1980

A theory of prescribed academic change : the case of Title IX

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College of William & Mary - School of Education

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A THEORY OF
PRESCRIBED ACADEMIC CHANGE:
THE CASE OF TITLE IX

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of the School of Education
The College of William and Mary

In partial fulfillment of the
requirements for the degree of
Doctor of Education

by
Judith Patten Newcombe
May 1980
A THEORY OF
PRESCRIBED ACADEMIC CHANGE:
THE CASE OF TITLE IX

by
Judith Patten Newcombe

APPROVED

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A THEORY OF PRESCRIBED ACADEMIC CHANGE: THE CASE OF TITLE IX
CHAPTER I

INTRODUCTION

Many observers of American higher education would agree with Baldridge’s contention that "The modern university is in turmoil and the changes that are overwhelming it are outrunning our ability to understand them . . . the academic community has become a complex political tangle, with forces inside and out struggling to gain control over its destiny."¹ Unfortunately, interpretive literature and research have failed to keep pace with the dynamics of the increasingly complex change process in higher education. Nowhere is this lack of theoretical and empirical information more pronounced than in the areas of change implementation and impact.

During the past decade, colleges and universities have witnessed a rapid expansion and intensification of external pressures for major policy changes. Among the most influential of the forces for academic reform are the federal legislative and judiciary systems. Specifically, federal mandates have recently become crucial factors in initiating change and, perhaps, in shaping the future of higher education in the United States. Current theories of change, innovation and reform fall short of providing explanations of the impact of mandates on the process of academic change.
The Problem

Academic response to federal mandates is a fairly recent phenomenon in this country. Historically, there are few examples of equivalent external government interference with institutional policies and practices, and the probability that such governmental involvement will cease or decrease in the future appears remote. Not only have recent federal mandates affected policies and decision-making, they often have struck at the very core of cultural, social, institutional and personal value systems. Yet studies regarding the implementation of governmental directives are rare and there were no theories of mandated educational change.

This study was directed toward the discovery of a grounded theory that identifies the conditions and processes which facilitate effective implementation of federal mandates. One major research question guided the investigation: What are the key variables, which influence, and how do they interact to influence, an institution's ability to successfully adapt programs, policies and practices in compliance with a federal mandate? Because of data accessibility, the study focused on the interpretation and implementation of Title IX of the Higher Education Amendments of 1972 and the accompanying regulations and guidelines for elimination of sex discrimination in athletics.

Background

In June, 1972, the Congress passed Title IX, a law which prohibits discrimination by sex in educational programs and organizations that receive federal money, and which affects nearly every educational institution in the United States. Originally introduced in 1971 as an amendment to the Civil Rights Act of 1964, the law emerged as Title IX
of the Education Amendments of 1972, a broad-scale bill covering a range of federal assistance programs. The opening statement of the law reflects the spirit of the legislation: "No person in the United States shall on the basis of sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance . . . ." The primary objective of the law is to end sex discrimination in American education, including nearly 2,700 post-secondary institutions receiving federal assistance in any or all of its various forms. Title IX "is by far the broadest and most comprehensive of the sex discrimination laws affecting schools." One of the six major issues addressed by the law, and perhaps the most controversial, concerns athletics. The regulations for implementing Title IX require that educational institutions provide equal opportunity for both sexes to participate in intramural, interscholastic and intercollegiate athletics.

The responsibility and jurisdiction for interpretation and enforcement of the law rest with the Office for Civil Rights (OCR) of the U.S. Department of Health, Education, and Welfare (HEW). Although Title IX was adopted into law in June, 1972, it was not made effective in higher education until July 21, 1975. During the three-year interim, institutions were instructed to complete a self-evaluation and to begin taking steps toward program revisions through voluntary compliance. The "final Title IX Regulation Implementing" documents were issued by HEW in June, 1975. On December 6, 1978 HEW issued new policy interpretations regarding Title IX and intercollegiate athletics. The basic compliance concepts underlying this latest policy draft are 1) to assess existing program compliance based on per capita expenditures, and
2) to ensure that athletic program offerings increase as an outgrowth of appropriate institutional policy.

