the University of Oregon and State University of New York, as well as 40 percent at the University of California system, all part of a nationwide 12 percent average increase. Private institutions were in the same situation as "Yale University's President Benno C. Schmidt asked each department to reduce its budget ... by 5 to 10 percent, with the biggest cuts to come from administrative departments" ("Cut staffs, but", 1991, p. A31).

In the past, community colleges have commonly dealt with financial shortfalls through such measures as general reductions in part-time faculty (Glenny, 1982) and filling specific full-time faculty vacancies with part-time staff. These were expedient in light of faculty association agreements, caused minimal organizational disruption, and maximized political visibility by translating funding impacts into reductions in service at the classroom level. If future funding restrictions are less episodic, it may be necessary for community colleges to take a longer, more structural view on reducing costs. Such long-term structural reductions will inevitably stir the most basic faculty concerns: job security and working conditions (Cohen & Brawer, 1989). As a result, there will be great pressure to make as many of the reductions as possible in non-instructional expenses. In the area of non-instructional expenses, administrative positions loom large fiscally, because of the annualized salary, and symbolically, because of faculty concerns over bearing the brunt of the reductions.

Administrative positions are a particular challenge to reduce in the community college organization because of their specialization and because, typically they are relatively few in number. If personal animosity and union concerns are set aside, a clerical worker in the instructional office can

quite easily be dismissed and the resultant work load shifted to the desk of a clerical worker in the registrar's office. The registrar however, is less able to pick up an instructional dean's work load.

As colleges have been faced with this problem, individual localized solutions have been devised. The combination of these solutions may provide a guide for those implementing administrative position eliminations in the future.

Statement of the problem

A review of the newspapers (Cage, 1991a; Blumenstyk & Cage, 1991; Mooney, 1991) showed that community colleges were probably in for a period of fiscal decline during the next few years. A review of the literature on decline (Chabotar & Honan, 1990; Wattenbarger & Vader, 1986; Temple, 1986) showed that analysis of the most recent period of community college decline found across-the-board budget cuts to be undesirable. Unfortunately, there was reason to doubt that community colleges would respond in a manner consistent with the prescriptions developed from analysis in the literature.

Mintzberg (1973) noted that practicing managers tend not to read the research about their field. This was buttressed by Martin and Wilson's (1989) finding that when managers were restructuring, "In essence, they did what they had done before" (p. 36).

Sutton and D'Aunno (1989) found that administrative personnel are removed more slowly during retrenchment than they are added during growth. Accepting that finding, as well as the assumption that there is a reluctance to eliminate full-time personnel, differential allocation of cuts to administrative functions can be a measure of the sophistication with

which community colleges respond to retrenchment.

The procedural problem was to analyze the relationship between administration's intended response and actual response to a retrenchment situation.

Conceptual framework

Toward the end of the 1978-1982 recession in the United States, a flurry of publications appeared regarding conceptual approaches to retrenchment in higher education. Although institutions varied in how they set about the task and the individual mechanisms they developed, the underlying theme was that retrenchment was best accomplished by a diversified, incremental strategy stressing innovation. The broad disapproval of a more passive response can be summed up as the opinion, "A decremental, across-the-board approach to retrenchment may be the quickest way to destroy the organization" (Behn, 1983, p. 111).

Coming out of the same time period was a group of publications based on the concept that not only were there different types of decline, but that management response varied by type. This proposition was developed by Cameron and Zammuto (1983) for the various types of change in organizational niches: erosion, contraction, dissolution, and collapse. The decline dealt with by community colleges in this researcher's study fits their model as "contraction," which is "a discontinuous decline in their niche's size" (Cameron & Zammuto, 1983, p. 364). The prediction was that conflict would be caused by the threat of contraction, management-subordinate relations would become autocratic, tactics would be reactive, and the strategies used would involve cutting back to the essential core of the organization.

While current theory continues to disapprove of across-the-board cuts and to promote strategic responses, it has become more sophisticated in looking at what drives the decisions. While the mid-1980s organizational theory related to decline remains valid, Hardy (1990) shows that the context, which "comprises both the internal and external environment" (p. 207), has significant effects on the strategies used during retrenchment.

There are many possible conceptual approaches to the study of retrenchment at community colleges. In this study the actions of the sample group were investigated to determine which, if any, of the above approaches are followed.

Purpose and research questions

The general purpose of this study was to document the approach taken by a group of community colleges in response to retrenchment caused by environmental contraction. In order to accomplish this, the investigator completed the following goals by addressing the attendant questions.

1. Synthesize the extant literature.
 - a. What information is available on retrenchment in the literature of higher education?
 - b. What information on retrenchment may be found in non-higher education literature?
 - c. What trends developed as the literature on retrenchment evolved during and after the 1978-1982 recession experience?
2. Produce a predictive model of community college response to retrenchment.

- a. What prescriptions are found in organizational theory?
 - b. What prescriptions are found in administrative theory?
 - c. What prescriptions are found in psychological theory?
3. Determine the response of community colleges in conditions of retrenchment.
- a. What is the severity of the retrenchment as understood by the college community?
 - b. Is the response to the contraction framed as a need for increased revenue or decreased expenses?
 - c. Are cuts categorized as selective, across-the-board, or a combination of both?
 - d. Are selective cuts focused on core or non-core areas?
 - e. Are selective cuts based on expediency or are they in furtherance of a long-range plan?
 - f. How do actual responses to environmental contraction vary from those proposed prior to reduction of resources?
 - g. What strategies are used by colleges to respond to reduced revenues and how do they differ by size, department and district organizational type?
4. Determine the effects of retrenchment on administrative functions relative to non-administrative functions.
- a. What percentage of cuts are allocated to each

department?

b. What is the relative severity of cuts by department when expressed as a percentage of that department's pre-cut budget?

c. Is there a relationship between the scope of participation in the retrenchment decision process and allocation of cuts?

d. Are reductions in part-time personnel differentially distributed by department?

e. Are reductions in full-time personnel differentially distributed by department?

Delimitations

This study considered retrenchment only as a college-level response to externally imposed revenue reduction. Retrenchment caused by any other condition, such as inefficient use of funds or intra-departmental reallocation, was not addressed.

Zammuto and Cameron's (1985) typology of decline uses the concept of organizational niche to differentiate between erosion, a continuous decline in niche size; contraction, a discontinuous decline in niche size; dissolution, a gradual shift in market demand away from a niche; and collapse, a rapid move away from a niche. This study considered only the condition of contraction.

It has been found that the context, both internal and external, in which retrenchment decisions are made has a significant effect on the results (Hardy, 1990). Due to the probability of confounding by relationships such as public versus private and two-year versus four-year,

this study considered only public two-year colleges. The issue of context also appears in considering the broad range of funding approaches extant among public two-year colleges. To avoid confounding the results with the various mixes of state and local funding, this study considered only Washington State community colleges.

All organizations continuously evolve and adapt over time. This study attempted to avoid the confounding influences of changes not related to retrenchment by addressing only a single year's budget changes. It is recognized that this approach increases the risk of missing some long-range responses to retrenchment.

Limitations

The external validity of this study was limited by its focus on retrenchment as a function of revenue reductions imposed from outside the college. Any attempt to generalize the results must be made with awareness as to the source and cause of the revenue reductions involved. Similarly, this study addressed only the condition of contraction; any attempt to generalize the results to situations involving dissolution will create a question of external validity.

Further limitations to external validity were caused by the sample selection. One source of this limitation was found in the restrictions and options specific to the sample. An example of this is tuition, which under Washington State law is not retained by the college: an increase in tuition revenues was therefore not an option that would decrease the impact of retrenchment. Another source of sample selection limitation related to the colleges themselves: Hardy's (1990) concept of context creates a limitation because retrenchment strategy was significantly related to local

conditions. Hence, the results of this study will need to be considered in light of those conditions, particularly status as a public two-year college, prior to making any generalizations. Finally, the external validity was limited by the self-reporting format of the questionnaire.

In addition, the sample selection created a limitation of internal validity due to contemporary history: the reaction of the colleges to retrenchment was influenced by the actions and mandates of the Washington State Legislature and the State Board for Community and Technical Colleges (SBCTC).

The internal validity of the study was also limited by the "snapshot" character of the measuring instrument and the length of time it investigated. Zammuto (1984) found that reallocation decreases as the length of a decline episode increases, while Sutton and D'Aunno (1989) report that administrative personnel are removed more slowly during decline than they are added during growth. Neither effect was investigated in the present study.

Internal validity is further limited by the investigator's treatment of the survey results. Responses to questions 3-b and 3-e were marked outside of the response box in .047 of the survey instruments. Rather than attempt to interpret these marks in a manner that would place them in a response box, they were deleted from the study.

Definitions

The following definitions were used in this study:

Across-the-board: Cuts in spending authority in which "every budgetary unit in the institution is cut by some fixed percentage" (Kerr &

Gade, 1986, p. 73).

Administrative function: Those functions of the organization which are not involved in direct teaching or public service (Zammuto, 1984).

Core function: The functions of the organization which are directly involved in teaching and public service (Zammuto, 1984).

Dean: For the purposes of this study, the chief departmental officer (e. g. chief instructional officer) as identified in the 1992 Directory of Washington Community and Technical Colleges (State Board for Community and Technical Colleges, 1992c).

Department: For the purposes of this study operationally identified as sub-areas of responsibility, delineated by dean.

District organizational type: For the purposes of this study, operationally identified as the classification of districts between "multi" or "single-college".

Environmental contraction: "Discontinuous decline in organizational niche size" (Cameron & Zammuto, 1983, p. 364), in this case the reduction of the college's funding and enrollment authorizations imposed by the state.

Program: The major organizational groupings, including Instruction, Library, Student Services, Institutional Support, and Plant (State Board for Community and Technical Colleges, 1987).

Recession of 1978-1982: For the purposes of this study, operationally identified as the "rolling recession" of the late 1970s and early 1980s as it affected higher education.

Retrenchment: A reduction of expenses (Friend & Guralnik, 1960, p. 1244).

Selective: For the purposes of this study, operationally identified as cuts in spending authority guided by a methodology other than

across-the-board.

Assumptions

In developing this study, the following assumptions were accepted to be true:

1. The literature from classical administrative theory, organizational theory, public administration, and private enterprise relative to retrenchment can be generalized to higher education.

2. Full-time personnel are terminated during retrenchment only as an extreme measure, which can be used to indicate the severity of the retrenchment.

3. Local funds, from sources such as foundations, grants or contracts, are not significant in responding to budget cuts at the community college.

Organization of the study

Chapter two contains a review of the literature relating to retrenchment.

Chapter three contains the design of the study, an explanation of the sample population, a description of the instrumentation used, a description of the data collection procedures and the plan for analysis of data.

Chapter four contains a detailed and objective report of the results and analysis of data with explanatory graphics.

Chapter five contains a summary, subjective analysis, conclusions, and recommendations, including potential implementation of the results.

Chapter 2

REVIEW OF THE LITERATURE

The flow of information resulting from a review of the literature led to the decision for this investigation to be organized first by the theory types to be reviewed and then by author, chronologically, within the theory type.

Classical administrative theory

An underlying concept upon which this investigation is built is the belief that organizations are staffed with specialists rather than generalists. This concept was most notably explicated by Weber (1947) in his enumeration of the criteria for modern bureaucracy, which includes:

- (3) Each office has a clearly defined sphere of competence in the legal sense.
- (5) Candidates are selected on the basis of technical qualifications. In the most rational case, this is tested by examination or guaranteed by diploma certifying technical training or both. (p. 333)

The result of this specialization is that retrenchment in an organization staffed with accountants, botanists and counselors is a different type of event than in an ancient university comprised solely of teachers, each of whom held and taught the complete knowledge of their civilization.

In his study on differentiation in organizations, Blau (1970) investigated 53 state and territorial employment security agencies. Two basic generalizations involved were: "Increasing size generates structural differentiation in organizations along various dimensions at decelerating rates" (p. 204) and "Structural differentiation in organizations enlarges the

administrative component" (p. 213).

Blau structured his study as the premise and support of various propositions, the first of which was that "as the size of organizations increases, its marginal influence on differentiation decreases" (p. 207). This proposition can be illustrated by the manner in which an educational institution starts to grow by expanding the breadth of its offerings. At some point it is determined that a full program is being offered and additional enrollment is dealt with by multiple sections with the same course objectives.

The analogy of a growing college can also be used to illustrate other propositions Blau derives from the first generalization, including, "the larger an organization is, the larger the average size of its structural components of all kinds" (p. 207); "the proportionate size of the average structural component as distinguished from its absolute size, decreases with increases in organizational size" (p. 208); "the larger the organization is, the wider the supervisory span of control" (p. 209); and, "organizations exhibit an economy of scale in management" (p. 210).

Less intuitive is the proposition that "the economy of scale in administrative overhead itself declines with increasing organizational size" (p. 210). Blau's data show, "the proportionate size of any particular complement decreases at a declining rate as organizations become larger" (p. 210). This can be traced back to the original analogy in which it is shown that as size increases, at some point the organization does fewer different things and more of the same things. To expand on the analogy, although only one president is needed per college for 1,000 or 10,000 student FTEs, the 10,000 FTE president is likely to have some administrative assistants.

The second generalization gives rise to the propositions that "the large size of an organization indirectly raises the ratio of administrative personnel through the structural differentiation it generates" (p. 213) and that "the differentiation of large organizations into subunits stems the decline in the economy of scale in management with increasing size" (p. 214). Thus, despite the hopes of some that the organization would someday get so large that economies of scale would effectively make the administrative component disappear, the process of differentiation not only increases the ratio of administration but even counteracts the effects of any economies of scale.

An important function of this differentiation process is that it affects subunits in the same way in which it affects organizations. Thus, growth doesn't just make the business office larger, it results in splitting the payroll/personnel function between two different specialists. Similarly, further growth is unlikely to produce multiple payroll staffers, but rather specialists in the areas of benefits and salary administration.

