

DOCUMENT RESUME

ED 184 385

HE 012 298

AUTHOR Bowen, Frank M.; Glenny, Lyman A.
 TITLE Uncertainty in Public Higher Education: Response to Stress at Ten California Colleges and Universities. A Report to the California Postsecondary Education Commission.
 INSTITUTION California State Postsecondary Education Commission, Sacramento.
 PUB DATE Jan 80
 NOTE 75p.
 AVAILABLE FROM California Postsecondary Education Commission, 1020 12th Street, Sacramento, CA 95814

EDRS PRICE MF01/PC03 Plus Postage.
 DESCRIPTORS Accountability; Budgeting; Collective Bargaining; College Administration; College Faculty; *College Planning; Community Colleges; *Declining Enrollment; *Educational Demand; Enrollment Trends; Facility Planning; Governance; Government School Relationship; *Higher Education; *Public Education; Retrenchment; State Colleges; State Surveys; State Universities
 IDENTIFIERS *California; *Institutional Survival; Program Review

ABSTRACT

In May 1979 a survey of ten California public postsecondary institutions was undertaken, at the request of the state commission, to learn the impact of enrollment and financial uncertainty on the institutions. Surveyed were these community college districts: El Camino, Mt. San Jacinto, San Jose, San Mateo County, and San Diego; also surveyed were the California State University at Dominguez Hills, California State University at Hayward, San Diego State University, the University of California at Davis, and the University of California at Los Angeles. Questionnaires were sent to the chief executive officers, and field interviews were conducted. Results are discussed in this report under five chapter headings: (1) the character of uncertainty (enrollment, budgetary, and other factors such as collective bargaining, accountability requirements, student preparation, shifting student interests, physical plant, and unclear governmental policies) and its differential impact on segments of the institution's community; (2) the concept and context of stress as it is studied here; (3) institutional response; (4) institutional processes for the orderly resolution of program planning and budgeting issues (governance, budgeting, planning, and program review); and (5) concluding observations regarding institutional procedures and autonomy, coordination and control, state government, and community services policy. It is suggested that virtually all of California's public higher education institutions will survive as organizational entities; but to do more than simply survive, they must maintain program quality and processes that impose order on uncertainty to the extent possible. Advisory committees for the survey are listed.

(MSE)

ED184385

HE

UNCERTAINTY IN PUBLIC HIGHER EDUCATION

RESPONSE TO STRESS AT TEN CALIFORNIA COLLEGES AND UNIVERSITIES

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

*Calif. B.S.F.
Commission*



TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATOR. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT THE NATIONAL INSTITUTE OF EDUCATION.

A Report To The
California Postsecondary Education Commission
by

FRANK M. BOWEN

LYMAN A. GLENNY

HE 012 298

UNCERTAINTY
IN
PUBLIC HIGHER EDUCATION:
RESPONSE TO STRESS AT TEN
CALIFORNIA COLLEGES AND UNIVERSITIES

A REPORT TO
THE CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

by
Frank M. Bowen and Lyman A. Glenny

January 1980

TABLE OF CONTENTS

PREFACE	iii
CHAPTER I: UNCERTAINTY	1
<i>Enrollment Uncertainties -- Budgetary Factors -- Other Factors -- The Differential Impact of Uncertainty.</i>	
CHAPTER II: THE CONTEXT OF STRESS	12
<i>Individual Institutional Factors -- Segmental Structure -- "External" Influences.</i>	
CHAPTER III: RESPONSE	27
<i>Operational Responses -- Programmatic Responses with Little Impact on Faculty -- Faculty Adjustments: Primary Reliance on Attrition -- Faculty Adjustments: Primary Reliance on Program Considerations.</i>	
CHAPTER IV: PROCESS	40
<i>Governance -- Budgetary Procedures -- Plans and Planning Procedures -- Program Review.</i>	
CHAPTER V: CONCLUDING OBSERVATIONS	52
<i>Institutional Procedures and Autonomy -- Coordination and Control -- State Government -- More than Survival?</i>	
APPENDIX A. INSTITUTIONS IN SURVEY	63
APPENDIX B. ADVISORY COMMITTEES	64
REFERENCES	66

PREFACE

In 1979 few Californians could anticipate the 1980's with confidence that even their best laid plans would be realized. Could they afford homes as property values soared? Or sell them at historically high interest rates? What would gasoline cost? Would it be available at all? How would they be affected by the new limitations on governmental spending and taxing? These and other serious local unknowns were compounded by pervasive national, and even international, questions — the future of social security and the implications of arms limitation proposals, to name but two. "Uncertainty" defines our times, we suggest, much as "progress" defined the late 19th Century.

In the midst of this burden of general uncertainty, college and university faculty and administrators faced specific problems. Two clouds on the horizon seemed particularly ominous, for they appeared to be beyond the control of those responsible for higher education:

- Because of low birthrates in the 1960's, there would be dramatically fewer young people who traditionally make up higher education enrollments.
- Funds available for higher education would probably be constrained severely by continuing inflation of costs, by public and legal restraints on governmental taxing and spending, and by the operation of enrollment driven formula.

We began this survey of the impact of these two factors on selected public institutions in California under the rubric of "response to enrollment and financial stress." However, we quickly found that it was not possible to isolate these factors from concerns that were of equal import for all or some of the campuses and districts in the study. It is more accurate, we believe, to speak of the "stress of uncertainty" which, vague though it may be, more accurately describes the impact of the current environment of higher education on administrators and faculty.

This report describes the stresses of uncertainty currently experienced by ten selected public California campuses and districts.

Survey Procedures

The survey was undertaken in May 1979 at the request of, and under contract with, the California Postsecondary Education Commission. During May and June, ten institutions were selected by representatives of the three public segments and the Commission's director for inclusion in the survey (Appendix A). The major criterion for inclusion was the belief that a campus or district could contribute to the proposed study of the impact of stress. Other questions were relevant: Had it lost enrollment? How was it managed? How large was it and

where was it located? We sought diversity, but the ten campuses are not, and were not selected to be, typical or representative of those in their particular segment or in California higher education generally.

In June 1979, representatives of each of the ten campuses and districts in the survey, of the three segmental central offices, and of the Commission met as an advisory committee to review survey plans and to comment on a proposed questionnaire that would be used to provide background for the interviews. In early July, the questionnaire, revised to reflect advisory committee suggestions, was sent to each chief executive officer, and responses were received before the end of the month. Field interviews were conducted during August and September. Typically, these interviews included, in addition to the president or chancellor, senior administrators responsible for budgeting and planning, institutional research staff, and one or more faculty representatives.

Following the interviews, a brief "overview" or summary of what the authors believed to be the major issues at each campus and district was prepared and mailed to the chief executive officer for correction and comment. During October 1979, a preliminary draft of this report was prepared from the overviews and from other questionnaire and interview data. This draft was circulated to members of the advisory committee, who met in late November 1979 to discuss their comments and criticism of the draft. This final report reflects, to our knowledge, all advisory committee corrections of factual matters.

Organization of the Report

The impact of uncertainty on the educational community is diffuse. We have attempted to organize our discussion under five chapter headings, but to suggest that this attempt has been successful would fail to recognize the pervasiveness and complexity of the phenomenon with which we are concerned. None of the chapters can stand alone.

The major elements that make up the stress of uncertainty are discussed in Chapter I. Chapter II explores the influence of institutional characteristics such as age and size, and of external factors on the impact of stress and response to it. Chapter III describes the different responses to stress at the ten institutions in the survey, and Chapter IV discusses apparent changes in, and the importance of, budgeting, planning, and program review procedures. The fifth and final chapter extends discussion to statewide and segmental coordination and governance.

As a research project, the survey is exploratory. It is intended to provide a census of actual and potential problems and issues regarded as urgent by the persons working at the campuses and districts and to describe how these are being met. The survey is not based on any

conceptual or theoretical framework, and we have not attempted to array the institutions across arbitrary objective or normative dimensions. However, we do have opinions about what we found. We have attempted to confine these opinions — biases and prejudices, perhaps, — to italicized "Observations" that are interspersed in the text and brought together in the final chapter.

Caveats

A senior administrator at one institution in the study has predicted that "there will be a period of time in the 1980's when the rarest commodity in higher education will be quality." Whether or not this prediction will be borne out, quality was not a rare commodity on the campuses and districts we visited in 1979, and the preservation of quality was a major concern at each of them. To preserve quality, administrators and faculty need the understanding of state and segmental officers and staff. The caveats below are intended to discourage use of this report (however well intended) to impose hasty or ill-considered controls and mandates; i.e., to underscore the need for caution, patience, and understanding on the part of the state and the segments.

1. There are 140 colleges and universities in the public sector in California. This survey includes only ten.

Caveat: Nothing in the present study should be extended to the balance of the campuses and districts in a segment or to the remainder of public higher education in California without additional, careful consideration and investigation.

2. The study deliberately and narrowly focuses on individual campuses and districts. We did not include activities of the segmental central offices in the project design. Segmental officers and staff responded freely to our inquiries when we (not they) believed that such inquiries were necessary, but advice and assistance are not a substitute for structured investigation. The segments are three very large, highly complex organizations, each of which differs in critical ways from the other two in organization, mission, legal authority, and administrative style. We did not have the time, nor was it our charge, to fully explore their activities, but these activities are, nevertheless, the organizational setting for institutional response.

Caveat: In most instances, information about the segmental central offices is based on campus and district reports. Our observations about segmental activity are similarly qualified.

3. The enrollment, financial, and other factors that create uncertainty are real and current problems at each campus and district in the survey. We share the misgivings of some members of the advisory committee about publicly airing those problems. There is no thought that the difficulties will "simply go away" if they do not appear in print. Rather the concern is about a wide variety of people waiting in the wings with statewide or segmental "solutions" to any problem that might be identified. The need for state and segmental coordination in times of stress should not be discounted, but the function must not be exercised with a heavy hand. The difficulty with general solutions is that action appropriate at one campus or district could be disastrous at another. Even within the same institution, reasonable persons differ on the resolution of the same problem.

Caveat: The problems of the 1980's will not have simple solutions applicable to all public campuses in California or to all in a particular segment. Within the broad limits of state and segmental educational policy, each college and university should be allowed to work out its own solutions.

4. All administrators with whom we spoke recognized the probability of enrollment declines, and all frankly discussed enrollment uncertainties at their own institutions. At only one institution, however, were projected enrollment declines over the next five or ten years made the basis for planning. However qualified by uncertainty, the expectations of the others were for stable or slowly growing numbers of students. But many who held such expectations were improving and expanding program review, information systems, and other procedures relevant to possible decline.

Caveat: Hasty and critical conclusions about the "blind optimism" of institutional leaders should not be drawn from their stated hopes for the future. They are haunted by the dangers of the self-fulfilling prophecy. What they say must be judged in the context of what they do.

5. Success in higher education is measured by subjective considerations of quality, not by numbers of students or dollars. Definitions of quality vary by program and institution. Quantitative measures of workload and unit costs, however sophisticated, may be relevant, but they are never determinative of quality. During the interviews, administrators and faculty spoke of "weak" and "strong" programs in terms of their quality, and all were concerned about the impact of uncertainty on their institutions' quality.

Caveat: Considerations of educational quality should not be ignored just because we cannot give quality a simple or universal definition. It is a critical concept in higher education. We know that it is unlikely to be found in overcrowded classrooms, badly maintained buildings, fragmented course sequences, and stagnant faculty, all of which may result if campuses and districts cannot or do not prepare adequately for uncertainty.

Acknowledgements

We have had the help of many people in preparing this report. Our greatest obligation is to the presidents and chancellors who agreed to the inclusion of their campuses and districts in the survey. All afforded us hospitality and cooperation during our visits. We are under a similar obligation to institutional officers, faculty, and staff for their patience and candor during the more than eighty interviews that were conducted.

The members of the advisory committees (Appendix B) took valuable time to read and comment on a variety of documents and to meet and discuss project plans and findings. Their suggestions and criticism have been invaluable throughout the project, and contributed greatly to the usefulness of this report.

Officers and staff of the three public higher education segments and of the Commission were more than helpful in responding to inquiries and in clarifying the sometimes obscure details of their complex operations. We are grateful to Commission staff for responding to many of our administrative needs as well.

As essential and as valuable as this assistance and advice has been, responsibility for this report rests solely with the two authors.

CHAPTER I: UNCERTAINTY

Institutional administrators and faculty are under stress that is caused by uncertainty about what the future will bring. Of course, no one has ever been certain that a particular decision would bring about a desired result. But in the past one could reasonably expect that most conditions under which the decision was made would remain relatively stable. Even if the conditions changed and the decision eventually proved erroneous, its impact was generally limited to the specific program or area concerned. Even then, increased funding associated with increased enrollment might soften the impact.

What are the specific causes of this current stress of uncertainty? A single answer applicable to all or any one of these institutions is not possible. As background for the remainder of the report, the following two sections of this chapter discuss the two major causes: enrollments and budgets. A third section explores other critical factors, such as collective bargaining and shifting student interests. The final section discusses the differential impact of uncertainty on administrators and faculty.

Enrollment Uncertainties

Ironically, the cornerstone of current uncertainty is not unknown at national and state levels: There will be dramatically fewer young people of college age in 1992 than there are today. Specifically, the number of 18 to 25 year olds in California is expected to drop from 2.9 million in 1984 to 2.46 million in 1992, a decline of some 15 percent (Callan, 1979, p.1). There may be some tendency to underplay the expected decline in this age group. At a joint interview, a chief executive officer noted that the average age of students at the institution was 27; a senior aide suggested that the median age of just over 19 would be more relevant to enrollment projections. At another institution, it was noted that the average age of all students was 26, while the median age was 23. But even more striking were the proportions of full-time students:

- Over one-half were 19 years of age or younger;
- Over two-thirds were 20 years of age or younger;
- Over 75 percent were 21 years of age or younger.

By itself, the overall decline in the 18-24 year old age group will have a substantial impact on higher education, but its impact will be compounded by at least two other factors:

- Since 1969, the percentage of 18 year olds in California who have attained the twelfth grade has declined fairly constantly from almost 90 percent to less than 80 percent. If the drop-

out rate continues to increase, high schools will provide fewer potential applicants for higher education than are projected.

- Participation in higher education has varied in the past among different ethnic groups. Historically, there has been a greater participation by those from Asian backgrounds than those from white. On the other hand, there has been significantly less participation by those from Black or Hispanic backgrounds than those from white.

While these are not the only factors that will be relevant to the enrollment outlook, they are the major ones. If one takes a quite pessimistic view of the future, "it is not beyond the realm of possibility that enrollments in California postsecondary education could drop by one-third or more during the 1980's" (Callan, 1979, p. 4).

At any specific campus or district, however, one need not take the most pessimistic view of state or national demographic projections to be concerned about the future. As discussed more fully in the following chapter, each district and campus has its own mission, location, program, and other characteristics which will influence its enrollment prospects. Willingly or otherwise, each will compete with other institutions for applicants from a shrinking pool of potential students. Competition for students and maintenance of program quality are not antithetical, but they are intimately related.

Budgetary Factors

This report is not an argument for or against budgetary increases or decreases for the public sector of higher education. The level of funding for public colleges and universities is a matter of state and segmental policy beyond the scope of this report. We are seriously concerned, however, about the current uncertainties in levels and conditions of state funding.

Higher education, like state government itself, is a particular victim of the spiraling costs of inflation, because of its labor intensive nature and the difficulty of offsetting rising costs by increasing productivity. Inflation is undoubtedly one of the most critical issues facing the nation today, and there is little need to belabor its impact on California higher education. Nevertheless, several points must be made.