Child (1973) investigated the relationship between size, complexity and formalization in organizations. The investigation was based on four British studies, which all employed the same measures of organizational structure and covered a wide variety of work organizations. As a result of these efforts, Child developed a model of organizational structure that "postulates that size in conjunction with other contextual variables will be a major predictor of complexity, but that complexity will have a more direct, and therefore stronger, influence on the extent to which a bureaucratic strategy of control is present" (p. 169).

This type of relationship can be visualized in the concept of a successful correspondence program. If it grows from one to 100 sections of

English 99, there will be some increase in formalization (e.g. grading standards, course outlines, etc.). The increase in formalization will be greater and more rapid, however, if the 100 sections are developed as four sections each of 25 subjects. Because of this, Child observes:

With specialization and expertise (that is, complexity), it is therefore predictable that managerial control tends to become indirect and impersonal. The possibility for decentralization of decisions to qualified employees and the necessity to do so will both be in evidence. Decentralization is likely to be accompanied by an increase in standard procedures and documentation designed to maintain control and consistency of performance. In addition, the employment of qualified specialists such as those in personnel, accounts, workflow planning and maintenance, is in itself likely to generate more standardization of procedures and documentation. Specialists such as these have generally been trained to institute sound management systems, which usually entail standard procedures and forms. It is not difficult for them to believe that a justification of their continued presence in the organization depends upon activity of this kind. (p.181)

Of particular interest to the field of education, much of which is owned by governments or other large organizations, is this explanation from Child:

The size of the owning group was used as a proxy measure for the transmission of owning group organizational practices to a subsidiary. The larger size and therefore the presumed greater complexity of owning groups was assumed to predict that group

practices would act as a positive influence towards bureaucratic modes of control in a subsidiary. (p. 181)

Cullen, Anderson, and Baker (1986) did a review of Blau's work and concluded "The theory better explains differences in scale among organizations than it explains how individual organizations change" (p. 225). It seems a bit disingenuous to claim that Blau's theory does not effectively explain the structural changes that occur as an organization gets larger, but does effectively explain the resulting structure when it is larger, although Cullen et al. focused mainly on what happens as organizations get smaller. Blau's theory is not supported by organizational behavior in these cases.

It is predictable from Blau's theory that an organization decreasing in size should have dis-economies of scale, but Cullen et al. found, "These dis-economies have often been more extreme than those suggested by the theory of structural differentiation, with many organizations actually increasing the absolute sizes of their administrative staffs" (p. 211). It is noted that Blau did not predict time lines within which the cause and effect of growth and change would occur, but it appears that in the short run, "in organizations that are in decline or experiencing scarcity of resources, power rather than reason may have more influence on decisions regarding retention of administrators or the elimination of departments" (p. 226).

Early higher education theory

In the late 1960s to early 1970s the United States underwent a period of reduced governmental resources and a basic questioning of institutional roles in society. Among the analyses responding to these phenomenon was Culbertson's (1976) study on the uses of adversity. He

concluded that three components of adversity needed to be addressed: (1) identify and improve understanding of the sources of adversity in education and those sources' implications for change, (2) determine how best to cope with and make use of adversity, and (3) determine the leadership requirements for dealing with these adversities. It is the second component, how to cope with and make use of adversity, that is of most interest here.

Culbertson's approach to the use of adversity is similar to folk wisdom about the Chinese ideogram for crisis, which is composed of the ideograms for danger and opportunity. He states: "In fact, more fundamental change can perhaps be realized in adverse than in prosperous times" (p. 255). This is a situation that may "offer opportunities to eliminate or consolidate programs, to revise existing programs, to develop new programs, and to create new training markets by preparing personnel to perform functions not now being performed" (p. 256).

Culbertson is not unaware of the difficulties created by adversity. He notes that this is "a time which is characterized by widespread gloom and a 'politics of despair'" (p. 256). He is also aware of the effects on leaders, that they "inevitably become deeply involved in activities directed toward short-term solutions" (p. 256). The author has a tendency to pass these problems off with somewhat pat answers. For example he notes "At worst, the lack of clarity in purpose can produce a kind of paralysis in educational institutions" (p. 255). Culbertson's response is to advise that "a special use of adversity and a function central to leadership, then, is the articulation of needed directions which can guide organizations toward more promising states" (p. 255). Administrators who are thereby advised to solve institutional paralysis by changing the direction of the institution during times of gloom, despair, and program elimination could probably benefit

from an extra paragraph or two on implementation of such a plan.

Starbuck, Greve, and Hedberg (1978) approach the issue of dealing with adversity on the same conceptual plane (that adversity can create opportunity), but with a brash sense of pragmatism. They believe, "Organizations are right to receive prescriptions skeptically. Their complexities make organizations very difficult to manage as complete systems, whereas prescriptions for managing organizations have to be simple in order to be understandable.... Thus, organizations should never adhere strictly to any prescription ... including this one" (p. 122).

The authors agree with Culbertson, that, "Perhaps the greatest need is for dramatic acts symbolizing the end of disintegration and the beginning of regeneration" (p. 125). However, they feel that management's proclamation of new goals and values will be saddled with the institutional staff's memories of past decisions. Managers have equity in the status quo as the edifice they built, and indeed a manager's perception of a good idea is filtered by how well that idea fits in with the existing program. Characteristically, Starbuck et al. solve this problem with "indiscriminate replacements of entire groups of top managers... even if they are all competent people who are trying their best and even if the newcomers have no more ability, and less direct expertise, than the veterans" (p. 124).

The authors also agree with Culbertson on the value of having and following a plan "to invest in new markets, new products, new technologies, new methods of operating, or new people" (p. 131). But they also note, "Crisis-ridden organizations find it difficult to pursue several alternatives simultaneously because they lack resources" (p. 131). Despite this difficulty it appears that the effort to move in new directions is essential:

The processes of disintegration make shambles of the

ideologies in crisis-ridden organizations, and the top managers confront the task of building new ideologies on these shambles. These new ideologies should encourage people to break with precedents and to root out implicit assumptions. The best way to dis-confirm implicit assumptions is to substitute experiments for analysis, to evaluate proposed strategies and methods by trying them out rather than speculating about their outcomes. Experiments depend upon enthusiasm and willingness to take risks, and risk taking depends, in turn, upon the penalties for failure being mild. (p. 134)

Levine (1978) provides a transition of management theory into dealing with decline as a mainstream approach to management. He notes with disapproval that in 1978, "growth is a common denominator that links contemporary management theory to its historical antecedents and management practices with public policy choices" (p. 316). He frames the current question to be addressed as simply the need to create a strategy to manage without growth.

Among the concepts addressed while searching for a non-growth strategy, Levine touches upon several specific complexities posed by conditions of decline. He points out, "Organizations cannot be cut back by merely reversing the sequence of activity and resource allocation by which their parts were originally assembled" (p. 317), reality which is exacerbated by the self-interest of the people making the cuts. It is not surprising to read that in Levine's opinion, "Subunits usually respond to requests to make cuts in terms of their particular long-term survival needs ... irrespective of impacts on the performance of ... the organization as a whole" (p. 319).

Levine is unusual among theorists in that he includes practical information which may be directly implemented by the practitioner. His figure on tactics, with accompanying definitions, can profitably be taped to the wall next to any dean's desk. Of particular note here is his tactic to smooth decline in the face of economic/technical adversity, "Exploit the exploitable" (p. 321). Levine illustrates this explanation in terms of hiring part-time faculty in lieu of full-time to reduce salary expense. The illustration could be expanded to include elimination of those same part-time personnel without the encumbrance of formal reduction-in-force procedures.

One of the definitions Levine included is fundamental to the present investigation, an explanation of what this investigation characterizes as across-the-board versus selective cuts:

As with most issues of public management involving the distribution of costs, the choice of decision rules to allocate cuts usually involves the trade-off between equity and efficiency. In this case, "equity" is meant to mean the distribution of cuts across the organization with an equal probability of hurting all units and employees irrespective of impacts on the long-term capacity of the organization. "Efficiency" is meant to mean the sorting, sifting, and assignment of cuts to those people and units in the organization so that for a given budget decrement, cuts are allocated to minimize the long-term loss in total benefits to the organization as a whole, irrespective of their distribution. (p. 320)

Higher education 1978-1982 recession theory

During the 1978-1982 recession period, when the higher education community had an opportunity to implement the various administrative theories on decline, the main response was that the institutions chose not to participate. Whetten (1981) summarizes reports from the field indicating that, "Instead of experimenting with novel alternatives, administrators are, as a rule, opting for piecemeal and conservative responses to retrenchment" (p. 80).

Whetten proposes a number of dynamics that reinforce the tendency for administrators to respond in this fashion. Among these is the effect of stress on the institution and the people within it. Retrenchment produces individual economic fear, the discomfort of terminating employees, interdepartmental fights, etc. In the face of such stresses, "Administrators are likely to favor an across-the-board cutback in existing services over a long-term reassessment of the organization's mission because it is politically less volatile and, therefore, more likely to quickly diffuse the emotionally charged atmosphere associated with retrenchment" (p. 84).

The fact that administrators have done all their learning and had all their successes under conditions of growth presents another dynamic. Their resulting experiential filters leave them unable to treat decline other than as a need for internal reallocation of funds because: "(1) Their past experiences have not facilitated the development of skills necessary for effectively managing environmental constituencies, and (2) they harbor a fatalistic attribution process that treats environmental constraints as immutable" (p. 86).

Supporting the administrators' reluctance is a dynamic in which the very structure of educational institutions is resistant to change. The

multi-committee format of faculty governance makes it difficult to come to any type of consensus about what may be cut, and indeed absolute deadlock may be reached if the necessary committee just flatly refuses to make a decision. Further difficulty lies in the politically sensitive question of what department will be the beneficiary of any innovations during times of retrenchment. The opportunity to innovate may be lost by territorial disagreement over the division of the spoils. Whetten reports "a common pattern of conservative and piecemeal remedies because the loosely joined structure of these organizations inhibited the administration's efforts to forge a unified, comprehensive strategy" (p. 87). He doesn't hold out much hope for improving this situation, commenting that, "Despite its anachronistic and potentially maladaptive characteristics, the prevailing administrative structure is not easily modified for two reasons: first, it is grounded in a deeply held value of faculty governance that serves as a fundamental maxim of university scholarship. Second, it has functioned effectively during the entire academic lifetime of the most influential members of the university community" (p. 87).

The last of Whetten's dynamics to be covered for the purposes of this investigation is the relationship between problem solving and data. If an item is measured it can be acted upon; therefore, the supply budget can be increased, decreased, or explained in terms of last year's budget or dollars per full-time equivalent student. This is convenient for providing rational and defensible proof of actions taken to deal with retrenchment, indeed this investigation is full of state, State Board, and college numbers on budget reduction targets, proposed cuts, and actual cuts. None of this purports to address effectiveness in the delivery of education in either absolute or relative terms.

While Whetten does not deny that increased efficiency in the use of resources is desirable during retrenchment, he feels that normal give and take in the budget creation process will smooth out supply and demand at any given funding level. This leads him to conclude:

The real challenge of retrenchment for educational administrators is to galvanize their faculty's attention on the emerging *opportunities* to redesign our educational institutions to match the conditions of coming decades. Otherwise, they will naturally dwell on the *danger* retrenchment represents to the traditional interests rooted in the environments of the past. (p. 92)

The similarity of international adversities produces a similar proposal in the work of an English researcher, Gareth Williams (1981). After a review of the situation facing England's higher education system, he determines that innovation is the best resolution to the difficulties, but then he notes:

One mechanism inhibiting innovation will therefore be financial stringency. The more democratic the decision-making in an institution or system, the more likely it is that available resources will be shared more or less *equally* amongst *existing* activities rather than some of them being redeployed toward new activities or toward those existing activities that have potential for development. (p. 134)

Williams proposes, "The financial obstacle to innovation can be overcome by mechanism of an innovation fund. The basic idea is simple. Some of the resources the government decides to allocate to higher education should be held back and earmarked for innovation" (p. 136). He

proposes that this be done not only at the institutional level, but also at the national level to encourage national initiatives. He does not address methods for gaining institutional support for a diversion of existing funds to be distributed at the national level by politicians.

In a rather humorous article adapted from a conference paper, Lyman Glenny (1982) reports on a study that found the response to "reduced higher education budgets was to make it 'across-the-board' and later 'do it again'" (p. 20). Indeed, Glenny found that "for quick cuts of a magnitude no greater than about 5 percent, the universally favored technique remains Across Board Cuts, as simple as ABC" (p. 20). The article follows a stereotypical state through the budget reduction process as the governor, legislature, higher education coordinating council, system boards, and colleges each try to minimize the political fallout of fiscal bad news. In each case, the result is the smallest possible across-the-board cut, in response to which the campuses "would cut back on travel and building-and-ground maintenance, put a hiring freeze on clerical staff, and probably fire part-timers" (p. 22). Then, at the next revenue forecast, the process is repeated. Glenny found, "Several states made three consecutive across-board cuts. Not until the actual cuts amounted to some 8 percent did it seem to occur to the various leaders that they were damaging the best programs as much as the weak ones" (p. 20).

Glenny notes that at some point on the local campus, someone has to actually take the heat and make selective cuts (assuming the staff will not accept their share of an across-the-board salary and benefit cut). No one at the higher policy levels assumes any responsibility for the final direction of the cuts, "yet these local decisions often fail to comprehend long range or even intermediate range consequences" (p. 24). Given recent and

anticipated governmental fiscal conditions, "No excuse exists for higher education institutions or state agencies to have failed to replace temporary expedients with well developed plans and procedures for reductions ... related to the objectives and goals of long-range plans" (p. 24).

Another approach to the opportunities of retrenchment is provided by Behn (1983) who sees the chance to rethink organizational strategy, the meaning and measures of performance, and the meaning of equity. In addition, he sees an opportunity to increase managerial flexibility and to develop new managerial styles. Following his thinking, one begins to pity the administrators of the 1960s, who had to struggle along without the boon of retrenchment. He does note, "With retrenchment, decision making becomes more centralized, which accounts [for] the increase in administrative costs" (p. 117).