Administrators in the survey noted the inflationary trends of the past ten or fifteen years: Between 1965 and 1975, the Consumer Price Index increased at an average rate of about 3.6 percent a year and the Halstead Higher Education Price Index increased at about 5.3 percent (Learn, 1975). One senior administrator suggested that he and others had become so accustomed to rapid enrollment growth that they "failed

to recognize the degree to which they had become dependent on dollars appropriated to cope with increased enrollments to offset concurrent but unrelated problems resulting from inflation."

The point is not that higher education has suffered more than other organizations from inflation, although this may be the case, but that the portion of institutional budgets required for relatively fixed costs of equipment, supplies, and maintenance has been increasing more rapidly than have the specific funds available for them. At present, administrators reported the margin of flexibility in areas other than direct instructional costs is perilously slim at many institutions; there is no more money to be saved by rationing pencils and paperclips.

A second point is the differential impact of inflation on instructional programs. Among the problems most commonly mentioned during interviews was the inflationary impact on supplies needed for instruction in science. We heard of faculty purchasing such supplies from their own personal funds. In the context of inflation as a threat to national survival (Walton, 1979), the cost of chemical supplies is small potatoes, indeed. But chemistry students must have these supplies and providing them from finite resources may mean reallocation of funds from another program.

If inflation is an inexorable pressure on the expenditure side of the ledger, there are equal pressures on the opposite side. Like inflation, these revenue pressures are not directed at higher education, but are part of the broader phenomenon of public distrust of authority. Whether or not Propositions 13 and 4 evidence a national "taxpayers' revolt," their consequences for governmental services — including higher education — are serious in California.

For the University, unspecified budgetary reductions related to Proposition 13 amounted to some \$15.4 million in 1978-79, and an additional \$1.3 million for 1979-80.

- For the State University, reductions related to Proposition 13 amounted to \$14.0 million in 1978-79 and, after one-time supplemental funding, an additional \$1.0 million in 1979-80.
- For the Community Colleges, Proposition 13 meant radically new, complex, and often confused and confusing funding conditions in 1979 under SB 154 in 1978 and AB 8. The consequences for each college and district varied widely, but for all of them support has shifted from local to state funding and become dependent on enrollment.

Higher education shares with other agencies of state and local government the uncertainties and pitfalls of predicting revenues, but it has concerns beyond those directly related to the levels of funding:

- The rules and conditions of funding for individual campuses and districts are not clear;
- State agencies appear to be maintaining some fiscal flexibility at the expense of higher education — e.g., increasing recharges for contract review, and shifting costs of building maintenance from state to institutional funds;
- The University and State University are now in direct — even if thus far, gentlemanly — competition for state funds, not only with each other but also with the Community Colleges.

Other Factors

Enrollment and financial pressures are, we believe, the major causes of uncertainty in higher education, but they are by no means the only ones. At the inception of this survey, one chief executive officer noted that "collective bargaining, increased state and federal requirements for accountability, poorer academic preparation of new students" were all additional factors that were difficult to separate from the consequences of the numbers of students and dollars. Some of these are introduced here for more detailed discussion later.

Collective Bargaining

After enactment of authorizing legislation, collective bargaining for faculty in the Community Colleges began in 1976, and for those in the University and State University in 1979. How has the actuality or expectation of faculty unionization created uncertainty?

- There is concern that the distance between faculty and administration will increase under "industrial models" of collective bargaining. Consensus and collegiality have been pursued as ideals, and, in many institutions, captured to a greater extent than is often realized. Many administrators and faculty fear discord as firm legal distinctions are drawn between "management" and "labor."
- Although we did not find any administrator who welcomed collective bargaining, at least one believed that it might be a more reasonable context for difficult decisions in the 1980's than would be traditional, collegial models: "I will know who is an administrator and who is not, and just how far my authority runs."
- Possible interruption of the continuing participation of faculty senates in institutional governance was reportedly of concern. At one institution, senate representatives had been dropped from the major academic planning committee because discussion might encompass matters covered under the collective bargaining agreement.

- At another, we were told that the annual preparation of a planning and budgeting document had not been undertaken with faculty participation for the same reason. But we did see what appeared to be an interesting compromise: "productivity" provisions in a collective bargaining agreement were, under its terms, being monitored for the faculty by the senate not the union appointees.
- In at least one Community College district, governing board members were said to have been elected with the help of the faculty union and to be responsive to union interests. Administrators were concerned about the need for clearing their proposals with the union prior to seeking board approval and also about possible board discord.

Collective bargaining in California higher education is too new for its full implications to be known, and for that reason is a major cause of uncertainty in many institutions.

Accountability Requirements and Mandates

No one with whom reporting requirements were discussed disputed the rights of the state and federal governments to require accounting for the expenditure of public funds. With one or two exceptions, neither did anyone dispute the reasonableness of reporting requirements in individual instances. At all campuses and districts, however, there was serious concern over the cumulative impact of these requirements in the face of rising costs and diminishing revenues.

- Administrators see state and federal reporting requirements and other mandates for compliance as "non-negotiable" demands on their time and on that of secretarial and clerical help. Such time is finite, and compliance with external demands means that internally imposed requirements must take second priority.
- State and federal rules may differ substantially. Reportedly, widening one door on a floor in an administrative building would be sufficient to comply with federal requirements, but state regulations would require alteration of all doors on the floor.
- A minor change in classifications or categories by state or federal agencies may require costly reprogramming of computer systems to retain historical data.

The burdens of reporting and compliance are considered in somewhat greater detail in Chapter II. Of importance here is the uncertainty that arises as such requirements are seen to be increasing, changing, and not wholly consistent.

Preparation of Students

The continuing decline of student scores on the Scholastic Aptitude Test (SAT) is well known. Although there is some suggestion that improvements in the secondary schools may have reversed the trend in California, there are other factors which indicate that higher scores in 1979 are attributable to a skewed sample rather than better preparation (California Postsecondary Education Commission, 1979, p. 17). Regardless of how these scores may be interpreted, administrators saw the existing situation as one requiring their attention to difficult questions:

- Which institutions should provide remedial or transitional help to poorly prepared students? Should the Community Colleges be assigned this responsibility? Should the four-year campuses add, in effect, a fifth year to programs to assure that students graduate?
- What steps can be taken to assure better preparation in the secondary schools? How, if at all, can high schools be urged, encouraged, or pressured to greater efforts?

Shifting Student Interests

Within very broad limits, higher education institutions must provide students with the programs they demand. When campuses were crowded, students sometimes enrolled in whatever was offered to get into school, and their specific interests could be accommodated over time by the addition or expansion of programs and faculty. But where enrollment is stabilizing or declining:

- Students have more options, and are likely to enroll at an institution which offers, and can accept them immediately in, the exact program they want.
- Expanding a program, or starting a new one, to accommodate student demand will require hard decisions about taking resources from existing programs or services.

If substantial resources are shifted internally to accommodate student demand, the mission of the institution may be skewed. But if they are not, students may not apply. If students are accepted into expanded programs but resources are not shifted, faculty workloads may become imbalanced beyond tolerance.

The major shift in student interest has been from the humanities and social sciences in the late 1960's to professional and occupational programs in the late 1970's. Evidence of the result of the shift was found at almost all of the institutions in the survey. In several, faculty formally assigned to less popular disciplines were teaching in secondary specializations or in remedial courses; engineering and

business administration programs were sometimes understaffed; humanities departments were, in some instances, made up almost entirely of full-time tenured faculty.

Some administrators believe that this particular shift of student interest is now stabilized and that the peak of the shift has passed. But none was certain, and all were aware that their academic programs would be subject to unpredictable shifts in the future. Student needs must be met, but faculty cannot be quickly reallocated when overall enrollment is stabilizing or declining. The difficulty of adjustment is compounded by the uncertainty of determining whether the shift in student interests is sufficiently permanent to justify a major redistribution of resources.

Physical Plant

Buildings are assuredly an institution's most stable resource, but they too are a cause for uncertainty. In times of growth, capital outlay necessarily meant new buildings and expanded campuses. Administrators perceive that state elected officials and agency staff now believe that enrollment stabilization or decline has virtually eliminated the need for capital funding. The implications of this belief for institutions whose physical plant has not yet been completed are obvious. But they are equally serious for older campuses and districts:

- Physical facilities wear out. Water pipes that have been in the ground for thirty years must be replaced. Ceilings do not resist gravity forever.

Facilities constructed for one purpose may be inappropriate for changing institutional and student needs. In laboratories, protection must be afforded against biohazards not known even a few years ago. Small classrooms cannot be used to increase productivity through large lectures. Facilities and equipment for occupational and vocational courses must reflect current practices in business and industry.

Administrators were not in constant fear that their office walls might collapse, and there were few indications that the "edifice complex" is still with us. But at many campuses and districts, administrators were seriously concerned about the declining resources for physical operations and plant maintenance.

Unclear Governmental Policies

What is generally perceived as pervasive distrust of established authority by the public at large is a double-edged sword in its impact on higher education. Administrators and faculty believe that they — along with legislators, bankers, and lawyers, for example — are viewed

with suspicion by the public and their students. At the same time, they suspect that state and federal agencies lack clear policies. What community services should higher education provide, and who is to pay for them? What rules, if any at all, are to determine the nature of research for which the University is responsible? Does a mandate to provide one program imply that other programs should be given lower priority? What expectations does the state have regarding educational quality?

While each question of unclear or ambiguous policy must be answered on its merits, the aggregation of many such unanswered questions not only creates uncertainty but undermines the credibility of institutional leaders. Campus and district administrators offered examples of action that they had taken on the basis of reasonable inferences about the direction of legislation or of segmental guidelines only to find later that their inferences were unjustified. The credibility of an institutional leader can erode swiftly under such circumstances.

In most instances, no one is at fault or to blame for lack of clear policy. But chief executive officers and faculty leaders can take little consolation from this, for they must face the uncertainty in making specific decisions.

The Differential Impact of Uncertainty

There are three major groups at each campus and district: the administration, the faculty, and the students. Uncertainty affects each group somewhat differently.

Administration

Presidents, chancellors, and their senior aides are charged with giving direction to their institutions, but most are unsure of the major factors they should consider in setting such directions. One such administrator, for example, explained detailed procedures for allocation of a budget reduction to faculty leaders. The latter understood and agreed with the procedures, but asked how the total amount of the cutback at the institutional level had been determined. The administrator had not been told and did not know, yet his was the major responsibility for distributing the burden of the reductions.

Campus and district leaders are not, of course, paralyzed by indecision. Most are actively steering their institutions into the 1980's as best they know how. They are encouraging new programs, reducing costs, and establishing procedures and policies that will, they believe, enable their institutions to weather expected storms. But they are doing so with very little confidence that their decisions will prove to be the correct ones, or that they will not be second-guessed by state and segmental authorities.

Uncertainty has increased the time and attention that senior administrators must give to a great variety of questions — particularly those concerning personnel and fund allocation. Relatively minor clerical positions can no longer be filled automatically, and replacing a faculty member may pose questions for the chief executive officer.

The increased burden on senior administrators does not relieve middle management of the campuses and districts from the problems of uncertainty. Accustomed to working within relatively narrow ranges of policy and procedural guidelines, many middle management administrators find that they are now being forced to go beyond these ranges. Not everyone wants to deal with ambiguity; perhaps fewer are able to do so. Uncertainty exacts a heavy toll regardless.

- Those who can manage uncertainty have limits of tolerance. One chief executive officer stated, "I will not spend every day, every week, for two months allocating and reallocating funds as I have these past two years."
- In a small, cluttered office, a budget officer seemed on the verge of nervous collapse: "Maybe you can tell me what I'm doing, for I don't know." Less dramatic evidence of the high personal costs of uncertainty were found at almost every institution.

Faculty

Within a narrow academic specialization, a faculty member may spend a professional lifetime probing the unknown and uncertain. But unlike administrators, faculty are not employed to resolve organizational uncertainty. No matter how great the effort, they cannot be as fully and currently informed as administrators. The intricacies of unfamiliar quantitative guidelines and formulas add to uncertainty.

At an institution where faculty confidence in the administration was reputedly high, a dean reported that a faculty member had recently asked if it were true that the institution would be closed because of enrollment problems. The question had been based on a rumor originating at another institution, and there were only a few institutions in which a faculty member did not tell us that "no one seems to know what is going to happen next." Often the implication was that "no one" was an administrator.

We were told that faculty uncertainty and lowered morale had not yet affected instructional programs. But we were also told that some young and abler faculty sought and found work elsewhere when salaries were frozen in 1978. The stress of uncertainty had also caused, it was said, the withdrawal of faculty "into a circle of wagons," at least initially, in response to administrative requests for assistance;

faculties in each department, division, or school would take a defensive position against the others. Fortunately, this narrowly defensive stance appeared to give way to broader perspectives as time went by. But when one's job is at stake, the narrow perspective is a natural one, and widening it demands extensive efforts by senior administrators and faculty leaders alike.

Students

We did not interview students, and cannot report on their attitudes about uncertainty. With what appear to be minor exceptions, we were told that the quality of ongoing academic programs was unimpaired. Not all programs were maintained, and uncertainty was clearly responsible for the cancellation of summer sessions in some Community Colleges in 1979. In some instances, institutions achieved economies through reductions in student services. Fees were sometimes increased, but it also appeared that students' wishes regarding scheduling and registration, for example, were being given greater consideration as the importance of enrollment numbers increased.

To preserve the jobs of full-time faculty, some were reassigned to secondary teaching specialties. In some instances, for the same purpose, specialized, part-time instructors were laid off. Reportedly, these responses to stress were without impact on program quality or the value of the programs to students.

Observations: "Uncertainty" is the title and theme of this introductory chapter because it is a concept that most accurately describes the many aspects of enrollment, financial, and other difficulties that we found at the campuses and districts in 1979. As broad and ambiguous as the concept may be, it is sufficiently familiar to be a context for most matters in the remainder of this report.

The concept of uncertainty stresses the great number and variety of problems — actual and potential — at the campuses and districts in 1979. These grave problems will continue into the 1980's and must be seen as interrelated and cumulative. There is the very real danger that the impact of some may be discounted or overlooked as a particular "burning issue" demands immediate attention at an institution, in a segmental central office, or in Sacramento.

The final aspect of uncertainty as an umbrella under which stress can be discussed is that it is not something for which any particular individual or agency is responsible. The inability to fix responsibility has two advantages:

- 1. It discourages belief that reformation of or change in one particular aspect of structure or process will bring an end to troubles;*

2. It encourages — requires — each organization with responsibility for higher education, legislative committees and academic departments alike, to examine its own activities. The resolution of uncertainty is everyone's responsibility. It cannot be blamed on anyone "up there," "down there," or "out there."

CHAPTER II: THE CONTEXT OF STRESS

The diversity of higher education in the United States contrasts sharply with the central management and governance of colleges and universities in other countries. Nationally and in California, both the existence of diversity and its virtues have been cited so often that introductory comments about it are easily passed over or ignored. Such easy familiarity with the general concept of diversity is not sufficient for understanding its effect on response to uncertainty in 1979 and its implications for the future.

This diversity and its environment are discussed under three broad headings in this chapter: individual institutional factors, segmental structure, and "external" influences. The discussion generally moves from the local and specific to the more comprehensive influences on response to stress, but organizational boundaries are not precise, and the three classifications overlap — for example, even though the mission of each campus or district is unique, statutes and segmental policy set direction and fix limits.

Individual Institutional Factors

The response to stress at each campus and district was shaped by factors specific to the particular institution. The major factors are explored under three headings: history and mission, geography and location, and age and size.

History and Mission

Very few of California's institutions of public higher education have been given distinctive missions beyond those broadly stated in the 1960 Master Plan's provisions for segmental differentiation of function. Most districts and campuses, including those in the study, were established or have expanded to have broad goals that could encompass wide differences in program objectives.

- At none of the campuses or districts in the survey were administrators or faculty considering abandoning (or being forced to abandon) the broad array of programs which they believed marked their institutions as "comprehensive" ones within their segment.
- In apparently only one institution did administrators give priority to specific objectives stated in a formal academic plan in responding to stress.
- In at least three institutions, the influence of earlier liberal arts objectives or missions were causes of some concern. Programs in the humanities and social sciences had been initiated and

staffed during the late 1960's when these programs were popular with students. That popularity has declined, leaving in some disciplines a residue of instructional units comprised almost entirely of tenured faculty. At these institutions in particular, but in others as well, curricular reorganization has been undertaken or is being considered to use liberal arts faculty for professional or occupational programs.

- At least two institutions have an early history of interdisciplinary instruction. Administrators at these reported that the earlier interest had carried forward to become an asset in responding to stress. Structures and processes for interdisciplinary work were in place; faculty were prepared and willing to move beyond their primary specializations.
- In at least one institution, administrators saw interdisciplinary groups, centers, or programs as vehicles for allocating marginal resources to areas in which they believed greater instructional or research productivity might be found.

Observations: We have few illusions about the past utility of mission and goal statements. For the most part, rhetorical generalizations about aspirations have afforded little concrete guidance for evaluating programs or for determining how a particular program relates to other offerings. Mission and goal statements of the campuses and districts in the study provide a minor but important exception to our doubts about these statements.

In one or two institutions, express goals of liberal arts education were factors considered in responding to stress. Had it not been for such goals, it seems probable that professional and occupational programs at these institutions would have been larger than they were in 1979. Conversely, the absence of such a goal or mission statement may have been a factor in what we perceived as more or less benign neglect of liberal arts programs at one or two institutions.

Campuses and districts should, we suggest, seriously consider developing more specific statements of objectives than now exist. More than once we were told that programs which appeared to be overstaffed were being maintained because they were something "that every college (or university) must have." We would have been more confident that the justification was correct if we had known why the program was essential to the particular campus or college, not to "every" one.

Interdisciplinary studies can provide curricular flexibility, can broaden the intellectual content of occupational and vocational programs, can be a vehicle for faculty development, and can give precision to resource distribution. Adding a liberal arts dimension to a vocational program can also result in saving a faculty job, and care must be taken to assure that this incidental result does not become the primary motive for establishment of an interdisciplinary program.

Geography and Location

Geography and location raise an almost endless variety of issues, for the impact of stress is mediated by local conditions.

- Administrators expect enrollment to vary with local economic conditions, and employment opportunities in an institution's service area can be highly salient. If classified employees doubt their job security, they will move to private employment, if it is available. In a high employment area, recruiting and retaining qualified technical and administrative staff is difficult.
- The local economy may be dependent on a few particular businesses or industries — e.g., electronics, aerospace, etc. Administrators at Community Colleges, in particular, believe that their institutions must retain the ability to respond quickly to changing technological requirements in the local business and industrial community. Their belief colors their institutions' responses to stress.
- Administrators at rural, urban, and suburban institutions all seemed to view their own particular locations as advantageous in recruiting faculty and students. But disadvantages were also noted: Urban institutions could draw on a larger pool of potential students than the others, but they faced greater competition from other institutions, both public and private. Administrators in the suburbs expected an increasing number of adult students, but also expected these to enroll on a part-time basis in noncredit, avocational programs. Administrators at rural institutions foresaw possible problems with student transportation and housing.
- Community College administrators were often of two minds about possible "free flow" of students across district boundaries: In the abstract, they might either oppose or favor it, but as a practical matter, their position often depended on the vulnerability of their institution to competition from adjacent ones.
- Campus and district location determines both the size and characteristics of the student body, for most undergraduates enroll at the institution nearest their home. Administrators at institutions in the Los Angeles Basin are well aware that the proportion of Blacks and Hispanics in the population pool from which their students are drawn will increase dramatically over the next ten years. Serious uncertainties arise because of the historically low participation rates of these ethnic groups in higher education: How many Black and Hispanic high school graduates will there be? Will their high school preparation be adequate for continuing on to higher education? How

many will be motivated to continue? Where should responsibility for improving preparation and increasing motivation be located? In what institutions and programs will they enroll?

Observations: At every institution in the study, local factors mediated the more pervasive causes of uncertainty. The changing ethnic composition of the Los Angeles Basin was a factor which had implications for several campuses and districts. If these institutions are successful in attracting sufficient numbers of minority students to maintain enrollments, programmatic issues will remain. How, whether, and when program changes should be made and what these might be were questions for which there were no clear answers.

The directions of demographic changes in the Los Angeles Basin were fairly clear in 1979, and each institution was searching for appropriate responses to them. The potential problems call for locally determined or locally developed regional responses which build on the strengths and missions of each institution in the area. But state and segmental policies — differential eligibility standards or the location and costs of remedial education, to name but two — will be integral to any single institution's solution. It will be the task of the segments to assure attention to the broader policy concerns in a context that recognizes the uniqueness of each campus and district.

Age and Size

Many of the institutions in the study have had several locations and names during their history. Perhaps the oldest dates back to 1897, and the most recent accepted its first students in 1975. As a generalization, the older the institution, the larger its enrollment and the greater number of its programs and services.

- Administrators at newer institutions saw their college or campus as a "new boy on the block" and in a poorer competitive position than their older neighbors. Some were concerned that students were bypassing the institutions in their own communities — usually on a freeway.
- Administrators at older, larger institutions were concerned that state or segmental resources might be shifted from their campuses or districts to support the survival of newer ones.
- Established institutions with professional programs were said to attract undergraduates who believed, rightly or wrongly, that undergraduate attendance would enhance their chances for admission into the professional programs. Newer institutions were considering new or expanded professional programs on the bases of student demand and apparent need. But the attraction of pre-professional undergraduates to such programs had to be considered

also. The question was one of costs as well as enrollment numbers. A professional program — nursing, for example — is expensive, and funding it might not be possible unless its higher costs were at least partially offset by less costly undergraduate enrollments.

- Administrators at older institutions had serious concerns about maintenance and modification of buildings, even though their building programs may have been complete. The newer institutions, on the other hand, were established only after careful assessment of their need, but, in at least two instances, administrators found building plans aborted or uncertain in 1979.
- Administrators at larger institutions in the study generally believed that they were in a better position to adjust to stress than did those at smaller ones. Larger institutions appeared to have a greater proportion of part-time or temporary faculty positions which could be relocated or, in the last resort, abolished. In absolute numbers, departments or divisions were larger, and reallocation or lay-off of permanent instructional staff would be less likely to cripple a program than would be the case in a small district or campus. Moreover, a large institution has more departments and activities than a smaller one, and such greater numbers facilitate both faculty reassignment and organizational change to modify, expand, or establish programs in response to stress.

Observations: If the experience in other states is any guide, it is highly unlikely that any public campus or college will be closed for lack of enrollment. In addition to their primary, educational functions, these institutions are economic and cultural assets to their communities. Their value as such is relatively fixed regardless of enrollment variations. The political problems that would attend selection of an institution for closure would be serious. On the other hand, one administrator did suggest that the "free flow" of students across district boundaries could result in the closure of small colleges in multi-campus districts. But with this possible exception, it seems probable that even very small public colleges will continue in operation throughout the 1980's.

Some students will continue to enroll in smaller institutions simply because they are small; for other students, these institutions will be the only means of access to higher education because of locational constraints. Both groups will be disadvantaged if competition severely reduces already small enrollments, unless the state and the segments recognize that these institutions will have difficulty in maintaining core programs and in modifying and adapting instruction to changing educational and community needs.

Small institutions seem to be doubly disadvantaged in times of stress: They are likely to lose students to larger campuses or colleges, and they will have greater difficulty in absorbing reductions resulting from loss of enrollment. Currently, there is a "small college" factor in Community College funding procedures, and the University appears to have assured stable funding for two of its smaller campuses. We are not aware of differential funding because of size in the State University system. We have not investigated differential funding procedures or lack of them, but nevertheless suggest that deliberate attention be given to smaller institutions. If they are to remain open, they should provide effective education to those students who enroll, however few these may be. Their survival should be considered in terms of physical plant and program offerings suitable for size and mission — not, as so often seems the case, in terms of preserving existing jobs of faculty and staff.

Segmental Structure

Since 1960, California Master Plans have structured public colleges and universities into three segments. The implications of this tripartite organization arise elsewhere in this report, but those that appear to be most relevant to response to stress are stated briefly here.

The University of California

The University is a constitutional, multicampus system with nine campuses — two of which were included in the survey. The University draws its entering students from the upper 12-1/2 percent of California's high school graduates. It shares responsibility for undergraduate education with the State University and Community Colleges, but has sole responsibility for basic research, doctoral programs, and such professional programs as law and medicine.

Constitutional status frees University campuses from detailed statutory controls, but the Legislature exercises influence in specific areas through funding provisions in annual state budgets.

As distinguished from the other two segments, responsibility for courses and degrees has been delegated by the governing board to the faculty of the University. At the systemwide level and at the campuses, the faculty historically have participated in governance to the extent of sometimes being considered a parallel administrative structure.

University planning procedures have varied over the years, but, in general, have stressed substantial campus autonomy in programmatic matters. The campuses, other than the health sciences complex in San Francisco, have been considered "general campuses" that could develop a full range of undergraduate and graduate programs. The University's central office routinely reviews new program proposals from the campuses,

and selectively reviews existing programs to coordinate and monitor offerings. A new systemwide planning effort was undertaken in early 1979, and will reach formal completion in 1980.

The California State University and Colleges

The State University is a statutory, multicampus system with nineteen campuses, three of which were included in this survey. The State University draws its entering undergraduates from the upper one-third of California's high school graduates. It is responsible for undergraduate education and for graduate and professional education through the master's degree. It can offer doctoral programs jointly with the University or independent institutions.

Faculty participation in governance is encouraged, and, in some cases, campus administrators are required to consult with faculty. Actual participation varies among the State University campuses, but has historically been less influential than at the University.

Lacking constitutional status, the State University campuses are subject to control through statute. Although earlier, highly detailed controls have been relaxed or subsumed under delegations to the State University's central office, some restrictions remain.

In the State University, annual five-year plans aggregate the program plans of the campuses, and selected, current planning issues are presented and analyzed. Regular planning procedures were supplemented in 1979 by a number of broadly based task force efforts directed primarily to recommending economies requested by the Governor. A permanent standing Committee on Academic Planning and Program Review has recently been established.

The California Community Colleges

The Community Colleges differ from the other two public segments by not being governed as a multicampus system. The Board of Governors is a state agency responsible for coordination of 70 separately governed Community College districts encompassing 107 colleges, of which five districts and some of their ten colleges were included in the survey. Each district has responsibility for lower division academic programs, for occupational and vocational programs that do not lead to an associate degree, and for service to its community. All high school graduates and California citizens over the age of 18 living in a district are eligible to attend a Community College.

Community Colleges are subject to more detailed statutory regulation than are the other two public segments. Board of Governors' staff list some 103 statutory "impediments" to resource use, of which some 27 are thought to be significant. Within — or despite — these controls, the

Community Colleges have had a long history of local autonomy. In principle, such autonomy was necessary to adapt to local needs; in practice, it was reinforced by predominantly local funding prior to the passage of Proposition 13.

Faculty participation in Community College governance differs among districts and colleges, but generally seems less influential than that in either the University or the State University.

The Board of Governors has been the focal point for collection of data and research into alternative methods of financing. Segmental planning has reflected these interests, as well as continuing concern for local autonomy. The nature and extent of district and college planning varied more widely among those in the survey than did planning found in the University and State University campuses.

Observations: Within the narrow context of response to enrollment and fiscal stress in 1979, segmental differences loom large. The immediate impact of Proposition 13 and enabling legislation, particularly the delays and uncertainties of the latter, were borne by the Community Colleges. But in the broader context of response to stress beyond 1979, common issues across campuses and districts were colored by segmental differences but seemed to overarch them. Although not true of all institutions in the survey, the following impressions are applicable to most:

1. The problems of stress — particularly those relating to enrollment numbers and volatility of student interests — were seen as institutional, not segmental ones. Campus and district administrators might look to the segmental central offices for information and technical assistance, but few actively sought policy guidance or leadership or appeared to have much confidence that it would be forthcoming if sought.
2. With some exceptions, issues of stress were seen by campus and district administrators in terms of their individual institution, not in terms of the segment, the region, or the state. Only a few chief executive officers suggested the need for regional action or investigation.
3. The chief executive officers varied greatly in their styles of leadership and management. But allowing for segmental differences in the extent of faculty participation in governance, there did not appear to be any patterns of management style that could be related to segmental differences.
4. Formal, segmental, academic plans appeared to have little influence on campus or district planning or response to stress except to the extent that such plans might embody legal constraints.

"External" Influences

Public colleges and universities have substantially more freedom of action than other governmental organizations, but institutional "autonomy" has never been absolute. Of the many and varied constraints and controls exercised by state and federal agencies, by segmental central offices, and by others, our survey was limited to those reported to influence campus and district response to stress.

The term "external" is used somewhat arbitrarily to describe requirements or influences which administrators perceive as being beyond their control. Segmental central offices are "external" in this sense, even though University central offices and, to a lesser extent, those in the State University, can also be seen as a higher, internal organizational level.

External influences are discussed below under the topics of Proposition 13 and its aftermath; cumulative compliance costs; uncertain state and segmental policy; and other concerns.

Proposition 13 and its Aftermath

Undoubtedly, the major externally imposed burden on individual administrators and faculty members in 1978-79 was the absence of cost-of-living increases for state employees. Morale suffered and difficulties were experienced in recruiting and retaining professional and clerical staff. For University and State University campuses, the salary freeze had an impact very similar to the widespread funding uncertainties that Proposition 13 created among the Community Colleges — prospective employees saw an uncertain future in California higher education.

As important as Proposition 13 and its impact on higher education budgets were, they are not the topic of this report, although they are directly relevant to it. Every campus and district in the study absorbed some of the impact, and each lost some of the flexibility that it will need to meet the uncertainties of the 1980's.

Observations: In objective and material terms of dollars and enrollment, some districts and campuses may have already recovered from the trauma of Proposition 13 and related budget reductions. In terms of a sense of security, it is probable that few administrators or faculty will see their institutions in the same light in the future that they did in the past. Salary freezes and funding uncertainties were severe blows to morale. As severe as these blows were, they may have been a relatively small price to pay for the early warning of greater shocks in the future.

The warning, of course, is of the need to prepare for adjustment to change. Campuses and districts which had procedures for determining program priorities, those which had experience with stable or declining enrollment, and those which had actively pursued economies in the past were better able to absorb and adjust to shock in 1978-79.

Cumulative Compliance Costs

Administrators rarely mentioned a specific governmental regulation or accountability requirement as a major cause of concern, but the cumulative impact of all federal, state, and segmental requirements was seen as a clear threat to their capacity to respond to uncertainty. Individual requirements for fund use or activities or for reports of compliance were generally considered reasonable. Administrators believed that their institutions should be accountable for public funds, but they were increasingly aware of the burden which the totality of such requirements imposed.

One administrator questioned what he perceived as attempts to achieve 100 percent accountability. He stated that in some cases, "it looks as though we are spending \$50 to cover a \$10 risk." In his institution, some internal accounting functions which previously had been performed centrally were delegated to instructional units.