Some of the opportunities for rethinking strategy should not be passed up. Behn points out, "If the only managerial response is to hunker down (to attempt to make do with the old managerial style of controlling everything, and now even more tightly), then the result is apt to be even poorer performance" (p. 117). A new approach to budget cuts that is selective in impact will be more painful than the old across-the-board methods. People will argue that selective cuts are not fair, and Behn agrees, stating "In retrenchment it is important to be fair. People are getting hurt, and it is essential to distribute (or concentrate) the pain in an equitable manner" (p. 115). But he is unequivocal about the results of taking the easy path of being concerned with short term pain to the exclusion of priorities: "A decremental, across-the-board approach to retrenchment may be the quickest way to destroy the organization" (p. 111).

A relatively rare positive treatment of across-the-board cuts is

presented by Kerr and Gade (1986). This quite practical article is in the form of a report to European educators on the state of U.S. higher education, but it would serve U.S. educators well as a "how to" guide. Kerr and Gade provide a spectrum of retrenchment options ranging from "across the board" to "selective" with definitions, advantages and consequences for each option. The authors' positive treatment is shown in the definition of across-the-board cuts:

In this approach every budgetary unit in the institution is cut by some fixed percentage. All are affected. Such cuts serve as a sort of "shot across the bows," making everyone on campus aware of the threat to financial stability. They maintain, and may even reinforce, cohesion inside the campus, a "we're all in this together" attitude. And the culture and morale of a college or university may be more important in determining its effectiveness than any "rational" allocation of resources.

Such cuts are also politically safe because they do not favor one group or department at the expense of others. They avoid repercussions from groups outside the university who have special attachments to specific programmes inside the institution. They are also easier on members of the administration, who do not have to make difficult choices but simply apply a general formula. (p. 73)

After in-depth explanation of the other six options, Kerr and Gade outline six steps to take before any type of budget cutting. They follow with a seven-option action plan for an institution in a severe downward spiral:

- (i) Small cuts clear across-the-board in all unit budgets

except salaries.

- (ii) Selective cuts in non-personnel areas such as travel, office supplies, books, telephones, etc.
- (iii) Selective cuts in non-academic personnel on the basis of seniority.
- (iv) Selective cuts in non-tenured faculty, including part-time, based on student demand for programmes and courses.
- (v) Selective cuts of academic programmes in "peripheral" and professional fields.
- (vi) Selective cuts of academic programmes in the core letters and science areas, based on low demand or quality or both. (p. 77)

It is important to note that although Kerr and Gade find positive uses for the across-the-board approach, it is only as a first step in an overall plan to deal with retrenchment. It does not appear from this article that they would approve of the repeated incremental cuts reported by Glenny.

Organizational theory

Kim Cameron (1983) compared responses to decline in education and the private sector, finding the same types of inhibitors previous researchers had noted. The administrators' experience has been in responding to growth. Our culture views growth as a measure of effectiveness, and most existing organizational theory is growth based. He makes a point of distinguishing between efficiency, "doing things right," and the less easily measured effectiveness, "doing the right things."

Cameron's research indicates that in higher education, "When faced with conditions of decline, administrators define these conditions exclusively as resource allocation problems or problems of efficiency, and they respond conservatively rather than innovatively" (p. 362). Six reasons are listed for this behavior: the difficulty of defining or measuring efficiency in higher education; the stress of decline which leads to conservative and self-protective behavior; the tendency to follow previously successful strategies; cumbersome, loosely coupled systems; a tendency for the most creative and innovative personnel to solve the decline problem by finding a new place to work; and the tendency of core program staff to view existing innovative programs as a financial burden, and thus a cause of the difficulty. To help offset these inhibitors, the article includes a table listing conditions that lead to conservatism during decline and suggested solutions leading to effective coping.

Cameron selected the U.S. tobacco industry as the subject of a study on organizational response to conditions of decline due to its relative success in dealing with reduced revenues and lowered public support. As opposed to the prevailing higher education approach of conservative efficiency, the tobacco firms pursued adaption strategies. These strategies started with a *domain defense* designed to protect and preserve the core programs of the industry. Some higher education related examples are "activating support groups such as alumni or boards of trustees, forming lobbying organizations, organizing consortia, or acquiring increased operating autonomy from state legislatures" (p. 374). This was followed by a *domain offense*, doing more of what the industry was already doing right (effectively). In higher education this might include "the expansion of current markets or student groups, using current resources to engage in

extra non-traditional programs, ... aggressive recruiting, active public relations programs, or cultivating alternative revenue sources" (p. 374). This provides resources for *domain creation*, which is the innovative and creative process by which the industry diversifies into areas that are not threatened by the conditions of decline. These are strategies such as "completely new program offerings in high demand areas, acquiring subsidiaries, capital investment, or public-service ventures in previously unexplored areas" (p. 375).

Providing evidence of the growing sophistication in the study of organizational decline, Zammuto, Whetten, and Cameron (1983) argue "There are different types of environmental conditions that cause enrollment decline and that require different types of institutional retrenchment strategies" (p. 93). As a part of this argument they develop a model of environmental decline, use higher education enrollment data to illustrate the model, and discuss the implications of the different patterns of decline.

The authors present the concept of an environmental niche as "the intersection of available resources and the demands for services in the environment that creates the potential for an organization, or population of organizations, to exist" (p. 94). Decline can then result from changes in either the size or shape of the niche. "A change in the size of the niche occurs because of reductions in the demand for an organization's products or services, or in the availability of resources to produce those products or services" (p. 94). A change in the shape of the niche is caused by qualitative shifts in demand, e.g., "Individuals want something different than the products or services produced by the organization in the past" (p. 95).

A typology is included which defines *erosion* as a continuous decline in niche size, which is typically dealt with by realignment of resources

within the college or university. Discontinuous decline in niche size is defined as *contraction*, response to the sudden onset of which is usually reconstruction of the programs or organization involved. A gradual change in the shape of the niche is defined as *dissolution*, in which student demand for programs moves away. This is commonly dealt with by expansion into the new areas of interest. Finally, *collapse* is used to define a rapid unanticipated shift in the shape of the organization's niche. Although collapse is not usually survived, the only possible response is experimentation.

The authors' conclusion was that "enrollment decline is a multidimensional phenomenon, and that retrenchment strategies have to be carefully tailored to match the characteristics of environmental change causing it" (p. 106). Both contraction and dissolution have been occurring in higher education and some new and different solutions will be required for colleges to survive the transition.

	CONTINUITY OF ENVIRONMENTAL CHANGE	
	Continuous Change	Discontinuous change
TYPE OF CHANGE IN NICHE CONFIGURATION	EROSION	CONTRACTION
	<u>SOURCE OF CONFLICT</u>	<u>SOURCE OF CONFLICT</u>
Change in Niche Size	Stagnation	Threat
	<u>MANAGER-SUBORDINATE</u> <u>RELATIONS</u>	<u>MANAGER-SUBORDINATE</u> <u>RELATIONS</u>
Change In Niche Shape	Consultive	Autocratic
	DISSOLUTION	COLLAPSE
	<u>SOURCE OF CONFLICT</u>	<u>SOURCE OF CONFLICT</u>
	CONTENTION	CONFUSION
	<u>MANAGER-SUBORDINATE</u> <u>RELATIONS</u>	<u>MANAGER-SUBORDINATE</u> <u>RELATIONS</u>
	Coalitional	Chaotic

Figure 1. A typology of decline and some human resource issues.

Cameron and Zammuto (1983) combine to further refine the theory of decline and define what they refer to as a typology of decline. After reviewing much of the content of their previous papers, they present figures to show the relationship between variables and typical responses, as in the figure (p. 364) reproduced above, which shows the typology of decline as it relates to human resources issues. Of most interest here is the area of contraction, in which the institution's personnel feel threatened by the

economic situation they find themselves in. As noted earlier management usually takes on an autocratic role as it attempts to centralize operations and reduce costs.

	CONTINUITY OF ENVIRONMENTAL CHANGE	
	Continuous Change	Discontinuous change
TYPE OF CHANGE IN NICHE CONFIGURATION	EROSION	CONTRACTION
	<u>TACTICS</u>	<u>TACTICS</u>
	Proactive	Reactive
Change in Niche Size	<u>STRATEGIES</u>	<u>STRATEGIES</u>
	Domain Offense	Domain Defense
	DISSOLUTION	COLLAPSE
Change In Niche Shape	<u>TACTICS</u>	<u>TACTICS</u>
	Enactive	Experimental
	<u>STRATEGIES</u>	<u>STRATEGIES</u>
	Domain Creation	Domain Substitution

Figure 2. Managerial responses to conditions of decline.

In another figure (p. 367) typical managerial responses are presented, with the section of most interest again being contraction. The tactics are to react to events and the strategies center on domain defense or consolidation. This again shows the tendency to "hunker down" that Behn (1983, p. 117) referred to. Various theory writers in the field would have

administrations in a condition of contraction react more like those in a period of erosion, when there is more time to plot a response. The administrators would no doubt use that lack of response time as their defense, but as Glenny (1982) noted, given the recent fiscal history of higher education, "No excuse exists for higher education institutions or state agencies to have failed to replace temporary expedients with well developed plans and procedures for reductions ... related to the objectives and goals of long-range plans" (p. 24).

By analysis of Higher Education General Information Survey (HEGIS) data on finance and enrollments for 3,647 institutions, Zammuto (1984) investigated a number of hypotheses relating to across-the-board cuts. These were: "1. The extent to which reallocation occurs is positively related to the severity of declining revenues" (p. 4) so, given a large disaster, administrators will be less inclined to nibble around the edges of the problem, a hypotheses which was supported by the data. "2. The longer the duration of the decline episode, the greater the extent to which institutions rely on across-the-board cuts over time" (p. 5). This response pattern is predicated on the idea that, as the obvious reallocations have been made, the institution starts to depend on delaying actions, a hypothesis that is also borne out by the data. "3. Institutions that have experienced decreasing revenues in the past are more likely to engage in reallocation than are institutions with no recent history of revenue decline" (p. 5). The coefficient for the variable supporting this hypothesis was significant, but in the opposite direction. The author suggested that this possibly indicates that the institution may not have rebuilt its supply of slack resources enough to allow further reallocation. An alternative theory is that the individual administrators who survived the agony of the previous

bloodletting feel no desire to repeat the experience. Either way, this phenomenon is a useful subject for further study. "4. Private institutions reallocate more resources under conditions of decreasing revenues than do public institutions" (p. 6). This hypothesis was also supported by the data. It seems likely that the lack of a governmental entity being involved in operations may give the administration more flexibility in responding. "5. Two-year institutions reallocate more resources among functional areas during periods of decreasing revenues than do four-year institutions" (p. 7). The analysis of data supported this hypothesis. In this case, similar to the situation in private institutions, it may simply be that the administrators have more flexibility to do what they feel needs to be done than do administrators in four-year institutions. "6. Reallocation will occur so as to protect the technical core of the organization" (p. 7). Zammuto defined these core areas as instruction, research, and public service, not all of which are protected equally. After analysis, Zammuto concluded, "Overall, hypothesis 6 is only partially supported... Expenditures for instruction, which is clearly the core area of all college's and universitie's operations, appear to be buffered from the full impact of decreasing revenues. The results also suggest that fixed costs and restricted expenditures limit the extent to which resources from some of the components can be reallocated to other areas of operation" (p. 16).

Zammuto arrived at two main conclusions from this effort: "First, ... contrary to conventional wisdom, the results show that across-the-board cuts are the exception rather than the rule in colleges and universities ... Second, a number of structural factors -- those over which administrators have little control such as institutional control and type -- have significant effects on reallocation behavior" (p. 17).

Upon reflection, the author might find that his second conclusion at least partially explains his first. As Glenny (1982) described the process, across-the-board cuts often are the method of choice from the governor on down. But when the cut gets to the individual budget administrator, structural factors beyond that administrator's control force an actual decision as to some allocation between part-timers and pencils.

Barbara Parker joined Zammuto (1985) in further development of decline theory on a study of 56 small to medium-sized higher education institutions with a record of decline. The intent was to determine "the extent to which the contingency and strategic choice views accurately describe the response process" (p. 4). The contingency view is described as "bounded on one side by environmental exigencies and on the other by response alternatives; research focuses on identifying decline types and the responses believed consistent with each type" (p. 5). It is this view that has been followed in the previous papers in which Zammuto, Cameron and Whetten have been involved.

The strategic choice view is described as that in which "organizational managers respond to indications of decline first by interpreting the causes of decline, and that these interpretations shape responses" (p. 6). The three measures of cause used in their study are "perceived stability of decline (e. g., whether decline is believed to be temporary or permanent); perceived controllability; and the perceived locus of cause" (p. 7). Introduction of this view is a departure from Zammuto's previous work. In addition, the authors include another variable which is felt to have an impact on strategic choice: a sense of mission. Parker and Zammuto's search of the literature on strategic choice found, "A strong perceived sense of mission is believed to have both a direct and an indirect

causal relationship with responses to decline" (p. 7).

As a result of their efforts, the authors found, "What the data indicate is that the greater the perceived duration of a decline episode, the more likely the institution is to engage in operating and strategic responses" (p. 51). This result was offset by their concurrent finding that "while institutions with a strong sense of strategic mission agreement are less likely to engage in operating or strategic responses, a perception that the decline episode will be long in duration pulls in the opposite direction" (p. 51). In the end it was determined, "Neither the contingency or strategic choice approaches adequately model the responses of colleges and universities" (p. 52), but both will be useful in further research.

The further evolution of decline literature is found in Cameron, Kim, and Whetten's (1987) study of 334 higher education institutions in their effort to delineate organizational decline, turbulence, stagnation and environmental decline. For the purposes of their study, covering a six year period, "Institutions that experienced more than a 5 percent drop in revenues (adjusted for inflation) over the time period were classified as declining" (p. 230). Beyond this classification the authors specified turbulence as a separate case. A six-year period in which revenues rise and fall, perhaps repeatedly, is a different experience than a sustained reduction.