Almost all institutions reported that increasing administrative compliance costs were not being offset by increasing administrative overhead support allowances. Categorical program funds — e.g., federal and state student aid programs such as B.E.O.G., S.E.O.G., N.D.S.L. and E.O.P.S. — had grown at a greater rate than general operating funds. An institution with \$4 million in student aid funds could use only some \$42,000 of these for administration; the excess costs — some \$400,000 — came from institutional general funds that had been already reduced in response to fiscal cutbacks.

The inroads that compliance costs make on general administrative funds did not directly affect academic programs, but they did have indirect impacts. Campus and district administrators and their staffs do not have any purposes or objectives other than support of instruction. But they have finite time, and governmental and segmental requirements are non-negotiable demands on this time. Time that would be used to perform internally imposed tasks — the very reason for having an administration — had to be reduced to meet external demands.

At one institution, a cost-effectiveness study was underway to determine whether an energy management program should be undertaken with the institution's own funds or with external funding and the conditions attached to it. An administrator commented, "We don't know whether we can afford to hire someone to fill a room with documentation."

In at least one instance, inconsistency between state and federal requirements was noted. To assure physical access to the handicapped, widening the door to one room was said to be sufficient under rules of one jurisdiction, but the other reportedly required widening of all doors on the floor.

One concern about governmental regulations was that usually reasonable legislative requirements were being interpreted too narrowly by state agencies and segmental central offices. One administrator suggested

that "the closer an agency is to the legislature, the more narrowly it interprets laws or regulations." Narrow interpretation restricts institutional flexibility, and the converse of the administrator's thought would be that the farther from the legislature, the more likely the awareness that operating conditions require broad interpretation. There must be some play in the gears or the machine will not run.

Compliance costs were mentioned as a major concern by administrators at nine of the ten institutions in the survey. Many noted the diffuse and pervasive impact of compliance costs and the difficulties encountered in identifying specific costs with specific requirements. Others noted that during the past few years compliance costs have been increasing at the same time that inflation and fiscal cutbacks have reduced administrative capacity to carry out routine responsibilities.

Observations: It is not possible to document the impact of externally imposed compliance costs on administrative services, and through these, on instructional programs. Each requirement imposes on some of the time of many different people: a clerk to compile data, an analyst to organize it, a secretary to type it, and inevitably a senior administrator to see that all is coordinated and correctly performed. Multiply these fragments of time by ten or twenty, and then subtract the result from the time available. What is left is too little time for meeting the normal requirements of campus or district administration. Something must give.

External demands for institutional accountability can be moderated to a limited extent by reducing internal accountability requirements, as was done at one institution. In some cases, services with lower priorities than instruction — e.g., placement counseling — can be reduced or eliminated. Most likely, however, one of the first things to give will be unstructured administrative time — time for internal planning and analysis. For senior staff, unstructured time is essential for listening to faculty and students and for explaining issues to them. Planning and communication are essential elements in the ability of a campus or district to adjust to stress. If administrators are required to spend substantially all of their time reporting on what they have done, what they do in the future may not be worth reporting.

Some years ago a University task force recommended that the segments and the statewide coordinating agency work together "to insure that information-gathering activities of the institutions are coherent, not unnecessarily redundant, and consistent" with legislative staff recommendations concerning avoidance of duplication (University of California, 1976, p. 61). The recommendation should be pursued.

Uncertain State and Segmental Policies

Many administrators stressed the importance of administrative credibility. Administrative decisions had to appear sound to faculty, students, and staff. Yet administrators were concerned about their inability to predict what actions the state or segmental central offices might take, which posed a threat to their credibility.

Overall funding levels were the most widely mentioned source of concern. Realization that state officials and segmental central offices shared these uncertainties was of little consolation to those at campus and district operating levels. "I don't know" is not an answer to a specific question about whether a contract should be signed or a librarian or technician hired.

The timing of funding was seen to be as critical as the level. Funding of categorical programs was sometimes so late that personnel had to be hired after the school year began. In at least one Community College, funding delays were seen as evidence that the state did not realize the consequences of its actions. Internally, the faculty perceived the belated hiring as poor college management.

These funding uncertainties can adversely affect preparations for adjustment to stress. Planning and program review processes are time consuming, and the results are usually controversial. If subsequent funding renders the adjustment exercise idle, the administration is seen as overly conservative and the cause of unnecessary turmoil. The end result may be impairment of campus or district ability to marshal the effort needed to meet a future crisis.

Not all reports of the impact of uncertain state policy related to funding levels and timing.

- The Governor and Legislature (and federal agencies as well) were perceived as being more responsive to the demands of vocal special interest groups than they were to the broad requirements of campuses and districts as continuing institutions. The complaint was not that special interest groups were heard, but that response was piecemeal and, as one administrator said, "hit or miss" and fragmented.
- Governmental lack of understanding of the major educational problems was said to be evidenced by unrealistic affirmative action requirements, "flip-flopping" on state funding of non-credit courses, and controversy over "appropriate" research objectives.

Observations: State and federal elected officials, their staffs, and segmental administrators are faced with as many uncertainties as campus and district administrators. In dollar terms, their uncertainties are larger. But campus and district administrators face greater

pressure in the resolution of uncertainty. They must respond on a face-to-face basis to persons with vital professional and personal interests in the outcome.

Other Concerns

Administrative concerns about external influence — other than those discussed above — varied widely. One senior administrator said that "Most of the talk about external controls was a myth," adding that his institution had sufficient flexibility at the margins to meet any reasonable response to stress. To the extent that actual controls or restraints in 1979 were concerned, his statement appeared to describe the situation at other districts and campuses. But others voiced concerns about the future and about past attempts at external control. The brevity of our discussion does not do justice to the seriousness of many of these concerns.

Budget Bill Educational Policy: Both administrators and faculty expressed concern about the Legislature's tendency to "write ideas," as one expressed it, into budget documents. Examples offered were of proposed or actual requirements for student participation in faculty hiring and promotion procedures and for course credit for remedial programs. Whatever the merits of requirements such as these, the concern is that they have only peripheral and tangential relationships to financial support. To the extent that they are debated at all, the debate takes place in a forum designed for another purpose.

Observation: The concern is a serious one. Assuming an appropriate topic for state educational policy, what would be an appropriate forum for discussion? Remedial education, for example, is assuredly one in which the state shares an interest not only with higher education but with secondary schools as well. Should this issue be posed in the California Postsecondary Education Commission? In substantive legislative committees? Whatever the forum, we agree that educational policy issues should not be debated primarily as an integral part of the state budgetary process.

Capital Outlay: Administrators in many institutions were concerned about what they saw to be the increasing involvement of state agencies with the details of physical planning and construction. Aside from simple annoyance at being "second-guessed," their substantive concern was about delays in modifying buildings to meet instructional or research needs. In the University, such needs were reportedly the greatest for modification of specialized research laboratories; in the Community Colleges, quick response to vocational educational needs predominated.

A related concern was the perception that state agencies had seen capital outlay in terms of new buildings for enrollment growth for so long that they looked on statewide enrollment stability or decline as

substantially reducing if not eliminating the need for capital funding. One administrator noted the need for replacing thirty-year-old water pipes. Others furnished examples of classrooms in old buildings that required modification to meet new needs and, in some instances, of relatively newly constructed laboratories that required alteration because of recent scientific advances. In two instances, new Community Colleges were caught in 1978-79 with construction plans incomplete in locations where enrollment growth was expected despite probabilities of statewide decline.

Observations: The capacity of an institution for timely response to stress will be limited by requirements for state and segmental approval of plans for building alteration. Reasonable review requirements, both with respect to the threshold level for review and the length of review procedures, should be determined with awareness of the need for institutional flexibility.

Statewide Coordination: With one exception, administrators did not see the California Postsecondary Education Commission as a source of uncertainty or concern. Several mentioned that new program approval procedures had become prolonged, one noting that there was about a two-year delay in initiating a new major. Because of the delay, he suggested, there was a tendency to either "bootleg" programs or to drop plans for it if it were desirable but not necessary. The reasons for the delay were not clear, although several administrators mentioned repeated follow-up questions from Commission staff that they perceived as irrelevant to the applications.

We did not trace the sometimes tortuous path of new program proposals through institutional, segmental, and Commission review processes. The Commission is organizationally isolated from individual institutions by the segmental central offices, which also have a major role in program review. Campus and district perceptions of Commission activity (or perceived inactivity) should be understood in this context.

One administrator expressed concern about the future of the Commission. "Do we need it?" he asked, noting that a coordinating agency may have been required in the early 1960's to monitor and control the growth in numbers of new campuses and colleges, but that this purpose had been served.

Observations: The question of whether institutional planning and program review procedures are adequate for times of stress must also be asked of Commission procedures for review of new programs. Statewide overview of program distribution will be essential, but need the procedures be as prolonged as they are said to be? Have the questions asked in them been re-examined for relevance to current institutional needs and problems?

Is the Commission still needed? We believe that it is, for it is the only forum in which educational issues and needs can be deliberated at the state level without being reduced to dollars and cents in the heat

of state budgeting. More serious questions arise when one asks what the Commission should or can do as a result of its deliberations. How active should it be in collecting and analyzing enrollment data? Should the Commission be interested in the extent to which enrollment declines at a particular institution are attributable to recruiting, admissions, or other activity at another? But enrollments — at least under current practice — are directly and almost inextricably tied to funding levels and budgetary controversy. The Commission is the obvious forum for most educational issues that will arise from declining enrollments, but it should be cautious in dealing with these. The institutions would be ill served by the addition of another layer of budget analysts on top of existing segmental and state executive and legislative staff. More critically, however, the urgency and fascination of budgetary details might easily submerge the Commission's primary, educational policy role.

Academic Program Controls: State or federal intervention into curricular matters is rare. Two examples — both in the health sciences area — were reported. In one, a new law appeared to require offering nursing courses in the sophomore rather than junior years. In another, a new law could have been interpreted to allow a state board to specify format, hours, materials, methods, and types of faculty for instruction in human sexuality. Intervention was avoided through discussion, negotiation, and, in one case, by amending the law.

Observations: Neither example above is directly related to institutional response to stress in 1979. But both were attempts to implement state policy by curricular controls that would have substantially reduced institutional program options. The question is not one of abstract "autonomy" only, however important that question is. The issue is also a very practical one of internal flexibility to reallocate and realign resources. Options for reallocation are presently few and may well diminish over the coming years. State educational policy should be implemented wherever possible without narrowing curricular options at the campuses and districts.

CHAPTER III: RESPONSE

Reductions in response to stress have been commonly characterized as "across-the-board" or "selective" (Balderston, 1974, p. 226; Bowen and Glenny, 1976, p. 17). This dichotomy may be more appropriate for examining statewide or segmental procedures, however, than for describing responses by individual districts and campuses. At many of the latter, the number of budgetary units is too small to allow "across-the-board" reductions — a reduction of virtually any size might necessarily reflect a decision to terminate a particular program. Moreover, personnel decisions — particularly those regarding faculty — are more critical at a district or campus than at the statewide or segmental level.

In discussing stress and response to it in the ten institutions in the study, it is useful to consider responses in four or five categories. Responses in each category were found to some extent in all institutions. In only a few instances would it be possible to identify overall institutional response at a particular campus or district as characterized by only one category primarily. Four of these categories are discussed in this chapter.

1. Operational responses that are intended to relieve immediate stress. "Across-the-board" reductions would be included here, as would "targets of opportunity" — vacant positions, building maintenance, travel expense, etc. These responses are generally seen by administrators as being temporary and short term and as having little impact on instructional programs.
2. Programmatic responses that have little impact on faculty. These may or may not be seen as responsive to an immediate crisis, but they are more likely than are operational responses to be seen as having longer term implications for the programs concerned.
3. Faculty adjustments that rely primarily on attrition to adjust staffing of instructional programs to reduced funding or enrollment.
4. Faculty adjustments that rely primarily on program considerations to adjust staffing of instructional programs to reduced funding or enrollment.

A possible fifth category is the topic of the following chapter:

5. Procedural responses that are themselves determined by conditions of stress and are also the means of determining other responses.

We emphasize that these categories do not represent an attempt to develop a concept or theory of institutional response to stress. Any such concept or theory would probably give a greater role to time factors than we have done here.

Operational Responses

Undoubtedly, the most common, immediate response to an actual or expected cutback in support was reducing programs or services where reduction would have the least impact on existing instructional programs and tenured faculty. In general, this meant reductions in administrative areas, and administrative staff and services were targets of opportunity at all campuses and districts.

The administrative and clerical positions eliminated, and the number of personnel involved, varied widely across the institutions in the survey, but a summary prepared at one college in a multicampus Community College district appears representative:

Admissions and Records	2 clerks
Career Center	1 supervisor
Child Development Center	1 director 3 child specialists 1 part-time clerk
Counseling	1 counseling assistant .5 evening counselor
Information Services	1 coordinator 1 assistant
Library/media	1 part-time clerk
Outreach Program	1 director 1 assistant
Physical Education	1 equipment manager (later reinstated)
Placement Services	1 placement officer 1 clerk-typist
Student Accounts	.5 accounting clerk
Supportive Services	1 counseling assistant/clerk
Word Processing	1 clerk
Secretarial	2.5 positions 1 clerk-typist
Administrative	1 administrative assistant

The summary notes that it does not cover reductions in services provided to the college by the district — e.g., custodial, maintenance, and business services, security, and duplication and reproduction.

Administrative and clerical staff were affected in a number of ways. At one institution, internal review and reduction of administrative costs had been initiated in 1975 or 1976, and this self-imposed program of economy reportedly lessened the impact of later stress. In at least

two institutions, reduction of general administration took the form of consolidating senior administrative positions when vacancies occurred. In another, economies were being achieved, we were told, by redefining and, to a limited extent, merging the responsibilities of administrators and secretaries. According to one administrator, "It is not beneath me to do a little typing, and it is not beyond my secretary to maintain current data files; we both get more done."

At one institution, each unit with a non-teaching vacancy* during the year was required to hold the vacancy for eight weeks to realize salary savings. This across-the-board response had a disproportionate impact on units such as libraries that normally have high turnover.

It is sometimes said that "overhead" can be reduced without harm to instructional programs. Administrators sometimes enumerated what appeared to be extensive reductions, such as those above, and stated that ongoing instruction was not disturbed. But another stressed that "overhead" services facilitate instruction and the primary educational missions of the institution and that those services have no independent rationale for existence. He suggested that if there were an appropriate level of staffing, the elimination of one clerk could have impact on instruction.

In addition to their possible impact on instruction, reductions of classified staff had wide, prolonged, and adverse "ripple effects" on other classified employees and services: The termination of one classified employee initiated "bumping" actions as seniority rules moved another employee into the vacated position, and then another move into the position vacated by reassignment. This "musical chairs" disruption resulted in having necessarily less productive workers until the latter became as familiar with their tasks as their predecessors.

In the Community Colleges in particular, some administrative, technical, and secretarial employees reportedly reacted to uncertain funding policies by voluntarily shifting to private employment. These were readily employable people who had been attracted to higher education by supposedly tranquil working conditions and job security rather than by salary levels. When job security became uncertain, they left for better paying jobs.

In the Community Colleges, summer sessions provided a target of opportunity, and two of the five districts in the survey took advantage of this target by canceling sessions in 1978. Both restored the sessions in 1979.

- In one district where summer sessions were terminated, the decision was described — by hindsight — as a "knee-jerk reaction" by some administrators, but one that they nevertheless defended as an appropriate response based on the information available at the time it was made.

- In districts where summer sessions were maintained in 1978, and in those in which they were reinstated in 1979, increased attention was given to the cost-effectiveness of the programs — e.g., class size — and to their direct relationship to regular offerings.

Termination of summer sessions may have resulted in lower enrollments in the fall according to some administrators. But in one case the major impact was said to be a loss of credibility in the community. The decision to cancel the session was made almost immediately before summer classes were to begin, and students reportedly saw the cancellation as evidence of unreliability. In another district where summer school was retained for instructional reasons, the decision was reinforced by the desire to avoid poor public relations that might have resulted from cancellation.

Observations: The impact of reductions and reorganizations of administrative and clerical staff as a response to stress does not appear to have been given the attention that it deserves.

- *Consolidating senior administrative responsibilities in times of uncertainty imposes greater burdens on senior staff than a simple listing of formal responsibilities might imply; uncertainty raises previously routine decisions to the policy level.*
- *Reduction of classified staff can compound the problems for senior staff, of course, by requiring their personal attention to decisions that would have been made at a lower level. But more critically, shortage of clerical help may also force routine tasks on instructors. A teacher typing his or her own examinations is not making the best use of time.*

The lay-off of one clerk is unlikely to have any impact on what a student learns. Conversely, it is unlikely that educational quality will be enhanced because reports to outside agencies are timely and neat. But we emphasize that there is a real relationship between "overhead" and the effectiveness of instruction that cannot be ignored in considering response to uncertainty.

Programmatic Responses With Little Impact on Faculty

The distinctions between "operational" and "programmatic" responses are useful for the descriptive purposes of this report, but are probably not ones which can be extended much beyond these purposes.

- An "operational" response is usually characteristic of a crisis situation — a sudden financial cutback or a severe and unexpected loss of enrollment. Such a response is usually considered to be a temporary expedient. The emphasis is on the immediate

dollars saved rather than on specific programs. Except in the case of "across-the-board" reductions, however, program considerations are almost always present.

- A "programmatic" response may occur in a crisis situation also, but more likely would be considered as having longer term implications for specific programs or services. A programmatic response might include augmentation of current funding with the expectation of savings or other benefits at a later date; an operational response would not. The emphasis is on program considerations rather than dollar savings, although concern about the latter will always be present.

Programmatic response was quite scattered across academic and non-academic areas:

- In some instances, business and accounting services were selected for discrete reductions. One administrator suggested that past attempts to achieve 100 percent accuracy in reporting probably resulted in greater costs than the risks of inaccuracy would have.
- Information and data systems faced reductions in at least two instances, although difficulties in recruiting and retaining qualified staff at competitive salaries may have contributed to the decisions. There were at least two examples of augmenting or enhancing management information systems; in both instances, administrators believed that more, rather than less, relevant and timely data would be needed in the future.
- At one institution, funding for instructional television was reduced, and in another production of programmed learning modules was virtually terminated. These technological instructional programs were not believed to be cost effective by the administrators because of the reduced ability of state and local governmental agencies to continue to participate in their use. At another institution, funding for educational television was being increased despite reductions in other areas. Administrators believed that television would grow as a medium for reaching younger students who had grown up with it as their major recreation. They also saw it serving an increasing number of those who would be homebound because of physical disability or the energy shortage.
- At several institutions, academic programs were consolidated across colleges in multicampus districts or within individual campuses or colleges: e.g., nursing and languages. Program consolidation may serve a variety of purposes, and in one instance it was intended to improve a weak program by linking it with a strong one; cost considerations were secondary.
- Interdisciplinary programs have independent educational value, of course, wholly aside from their possible use in reducing program costs or increasing effectiveness. At institutions that had a

history of interdisciplinary instruction, such programs did facilitate response to stress, for they (1) permitted additions to the curricula at relatively little or no cost, and (2) sometimes relieved the pressure of staffing imbalance by integrating programs in the humanities and liberal arts with professional or occupational ones.

- Several institutions were rescheduling classes or entire programs to make attendance more convenient for students — perhaps less so for faculty, although changes were sometimes made at their initiative. At one institution, semester programs were divided into three shorter programs so that students could enroll at different times. In other instances, course offerings were rescheduled to coincide with the availability of car pools or public transportation.

In the Community Colleges, community service and noncredit instruction offered opportunities for reduction much like those provided by the summer sessions. In all districts in the survey community service funding was substantially reduced, and it appeared that the reductions were not simply operational, for the changes had longer-term implications:

- The question of which programs should be provided free as a community service and which should be subject to fees has never been one to which a clear answer was available. In at least one instance, the board and administration had been dissatisfied with the ambiguous answer to the question in their district for some time. The passage of Proposition 13 presented them with an opportunity to clarify program purposes and organization. Abolished in 1978, the program was reinstated in 1979 under a new name and under new leadership.
- In several instances, district allocations for community services were reduced in whole or in part with specific instructions that programs be placed on a self-supporting basis. In one instance, for example, a reduction of some 60 percent was accompanied by directions that the board be given periodic reports on the remaining programs and recommendations about progress toward self-supporting status and problems relating to it.
- Where districts did not make provision for any continuing community service funding, it appeared that some grant funds were lost because of inability to meet matching requirements.

The adverse results of the reduction or elimination of community services was summarized in a report to one governing board:

We are no longer serving significant portions of our community which cannot afford to pay the fees, nor are we providing community education programs for which there may be a need but which cannot generate enough income to be self-supporting.

This general statement was supported by detailed reports of specific reductions: recreation programs; movies for senior citizens; and visits by school groups to college facilities, for example. Community service funding supported a wide range of activities: A program for placing students in community volunteer organizations was operated out of the student services office but supported by community service funds. It also was terminated with that funding.

In several districts, the search for self-sufficiency went beyond charging fees for previously free courses or services, and active fund-raising activities were initiated. The reduction of local property taxes also reduced the reluctance of the districts to call on local business and industry for support.

Observations: Our impressions of community service programs and non-credit instruction are nebulous, but our lack of clear perception of the scope of these activities appears to be shared by district administrators. To the extent that actual or expected budget reductions stimulated examination and clarification of community service programs, immediate response was beneficial. But this benefit was gained at the expense of an adverse impact on particular programs that could not be put on a self-supporting basis.

The impact of the termination or reduction of a community service program may go beyond the program itself. Programs such as dance and drama were used to attract low-income and minority groups to the college and, although not documented, administrators believed that this informal familiarity with the college had contributed to increased enrollment of members of these groups in regular courses.

Faculty Adjustments: Primary Reliance on Attrition

Administration of a campus and district requires maintaining a balance among faculty numbers, their specializations, and the numbers and program requirements of students. Unforeseen student demand for a particular program and a vacancy caused by an unexpected faculty resignation are almost routine uncertainties.

In the past, the balance has generally been maintained at school, division, or departmental levels, where there is the greatest familiarity with both resources and needs. Through minor adjustments of faculty workload, scheduling assignments, and use of part-time and temporary faculty, few institutions in the survey found it necessary to change permanent faculty assignments or numbers; vacancies were generally filled on a relatively automatic basis. In 1979, there was clear evidence that earlier, routine management of faculty resources had changed:

- At many institutions, sophisticated information systems monitored faculty assignments and workloads; at others, such systems were in the initial stages of implementation.
- Control over filling vacancies had shifted in many cases to the chief executive officer. If not, the decisions of deans and division heads were circumscribed by policy guidelines.

In a few instances, procedures for managing faculty positions had been in place for several years, either for budgetary purposes or to assure flexibility under circumstances of planned enrollment stability. But in others, these procedures and their operation were responsive to changed conditions: to long-term shifts in the interests of students, to enrollment or financial decline, and to uncertain enrollment and revenue expectations.

Almost all institutions appeared to be changing procedures for management of faculty positions, and at some institutions the procedures appeared to be considered the major vehicle for coping with an uncertain future. As an immediate response to stress, these latter institutions made or were making protection of the jobs of tenured faculty (and sometimes full-time staff) an explicit, first priority in adjustment.

- For the Community Colleges in both 1978 and 1979, protection of faculty jobs also meant protection of existing programs at times of extraordinarily great uncertainty about levels and conditions of funding.
- For all institutions in which attrition seemed to be the primary means of dealing with uncertainty, protecting faculty positions meant tolerating varying degrees of staffing imbalances until they could be remedied as faculty resigned, retired, or died.
- For some institutions, protection of jobs meant reduction of funding for equipment and supplies or for nonacademic services to levels that could not continue for any substantial period of time without an adverse impact on instructional programs.

Observations: When the amount, extent, and duration of funding or enrollment changes are all unclear, preserving the jobs of existing faculty permits an institution to secure its primary resource, its faculty. Equipment, supplies, and many nonacademic services can be reduced temporarily without major adverse impact on instruction. Protection of faculty jobs may not only be an appropriate response to a crisis, but it may be the only one possible within the time allowed.

Reliance on attrition to resolve the longer-term issues of enrollment shifts and probable declines in the 1980's presents great risks, however appropriate it may be as a temporary measure. The first time that faculty jobs are protected by reductions in other areas the action is

consistent with institutional missions and objectives as these are reflected in currently offered programs. But this consistency will be lost over time as vacancies occur on a random basis and as new needs exert pressure for program change. Continued reliance on attrition can have other adverse effects:

1. Instructors may be reassigned to teach in secondary areas of specialization. If the instructor is qualified and brought current in the secondary area, such a reassignment can be beneficial to both instructor and program. On the other hand, without clear qualifications and retraining, the program, the instruction, and the students will suffer, even though a job is retained.
2. Overall institutional flexibility to meet recurring enrollment or financial crises will be reduced substantially as temporary or part-time positions are sacrificed to protect permanent ones.
3. "Making do" with existing faculty may become a habit that delays establishment of rigorous program review and planning procedures. There is a positive attraction to this habit, for reliance on attrition is reliance on "blind justice" in that it depends on random vacancies in the faculty ranks. In a period of our history in which distrust of organizational or establishment decisions is characteristic, "blind justice" is often an accepted substitute for informed judgment.

Enrollments fluctuate among instructional units within an institution, and some faculty will have too many students and others too few because of marginal and unpredictable shifts in student interests. When such shifts appeared relatively permanent during a period of enrollment growth, an instructional unit with too many students would receive newly created faculty positions; one with too few would eventually lose positions as tenured faculty resigned, retired, or died. Two factors changed the situation in 1979:

1. Many institutions recruited faculty in the 1960's to meet a growing and what appeared to be permanent student demand for instruction in the liberal arts and humanities. These faculty had acquired or were acquiring tenure during the 1970's, when student preferences moved to occupational and professional programs.
2. Coincident with the shift in student interest, rates of enrollment growth declined, and overall institutional enrollments stabilized or declined in some instances. New faculty positions for growing programs were no longer available.

Because of these factors, some institutions in the study found themselves with major, internal staffing imbalances that might continue for a number of years. Two of these institutions were relying primarily on attrition to bring faculty numbers into balance with program enrollments.

Administrators recognized that some instructional units had more than the planned number of students, and they knew that some risk to program quality existed. But they did not believe that the risk from staffing imbalance was as great as that which would result from the inevitable disruption and controversy associated with termination of tenured faculty.

Adjustment by attrition is often defended as an humanitarian course in contrast to one which emphasizes program needs. There is some truth in this, but, as a faculty bulletin notes, the ultimate necessity is that "of preserving human beings . . . not just their physical presence." Faculty relief at learning that their jobs will not be abruptly terminated will give way over time to discontent over inequitable workloads, over the inability of strong programs to grow, and for some faculty whose jobs have been saved, over their realization that they are merely marking time and lack a role in the institution.

We would emphasize that we do not and cannot judge whether institutions which relied on attrition were more or less effective in protecting student interests and program quality than were those which considered lay-offs for programmatic reasons (discussed below). Reliance on attrition can be justified by a variety of factors: expectations of stable or only gradually declining enrollments; belief that faculty will tolerate staffing imbalance; perceptions that lay-off of tenured faculty would severely damage the institution.

Against these expectations and beliefs, there is the virtual assurance of statewide enrollment decline and stringent public funding. Each campus and district must assess the risks to its students and programs, and should make these risks explicit. Only if this is done can state and segmental coordinating and governing bodies assure that statewide objectives are being met.

Faculty Adjustments: Primary Reliance on Program Considerations

Three institutions responded to stress by focusing on program issues, which ultimately resulted in termination or lay-off notices to faculty.

One small college lost some 15 percent of its expected revenue in the aftermath of Proposition 13 and SB 154. In addition, enrollment in several areas was not believed to justify continuation of existing staffing. Consequently, five full-time faculty positions were eliminated. In response, four faculty voluntarily terminated their employment. The fifth position was terminated by lay-off, and the termination was successfully defended in court. The collective bargaining agreement specifically delegated lay-off procedures to the board and administration, and, reportedly, the faculty senate did not have a role in the procedures.

Administrators at the institution reported spending an extensive amount of time in developing and implementing lay-off procedures, and attribute much of the success of the litigation to this careful and detailed attention. It was their opinion that current legal requirements could be simplified greatly without substantially impairing the rights of any parties.

Observations: Response by reliance on attrition simply was not possible even had it been considered as an alternative in the above situation. Small campuses have little running room in an emergency. A relatively minor and temporary downturn of enrollment can have serious consequences for there is little likelihood of a cushion of part-time or temporary positions to shelter faculty jobs until uncertainties can be resolved. When such a decline is coupled with an unexpected financial cutback, lay-off is almost inevitable.

At two other institutions, actual lay-offs had not occurred at the time of the interviews, but lay-off notices had been given after an extensive review of program offerings and their relationship to levels of faculty staffing. At both institutions, the probability of lay-offs arose and was considered in the academic year prior to that in which they might be expected to occur.

- At the first institution, a widely representative consultative group had been reviewing program plans for a year prior to the time when the need for detailed staffing review arose. This procedural vehicle was in place and took the lead in developing review procedures, conducting hearings, and assessing staffing needs. Although chaired by a senior administrator, the consultative group appears to have been generally viewed by the faculty as separate from — pejoratively — the "administration."
- At the second institution — unlike the first — procedures for faculty consultation were not in place when the apparent need for a reduction in staffing arose. The initial steps were taken by the chief executive officer who made known his view that (1) any reductions should be discrete and not across-the-board, and (2) that substantial dollar savings could only be achieved through reduction of faculty positions. As procedures were developing, the administration compiled a list of programs for possible reduction, a list eventually reviewed by the faculty senate.

There are two major similarities in the responses of these two institutions:

1. In both instances, issues of apparent overstaffing were openly discussed in terms of specific programs and the resulting need for relocation or lay-off of tenured faculty.

2. In both instances, the staffing issues were raised and resolved prior to the academic year in which adjustment would be required, and at times when the full faculty was available for consultation. Each institution entered a new academic year with staffing levels known to be considered appropriate by both administration and faculty.

There appear to be three major differences between these institutions:

1. In the first, a forum for discussion, review, and recommendation was in place when the staffing issue arose; in the second, these procedures had to be developed under severe time constraints, along with resolution of the issues themselves.
2. At both institutions, the initially expected number of lay-offs was substantially reduced by temporary reassignments. At one institution, however, these had a time limit — that is, an unacceptable staffing level would be permitted to continue only for a year or two until a particular vacancy occurred. In the other institution, it appeared that "temporary" solutions would continue through ad hoc reassignments until unspecified attrition reduced actual staffing levels to that deemed appropriate.
3. At one institution, the applicability of the procedures to future years was not clear. At the other, directions for additional review of program organization and staffing were set.

Observations: In business and industry there are numerous examples of widely varying levels of employment — the construction industry would be a prime example. In professional areas, large architectural firms hire architects and draftsmen for specific projects and lay them off when the project ends; staffing of advertising agencies rises and falls as clients come and go. But in higher education, only staffing for occupational and vocational programs in the Community Colleges appears to fit these examples; even here, radical changes in numbers of instructors are constrained by considerations of facilities.