Additionally the authors make a distinction between environmental and organizational decline. Environmental decline, as described in their previous work, is the change in either size or shape of niche. Organizational decline "refers to the reduction of resources within the organization itself" (p. 224). It is possible to imagine scenarios in which organizational decline occurs without environmental decline, and visa versa. It is also possible to

anticipate that response in an organization would differ between these types of decline.

Cameron, Kim, and Whetten make a further distinction between decline and stagnation. It is their contention that stagnation can be associated with slowdowns in general, including a slowdown in growth that is not actually a reduction for the institution. Decline, on the other hand, "refers to an absolute (and substantial) reduction in resource levels (i. e. a negative slope)" (p. 224).

Among the results of their study the authors found that the centralization efforts often attributed to managers during periods of decline actually occur during periods of turbulence, not during decline. They suspect this is due to the uncertainty of turbulence, while allocation of reduced resources during decline is in the same familiar pattern of resource allocation during growth. In another article based on the same study, Cameron, Whetten, and Kim (1987) also conclude "The negative attributes predicted to be associated with decline are actually characteristic of both stable and declining organizations" (p. 135). In what appears to be an expansion on their previously stated distinction between stagnation and decline, they propose "The central distinction in the literature investigating organizational life cycles should be one between growth and nongrowth, rather than one between decline and nondecline now prevalent in the literature" (p. 136).

Private enterprise theory

An insight into the difference between public and private management approaches to reduced circumstances may be had by noting that while higher education literature refers to retrenchment, private sector literature

refers to downsizing. Higher education seems to be concentrating on how to trim or cut an organization to survive hard times. Private industry seems to be more interested in finding the most effective size organization for the existing situation. A meaningful study could be done to determine if Levine's (1978) theory, "Organizations cannot be cut back by merely reversing the sequence of activity and resource allocation by which their parts were originally assembled" (p. 317) is less applicable in the private sector.

Robert Tomasko (1987) is less interested in how to cut back an organization during times of fiscal stress than in how to keep it lean for most effective operations after the panic subsides.

The slash-and-burn approach to streamlining may produce significant overhead reductions in the near term. And a combination of fear and adrenaline might even keep the survivors on a common course for a while. But sustainable downsizing, in many cases, requires a complete rethinking of the logic behind a corporation's organization. (p. 32)

One bit of logic to rethink is on type of control. A distinction that hasn't previously occurred in this literature review is that of "soft" as opposed to "hard" controls. Soft controls are created over the long term by "focused cultures, carefully selected employees, [and] mandatory training" (p. 35), while hard controls are the more familiar "staff, supervisors, [and] systems" (p. 36) approach. The soft control approach assumes you can manage by mission in a decentralized manner if your staff is composed of self-starters who know what to do and how to do it. The hard control approach assumes that you can fill a room with people who have the basic job skills and reach the organization's objectives by giving them detailed

instructions and constantly checking for compliance.

The author posits and explains a number of ideas to consider in staying lean, including "make it hard to get hired ... make it hard for poor performers to stay ... slow down the upward-only fast track ... [and] keep the pay system from building excess management back into the company" (p. 36). Beyond these ideas, "the job of the enterprise is to provide an exciting atmosphere that's open and fair, where people have the resources to go out and win" (p. 37).

Tomasko's approach is particularly challenging in the context of higher education. The methods of hiring faculty and classified staff, who are usually civil service employees for the public colleges, are firmly entrenched. There is usually some attempt at the final interview stage to determine whether the new employee will fit into the department or office, but it is unlikely that the applicants will have ever received a written copy of the college mission. Screening the applicants to determine whether they are predisposed to support and foster the culture and mission of the college, especially for faculty members, would probably provoke riots.

Richard Weiss (1988) found that organizations can in fact survive with fewer managers, indeed it turns out,

Reductions in both line and staff managers often have been reported as resulting in better rather than poorer company performance - and not just in terms of a lower labor bill, but in terms of such desirable characteristics as increases in responsiveness to customers and more rapid product innovation. (p. 115)

Weiss explains the role of the manager in carrying out the wishes of the organization's "owner," noting the difference between line managers

"who are assigned to make sure that the people employed actually to make the product or provide the service which the organization offers are each performing as intended and in concert with each other" (p. 115) and staff managers who attend to such important matters as finance and MIS, that the "owners" have neither the time nor expertise to handle on their own. In both cases he believes that the increased use of technology for the employees (i.e. software with on-screen forms and mandatory entries), and for the managers (i. e. reporting of retention by department), can reduce the number of managers needed.

Weiss' second approach is the hiring of what he terms "pre-programed" individuals. For example, it might be more cost-effective to hire only people with a B A in Accounting to work in the finance office, rather than employing the additional staff necessary for the supervision, checks, balances, and control of lesser trained individuals. He determines:

In general, to the extent that situations are complex and nonroutine, it frequently will be more effective to employ individuals who have the knowledge and skills to do a job as those in control of the organization wish than to attempt to control employees by transmitting orders through a hierarchical chain of managers. (p. 117)

The third approach is somewhat similar to Tomasko's, but rather than attempting to hire people who have goals and values that match the organization's, Weiss suggests trying to influence the employees after they are hired. Weiss explains the result: "This strategy in effect puts a manager inside the head of each employee, yet leaves all of them with the feeling that they are engaging in activities they have chosen, rather than work they have been ordered to do" (p. 120). Although this latter approach is probably

far more common, it would seem that the former would be far more successful.

Current higher education theory

An article by Wattenbarger and Vader (1986), entitled, "Adjusting to Decreased Revenues at Community Colleges in 1985," took on the task of "identifying institutional adaptations and strategies employed by community colleges for minimizing the problems associated with changes in sources of revenues" (p. 21). In spite of more than a decade of research and writing in the field of decline and retrenchment available to the higher education community, the conclusions of Wattenbarger and Vader's study were disappointing:

The most frequently implemented strategies are directed toward decreasing current expenditures, rather than oriented towards ways to increase revenues to the institution. The most frequently implemented strategies are also considered short-term in effectiveness; deferred maintenance and across-the-board cuts can have debilitating effects on an institution in the long run. (p. 23)

The authors summarized the strategic response of the colleges as doing what was easy, expedient, low stress, and protective of the instructional program. The balance of their article is devoted to prescriptions, both familiar and similar to those practitioners have been avoiding for years. The ongoing problem here was presented earlier by Culbertson (1976) in the statement, "A requirement of leaders, at the present time, then, is to be able to face with equanimity potential loss of position and other varieties of risk" (p. 258). Unfortunately, none of the

researchers have identified methods to allow managers to take this chance.

As a community college president, Ronald Temple (1986) weighs in with opposition to across-the-board cuts with the opinion, "Nothing could have been more harmful to the long-range future of higher education than the attempt to put everyone in the same boat" (p. 67). Temple finds several problems caused by this strategy:

To cut programs that are already underfunded may cause irreparable harm to the quality ... some programs may be better funded than they ought to be ... such an approach basically disregards the issues of quality and importance ... weak programs pull quality programs toward their level. (p. 67)

The essence of his argument is that this rewarding of weakness will compound itself over time. Program administrators will learn to avoid maximum use of resources so as to provide a cushion for future across the board cuts. The long-range danger, Temple states, is "The public will grow increasingly intolerant of supporting expensive institutions that exist primarily to perpetuate their own interests" (p. 69).

Temple is clear on what he feels to be a major contributor to the problem, noting, "While faculties have actively sought to participate in the governing process, they have resisted and refused the responsibility of making difficult decisions" (p. 66). Administrators who have made those difficult decisions have been ostracized, scorned, and subjected to votes of no confidence and petitions to the board of directors. The result of a politicized faculty and staff is, "To avoid conflict, many administrators, ultimately responsible for responding to the budget crisis, began to take the easy route, and thus began across-the-board budget cuts" (p. 66).

By comparing goals across decision-making theories, Hardy (1990)

developed a model of institutional contexts. The context in which any strategy, including retrenchment, takes place includes not only the external environment but also the "formal structure, as well as informal processes, culture and traditions" (p. 207) of the institution. Hardy found that having an insight into the influence of context on strategy "shows the importance, in particular, of collegiality and politics" (p. 233) in higher education decision making.

It may be unfair to Chabotar and Honan (1990) to consider them at the end of the collapsed timeframe of this review. After examining the preceding 20 years of research and prescriptions, their conclusion, "Available evidence points to the importance of early planning and decisive leadership to effective retrenchment" (p. 34), seems less than revolutionary. They list general principles for retrenchment and trot out some of the old favorites, such as, "Most retrenchment efforts still focus on balancing the budget without explicitly studying how the institution's mission will be affected" (p. 31). The need to minimize across the board cuts is again explained as: "They are quick and appear equitable, but are insensitive to real needs and inappropriately treat effective and efficient programs the same as the ineffective and inefficient" (p. 31).

The authors get close to what may be the real problem when they note, "Higher education can benefit not only from an extensive literature on organizational decline and cutback management but also from experience in governments, public schools, and other nonprofits" (p. 30). Putting the two parts of the article together may indicate that practitioners are already aware of the prescriptions offered by Chabotar and Honan, as well as the previous 20 years of higher education literature. The real problem may be to determine why the literature appears to be so widely ignored.

Summary of salient findings

- (1) Organizations are staffed with specialists rather than generalists (Weber, 1947).
- (2) Increases in organizational size cause increases in structural differentiation and also enlarges the ratio of administration personnel (Blau, 1970).
- (3) Decreases in organization size not only cause an increase in the ratio of administrative personnel, but may increase the absolute numbers (Cullen, Anderson, & Baker, 1986).
- (4) Lack of a clear plan during retrenchment can turn a college community's gloom into paralysis (Culbertson, 1976).
- (5) The sequence and units of retrenchment are not the reverse of those used during growth (Levine 1978).
- (6) In practice, administrators implement retrenchment responses that are conservative and piecemeal (Whetten, 1981).
- (7) Democratic decision making within an institution inhibits innovative or strategic response to retrenchment (Williams, 1981).
- (8) In response to small across-the-board cuts, administrators typically cut travel and maintenance, and fire part-time staff (Glenny, 1982).
- (9) All across the-board-cuts directed at or within an institution at some point become selective cuts (Glenny, 1982).
- (10) Higher education administrators treat all decline as a resource allocation problem rather than a strategic problem (Cameron, 1983).
- (11) Erosion should be treated as a resource allocation problem; contraction should be treated as a reconstruction problem (Zammuto,

Cameron, & Whetten, 1983).

(12) Higher education institutions do not have retrenchment plans related to their long-term goals to guide them through single or multiple retrenchment events (Glenny, 1982; Cameron & Zammuto, 1983; Behn, 1983).

(13) There is a positive association between extent of reallocation and severity of retrenchment (Zammuto, 1984).

(14) Retrenchment responses are designed to protect core activities (Zammuto, 1984).

(15) Contracts and restrictions limit flexibility in reallocation resources (Zammuto, 1984).

(16) There is a positive association between anticipated duration of decline and strategic response (Parker & Zammuto, 1985).

(17) Decline can be classified as a 5 percent revenue reduction over a six year period (Parker & Zammuto, 1985).

(18) Private industry uses the concept of "downsizing" rather than the higher education concept of retrenchment (Tomasko, 1987).

(19) Soft controls, putting the right people in the job, are more effective than the hard control approach of supervision (Tomasko, 1987).

(20) Community college responses to retrenchment have centered on decreasing expenditures rather than increasing revenues (Wattenbarger & Vader, 1986).

(21) Implementation of strategic and selective retrenchment responses can constitute a career choice for individual administrators (Culbertson, 1976).

(22) College communities resist hard choices (Temple, 1986).

(23) Retrenchment strategy takes place within the context of the institution's internal and external environment (Hardy, 1990).

(24) Institutions do not consider their mission when responding to retrenchment (Chabotar & Honan, 1990).

Chapter 3

RESEARCH DESIGN AND METHODOLOGY

This is a correlational study organized around budget cuts assigned to the Washington State community college system in the 1991-1992 fiscal year. The main data sources were State Board for Community and Technical College (SBCTC) reports of intended and actual college response to the cutbacks, as well as a survey in which senior administrators at all 32 colleges were requested to respond to a written questionnaire.

All resulting data were analyzed with results noted, graphed, and interpreted. The linkage between research questions, variables, and data sources is shown in Table 1.

Accomplishing the general purpose of this study, which was to document the relationship between administrative function and position elimination during retrenchment, involved three separate lines of investigation: prior versus post-cut budget, proposed versus actual cuts, and conceptual approach to retrenchment.

Table 1

Variable Matrix

RQ	Independent	Dependent	Source
3a	severity	low through high	survey
3b	fiscal approach	decrease through increase	survey
3c	selectivity	ABC through select	SBCTC
3d	focus	core or non-core	SBCTC
3e	strategic approach	expedient through plan	survey
3f	follow through	propose through actual	SBCTC
3g	strategy	association	survey
4a	share allocation	% of total	SBCTC
4b	burden allocation	% of pre-exist	SBCTC
4c	% of pre-exist	decision involve	SBCTC
4d	allocation	P/T reduction	SBCTC
4e	allocation	F/T reduction	SBCTC

Design of the study

Starting with the first line of investigation, this study analyzed the colleges' 1992 budget reductions in terms of amount reduced, share of budget reduction and variance of that share from the previous year's budget allocation. This was done by program area, expenditure object, and staff reduction by employee type and program area. These results were then investigated in finer detail to determine which functions bore the brunt of the impact.

In the second line of investigation, the incidence of cuts identified above were compared to the colleges' pre-retrenchment plans. These plans were produced at the governor's request when the state revenue shortfall first became apparent, and were to have detailed the steps the colleges would take if cuts were enacted.

In the third line of investigation, a survey instrument was used to measure the colleges' conceptual approach to retrenchment. Responses to the survey questions were compared by respondent group and between questions.