There are at least four reasons why higher education has greater difficulty in matching staffing levels with workload:

1. The major objectives of instruction in academic areas do not change rapidly — at a high enough level of generality, they may not change at all. Instruction in the fundamentals of English and mathematics is basic, for example. Moreover, each institution may have specific disciplinary offerings that are deemed essential to the mission and objectives of that institution.
2. Instruction is sequential, and the progress of students cannot be turned off and on by program changes without attention to student plans and expectations.

3. The relationship between faculty size and productivity is by no means clear. Overall student/faculty ratios for systems or individual institutions may be useful as rough measures for funding, but they obscure wide variations in actual workloads. The latter depend on modes and levels of instruction, on the availability of instructional assistance, the size of classrooms and laboratories, and administrative and research demands on faculty time, to name some major factors.
4. Tenure procedures protect faculty from lay-offs which would interfere with academic freedom. Policies and guidelines developed over the years by the American Association of University Professors are intended to assure "due process" in lay-offs. As detailed as the current guidelines are, they do not appear to provide the firm assurance of "legitimacy" that they once did (Mortimer and Tierney, 1979, p. 43). Nevertheless, they necessarily complicate staff reduction procedures.

Adjustment of faculty staffing levels may be required in a variety of situations: Substantial revenue cutbacks can only be met by reducing salaries or staffing levels. An enrollment decline may leave a program with insufficient students to justify existing staffing. Enrollment growth or planned change may require that faculty positions (not persons) in a lower priority program be reallocated to a higher priority one. All or any of these situations are probable in the 1980's, and planning and program review procedures which give explicit attention to staffing levels are essential.

Planning and program review procedures in which the possibility of faculty lay-offs is explicit will not be adopted without controversy, but the level of discord can be lowered by judicious administration and careful timing. Administrators must rely on their knowledge of local conditions to determine whom to consult, the extent to which responsibilities can be delegated, and the actions needed to protect valuable but vulnerable programs from the unintended consequences of "self-fulfilling prophecy."

Local conditions will influence timing also, but should not delay establishment of rigorous program review procedures until lay-offs are required by overall institutional enrollment or funding considerations. Less discord will result when there is a "clear and present need for lay-offs," in the words of one administrator, and we agree. But it is only through comparative examination of discrete program priorities and quality that such "clear and present need" can be determined. It cannot be assumed that program priority and quality issues that might (but need not) lead to faculty lay-offs arise only when lay-offs are required by institutionwide enrollment or funding factors.

CHAPTER IV: PROCESS

All institutions have processes for the orderly resolution of program planning and budgeting issues. Such structures and procedures are means of determining response to stress. But if they are not perceived as adequate when the need arises, new or modified procedures can be an intermediate response. In a broader sense, of course, procedures (like administrative "overhead") are means to achieve instructional and research objectives. The best — ultimately, the only — criterion for evaluating procedures is the extent to which they serve such ends.

Ten or fifteen years ago, budgeting, planning, and program review could be discussed as distinct topics — indeed, often they had to be — for they were only tenuously connected in operation. In 1979, the connections among them were strong and explicit in many of the ten institutions in the survey, and were becoming more so in others than they had been in the past. Although budgeting, planning, and program review are becoming less severable functions, they are discussed separately below because of their familiarity. But the lack of definite boundaries between them is reflected in the discussion and will be treated more fully in the observations. A brief look at governance precedes discussion of budgeting, planning, and program review procedures.

Governance

"Governance" is an umbrella term that encompasses all campus and district structures and procedures. It suggests more than the simple aggregation of these, however. Purchasing procedures resolve questions in that particular area on a fairly permanent basis. But governance implies less interest in final solutions to particular problems and more interest in relating all decisions to institutional goals and missions. For our purposes, governance differs from administration in its implication of the need for developing policy, not merely implementing it. Faculty participation in governance and the possible centralizing influence of stress are the two specific aspects of governance which emerged as concerns during the interviews.

Faculty Participation

Instruction and research are professional endeavors, the success of which depends on discretionary activity of individual faculty members in the classrooms and laboratories. Faculty discretion in the substance of education has almost absolute protection under accepted concepts of academic freedom. Discretion in other areas, while broad, is limited by faculty status as employees as well as professionals — they must, for example, account for time and meet classes as scheduled. It is as professionals, however, that faculty advise on programs and review the performance of their peers.

The extent to which faculty participate in governance and are consulted by administrators varies across and within segments.

- At virtually all institutions, administrators agreed that faculty were showing greater interest in governance. Budgetary processes, for obvious reasons, seemed of primary concern, but in several institutions, faculty senates were undertaking time-consuming and extensive reviews of academic plans and programs.
- Faculty interest in budgeting appeared to be expressed primarily through program reviews. It did not appear that any institution had yet resolved issues relating to direct faculty participation in budgeting procedures. But at some, faculty are acquiring working familiarity with the quantitative information used in budgeting and planning. A member of a faculty committee that was reviewing workload data believed that the administration took "an honest but too narrow view of the data," adding that "only the faculty really know what the faculty are doing to produce these numbers."
- Faculty participation in the Community College districts in the survey seemed to be substantially less influential than in the other two segments. In at least two districts, relatively major program changes were made with little or no consultation with the faculty — a program consolidation in one and the establishment of a new program in another. On the other hand, in a third district, administrators thought it necessary to seek informal clearance of critical aspects of program review procedures with the collective bargaining agency before taking these to the board for approval.
- Regarding the hard personnel decisions that response to stress may require, most administrators wanted faculty assistance. All believed, however, that the ultimate responsibility was an administrative one. There were no instances reported of a faculty senate failing to respond to a request for assistance, and faculty senate leaders also believed that decisions regarding personnel lay-off were administrative ones.
- When faculty lay-offs appeared imminent in several institutions, individual faculty members — with or without help from the organized senate — took action to alleviate the immediate pressures. A dean remarked that "they do things voluntarily that I could never make them do." Examples of such action included schedule changes, and voluntary reassignments and leaves.
- The role of faculty leadership in times of stress and uncertainty is reportedly more difficult than in times of growth. The skepticism that faculty normally reserve for administrators spills over onto their own leaders when the latter are seen to agree

with administrators in difficult decisions, particularly when these decisions require consideration of the need for lay-offs.

Observations: Faculty are not only the primary resource of higher education, but they are also the best source of detailed information about programs. In the University and State University, administrators regularly draw on this source for advice, and may be expected to continue to do so in times of stress. Faculty in these two segments appeared increasingly willing to spend time and effort in analysis, in review procedures, and in consultation. Faculty leaders were aware that consensus on decisions was unlikely, but believed that they could (and did) influence administrative decisions by acquiring greater understanding of the reasons for them, including detailed knowledge of sometimes complex formulas and quantitative guidelines.

Faculty leaders, in some instances, spoke of a gap in the understanding of enrollment and financial uncertainties between themselves and the faculty at large. Such a gap may be unavoidable, but both administrators and faculty leaders believed that every effort should be made to narrow it.

We found it difficult to assess faculty participation in the Community Colleges. Undoubtedly, the public school origins of many administrators and faculty may explain the apparent unwillingness or inability to establish the extensive consultative mechanisms found in the other two segments. The necessarily large proportion of part-time instructors at most Community Colleges is a complicating factor, and the multi-college organization in some districts presents an additional difficulty. Were these not enough, collective bargaining seems to have intensified the "we/they" split between faculty and administration. In several districts, administrators noted that lay-off decisions were retained as management prerogatives under collective bargaining agreements. In contrast, both administrators and faculty in the other two segments assumed that lay-offs would be administrative decisions but that faculty would play a vital consultative role in the processes on which lay-offs were based. Community College faculty should, we believe, play a similar role. Protection of the faculty's "bread and butter" concerns is the proper subject of collective bargaining, but administrators and faculty alike need an active forum for sharing professional concerns. Greater participation could be encouraged by staff development programs, but, as one Community College administrator commented, the need for the programs arises when funds and time are not readily available. We see the problem, but cannot offer a solution — other than urging that college administrators add it to their already crowded agendas.

Centralization

An academic plan of one institution in the survey stated well the difficulty with "centralization" as a concept and the reasons why it might be expected as a response to stress:

There is...widespread recognition that no simple solution such as decentralization or centralization exists for... a complex problem — that the most productive way to deal with the problem is through careful analysis of the various functions to be performed and assigning these at the level at which they can be most effectively achieved.

With changes in the law and the economy...the institution... no longer has the fiscal options it once enjoyed. As a result, close attention must be paid to...institutionwide... priorities for resource allocation and to accountability for the effectiveness of resource use.

At the campuses and districts in the survey, many personnel decisions had shifted from departmental or divisional level to the institution-wide level. During times of growth, an instructional or service unit could generally fill vacancies as a matter of routine. In 1979 this was no longer the case, and new procedures generally fell into three categories:

1. Relatively ad hoc selective hiring practices, usually with origins in a brief, blanket hiring freeze. Units in which the vacancy occurred were required to justify replacement in terms of the needs and quality of the specific program. These procedures appeared to emphasize reduction of overall staffing.
2. Relatively structured selective hiring procedures. These also required justification for filling a vacancy but relied on sometimes extensive quantitative as well as qualitative information about all programs. These procedures seemed to emphasize stability in overall faculty numbers rather than reduction.
3. Structured procedures that relied on projections of faculty attrition on an institutionwide basis. Authority to fill a planned number of vacancies was delegated to lower administrative levels.

Administrators and faculty in multicampus districts suggested that centralization of such services as placement and institutional relations could have an adverse impact on the separate identity which they saw as essential to their unit's educational goals.

Observations: Centralization is a pejorative term in higher education. The greater the distance between departmental faculty and a decision relating to their program, the less likely that the decision will be informed by intimate knowledge of program needs. On the other hand, there is greater likelihood that the decision will be informed by the needs of other programs and by institutionwide priorities. The extent to which campus or district administrators believe that a decision must be moved up to higher levels depends both on the function and individual institutional characteristics. But the higher that decision moves, the less credibility it will have with the faculty and with junior administrators whose implementation of it will be critical. If a decision must be centralized, procedures and criteria should, we suggest, be set out as clearly and openly as possible. Ad hoc selective hiring practices may well be unavoidable in a crisis, but they should be included in formal processes at the earliest possible date. Chief executive officers who have been in office for some time generally have the confidence of faculty leadership and, of course, their own staff. But it was one of the latter who, expressing his own confidence in the decision processes at his institution, noted "there are a lot of people around who don't know the chief executive officer as well as I do. They wonder how decisions get made."

Budgetary Procedures

Many critical facets of campus and district budgetary procedures are dictated or strongly influenced by state and segmental guidelines and formulas. Funding formulas relating enrollment to authorized faculty positions through student/faculty ratios were matters of serious concern at some University and State University campuses because of enrollment shifts among disciplines: The necessarily high costs of science, engineering, and music programs, for example, could not be offset against the lower costs of less expensive programs. Community College administrators had less well defined but real concerns about the possibility of similar enrollment-based funding procedures for their institutions. We did not examine state and segmental funding practices in detail, but concentrated on budgetary practices within the control of the districts and campuses.

If budget practices are examined in isolation from planning and program review processes, they do not appear to be substantially changed from prior years. There were two possible exceptions:

1. Traditional budgetary procedures rely on successive reviews of requests from lower-level budget units. Actual or expected financial cutbacks have altered this procedure in some instances, particularly in institutions in which attrition rather than program considerations appeared to play a primary role in adjustment to stress. In the latter cases — and almost invariably in a time of fiscal crisis — the initial step in budget making was determining the funding needed for

current wages, salaries, and fixed costs, and then allocating the balance (if any) of expected revenues.

2. Like all organizations, campuses and districts retained uncommitted reserves for contingencies and unexpected costs and opportunities. Aside from use of reserves to cover deficits from fiscal cutbacks, such reserves appeared subject to substantially greater formality than in the past. Both the amounts and the projected uses of reserves were public knowledge, and applications for their use appeared considerably more routine than in the past. Budget units had regular times to apply for funds to buy, for example, special equipment that could not have been obtained under regular funding. What also seemed well known was the absence of the "pot of gold" in the chief executive's desk drawer to bail out the results of careless departmental budgeting.

Budget practices which gave first priority to wages and salaries were undoubtedly an immediate response to stress, but the formalization of reserve funds seemed attributable more to changing management styles — "Since X became chief executive officer, we've allocated out all available funds as soon as we can. That's his policy."

At an institution which has had a planned stable enrollment for a number of years, 1 percent of the support budget of each budgetary unit has been withdrawn annually for redistribution according to institutionwide priorities. The priorities are routinely determined through the planning and program review processes. This or similar connections between budgeting and planning were emerging at other institutions in 1979 and were more striking than any changes in budgetary procedures themselves.

Observations: As funds have become scarce, the attention given to their distribution and use has naturally increased. Emerging budgeting practices may not be "program budgeting," but program objectives and priorities are assuredly the driving force in resource allocation at many districts and campuses. Even when the cost of survival is measured by current wages, salaries, and fixed expenses before programs are considered, the latter enter into calculations in the distribution of balances for supplies, equipment, and similar support costs.

Plans and Planning Procedures

Formal academic plans result from structured planning processes, but in the past the processes often ceased when the plan was printed. Planning processes are the means to the end of a formal plan, but increasingly these processes are seen as ends in themselves, with short-term or medium-term objectives as products in the context of more stable long-term goals or missions.

Among the ten institutions in the survey, we were shown only three formal plans. Two of these presented current, quantitative, and comparative cost and workload data. The third summarized conclusions drawn from the more limited data available at that institution, and recommended improvement of the data system; none of the plans was printed or illustrated, and all were expected to be revised annually.

At one institution with a formal plan, it appeared that the plan was used during a period of stress to maintain funding for a management information system and as a basis for program consolidation. But for the most part, the plans appeared to be lesser factors in determining response to stress in 1979 than were the results of planning processes (distinct from formal plans) or policy directions given by institutional leaders.

The importance of planning processes over and above possible formal plans was emphasized in two institutions:

- In one, a broadly based consultative group had regularly reviewed program plans prior to the time that response to enrollment stress was required. In 1979, the group widened the scope of its reviews to arrive at recommendations for appropriate staffing of instructional units. The chief executive officer described the planning procedures in an earlier address to the faculty: "Planning and plans are not static, and this whole approach is best conceived as one which always...has a capacity for change and renewal; planning is a process, not a set of statements."
- In the second, an examination of the major premises for ongoing planning began in late 1978 and early 1979. Broadly participatory conferences in 1979 explored the changing environment of the institution, enrollment projections, improvement of undergraduate education, and state and extramural funding trends. At this institution, the chief executive officer had stated some years earlier that "the major focus is on planning as a continual process and not on the production of formal written documents."

Planning and budgeting procedures appeared so closely related in at least two institutions that it was difficult to know where one began and the other ended. The essential links in this integration were ongoing comparative analyses of workload measures and costs in terms of current programs and institutional goals. Resources were shifted at the margins to reduce staffing imbalances and to develop fiscal flexibility for initiating new programs and expanding existing ones.

Meeting the demands of stress in the absence of established planning processes requires strong executive leadership — or at least the willingness to tolerate the almost inevitable controversy that surrounds programmatic and personnel reductions. For example:

- Two chief executive officers essentially asked themselves what specific things their institutions did best in the particular locales, consulted with their senior staff to obtain answers, and only then moved to consultation with faculty. In one case at least, efforts were then made to turn the primarily administrative process into a more broadly participatory one.
- In another instance, administrative determination of over-staffing resulted in the lay-off of several faculty members, all but one of whom resigned.

In the above instances, faculty appeared less receptive to the results of administrative action than they were in other cases where participatory planning procedures were in place when the need for adjustment arose. In part, the contrast may be attributable to the free-floating skepticism with which faculty generally view administrative action, but faculty skepticism also occurs because many members have only limited knowledge of instructional programs in any department other than their own. Moreover, despite widespread publicity about enrollment trends and governmental fiscal conservatism, some faculty members may not relate these trends to their own institutions.

Participatory planning processes reportedly increase faculty understanding of institutional stress. In addition, these procedures alleviate some of the uneasiness that stems from lack of familiarity with the acronyms and manipulations of quantitative budgetary and planning guidelines.

In one institution, immediate response to stress left instructional programs virtually untouched. Before instituting a broadly participatory program review, the administration widely publicized projected enrollment declines both in the institution's newsletter and at a "town hall" meeting.

Planning procedures in at least two institutions were developing slowly because administrators believed that the data available from existing information systems were not adequate. Although all districts and campuses used quantitative data for planning, none used it as more than one of many factors on which decisions were based. None believed that quality could be quantified, but all wanted the most precise data available as a context for judgment.

Observations: Some administrators perceived their planning procedures as adequate and others did not, but all were concerned with assuring that current program decisions were made in the context of long-term institutional goals and missions. The acceptance of operational planning procedures in 1979 enhances substantially, we believe, ability to meet stress in the 1980's.

The rhetoric of many earlier, formal academic plans will not be missed, but planning processes alone should not be considered substitutes for explicit statements of long-term institutional goals which most earlier plans contained. A longer time perspective may help assure balance among instructional and research programs, and may also protect vital support services — information systems, for example, or anticipated equipment needs — from possible erosion.

Inclusion of faculty in planning processes is necessary, but not without risk. Administrators — particularly in long-range planning — must weigh unpleasant contingencies that, if widely publicized, could have very adverse effects on faculty and staff morale. Rumor mills are fueled by the most pessimistic possibilities, and these mills can grind out self-fulfilling prophecies as well as rumors. Participatory planning requires trust and confidence on the part of administrators and faculty, but trust and confidence will be in short supply at an institution rife with conflicting and unfounded predictions of impending doom. We urge faculty participation, but caution the need for sound administrative discretion in the determination of when and how it can be best obtained.

Planning in the Community Colleges seems to differ in two major respects from that in the other two segments:

- Planning for occupational and vocational programs is necessarily short-term, and fragmented by reliance on a number of local advisory groups. For plans that may reach beyond a year or two into the future, administrators must rely on the perspicacity of these advisory groups. In the short term, programs must respond as quickly as possible to local needs.
- Planning for academic programs appears largely dependent on the transfer policies and procedures of the other two segments, particularly as these are interpreted and implemented by the nearby campuses to which most of a college's students transfer.

More so than in the other two segments, Community College planning must assume the need for a wide margin of continuing flexibility and change.

Program Review

Program evaluation is an essential management function. Effectiveness and efficiency are continuing concerns. Enrollment and financial stress impose additional burdens on review procedures.

New Instructional Programs

In the past, new programs were reviewed to assure adequate resources, evident need, quality, and consistency with institutional mission. These

purposes continue, but by 1979, enrollment, fiscal, and other uncertainties had often altered the emphases.

- Greater emphasis was placed on program costs and the sources of funding. A new program could no longer be established without careful consideration of its impact on the budgets of virtually all other programs.
- More careful examination of projected enrollments was evident. Concern about absolute numbers was coupled with concerns about the attractiveness of the program to underrepresented ethnic groups and older students, and about the effects on enrollments across all programs.
- More explicit attention was being given to the impact of the new program on the institution's mission, particularly where attempts were being made to maintain a strong liberal arts program.

Existing Instructional Programs

Until recently, reviews of existing programs emphasized improvement of program quality. They usually were required by segmental policies, focused narrowly on a single program, and often did not stress cost considerations. Procedures for reviewing existing programs had changed substantially by 1979 — more so than those for reviewing new programs.

- At one institution, the programs of all instructional units were reviewed by a broadly based consultative group to determine appropriate staffing levels.
- At at least three institutions, faculty senate groups were similarly examining all existing programs on their own initiative or in cooperation with the administration.
- At an institution which had experienced a series of enrollment declines, faculty review committees reportedly made valuable suggestions for increasing the effectiveness of two overstaffed programs.
- A senate review committee at another institution reportedly was persuasive with school and departmental faculty in its recommendations on filling prospective retirement vacancies.

Community College program reviews were more complex because of the dual missions of both academic and vocational programs. In at least one instance, administrators were working with faculty to develop normative criteria that would be applicable to and overarch the distinct quantitative measures applicable to these different programs.

Administrative Services

Administrative services were rarely subject to routine, periodic review in the past, nor does it appear that past practice had changed substantially in 1979. Earlier review efforts at specific institutions continued into 1979, however, and were said to have informed response to stress in at least three of these.

- In 1975 or 1976, one institution initiated studies to achieve economies in administrative services, and reportedly the need for response in 1978 and 1979 simply meant carrying on with earlier proposals.
- Attempts at another institution to develop quantitative output measures for administrative services are still in progress, but the admittedly incomplete measures were nevertheless said to have been helpful in making reductions in nonacademic areas.
- At a third institution, a centrally located, "in-house" management consulting unit was available to assist instructional and service units with administrative problems. Only a campus or district of substantial size would seem able to maintain such a unit.

Observations: Administration of higher education is almost totally encompassed by, (1) planning instructional and research programs, (2) allocating resources to implement planned objectives, and (3) reviewing and evaluating program operations. In theory each function is linked to the others; each must be performed well for the other two to be effective. In past practice, however, budgeting and planning usually have been the responsibility of separate administrative offices. Program review, a joint administrative/faculty function, was most often limited in scope to specific programs, and rarely included the broader, institutionwide implications of planning and budgeting.

Both scholars and practitioners found serious faults with past practice. A variety of reforms were suggested, the most relevant to this discussion being "Planning, Programming, Budgeting" (PPB), which was intended to integrate the three functions into a system that would encourage rational choices based on analyses of costs and quantified outcomes of alternative means to a particular policy objective. Although PPB and other reforms were logical and reasonable, and most were attempted at various times, none was wholly successful. Not only were there strong vested interests in existing procedures, but in a period of growth, few administrators perceived any real necessity for change.

The changes that we found in 1979 had not been made because they were seen as theoretically more rational than past practices, but because

the latter failed to meet practical needs in responding to stress. What were these changes?

- Budgeting was still concerned with dollar allocations, but there were fewer dollars for discretionary allocation in 1979. Moreover, most dollars were firmly attached to the salary of specific instructors in particular programs and — although less firmly — to the expenses of supplies and other support for that program.
- Plans were still made, but they were not likely to be formal ones or to voice mere aspirations. Often, short- and medium-range objectives were stated in operational terms of numbers of faculty positions and costs of existing programs. Planning processes were being seen as more important for response to stress than formal statements of long-term goals.
- Program review in 1979 was becoming something that was no longer done simply because it was required by higher authority or thought to be helpful only to an isolated instructional unit. Many administrators, as well as faculty, were vitally concerned with all programs and with comparative quality, costs, and relevance to institutionwide objectives.

The millenium of "rational" budgeting and planning sought by many reformers has not arrived, of course. But intensified concern about programs clearly linked budgeting, planning, and program review at some institutions, and was beginning to be so at others. At some, linkage was not evident. Evidence of change varied among the districts and campuses. At some, activity in 1979 was a continuation of earlier efforts at management reorganization; in others, changes were more dramatic. New procedures might generate discussion and analysis comparable to that which surrounded attempts to introduce PPB. On the other hand, continuing reliance on existing procedures might produce little new paperwork.

Our emphasis on local procedures is not based on the naive expectation that substantive response will be inevitably "better" or "more rational." Procedures are only as effective as the people who use them. We emphasize procedures as a response to stress — and as preparation for it — because campuses and districts can use them to impose a little order on the otherwise shapeless threat of uncertainties.

CHAPTER V: CONCLUDING OBSERVATIONS

The four sections in this chapter restate and emphasize major observations from the earlier chapters, extending these to statewide and segmental coordination and governance and to state government. The chapter is not intended to add new descriptive matter. The first three sections attempt to allocate responsibility for response to stress among individual institutions, state and segmental bodies, and state government; the fourth section is a brief, closing comment.

Institutional Procedures and Autonomy

Our observations on institutional procedures clearly border on being recommendations. Assuredly they would be recommendations if the ten institutions in the survey were the only ones in California. We believe that each campus and district should have planning and program review procedures through which program priorities and faculty staffing levels are determined. Questions of faculty relocation, reassignment, retraining, and lay-off should be explicitly raised in these procedures.

The massive planning exercises undertaken by many institutions in 1978 and 1979 need not be done annually. Most were a direct consequence of Proposition 13 and related budget reductions. But at least one such costly and time-consuming exercise may be required at almost every institution for it to be prepared for the 1980's. Issues of faculty staffing must be faced directly (Breneman, 1979):

...when resources are tight, it is foolish to debate issues such as curriculum control without confronting the implications for faculty staffing directly. The 1980s will be a difficult time to consider curricular change, for a shifting pattern of enrollments will threaten faculty members, who will oppose change for the good and understandable reasons of self-interest. There is no recourse here but to meet the issue dead on, linking curricular change to staffing patterns as part of the planning process. At least in this way decisions can be addressed honestly and on their merits, rather than having educational policy determined ostensibly on educational grounds, but, in reality, for reasons of job protection.

We emphasize the procedural link between curricular change and staffing levels because it is almost the only factor that is subject to control at a time when uncertainty surrounds virtually all other aspects of the institution. We share these uncertainties.

- We do not know what will happen to enrollments at any particular district or campus. Demographic projections based on people now alive make serious enrollment declines in the state inevitable; the magnitude of enrollment changes at particular institutions

cannot be predicted. Enrollment change is certain, but the extent of the impact on any one campus or district is uncertain.

- We do not know how the state and segments will fund institutions under conditions of declining enrollment. It is difficult to see how funding can be disconnected entirely from enrollment, however, or how funding for higher education can be isolated from the still unclear consequences of state spending and taxing limits or from inflation. Fiscal stringency in state funding appears unavoidable, but its extent has yet to be determined.
- We do not know what substantive decisions institutions should make in response to stress. We do know that such decisions must be made, and that to make them each campus and district must deliberately consider program and personnel changes that might lead to the lay-off of tenured faculty. The question of whether or not program changes should be made which would require lay-off of faculty must be asked. We do not know what answer will be given, but the question is likely to require answers on an annual basis.

To state the matter another way, administrators and faculty at individual campuses and districts can do very little to avoid adverse enrollment and financial changes in the 1980's. We do not discount efforts to enroll currently underrepresented groups, for example, nor efforts to increase extramural funding. These efforts may well moderate enrollment and financial stress at some places, but probably not to the extent that will render consideration of substantial program and personnel changes unnecessary. Both the quality of the program and personnel decisions and their acceptability to internal and external constituencies will depend largely on the procedures through which these decisions are made. It is within the control of administrators and faculty to establish these procedures before questions of lay-off arise, to subject them to review and open discussion, and to examine fully such constraints as law, segmental policy, and collective bargaining to which they may be subject.

There is no "one right answer" to the question of what planning and program review procedures will be effective in responding to stress. From our interviews with administrators and faculty, the following were considered desirable at one or more institutions:

1. The campus or college mission should be so stated that it provides guidance to planning processes and program review.
2. There should be a forum for annual discussion of all current issues concerning instructional plans and programs. The forum should be as broadly participatory as the environment of the particular campus or district permits. It should be seen as advisory to the chief executive officer but not simply as an extension of his office.

3. Budget procedures, decisions, and allocations should be subordinate to and follow planning and program decisions.
4. Budget procedures should stress annual recapture of funds for redistribution, and procedures for redistribution should be linked to the results of planning processes and program review to the extent possible.
5. Planning processes and program reviews should address appropriate staffing levels from an institutionwide perspective. Although recommendations on precise staffing levels should be explicitly sought, decisions about individual faculty and staff should be reserved to the chief executive officer and to administrative processes.
6. Campus and district administrators should support faculty interest and participation in planning and program review procedures to the extent feasible, particularly in providing quantitative data and assisting in their analysis. It is not clear how, if at all, faculty should participate in budgeting procedures to the extent that these are distinct from planning.
7. Program reviews by individual campuses and districts for internal use should not be used by state agencies and segmental central offices for comparisons across institutions. Answers to questions of state and segmental coordination and governance will be found only if studies are designed expressly to obtain them.
8. A file of all current documents relating to planning and budgeting and their outcomes should be available to all faculty, students, and staff at a convenient location.

Emphasis on procedures is not without peril, for it is possible to become so fascinated with them that their ultimate purpose may be lost. In the present context, procedures for identifying and adjusting faculty workload and program costs to enrollment changes may be seen almost as ends in themselves. The natural disinclination to lay off colleagues may be reinforced by sophisticated information systems and procedures that can be used to avoid such an unpleasant task. Highly refined procedures should not obscure the hard, substantive questions that must be asked and answered: Is a program essential to the campus mission? What priority does it have relative to other programs and services? At what level should it be staffed?

Information systems and quantitative procedures may reveal areas in which economies can be achieved without program changes that would threaten the jobs of tenured faculty. Such procedures can be a means to the end of job preservation, but they should not be so used unless

and until they have served their primary purpose of informing decisions about program priorities and appropriate staffing levels.

The particular structures and processes which an institution adopts for planning and program review must be tailored to its individual characteristics. The ten campuses and districts in the survey were very different from one another; response to stress varied with institutional history, size, mission, and location. Although there was some questioning of state and segmental guidelines, our impression was that administrators and faculty were largely free to adapt response to stress to local conditions. We would urge that this freedom be maintained, and that state and segmental authorities impose blanket rules for response to stress only after careful review and extensive consultation. Every requirement or mandate on a statewide or segment-wide basis is not only a direct limitation on local options but is also one more demand on finite administrative time available for consideration of the options that remain. Senior campus and district administrators must have unstructured time for planning, consultation, and communication.

Continuation of what appears to be substantial autonomy may well depend on rigorous and effective planning and program review procedures. Only such procedures and implementation of decisions reached through them can provide assurance to external constituencies that freedom is being well exercised.

Coordination and Control

The Postsecondary Education Commission and the three segmental central offices exercise varying degrees of control over public campuses and districts. We did not examine the procedures of these coordinating and governing bodies in any detail, but state and segmental policies are the context in which institutional freedom to respond to stress is found and in which planning and program review procedures must operate. Much of the uncertainty that caused stress at the districts and campuses in 1979 was beyond the control of state and segmental coordinating and governing bodies, and they will have little control over major aspects of uncertainty throughout the 1980's.

Although inflation, taxing and spending limits, and demographic trends are beyond their control, state and segmental coordinating and governing bodies can formulate and clarify policies and procedures in at least six areas. Two of these are stressed particularly in this report:

1. Procedures. Segmental expectations relating to a variety of institutional procedures for response to stress should be explicit. At a minimum, we suggest, segments should require planning and program review procedures in which consideration of faculty staffing levels in instructional units is explicit. In addition, budgetary guidelines indicating expected expenditure levels for such items as equipment, supplies, and

maintenance would highlight the importance of instructional support that is highly vulnerable in times of stress: deferral of maintenance causes no immediate pain; diffuse support reductions may be seen as an equitable sharing of distress. But at some threshold program quality will suffer. Rigid, non-negotiable budget formulas should be avoided, but segmental statements of reasonable ranges of expected institutional support could avoid creeping erosion of program quality, conscious or unconscious, caused by shifts of funds from support to wages and salaries.