Sample

The sample group in this study was comprised of the 32 colleges governed by the Washington State Board for Community and Technical Colleges, and, more specifically in the case of the survey instrument, the Presidents and Deans of those colleges. Use of a single state system provided elements of both consistency and diversity for the study. Consistency was built into the responses because the sample group all underwent the same retrenchment experience under the same constraints at the same time while using a common reporting format. This consistency should have eliminated a number of threats to internal validity. Diversity was provided in that the sample group ranged from largely academic to totally vocational, fewer than 1,000 FTEs to more than 5,000 FTEs, urban in the core of Seattle to rural on the scab lands of Eastern Washington, and from a single campus to a four college, multi-campus district. This diversity should have eliminated a number of threats to external validity.

Instrumentation

The colleges' responses were investigated through use of SBCTC reports based on the common management information system (MIS) and direct college-level reporting to SBCTC. The use of MIS reports provided a high degree of validity because they constitute the actual accounting system of each college and any action affecting the budget can be made only in a manner that is reflected in these reports. For purposes of this study, use of these reports also provided a high degree of reliability, since all colleges in the sample group were required by an overseeing state agency to report in this common format.

Evidence of the colleges' proposed cuts is taken from the college level-reports to SBCTC. Again, survey validity benefited from common reporting by the colleges at the direction of an overseeing agency with knowledge that the information provided was going directly to the state legislature.

Measurement of the colleges' conceptual approach to retrenchment was accomplished by use of a survey questionnaire. The challenge of this instrument was to measure senior managers' understanding of conceptual approaches to retrenchment, which as individuals, they may have never consciously considered. This was facilitated by use of a colloquial conceptual shorthand, making use of more common concepts to frame the questions (e. g., guns and butter).

Pilot study

The survey instrument was field-tested with a group of eight assistant and associate deans representing various college departments. After field testing, the investigator met with these individuals and

discussed the reasoning behind the questions and the concepts they were intended to measure, as well as the reasoning and concepts used in answering the questions.

As a result of the pilot study, question 3-a was rewritten in order to define the terms "Guns and Butter" and "Red Menace." Question 3-e was also rewritten to provide a more distinct contrast between the options of specific versus general budget reductions. Finally, the response system for question 4-c was determined to be unfathomable and it was completely redone based on input from the pilot study.

Data collection procedures

Proposed Budget Reduction Plans were obtained from SBCTC in November, 1991, followed by the actual Budget Reduction Plans and Summary of FY Budget Reductions in late January, 1992.

On May 25, 1992, the survey instrument was sent to all senior line administrators, which in Washington state typically includes the president and deans of instruction, student services, and administrative services. The instrument was designed as a pre-posted return mailer and was accompanied by a cover letter explaining the project, requesting assistance, and assuring anonymity. As shown in Table 2, the instrument received a response rate of .641. On June 25, a follow-up instrument was sent to all non-respondents along with a cover letter indicating that it was a second request. As indicated in Table 2, the follow-up netted an additional .266 response for a total of .907. At this point, it was determined that the effort necessary to obtain a completed survey instrument from the remaining subjects might impact their responses. Therefore, no further follow-up was made.

Table 2

Survey Response Rate

	Possible responses	Survey		Follow		Total	
		#	%	#	%	#	%
President	31*	19	.612	9	.290	28	.903
Instruction	31^	21	.677	8	.258	29	.935
Student Serv.	28#	16	.571	10	.357	26	.928
Admin. Serv.	30**	21	.700	5	.166	26	.866
Total	120	77	.641	36	.266	109	.907

* One president position was vacant at the time of the survey.

^ One college had no comparable position.

Four colleges combined this function with another dean's tasks.

** Two colleges shared one administrator. The investigator is excluded.

Method of analysis

After considering the types of data to be analyzed, it was determined to use different methods for the survey data than for the financial data. For the survey data, the first level of analysis was to segregate responses by value, and calculate each value's percentage of the total response. Thus, Table 3 shows that in the case of Severity of Retrenchment, it was calculated that response value 1 received 26.7% of the total valid response. Next, central tendency and dispersion were calculated for the total response

group. This was followed by the use of crosstabs "to facilitate the study and analysis of relations by arranging data into tabular frequencies which clearly display trends and patterns in the relationship" (Isaac & Michael, 1981, p. 163). Central tendency and dispersion were calculated for the responses segregated by respondent position. The Severity of Retrenchment case, Table 6, shows that the deans of administration had a mean response of 2.08 and the deans of students 2.30. Finally, Pearson's product-moment correlation coefficient was computed to analyze the level of association between responses to the various survey questions.

For the financial data, actual cuts were compared to previous year budgets. This was done by determining the amount cut in each object or program, calculating the percentage of the total cuts that amount would constitute, comparing the result to that object or program's share of the previous year allocation, and then calculating the variance. Thus, Table 11 shows that Travel was cut \$437,348.00, which was 8.4% of the total cuts, compared to its share of the previous year allocation of 1.0%, which yields a variance of 740%.

The Pearson product-moment correlation coefficient was then computed to analyze the level of association between the reductions by object and program. This analysis produced results such as a .49 association between staff reductions by program and budget reductions by program.

In addition, actual cuts were compared to proposed cuts with the differences calculated to determine variances. Pearson's product-moment correlation coefficient was computed to analyze the level of association between the variances by expenditure object. This produced results of .96 association between Travel/Other and Salary/Benefits shown in Table 19.

Chapter 4

FINDINGS

The findings of this study and analysis of resulting data are presented in the order in which the research questions are presented in Chapter 1. Research questions 1. a. through 2. c. are literature-based. A brief executive summary is provided here as an introduction to this chapter.

Research Question 1. a. What information is available on retrenchment in the literature of higher education?

As might be expected, production of literature on retrenchment has an inverse association with the general economy of the U.S. As the economy falters and funding becomes scarce, production of retrenchment literature increases, typically coming in two waves.

The first wave is comprised of authors like Culbertson (1976), who have noticed clouds on the horizon. These authors point out the accumulating predictions of economic hard times and exhort their readers to prepare to take advantage of the situation. The opportunity for improving the institution through the inevitable changes ahead is stressed, along with the need for innovation. Readers are warned to avoid the traps of easy, short-term, and expedient solutions to fiscal hardship.

The second wave of literature starts midway through the period of austerity and continues a few years after better times return. This wave is comprised of authors like Behn (1983), who have found that the higher education community largely ignored the advice of the first wave authors and, in fact, have used the easy, short-term, and expedient solutions to get

through the period of fiscal hardship.

These second wave articles do speak to some of the reasons why responses were what they were, but for the most part they list the lost opportunities for change and innovation while pointing out the dire long-term consequences that are inevitable because of responses made by the higher education community. These articles are prominent among citations for the next cycle of first wave literature.

**Research Question 1. b. What information
on retrenchment may be found in non-higher
education literature?**

Although not specifically in the area of retrenchment, the basic theories of administration by authors such as Weber (1947) and Blau (1970) provide invaluable insight as to why higher education institutions respond in some of the ways they do. Indeed, Weber's explanation of specialization and Blau's findings on diversification by growth are at the heart of difficulties that occur during retrenchment.

There may be some tendency by higher education administrators to dismiss private sector literature for not containing "our types of problems," involving tenure and government financing. Many private sector institutions do have more flexibility than many colleges, but those advantages blur as the size of the institutions increase. As an extreme example, the managers described by Starbuck, Greve, and Hedberg (1978) at Kalmar Verkstad, whose primary owner and customer was the Swedish government, were very familiar with all of the special conditions claimed by higher education administrators.

The literature for non-higher education also has much to offer, such

as Behn's (1983) analysis of opportunity and consequences presented by decline in the public schools. Behn also provides some crossover into the non-education public sector where diversification and unions present constraints very similar to those found in higher education. The similarities in problems can be traced all the way back to Blau (1970), whose initial study was based on state employment security departments.

**Research Question 1.c. What trends
developed as the literature on retrenchment
evolved during and after the 1978-1982
recession experience?**

Different authors presumed different levels of knowledge, but pre-recession literature can be generally characterized by Levine's (1978) comment: "Put squarely, without growth, how do we manage public organizations? We have no ready or comprehensive answers to this question, only hunches and shards of evidence to serve as points of departure" (p. 317). The literature as a whole took the approach of extrapolating classical administrative theory into the new circumstances.

During the following years, researchers such as Cameron and Zammuto (1983) defined and delimited the condition of decline, finding it had varied forms benefitting from varied responses. In addition, writers such as Kerr and Gade (1986) described the growing evidence of negative effects associated with treating retrenchment as only a short-term event.

By the end of the recession, articles were characterizing retrenchment experience as a moral failure on the part of the colleges. Writers such as Temple (1986) decried the general use of across-the-board cuts by colleges and universities. Post-recession literature can be

described as having three basic themes; (a) Higher education took the easy way out when faced with a fiscal challenge, (b) negative long-term consequences resulted from the actions taken, and (c) institutions should learn from past experiences in view of the dark fiscal clouds on the horizon.

**Research Question 2. a. What prescriptions
are found in organizational theory?**

Organizational theory would have the community college start by determining the exact type of decline that is being experienced. For the purposes of this study, the decline under investigation turns out to be contraction (Zammuto, Whetten, & Cameron, 1983). This condition of reduced resources leads to "a threat-rigidity response on the part of managers," (Cameron & Zammuto, 1983, p. 369) which manifests itself in activities that are reactive to the contraction. Cameron and Zammuto also found that these actions develop into tactics for the "*consolidation and defense* of the traditional domain of the organization" (p. 369). These tactics prevail until conditions change or strategic planning can occur.

**Research Question 2. b. What prescriptions
are found in administrative theory?**

Chabotar and Honan (1990) use their vantage point of 1990 to enumerate the general principles for retrenching:

"First, strong organizations often need retrenchment as much as declining organizations" (p. 30), just as an apple tree is most productive with judicious pruning.

"Second, reconsideration of mission precedes retrenchment" (p. 31). This point is repeated in both the prescriptions and the recriminations:

colleges need to expend the effort to have in place prior to the crisis a retrenchment plan that compliments some strategic plan.

"Third, retrenchment must consider the possibility of future growth" (p. 31). This may seem like a subset of strategic mission, but it is necessary to point out that economic contraction may not include any reduction in student demand. Indeed, one of the great difficulties in the retrenchment under investigation was that many colleges experienced increased enrollments and reduction of revenues concurrently.

"Fourth, decreasing expenses has a more predictable impact on financial condition than increasing revenues" (p. 31). This point teeters on the brink of being more explanation than prescription. Given a short response time and a dollar target, reducing expenses seems a less risky path to follow. With advance planning, it is possible to develop additional revenue sources that can provide the economic slack necessary to withstand retrenchment.

"Fifth, across-the-board reductions should be minimized" (p. 31). After years of prescriptions and analysis, the only good thing anyone has found to say about across-the-board cuts is Kerr and Gade's observation that they can be used to focus the attention of the college community on a coming fiscal crisis (1986, p. 73). This method of cutting remains the first, and often only, option used by colleges.

"Sixth, more revenues often mean more costs" (p. 31), so net revenues need to be kept in mind. Addressing retrenchment with outreach programs is innovative and creative, but the costs associated with staff, transportation, and administrative overhead can't be lost in the excitement.

"Seventh, issues of quality should be as important in retrenchment as issues of revenue and cost" (p. 31). This prescription is the key point that

will determine the future of the institution. Temple (1986) stated this conclusion:

The issue is relatively simple: do we, in the long term, want institutions of quality that address our varied missions and respond to those values we hold dear, or can we satisfy ourselves with mediocrity? If we make decisions primarily to serve our colleagues rather than our students, the result is obvious. The public will grow increasingly intolerant of supporting expensive institutions that exist primarily to perpetuate their own interests. If quality and service are the hallmarks of our colleges and universities, the public will be willing to support our institutions at great sacrifice. (p. 69)

Research Question 2. c. What prescriptions are found in psychological theory?

Culbertson found, "The evidence suggests that there is a general tendency in adverse situations to ignore or gloss over the unpleasant" (1976, p. 257). This unpleasantness certainly is associated with the loss of student opportunities and damage to the institution, but it also related to the administrators' own suffering. "A common side-effect of decline is personal stress, ... the consequences of this are ... anxiety-reducing behaviors .. reducing risk of mistakes ... restricting communication ... reducing the number of participants in decision making ... enforcing rules more closely ... rejecting disconfirming or contrary information ... perceiving tasks and decisions to be more difficult ... being prone to 'groupthink'" (Cameron, 1983, p. 363).

This siege mentality on the part of administrators runs in direct

opposition to the mentality of faculty and staff, who tend to want more involvement during a crisis situation. "The degree of confidence the institutional personnel express in the chief executive officers relates to the degree of comfort personnel feel regarding the decisions and adjustments being implemented" (Wattenbarger & Vader, 1986, p. 24). During bad times, the comfort level is apt to be quite low. According to Cameron, Kim, & Whetten (1987): "When decline is present, organization-member responses are characterized by significantly more scapegoating of leaders, resistance to change, low morale, fragmented pluralism, withdrawal of leader credibility, conflict, and curtailment of innovation than under conditions of growth" (p. 234).

Within many institutions, this discomfort leads to insurrection with the belief that with different leaders or different policies the need for retrenchment would go away. Temple (1986) concluded:

The internal process of budgetary decisions has resulted in an increasingly politicized faculty and staff. Presidents and deans have been ostracized and scorned for making "hard decisions." Votes of "no confidence" by faculty and staff and petitions to boards of directors challenging the decisions of administrators have become commonplace. While faculties have actively sought to participate in the governing process, they have resisted and refused the responsibility of making difficult decisions. (p. 66)

Culbertson rather glibly notes, "There is in all of this, of course, the risk of loss of position faced by the leaders" (1976, p. 258). He doesn't dwell on the results. Leaders, like most people, want to avoid pain and risk to their livelihood.

Consequently, administrators are likely to favor across-the-board cuts in existing services over a long-term reassessment of the organization's mission because it is politically less volatile and, therefore, more likely to quickly defuse the emotionally charged atmosphere associated with retrenchment. (Whetten, 1981, p. 84)

The following research questions, designated 3. a. through 4. e., are data based. Questions 3. a., 3. b., 3. e., and 4. c. are specifically based on responses to a survey instrument, a copy of which is included as an appendix to this researcher's study. The survey respondents included 104 presidents and deans at Washington State community and technical colleges. In instances where the results are presented by respondent position, those positions are indicated.

Research Question 3. a. What is the severity of the retrenchment as understood by the college community?

Response to this question is structured onto a continuum ranging from a low number representing business as usual, with the analogy of Lyndon Johnson's "Guns and Butter" approach to the Viet Nam conflict, to a high number representing a state of crisis, with the analogy of Harry Truman's "Red Menace" approach to the Korean conflict.

In Table 3, responses from the total survey group are displayed, in which 26.0% selected the lowest response type, while 35.6% and 26.0% selected the level 2 and 3 response types respectively. These levels were designed to capture the shadings of opinion the respondent might have

regarding a college effort which was either not clearly focused or which struck some degree of balance between the two extreme options. A much smaller group of 9.6% selected the highest level response, representing a "state of crisis" approach to the retrenchment.

Table 3

Response to Severity of Retrenchment, Frequency by Response Type

Label	Type	Frequency	Percent	Valid Percent	Cum Percent
Guns & Butter	1	27	26.0	26.7	26.7
	2	37	35.6	36.6	63.4
	3	27	26.0	26.7	90.1
Red Menace	4	10	9.6	9.9	100.0
Missing		<u>3</u>	<u>2.9</u>		
	Total	104	100.0	100.0	

Further analysis of the response to this question is found in Table 4. The subject group's overall inclination toward a Guns and Butter approach is shown both in the mean of 2.20 on a 1 to 4 range and the modal response of 2. The dispersion of the responses is indicated by a standard deviation of .95.

Table 4

Response to Severity of Retrenchment, Central Tendency and Dispersion

Mean	2.20	Median	2.00	Mode	2.00
Std dev	.95				
Valid cases	101	Missing cases		3	

Analysis of the responses by use of crosstabs is displayed in Table 5. This display shows the number of responses at each value level, with respondents broken out by position within the college. Some differences in severity of the retrenchment can be seen as reported by position. One example is the 10 out of 28 deans of instruction who reported the retrenchment as absolutely a Guns and Butter affair, while only five of 23 deans of students viewed it that way.

Table 5

Severity of Retrenchment by Respondent's Position, Crosstabs Analysis

Value	Pres.	Dean Inst.	Dean Stud.	Dean Admin.	Row/% Total
Guns and Butter	6	10	5	6	27/27.6
2	9	8	8	12	37/37.6
3	9	6	8	4	27/26.7
Red Menace	2	4	2	2	10/9.9
Column	26	28	23	24	101
Total	25.7	27.7	22.8	23.8	100.0

Further analysis of these responses is given in Table 6, in which the sharpness of some of the individual differences shown by crosstabs gets blurred by the average response. The mean response for presidents is shown to be 2.27; for deans of instruction, 2.14; for deans of students, 2.30; and for deans of administration, 2.08, as compared to a total population mean of 2.20. Table 6 also shows a difference in standard deviation among the respondents by position, most notably in the 20% difference between the deans of students and the deans of administration. This indicates that the deans of administration, as a statewide group, were much more consistent in their responses than were the deans of students.

Table 6

Severity of Retrenchment by Respondent's Position

	Mean	Std Dev	Cases
Total Cases	2.20	.95	101
Presidents	2.27	.92	26
Deans of Instruction	2.14	1.08	28
Deans of Students	2.30	.93	23
Deans of Administration	2.08	.88	24
Total Population = 104	Missing Cases = 3 or 2.9%		
1 = Guns and Butter, through 4 = Red Menace			

**Research Question 3. b. Is the response to
the contraction framed as a need for
increased revenue or decreased expenses?**

This question assesses the college's economic approach to scarcity; response is structured into a continuum running from a low value for Decrease Expense to a high value representing Increasing Revenue. The value of the response indicates the respondent's opinion of the approach his/her college took to the reduction in state funding.

Table 7 displays the response from the total survey group, in which 33.7% selected the lowest response value representing Decrease Expense, while 40.0% and 17.3% selected level 2 and 3 respectively. A much smaller group of 4.38% selected the highest level response, representing the

Increase Revenue approach to retrenchment.

Table 7

Response to Economic Approach to Scarcity, Frequency by Response Type

Label	Type	Frequency	Percent	Valid Percent	Cum Percent
Decrease expense	1	35	33.7	35.0	35.0
	2	42	40.4	42.0	77.0
	3	18	17.3	18.0	95.0
Increase revenue	4	5	4.8	5.0	100.0
Missing		<u>4</u>	<u>3.8</u>		
	Total	104	100.0	100.0	

Further analysis of the response to this question is found in Table 8 where the overall inclination toward the lower values is shown both in the mean of 1.93 on a 1 to 4 range and the modal response of 2. The dispersion of responses is indicated by a standard deviation of .86.

Table 8

Response to Economic Approach to Scarcity, Central Tendency and Dispersion

Mean	1.90	Median	2.00	Mode	2.00
Std dev	.86				
Valid cases	100	Missing cases	4		

A display of analysis of the responses by use of crosstabs is given in Table 9. This display shows again some shades of difference in the economic approach to scarcity as reported by position. This can be seen in the deans of instructions' 11/8 split between responses 1 and 2, and the deans of students' virtually opposite 7/13 response.

Table 9

Economic Approach to Scarcity by Respondent's Position, Crosstabs Analysis

Value	Pres.	Dean	Dean	Dean	Row/ %
		Inst.	Stud.	Admin.	Total
Decrease Expense	8	11	7	9	35/35.0
2	10	8	13	11	42/42.0
3	6	4	4	4	18/18.0
Increase Revenue	1	2	1	1	5/ 5.0
Column	25	25	25	25	100
Total	25.0	25.0	25.0	25.0	100.0

Further analysis of these differences shows that the groups are quite close in their opinions on this question. This is shown in Table 10, in which the mean response for presidents is 2.00; deans of instruction, 1.88; deans of students, 1.96; and deans of administration, 1.88, as compared to a population mean of 1.93. Table 10 also shows a difference in standard deviation among the respondents by position, most notably in the 23% difference between deans of students and deans of instruction.

Table 10

Economic Approach to Scarcity by Respondent's Position, Means and Standard Deviations

	Mean	Std Dev	Cases
Total Cases	1.93	.86	100
Presidents	2.00	.87	25
Deans of Instruction	1.88	.97	25
Deans of Students	1.96	.79	25
Deans of Administration	1.88	.83	25
Total Population = 104	Missing Cases = 4 or 3.8%		
1 = Decrease expenses, through 4 = Increase Revenue			

Research Question 3. c. Are the cuts categorized as selective or across-the-board?

Response to this question was obtained from a State Board for Community and Technical Colleges' (1992b) report on the result of the reductions. As shown in Table 11, reduction in budget share as compared to share of previous year's expenditures varies from a sheltered -33.7% for salaries and benefits to a sacrificial 740.0% for travel. These variances indicate that salaries were reduced 33.7% less than an absolute across-the-board cut based on the previous year's revenue allocation would require, while travel was cut 740% more.

Table 11

Reduction in Expenditures by Object

	Amount Reduced	% of Total Reduction	% of Prev. FY Budget	Deviation
Salary/Benefit	\$2,699,196	52.0	78.4	-33.7%
Equipment	1,472,458	28.3	5.2	444.2%
Goods/Services	587,840	11.3	15.4	-26.6%
Travel	437,348	8.4	1.0	740.0%

**Research Question 3. d. Are selective cuts
focused on core or non-core areas?**

Response to this question was obtained from a State Board for Community and Technical Colleges' (1992b) report on the result of the reductions. The question was investigated by first looking at FTE staff reductions by program area in Table 12, in which the budget reduction share is compared to the share of previous year's expenditures. The result is that the Instruction area was cut to a disproportionately large degree, 28.7% over what would have been expected from its previous year budget share, while all other areas received smaller than proportional cuts, ranging from -33.7% for Administration to -69.9% for Libraries.

Table 12

FTE Staff Reductions by Program Area

Program	FTE Reduced	% of Total Reduction	% of Prev. FY Budget	Deviation
Instruction	105.6	75.2	58.45	28.7
Library	1.8	1.3	4.32	-69.9
Student Services	12.7	9.1	14.23	-36.0
Administration	12.0	8.5	12.83	-33.7
Plant	8.3	5.9	10.18	-42.1

This analysis was followed by a computation of the Pearson product-moment correlation coefficient to investigate the association between staff reductions by program and budget reductions by program, which are found in Table 21. The result was a coefficient of .49, however, since the test was done by program area there were only five observations in the population, leaving only four degrees of freedom and a criterion level of .81 at .05. Because of this no inferences can be made based on this association.

The second approach to answering Research Question 3. d. is reported in Table 13, which reflects data from the State Board of Community and Technical Colleges (1992b). This display of FTE reductions by employee group compares staff reduction share to the share of the previous year's budget. In this comparison the Part-time Faculty group bears a

disproportionate burden with a variance of 231.1% in comparing the two values, while the other groups range from -28.1% for Classified to -80.0% for Administrators.

Table 13
FTE Staff Reductions by Employee Type

Employee Group	% Of Total Reduction	% Of Prev. FY Budget	Deviation
Full-time Faculty	10.3	30.0	-65.6
Part-time Faculty	60.2	18.2	231.1
Administrators	3.0	15.0	-80.0
Classified	26.5	36.8	-28.1

Research Question 3. e. Are selective cuts based on expediency or are they in furtherance of a long-range plan?

This question inquires about the colleges' strategic approach to scarcity; response is structured into a continuum running from a low value for across-the-board cuts, to a high value representing the following of a strategic plan. The value of the response indicates the respondent's opinion of the college's approach to the reduction in state funding.

Table 14

Response to Strategic Approach to Scarcity, Frequency by Response Type

Label	Type	Frequency	Percent	Valid Percent	Cum Percent
Across the board	1	10	9.6	9.8	9.8
	2	24	23.1	23.5	33.3
	3	48	46.2	47.1	80.4
Follow the plan	4	20	19.2	19.6	100.0
Missing		<u>2</u>	<u>1.9</u>		
	Total	104	100.0	100.0	

Table 14 displays total survey response, in which a small group of 9.6% selected the lowest response value representing Across-the-board, while 23.1% and 46.2% selected levels 2 and 3 respectively. A group of 19.2% selected the highest level response, representing the retrenchment approach of Follow the plan.

Further analysis of response to this question is found in Table 15, where the overall inclination toward the higher values is shown both in the mean of 2.77 on a 1 to 4 range and in the modal response of 3. Dispersion of the responses is indicated by a standard deviation of .88.

Table 15

Response to Strategic Approach to Scarcity, Central Tendency and Dispersion

Mean	2.77	Median	3.00	Mode	3.00
Std dev	.88				
Valid cases	102	Missing cases		2	

A display of analysis of the responses by use of crosstabs is given in Table 16. This display shows there was very little difference as reported by the position of the respondent in the strategic approach to scarcity.

Table 16

Strategic Approach to Scarcity by Respondent's Position, Crosstabs Analysis

Value	Pres.	Dean Inst.	Dean Stud.	Dean Admin.	Row/ % Total
Across the Board	1	2	4	3	10/9.9
2	6	7	7	4	24/23.5
3	12	10	12	14	48/47.1
Follow the Plan	7	9	2	2	20/19.6
Column	26	28	25	23	102
Total	25.5	27.5	24.5	22.5	100.0

Further analysis given in Table 17 shows there is very little difference in the mean response for presidents at 2.96; deans of instruction, 2.93; deans of students, 2.48; and for deans of administration, 2.65; with a population mean of 2.77. Table 17 also shows minor difference in standard deviation among the respondents by position, with the largest difference at 14% between deans of students and presidents.

Table 17

Strategic Approach to Scarcity by Respondent's Position. Means and Standard Deviation

	Mean	Std Dev	Cases
Total Population	2.77	.88	102
Presidents	2.96	.82	26
Deans of Instruction	2.93	.94	28
Deans of Students	2.48	.87	25
Deans of Administration	2.65	.83	23
Total Cases = 104	Missing Cases = 2 or 1.9%		
1 = Across the Board, through 4 = Follow the Plan			

Research Question 3. f. Do actual responses to environmental contraction vary from those proposed prior to reduction of resources?

Response to this question was developed by comparing State Board for Community and Technical College reduction plan reports from before (1991) and after (1992a) the imposition of reduction in state funding. Table 18 shows that variance runs from a positive 113.34%, higher than proposed cuts, in the Student Services Equipment budget to a negative 38.70%, lower than proposed cuts, in the Administration Other/Travel category.

Table 18

Variance in Actual Versus Proposed Budget Reduction by Program Area and Expenditure Object

Program	Salaries/ Benefits	Equipment	Supplies	Other/ Travel	Total
Inst.	-16.88	37.01	38.87	-31.10	-1.76
Library	80.39	88.79	19.64	53.02	61.50
Stu. Serv.	4.86	113.34	31.67	-8.95	15.01
Admin.	- 1.00	40.41	20.08	-38.07	3.85
Plant	-8.34	67.68	29.29	-7.17	2.92
Total	-10.87	42.81	29.77	-25.34	2.48

The relationship between the various budget areas was investigated by computation of the Pearson product-moment correlation coefficient, measuring association in the variances between proposed and actual cuts. Table 19 displays the resulting correlation coefficients with Supplies being negatively associated with the other three categories ranging from -.12 with Equipment to -.65 with Salary/Benefits. The inference here is that as the colleges cut Salary/Benefits less than had been proposed, they cut Supplies more than had been proposed. All other correlation coefficients are positive, with Equipment and Salary/Benefits having an association of .47 and Travel/Other and Equipment at .59. Travel/Other and Salary/Benefits have the strongest association with a value of .96,

indicating nearly absolute positive association between the college's actual versus proposed results for the two budget areas. This association is statistically significant at the .05 level, which allows a conclusion that any change in variance between proposed and actual cuts for Salary/Benefits will be matched by a change of equal magnitude for the Travel/Other expenditure object.