The operation of institutional procedures should be monitored for compliance with state and segmental policies as in the past, but detailed planning, program review, and staffing determinations should remain with individual institutions.

2. Institutional Enrollments. For a period of growth, California's 1960 Master Plan for Higher Education recommended minimum, optimum, and maximum full-time enrollments for all public colleges and universities (Smelser, 1974). Enrollment ceilings effectively limited the size of the largest institutions, and some assurance of access was provided by redirection and referral procedures. Within institutions, discrete program enrollments were controlled by varying closing dates for applications.

As enrollments decline, enrollment management and assurance of access may require different procedures, and coordinating and governing bodies should, we believe, review their responsibilities in the light of these expected statewide declines.

Some institutions will be better able to attract students than others, and "popular" ones may be able to maintain stable or even growing enrollments from a diminishing applicant pool — but at the expense of severe declines at neighboring campuses. Better qualified and more mobile students will have their choices among institutions enhanced by competition; less qualified or less mobile students may find that the programs at the only institution available to them have been crippled by the severity of enrollment decline. State and segmental bodies will, we assume, regulate the fairness of competition for students should this be necessary. But adverse results from fair competition are possible.

It is easier to discuss management of student flow than to accomplish it. An institutional administrator suggested that the policy tools for such management would include eligibility standards, differential institutional and segmental functions, and pricing considerations. These are blunt instruments, and they are near the core of state policy for the organization of higher education.

Can or should the coordinating and governing bodies assume any responsibility for the size of campus and district enrollments? Of segmental enrollments? If so, how can this responsibility be exercised? We do not know the answers, but we do believe that answers should be found. The effectiveness of campus and district planning is dependent on knowledge of whether and how state and segmental enrollment policies will affect an institution's attraction for students.

The four additional areas in which increased attention by state and segmental coordinating and governing bodies may be required are:

3. Information. The Postsecondary Education Commission and the segmental central offices have more extensive facilities for the collection and analysis of information than do most of the individual institutions. A joint, coordinated, and continuing effort by these agencies and the Department of Finance to refine enrollment projections would provide a useful context for local projections. In addition, a similar effort should be made to inventory current information demands on the institutions and to explore ways and means of reducing the amount of data and the reportedly duplicative collection of it.
4. Admissions. Under the 1960 Master Plan, wider choice among institutions is given to applicants with better formal academic qualifications. These differential admissions policies and the exceptions to them should be subject to continual monitoring, review, and assessment, for they represent a major restraint on competition for students.
5. Articulation. Issues raised by student transfers from a Community College to a four-year campus are intensified in times of stress. The value of student choice among institutions has always been in tenuous balance with that of the receiving institution's responsibility for its own programs. We inferred that the requirements of some academic programs were such that prospective freshmen found it necessary to enter a four-year campus immediately after high school to graduate in four years. In some areas, this difficulty may have been compounded by the apparently narrowing scope of academic offerings in the Community Colleges. The Master Plan's suggested ratio of 60 percent upper division students to 40 percent lower division ones appears to have fallen into desuetude. Cause and effect are difficult to assess, but — to state an extreme case — if the Community Colleges are to lose their transfer function, the loss should not be simply an unintended casualty of institutional competition for students.

6. Remedial Education. The continuing decline in the academic preparation of high school students has been a matter of public and professional concern for some time. Concern will grow with the increasing proportion of applicants from high schools that have not traditionally contributed to the higher education pool. Problems in this area are legion: motivation of students and recognition of it; assurance of formal prerequisites and of transition from a high school environment to a collegiate milieu; provision of general and specialized tutorial and counseling services; and determination of the distribution and level of funding for all of these. Ultimate responsibility for solving these problems will be with individual institutions and with essentially voluntary, regional arrangements. But there are limits to what individual institutions can do, and outside help seems essential. Unavoidable lack of preparation must not be allowed to close the open door that assures every California resident of access to higher education. Major issues of remedial education — the incidence of costs; facilitation of interinstitutional agreements — would seem to require statewide and segmental coordination, cooperation, and resolution.

These six issues are not new, but the need for attention to them is now more urgent than in the past. Competition for students raises serious concerns (Glenny, 1979):

The competition for students in the next ten years will become more and more rapacious; many of us will be ashamed of the used-car salesman techniques that will be used to proselytize students.

Historically, colleges and universities have attracted and retained students through the quality of their academic programs, and this form of competition characterized the ten institutions we visited in 1979. But increased enrollment stress may tempt institutions to adopt inappropriate competitive means, to lower admissions standards, to dilute program rigor, and to engage in dubious recruiting practices. Statewide and segmental coordination and cooperation will not prevent temptations from arising, but they can limit the adverse results of yielding to it.

State Government

The line between responsibilities that are primarily those of state government — the Governor and the Legislature — and those that belong to state and segmental coordinating and governing bodies is not always an easy one to draw. Who, for example, if anyone, should determine what student recruiting practices are "fair" in the probable competition for enrollment? There are three areas, however, for which state government clearly appears to have primary responsibility: state budgeting

practices, community services policies, and Community College district residency requirements.

State Budgeting Practices

Considered program and faculty staffing adjustments cannot be made quickly because of student expectations and contractual commitments. State "transitional" financial support could avoid the adverse effects of ad hoc reductions. The need for such funding appears to have been recognized by the Governor and the Legislature in a 1979 special appropriation bill (AB 1173), which provided \$2 million of one-time support to the State University (State of California, 1979).

...to lessen the negative impact of enrollment declines and budget restrictions on the instructional programs and, to the extent feasible, to lessen the negative impact on the upward mobility and affirmative action programs.

We hope that this recognition will continue, and that the state's executive and legislative fiscal agencies will understand and tolerate the necessarily complex and deliberate planning and program review procedures of higher education.

Without, we hope, discouraging transitional support, we are concerned that well-intentioned but delayed and essentially ad hoc support may be detrimental. Considered response to stress depends on the credibility of decisions reached through planning and budgeting procedures. The seriousness with which these procedures are undertaken will suffer if the results are negated after conclusions have been laboriously reached. Institutional planning will be effective only if the participants expect the results to be implemented.

Institutional planning will be more effective if it is accompanied by reasonable expectations of state funding, and one chief executive officer suggested that multi-year funding on some minimum threshold basis could alleviate much of the uncertainty. We agree. The Governor and the Legislature face actual revenue uncertainties that are compounded by political ones. But these uncertainties have bounds. An unexpected recession may reduce the lower boundary; so may fundamental changes in budgeting authority — Propositions 13 and 4 or the drastic cut in income taxes proposed on the June 1980 ballot. Usually, however, the "largest determining factor of the size and content of this year's budget is last year's budget" (Wildavsky, 1964, p. 13). The two-year funding for the Community Colleges enacted in 1979 (AB 8) indicates that multi-year support is not beyond legislative competence.

That multi-year funding could not be freed from revenue uncertainties was reflected in AB 8 by provisions for reductions if state revenues in 1980-81, the second year of funding, fall below a specified level. One administrator criticized this feature as adding more uncertainty to an already confused situation. This would not seem to be the case;

the provisions expressly recognize an unavoidable uncertainty which state government must pass on in its appropriations to state agencies and in local subventions. Greater stability for planning is provided by the express statement of one limit to uncertainty and the conditions for its resolution than it is by leaving the entire matter open for later political solutions.

A related issue concerns state funding of Community Colleges after 1980-81. Should state support continue under statutory formulas for the Community Colleges, or should support be based on procedures more consistent with those applicable to the other two segments? Or does the unavoidable need for reexamination of Community College funding procedures suggest a broader assessment, one that would encompass the other segments and perhaps student financial aid as well? These questions, of course, can only be answered in Sacramento, but prompt attention to them is required. The trauma of delayed funding that the Community Colleges suffered in 1978 and 1979 can be avoided in 1981.

Community Services Policy

We admit to confusion about community services programs in the Community Colleges. Historically, local needs and desires have been supported mainly by local funds. We have not attempted to probe very deeply into the diversity of local responses that have resulted. In addition, administrators are perplexed by fluctuating state policy on the funding of noncredit courses. The Board of Governors is currently investigating policies on credit and noncredit courses, and the study may give insights on two related matters which we see as a source of uncertainty that state government could clarify:

1. We assume that equalization of support for educational programs across Community College districts will remain a principle of state funding policy. But are equalization policies applicable to what appear to be essentially social service, entertainment, or welfare programs that have been encompassed by "community services" in the past?
2. We assume that "fee-for-service" funding will continue to be considered appropriate for many avocational programs. But does the state have an interest in continuing specific programs for senior citizens, children, or others who cannot afford the fees that would be required to make the programs fully self-supporting?

Community College District Residency

Students may be admitted to any of the University or State University campuses regardless of their places of residence in California. On the other hand, with certain exceptions, attendance at a Community College is restricted to students residing in the district. When the bulk of educational costs were derived from local taxes, this restriction assured local benefits. As the larger proportion of support has shifted from local to state funds, the apparent need for the restriction has diminished.

The move away from residency requirements, if it should be made, should be a cautious and considered one. The restrictions were factors in determining college locations and in shaping curricular development, as well as protecting local taxpayers. Regardless of sources of financial support, Community Colleges should remain responsive to local needs, and proposals for "free flow" of students across district boundaries should not inadvertently delete "community" from "community college."

More than Survival?

In 1975, The Carnegie Foundation examined the future in a report entitled, More than Survival: Prospects for Higher Education in a Period of Uncertainty. They chose the title, "More than Survival," because of the "great and continuing purposes of higher education and the new opportunities now lying before it." The subtitle, "in a Period of Uncertainty," was added because of "the dangers and uncertainties and the importance of effective policies." We pose the title as a question for each campus and district.

Probably, virtually all of California's public higher education institutions will survive as organizational entities. Lewis Mayhew notes (1979, p. 2):

Among the factors contributing to longevity, being a public institution helps. States having a vested interest in their institutions simply do not allow them to die. They may undersupport them and they may require retrenchment but they do not kill them off, even when a rational analysis indicates — as in Minnesota, Montana, and Wisconsin — that these institutions are maintaining more campuses than are needed.

But to do more than simply survive, colleges and universities must maintain program quality through policies and processes that impose order on uncertainty to the extent possible. It would be foolish to predict that the most effective procedures will improve the quality of existing programs, but honest assessment of program quality, priorities and staffing can afford at least a small measure of assurance that

student needs will be met as they arise. It is unlikely that such procedures can be established without controversy and contention. If they are not, however, California's remarkable system of higher education may fall into disarray as each institution settles into a patchwork offering of programs and services determined by expediency, seniority, and self-interest.

APPENDIX A
INSTITUTIONS IN SURVEY

Two-Year College Districts

El Camino Community College District
Mt. San Jacinto Community College District
San Jose Community College District
San Mateo County Community College District
San Diego Community College District

Comprehensive Universities and Colleges

California State University, Dominguez Hills
California State University, Hayward
San Diego State University

Research Universities

University of California, Davis
University of California, Los Angeles

APPENDIX B
ADVISORY COMMITTEES

Advisory committees for the survey consisted of the chief executive officers of the ten institutions in the survey, or their representatives, and representatives of the three segmental central offices and of the California Postsecondary Education Commission. A meeting at the beginning of the survey was held to review survey procedures and instruments. Following the field interviews, a draft of the report was reviewed at another meeting. The campus and district representatives who attended one or both meetings are:

Lawrence Davenport, Provost
San Diego Community College District

Thomas B. Day, President
San Diego State University

Jerry C. Garlock, Associate Dean - Research
El Camino Community College District

Robert W. Glock, Assistant Vice Chancellor, Planning and Budget
University of California, Davis

Milo P. Johnson, Superintendent
Mt. San Jacinto Community College District

Robert A. Kennelly, Vice President for Administration
California State University, Hayward

Gerald Kissler, Assistant Director of Planning
University of California, Los Angeles

Donald A. MacPhee, Vice President, Planning
California State University, Dominguez Hills

James H. Meyer, Chancellor
University of California, Davis

Otto Roemmich, Chancellor
San Jose Community College District

Glenn P. Smith, Chancellor
San Mateo County Community College District

Representatives of the segmental central offices and of the Postsecondary Education Commission met with the campus and district representatives. Some also attended other meetings or discussion at which institutions

were selected or the segmental aspects of the survey discussed.
Such representatives who attended one or more such meetings are:

James Albertson, Special Assistant to the Academic Vice President
University of California Systemwide Administration

Patrick M. Callan, Director
California Postsecondary Education Commission

William Craig, Chancellor
California Community Colleges

Glenn P. Gooder, Interim Chancellor
California Community Colleges

John Harrison, Associate Director
California Postsecondary Education Commission

Peter Jegers, Coordinator, Office of the Academic Vice President
University of California Systemwide Administration

Kenneth B. O'Brien, Associate Director
California Postsecondary Education Commission

Keith Pailthorp, Executive Assistant
California Postsecondary Education Commission

William H. Pickens, Director of Fiscal Analysis
California Postsecondary Education Commission

John R. Richards, Senior Administrative Analyst
California State University and Colleges

Jesse Shaw, Associate Director of the Budget
University of California Systemwide Administration

John M. Smart, Assistant Vice Chancellor - Institutional Relations
California State University and Colleges

Donald C. Swain, Academic Vice President
University of California Systemwide Administration

REFERENCES

- Balderston, Frederick E. *Managing Today's University*. San Francisco: Jossey-Bass, 1974.
- Bowen, Frank M. and Lyman A. Glenny. *State Budgeting for Higher Education: State Fiscal Stringency and Public Higher Education*. Berkeley: Center for Research and Development in Higher Education, 1976.
- Breneman, David. "Economic Trends: What Do They Imply for Higher Education?" *AAHE Bulletin*. September 1979.
- California Postsecondary Education Commission. *Report of the Director*. Sacramento, October 1979.
- Callan, Patrick A. *California Postsecondary Education: Challenges and Constraints. Summary of Testimony to Committees of the California State Legislature*. Sacramento, 1979.
- Carnegie Foundation for the Advancement of Teaching. *More than Survival: Prospects for Higher Education in a Period of Uncertainty*. San Francisco: Jossey-Bass, 1975.
- Glenny, Lyman A. "A Bleak Prospect for Colleges and Universities." *The Center Magazine*. July/August 1979.
- Learn, Elmer W. "Inflation — What Is It? — How Do We Cope?" Background Paper, Chancellor's Management Conference, Davis, May 1975.
- Mayhew, Lewis B. *Surviving the Eighties: Strategies and Procedures for Solving Fiscal and Enrollment Problems*. San Francisco: Jossey-Bass, 1979.
- Mortimer, Kenneth P. and Michael L. Tierney. *The Three "R's" of the Eighties: Reduction, Reallocation and Retrenchment*. Washington, D.C.: American Association of Higher Education, 1979.
- Smelser, Neil J. "Growth, Structural Change, and Conflict," in Neil J. Smelser and Gabriel Almond, Eds. *Public Higher Education in California*. Berkeley: University of California Press, 1974.
- State of California. *Assembly Bill 1173*. 1979.
- University of California. *Administrative Information Systems in the University of California. Management Information Systems Task Force Report*. Berkeley, April 1976.
- Walton, Clarence C., Ed. *Inflation and National Survival*. New York: The Academy of Political Science, 1979.
- Wildavsky, Aaron. *The Politics of the Budgetary Process*. Boston: Little, Brown and Co., 1964.