Table 19
Correlation Coefficient of Proposed Versus Actual Cuts by Expenditure Object

N = 4	Salary/ Benefits	Equipment	Supplies	Travel/ Other
Salary/Benefits	1.00	.51	-.66	.96*
Equipment		1.00	-.15	.57
Supplies			1.00	-.46
Travel/Other				1.00

*criterion level at .05 = .878

Research Question 3. g. What strategies are used by colleges to respond to reduced revenues and how do they differ by size, department, and district organizational type?

This question was investigated by computation of the Pearson product-moment correlation coefficient measuring association between the means of the three perceived response questions: Severity of Retrenchment, Economic Approach to Scarcity, and Strategic Approach to Scarcity. Table 20 displays the resulting correlation coefficients, with Severity of Retrenchment and Economic Approach to Scarcity having the only positive association at a value of .69. Severity of Retrenchment and Strategic Approach to Scarcity had the weaker negative association at $-.24$, while Strategic Approach to Scarcity and Economic Approach to Scarcity had the strongest association with a value of $-.87$. These results were all significant at the .05 level and it can therefore be inferred that (a) a college that treats the retrenchment as a significant threat is likely to include revenue enhancement among its responses, (b) a college that treats the retrenchment as a significant threat is likely to have an across the board cut strategy, and (c) a college that follows a strategic plan during retrenchment is highly likely to orient that plan primarily towards decreasing expenditures.

Table 20

Correlation Coefficient of Perceived Severity of Retrenchment, Economic Approach to Scarcity, and Strategic Approach to Scarcity

N = 104	Severity Retrenchment	Economic Approach	Strategic Approach
Severity Retrenchment	1.00	.69*	-.24*
Economic Approach		1.00	-.87*
Strategic Approach			1.00

*criterion level at .05 = .195

Research question 4. a. What percentage of cuts are allocated to each department?

Response to this question came from a State Board for Community and Technical Colleges' report (1992b) on the results of the cut in state funding. Table 21 shows that the impacts of the cuts are differentially distributed through the program areas, with a low of 3.0% in the Library area and a high of 58.8% in the Instruction area. There are also great differences in variance between the percentage of cuts and percentage of budget, with Library giving up 26.8% less than would be expected in an absolute across-the-board cut and Administration giving up 19.0% more than an expected share.

Table 21

Budget Reductions by Program Area

	Amount Reduced	% of Total Reduction	% of Prev. FY Budget	Deviation
Instruction	\$3,106,269	58.8	57.9	1.6
Library	156,096	3.0	4.1	-26.8
Student Services	560,881	10.6	10.6	0.0
Administration	1,027,035	19.4	16.3	19.0
Plant	434,865	8.2	11.1	-26.1

Research Question 4. b. What is the relative severity of cuts by department when expressed as a percentage of that department's previous year budget?

Response to this question came from a State Board for Community and Technical Colleges' report (1992b) on the results of the cut in state funding. Table 21 shows that the most protected areas were Library and Plant, with -26.8 and -26.1 variance respectively between their share of the reductions and their share of the prior year's funding. Administration was cut to the greatest degree with a 19% variance in cuts as compared to budget share.

Research Question 4. c. Is there a relationship between the level of participation in the retrenchment process and allocation of cuts?

The data collected does not provide enough detail to adequately address this question. It is notable from the data that the only group of employees to suffer job loss to any significant degree were the part-time faculty members, who were not described as represented in the deliberations on budget.

Research Question 4. d. Are reductions in part-time personnel differentially distributed by program area?

Response to this question was derived from a State Board for Community and Technical Colleges' report (1992b) on the results of cuts in state funding levels. This report does not differentiate between full-time and part-time classified or exempt personnel. In addition, the bulk of part-time faculty personnel, which are identified, are in the Instructional program area. Comparison of total staff reductions, as displayed in Table 22, and staff reductions of full-time employees only, as displayed in Table 23, shows that part-time staff reductions were nearly non-existent except in the instructional area.

Table 22

FTE Staff Reductions by Program Area

Program	FTE Reduced	% of Reduction	% of 90-91 FY	Variance
Instruction	105.6	75.2	58.45	28.7
Library	1.8	1.3	4.32	-69.9
Student Services	12.7	9.1	14.23	-36.0
Administration	12.0	8.5	12.83	-33.7
Plant	8.3	5.9	10.18	-42.1

Research Question 4. e. Are reductions in full-time personnel differentially distributed by department?

Response to this question was derived from a State Board for Community and Technical Colleges' report (1992a) on budget reductions and a second report (1992b) on results of cuts in state funding levels. Table 23 compares full-time FTE reductions as a percentage of total full-time FTE reduction with the program area percentage of prior year budget. In this comparison, the Instruction area was most protective of full-time staff with a -34.20 variance. The hardest hit program was Student Services, with a variance of 112.64 in full-time FTE reductions as compared to budget share.

Table 23

Full-time FTE Reductions by Program

Program	FTE Reduction	% Of Reduction	% Of 1991 Budget	Variance
Instruction	21.30	38.10	57.90	-34.20
Library	1.70	3.04	4.10	-25.85
Student Services	12.60	22.54	10.60	112.64
Administration	12.00	21.47	16.30	31.72
Plant	8.30	14.85	11.10	33.78

This analysis was followed with a computation of the Pearson product-moment correlation coefficient to investigate the association between full-time staff reductions by program and budget reductions by program. The result was a coefficient of .24, however, since the test was done by program area there were only five observations in the population, leaving only four degrees of freedom and a criterion level of .811 at .05. Because of this no inferences can be made from this association.

Summary of chapter four findings

Literature based findings

(1) A large body of higher education literature on retrenchment exists, covering both historical and prospective views.

(2) Non-higher education literature on retrenchment predates that of higher education and includes important conceptual points, such as the effects of diversity and specialization.

(3) Through the 1978-1982 recession period, retrenchment literature evolved from speculation on the effects of non-growth to case analysis and review.

(4) Organizational theory on retrenchment has delineated decline types and identified tactics by type. During environmental contraction, consolidation, and domain defense are predicted.

(5) Administrative theory prescribes reconsideration of the college mission prior to retrenchment activities.

(6) Psychological theory indicates that political pressure and personal stress on administrators will result in an across the board approach to retrenchment.

Data based findings

(1) In the survey population, the fiscal situation was generally approached in a low-key manner.

(2) In the survey population, there was a tendency to attempt to resolve the fiscal situation by decreasing expenditures rather than by increasing revenue.

(3) Analysis of the fiscal data indicates that cuts were selective

at the expenditure object level.

(4) Analysis of the fiscal data indicates that the instruction program was subject to the largest share and magnitude of staff cuts, but that the reductions were composed largely of part-time faculty.

(5) In the survey population, there was a tendency toward a retrenchment response lying somewhere between implementing across-the-board cuts and following a strategic plan.

(6) Analysis of the fiscal data indicates wide variance between proposed and actual response to retrenchment.

(7) Analysis of the fiscal data indicates an absolute positive association between the expenditure objects of Salaries/Benefits and Travel/Other.

(8) Analysis of the survey data indicates that more dire portrayals of the fiscal situation are positively associated with responses that include revenue enhancement alternatives.

(9) Analysis of the survey data indicates that the use of a strategic retrenchment plan is negatively associated with responses which include increasing revenues.

(10) Analysis of the fiscal data indicates that cuts were distributed differentially among program areas.

(11) Analysis of the fiscal data indicates that cuts were distributed differentially as compared to the previous year's budget allocation.

(12) Analysis of the fiscal data indicates that reductions in part-time personnel came almost exclusively from the instructional program.

(13) Analysis of the fiscal data indicates reductions in full-time personnel were differentially distributed, with the instruction program

making the least reduction and the student services program the most.

Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study determined that an extensive and well evolved body of literature is available for the practitioner to turn to when faced with retrenchment. A body of non-higher education theory points out the difficulties caused by specialization and organizational diversity. A body of organizational theory delineates the discrete differences in types of retrenchment and various appropriate responses. A body of administrative theory counsels shaping retrenchment activities around the college mission. And a body of psychological theory warns that actions are likely to be driven more by pressures on the individual actors than by any of the above theories.

Through a survey of community and technical colleges, this study found that retrenchment was treated in a low-key manner, with actual cuts varying widely from those that had been proposed. These findings were consistent with the conservative and piecemeal response to retrenchment in higher education reported by Whetten (1981) and the tendency to resist making hard decisions mentioned by Temple (1986).

It was further found that the colleges tended to resolve the fiscal exigency by decreasing expenditures rather than by increasing revenues. Although the respondents indicated their fiscal approach was somewhere between the extremes of implementing across-the-board cuts and following a strategic plan, they also reported that their strategic plans were oriented toward reduction of expenditures. These findings reflected those of Wattenbarger and Vader (1986) that community college responses to funding

reductions are decremental, as well as Chabotar and Honan's (1990) conclusion that college mission is not reconsidered during retrenchment. The findings are also consistent with a theme in the literature that colleges do not use long-range plans during retrenchment (Glenny, 1982; Cameron & Zammuto, 1983; Behn, 1983) and that administrators tend to treat all fiscal problems as resource allocation issues (Cameron, 1983).

Fiscal analysis found a statistically significant ($p > .05$) positive association between cuts applied to salaries and to directly related support expenditures such as travel, both of which were treated much more favorably in the actual cuts than had been proposed. Staff positions cut were mostly part-time and almost exclusively part-time faculty. This tendency to reduce part-time faculty was reported by Glenny (1982) and can be explained by both a lack of contractual flexibility (Zammuto, 1984) and the context of the internal environment (Hardy, 1990).

The survey data found there was a statistically significant ($p > .05$) positive association between the severity of the fiscal situation as understood by the college community and the adoption of revenue enhancement alternatives. This was consistent with Hardy's (1990) conclusions about the internal context of the institution shaping retrenchment response.

Finally, analysis of the fiscal data indicated that cuts were selective at the expenditure object level. Cuts, including those in full-time personnel, were not only differentially distributed among program areas, but also as compared to the previous year's budget allocation within program areas. Literature-based concurrence with these findings includes the observations that all across-the-board cuts become selective cuts (Glenny, 1982), flexibility is limited during resource allocation (Zammuto,

1984), and retrenchment responses are crafted to protect core activities (Parker & Zammuto, 1985).

Conclusions

This study, as supported by findings in the literature, resulted in two basic conclusions. The first was that colleges are unwilling to equate reduced funding with a change in the size or scope of their institutions. The second was that their internal governance structure is what prevents them from doing so.

In the retrenchment activity under study, the colleges conformed to the piecemeal and conservative approach that has been found to be common in higher education. In spite of a broad body of literature counseling the need to reconsider the college mission and adhere to a long-range plan during retrenchment, the colleges persisted in shaving around the edges of core activities. This may be described as a "peeling the onion" approach, a title descriptive of the copious weeping and repetitious removal of very thin layers.

This study found that even when colleges do claim to have a strategic plan in place during retrenchment, the plan focuses on expenditure reduction rather than revenue enhancement. This is indicative of a mind set which seems to permeate higher education, the unshakable conviction that the appropriate response to retrenchment is belt-tightening. Compare this idea, that retrenchment is something to be survived, to the concepts discussed in literature from the private sector, which doesn't speak of retrenching but rather of downsizing. The private sector conceptual framework is not defined in terms of what can be trimmed to get through the cuts, but rather what size and scope of organization will be most effective in light of the

new circumstances. It is precisely this conceptual leap, that reduced funding might best result in a change in size or scope of the institution, the colleges seem unable or unwilling to make.

This inability or unwillingness of higher education to optimize its function in new circumstances may be attributable to the way in which colleges are governed. The literature review repeats references to involvement of the college community in the decision process. This involvement, whether identified specifically as faculty governance or generally as the internal context, is a political process by which the various college groups can influence institutional response to environmental contraction. As also mentioned in the literature, this involvement can actually stop the decision making process.

In this study's survey, severity of the fiscal situation was measured by use of the two conceptual extremes employed by American presidents to conduct ground wars against communist forces in Asia. Harry Truman mobilized public support by declaring the imminent danger of a Red Menace. Lyndon Johnson attempted to conduct the war as just another government program, to have both Guns and Butter, and was unable to maintain public support. The results of this survey question were part of a statistically significant ($p > .05$) finding that those colleges which leaned more toward the Red Menace approach were more likely to adopt revenue enhancement measures as a part of their retrenchment plans. From this, it seems reasonable to conclude that an appreciation for the magnitude of the institution's fiscal situation within the college community is conducive to support for long-range and mission-oriented cuts. The college president who attempts to get through the cuts with as little turmoil as possible may be eliminating those options most necessary for the long-range health of

the institution.

The president's desire to minimize turmoil may result from a well-founded fear. The literature reports that retrenchment can result in widespread gloom on campus (Culbertson, 1976) and retaliation against those who move the process forward (Temple, 1986). The resulting fervor can result in loss of position for the college's leaders (Culbertson, 1976).

This brings us to the second conclusion: that college administrators may indeed know and understand the prescriptions of the literature on the long-range needs of the college, but their internal governance structure prevents them from following that advice. Administrators may also know and understand that following those prescriptions may well cost them their jobs. Despite the basically noble nature of humans, observation instructs that the average community college senior administrator is probably fairly described as a slightly pudgy, graying civil servant with a couple of kids somewhere around college age. This is not the type of person who can be reasonably expected to throw away the source of house payments and medical benefits in order to force an unwilling college community to do what's best for the long term future .

Recommendations

The findings of this study have led to the conclusion that fear of negative consequences inhibits the implementation of strategies which would be advantageous to the institution during retrenchment. It is therefore this investigator's recommendation that policies and procedures be developed or discovered which reduce that fear. This can be accomplished from two directions, either by lessening the threat or by empowering the person.

Colleges should develop the long-range, mission-oriented, retrenchment plans that have been called for in the literature, but the time to do it is between retrenchment events. An honest atmosphere of crisis reflecting the true long-term plight of the institution, and use of a neutral authority to explain the unavoidable facts of the situation to the college community, might be a good place to start. Any such plan should conclude with an agenda of implementation activities designed to facilitate the college's transition into its new form. Activities such as retraining, reassignment, out-placement, and early retirement can be put in place before the next fiscal emergency and can help reduce organizational stress caused by retrenchment. In support of this recommendation the letter in Appendix D will be sent to all college presidents in the Washington State Community and Technical College System.

In addition, some method needs to be developed that would allow leaders to make hard decisions and remain around to tell the tale. The trend toward consensus management may in fact intensify the problems encountered when dealing with the higher education equivalent of a classic "lifeboat" situation. The federal government's use of an independent, third party, commission to develop military base closing lists that can not be amended, suggests one approach. Multi-year contracts for the principal actors is another approach, but may be weak in solving this problem and make it difficult to solve others.

There is need for a broad-based survey to discover what policies or procedures may be in use within higher education institutions for dealing with the problem of hostility towards those who are required to design the institution's response to reduced funds. Such a survey would have to be structured with the awareness that beneficiaries of such policies and

procedures may not desire the college community to know the protections exist. The development of this information, which could be used in concert with the long-range planning procedures outlined above, might prove to be more valuable than an infinite number of future studies documenting higher education's conservative and piecemeal approach to reductions in funding.

Reference List

- Behn, R. D. (1983). The managerial opportunity of decline. Peabody Journal of Education, 60(2), 108-119.
- Blau, P. M. (1970). A formal theory of differentiation in organizations. American Sociological Review, 35(2), 201-218.
- Blumenstyk, G., & Cage, M. C. (1991, June 12). Dire state economies force tough choices on many universities. The Chronicle of Higher Education, pp. A1, A20.
- Cage, M. C. (1991a, June 26). 30 states cut higher-education budgets by an average of 3.9% in fiscal 1990-91. The Chronicle of Higher Education, p. A1.
- Cage, M. C. (1991b, July 17). Recession expected to bring long-term changes in state colleges' relations with governments. The Chronicle of Higher Education, pp. A1, A30.
- Cage, M. C. (1991c, May 1). Community colleges vie for scarce state funds as budgets tighten and enrollments increase. The Chronicle of Higher Education, pp. A17, A18.
- Cage, M. C., & Blumenstyk, G. (1990, March 7). State budget deficits force colleges to defer raises and freeze projects. The Chronicle of Higher Education, p. A1.
- Cameron, K. S. (1983). Strategic responses to conditions of decline. Journal of Higher Education, 54(4), 359-379.
- Cameron, K. S., Kim, M. U., & Whetten, D. A. (1987). Organizational effects of decline and turbulence. Administrative Science Quarterly, 32, 222-240.
- Cameron, K. S., Whetten, D. A., & Kim, M. U. (1987). Organizational dysfunctions of decline. Academy of Management Journal, 30(1),

126-138.

- Cameron, K. S., & Zammuto, R. F. (1983). Matching managerial strategies to conditions of decline. Human Resource Management, 22(4), 359-375.
- Chabotar, K. J., & Honan, J. P. (1990, November/December). Coping with retrenchment: Strategies and tactics. Change, pp. 28-34.
- Child, J. (1973). Predicting and understanding organizational structure. Administrative Science Quarterly, 18, 168-185.
- Cohen, A., & Brawer, F. (1989). The American community college. San Francisco: Jossey-Bass.
- Culbertson, J. (1976). Educational leadership: The uses of adversity. Theory Into Practice, 15(4), 253-259.
- Cullen, J. B., Anderson, K. S., & Baker, D. D. (1986). Blau's theory of structural differentiation revisited: A theory of structural change or scale? Academy of Management Journal, 29(2), 203-229.
- Cut staffs but not across the board, strapped colleges are advised. (1991, February 13). The Chronicle of Higher Education, pp. A31, A34.
- Friend, J. H. & Guralnik, D. B. (1960). Webster's new world dictionary of the American language (College ed.). Cleveland: World.
- Gardner, B. (1990). [Financing community colleges]. Unpublished meeting notes of February 12.
- Glenny, L. A. (1982). Decision-making in panic time. AGB Reports, 24, 20-24.
- Hardy, C. (1990). Strategy and context: Retrenchment in Canadian universities. Organization Studies, 11(2), 207-237.
- Isaac, S. & Michael, W. (1990). Handbook in research and evaluation. San Diego: EdITS.
- Kerr, C. & Gade, M. (1986). Response to decline and change: The USA

- experience. European Journal of Education, 21(1), 67-79.
- Levine, C. H. (1978). Organizational decline and cutback management. Public Administration Review, 38(7/8), 316-325.
- Martin, J. & Wilson, G. (1989). Administrative restructuring: The first step in public school reform. Planning & Changing, 89, 34-40.
- Mintzberg, H. (1973). The nature of managerial work. New York: Harper and Row.
- Moony, C. J. (1991, February 27). Financial stresses hit professors, but most colleges protect tenured ranks. The Chronicle of Higher Education, pp. A1, A11.
- Parker, B., & Zammuto, R. F. (1985). Predictors of organizational responses to decline (Report No. 270 071). Boulder: National Center for Higher Education Management Systems.
- Public colleges announce 12 percent hike in tuition. (1991, October 16). The Chronicle, p. C4.
- Starbuck, W. H., Greve, A., & Hedberg, B. L. T. (1978). Responding to Crisis. Journal of Business Administration, 9, 111-137.
- State Board for Community and Technical Colleges. (1987). Washington community colleges operating budget allocation formula: Description and background information. (Available from SBCTC, 319 Seventh Avenue, Olympia, Wa. 98504-3111)
- State Board for Community and Technical College. (1991). Budget reduction plans - 2.5%: October 25, 1991. Olympia, WA: Author.
- State Board for Community and Technical Colleges. (1992a). Budget reduction plans - 2.5%: January 13, 1992. Olympia, WA. Author.
- State Board for Community and Technical Colleges. (1992b). Summary of FY 1992 budget reductions. Olympia, WA. Author.

- State Board for Community and Technical Colleges. (1992c). 1992 Directory of the Washington Community and Technical Colleges. (Available from SBCTC, 319 Seventh Avenue, Olympia, WA 98504-3111)
- Sutton, R. I. & D'Aunno, T. (1989). Decreasing organization size: Untangling the effects of money and people. Academy of Management Review, 14(2), 194-212.
- Temple, R. J. (1986). Weak programs: The place to cut. New Directions for Community Colleges, 53, 65-69.
- Tomasko, R. M. (1987, November). Running lean, staying lean. Management Review, pp. 32-38.
- Wattenbarger, J. L. & Vader, N. J. (1986). Adjusting to decreased revenue at community colleges in 1985. Community College Review, 13(4), 20-26.
- Weber, M. (1947). The theory of social and economic organization (A. M. Henderson and T. Parsons, Trans.). New York: Free Press.
- Weiss, R. M. (1988). Will the role of managers decline in the corporation of the future? National Productivity Review, 7(2), 114-121.
- Whetten, D. A. (1981). Organizational responses to scarcity: Exploring the obstacles to innovative approaches to retrenchment in education. Educational Administration Quarterly, 17(3), 80-97.
- Williams, G. (1981). Of adversity and innovation in higher education, Studies in Higher Education, 6(2), 131-138.
- Zammuto, R. F. (1984). Cutback management and resource allocation in higher education. Revised. Paper presented at the Association for the Study of Higher Education annual meeting, Chicago, IL.
- Zammuto, R. F. & Cameron, K. S. (1985). Environmental decline and

organizational response. Research in Organizational Behavior, 7, 223-262.

Zammuto, R. F., Whetten, D. A., & Cameron, K. S. (1983). Environmental change, enrollment decline and institutional response: Speculations on retrenchment in colleges and universities. Peabody Journal of Education, 60(2), 93-107.

4-c Response to a family budget crisis may be developed by the head of the household, his or her spouse, a committee of dependents, or a combination thereof. Who was involved in developing, not just reviewing but actually developing, your college's response to the recent budget cuts? Please check all that apply.

- | | |
|--|--|
| <input type="checkbox"/> Classified Union | <input type="checkbox"/> Junior Level Administrators |
| <input type="checkbox"/> Division Chairs | <input type="checkbox"/> President |
| <input type="checkbox"/> Faculty Union | <input type="checkbox"/> Senior Level Administrators |
| <input type="checkbox"/> Individual Classified Staff | <input type="checkbox"/> Trustees |
| <input type="checkbox"/> Individual Faculty | <input type="checkbox"/> Others |

APPENDIX B
Cover letter

Dear Colleague,

The attached questionnaire is part of a study on how organizations react to revenue reductions. Specifically, it attempts to measure some subjective aspects of revenue reduction planning resulting from the governor's December 1991 budget cuts. Your assistance in completing and returning this questionnaire is essential to the study and will be greatly appreciated.

Of course all responses will remain confidential as to your name and college. Individual identification on the questionnaire is for the purpose of follow up contacts with non-respondents; all survey instruments will be destroyed after the statistical data have been accumulated.

Please make a check below if you would like a copy of the results. Thank you for your assistance and participation.

Sincerely,

S. Scott Horner
Dean of Administrative Services

Yes, send me the survey results. []

APPENDIX C
Follow-up letter

Dear Colleague,

A while back I sent you a copy of the attached questionnaire, which is part of a study on how organizations react to revenue reductions. Specifically, it attempts to measure some subjective aspects of revenue reduction planning resulting from the governor's December 1991 budget cuts. Your schedule at the time you received the questionnaire apparently prevented you from completing and returning it. However, your participation is essential to the study and will be greatly appreciated.

Of course all responses will remain confidential as to your name and college. Individual identification on the questionnaire is for the purpose of follow up contacts with non-respondents; all survey instruments will be destroyed after the statistical data have been accumulated.

Please make a check below if you would like a copy of the results. Thank you for your assistance and participation.

Sincerely,

S. Scott Horner
Dean of Administrative Services

Yes, send me the survey results. []

APPENDIX D
Letter to presidents

5-10-93

Dear _____,

As you may recall, last year I requested the participation of presidents and deans in completing a survey as part of a study on community colleges' response to budget cuts. Based on the survey results, system fiscal data, and in-depth research on retrenchment in higher education, I came to the good news that in Washington State we are in the mainstream of current practice when it comes to retrenchment response. The negative news is that there is general agreement that current practice is very damaging to the individual colleges over the long term.

Throughout higher education there is a tendency to meet financial problems in what has been described as a conservative and piecemeal manner. The best long-term option is agreed to be reexamination of college functions to insure that all parts are the right size to be fully funded in the new fiscal environment, yet colleges tend to tighten belts and hope that next year will be better. The published analysis' of demographic and economic projections for the next 10 years do not show any sign that such a hope will be rewarded.

This response pattern by the colleges is described as being a result of the administrators' personal concern for the people and programs that they have put in place, constraints of union agreements and state regulations, a tendency for college staff to scapegoat the administration during times of stress, the loosely-coupled faculty governance structure, and the

legislatures' tendency to "nibble" away with repeated small cuts and reductions rather than a larger and more significant single cut.

On the recommendation and sanction of my doctoral advisory committee at Virginia Polytechnic Institute and State University, I am offering you the following proposal as an alternative to current practice. As soon as this budget cycle is over, but while it is fresh in everyone's mind, it would be a good time to prepare for the future.

1. Bring in an outside expert to talk to the entire staff about realistic prospects for state financing over the next decade, the damage caused by starving all programs, and the negative environment caused by a career of light bulb snatching.

2. After an honest appreciation for the gravity of the situation is established, sketch a design of your programs as they would look if you started the college from scratch, right now with today's resources.

3. Create implementation strategies for the transfers, early retirements, sabbaticals, new hires, retraining, and outplacement activities necessary to transition your college to a right size for the 1990's.

4. Get the college community started on the transition immediately, before the next round of cutbacks, while you still have resources to facilitate the transition and you are able to keep the resulting savings for purchase of productivity enhancing equipment.

I am aware that diving into a strategic financial planning activity right after going through budget development is not going to strike you as a particularly pleasant alternative. However, I am convinced that an effort of this type is vital to the long-term health of our community college programs, the maintenance of public and legislative support, and ultimately preservation of the open door concept.

As a result of this research and my ongoing interest in the area of community college response to retrenchment, I am planning the development of a workshop/seminar which can be used at the college level to facilitate the alternative described above. If you would like to discuss this alternative, my forthcoming work, or would just like more information, I am available at 580 W. Reynolds Avenue, Centralia, WA 98531. My thanks to you and your deans for your input and assistance in this study.

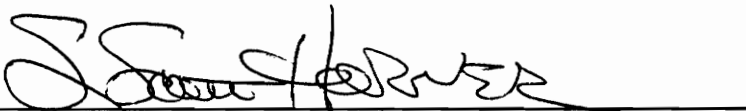
Sincerely,

Dr. S. Scott Horner

VITA

Scott Horner was born and raised in the small, Pacific Northwest town of Centralia, Washington. After attending local schools he enrolled first in Centralia College and then Grays Harbor College, both traditional community colleges. After diverting from education for two years to serve as a rifleman with the United States Marine Corps in Viet Nam, he completed his undergraduate education at The University of Puget Sound, majoring in Business and Political Science. Horner's postgraduate work started with a Masters in Business Administration, specializing in finance, at Southern Illinois University. Doctoral course work was completed at Virginia Polytechnic Institute and State University in the field of Community College Education.

Concurrently with the above education Scott Horner held a variety of jobs as a young man, ranging from mill hand to commercial fishing, and first moved into higher education as Personnel Officer at Washington State's Community College District 12 in 1975. After seven years there he became Dean of Administrative Services at South Puget Sound Community College in Olympia, Washington, a position held for an additional ten years. During that time he was selected to serve on the State Capital Budget Committee, was elected as an officer in the Business Affairs Commission, and was selected to speak on retrenchment at a Western Association of College and University Business Officials convention.



S. Scott Horner