Prior to 1975, female participation in sports had been limited largely because of the social attitudes and educational values of the times. Most colleges and universities historically have emphasized intercollegiate athletic competition for men. Although not the most critical issue in terms of social and educational sex discrimination, the lack of opportunities for female participation in organized competitive athletics represents one of the sharpest examples of inequality between the sexes. During the 1970s, the number of women participating in intercollegiate athletics has more than doubled. This expansion, as reflected through financial expenditures and program development, provided a rich data source as well as a complex and dynamic focal point for research concerning the implementation of organizational change brought about by federal mandates.

Assumptions

In order to conduct this research, it was necessary to make the broad assumption that Title IX has had an impact on higher education and that the extent and direction of this impact could be examined through changes and differences in intercollegiate athletic programs. One point was clear: as Title IX was introduced and went into effect, campus athletic opportunities for women increased in quality and quantity. Realizing that major policy change in higher education can often be traced to more than one source, it cannot be assumed that Title IX alone was responsible for all reforms which the investigation discovered. However, uncovering the origins of change was not the purpose of this inquiry. Regardless of whether or not a direct cause-effect
relationship was in operation, the nature, rate and degree of measurable change in athletic programs throughout the past five years allowed for and supported the assumption that institutional interpretation of and implementation efforts toward compliance with Title IX were reflected in the status of their athletic programs. It was further assumed that change in relevant major policies and practices during the period under investigation was related to the timetable and strategy employed by HEW with regard to dissemination and enforcement procedures of the legislation.

Definition of Terms

A number of key concepts are essential to this study. In order to clarify these terms for future reference, several operational definitions have been formulated. First, academic change refers to alterations in general policies and procedures in educational institutions which may or may not include structural changes. This term is not restricted to the formal curriculum. For the purpose of this study, academic change includes any change within an academic institution brought about by federal mandates, and encompasses the extracurriculum and athletics. Second, academic change is defined as either innovative (unforced) or prescribed (forced) change. Innovation, in this investigation, may result from the original prescribed change brought about by the federal mandate. For example, the implementation process at a given institution may involve innovation in interpretation and application of federal guidelines prescribing the change. Third, reform is a broader conception of the change process and implies that implementation has, in fact, occurred and practices have been altered. Institutions defined as having undergone reform are characterized by measurable differences in provisions for sex equality in athletic programs throughout the past five
years. Fourth, since effective (successful) implementation is a critical element in the study, criteria for defining this concept have been established as: 1) the degree to which athletic program components reflect the intent of the federal guidelines to eliminate sex discrimination; 2) the rapidity with which major change occurred during and following the voluntary compliance period; and 3) the perceptions of college and university constituents affected by change with regard to the success of institutional efforts to comply with Title IX athletic regulations. Finally, the terms institutions, colleges, and universities are used interchangeably throughout to describe formal educational organizations at the post-secondary level.

Purpose and Significance

The purpose of this study was to develop a grounded theory that identifies the conditions and processes which facilitate successful implementation of federal mandates in higher education. Understanding the circumstances under which effective change results from mandates involves either the verification of existing theory or the generation of new theory. Indeed, the wider the gap between available relevant paradigms and the problem under investigation, the greater the need to proceed with inductive rather than deductive research methodology. Because there was no theory of the implementation of change precipitated by mandates, this study utilized an inductive approach.

There is substantial agreement among educational researchers with respect to the scarcity of literature on change processes. Moreover, a review of the literature on organizational dynamics indicated that little systematic research has been done on academic change. Most research on this topic has failed to integrate findings into an overall
theoretical framework, and few paradigms of organizational theory are capable of handling the dynamics of a complex university. Of foremost concern to this study was the conceptual poverty about the implementation phase of organizational change. Furthermore, there was virtually no theory based on empirical evidence which attempted to describe the process or impact of change in the extracurriculum.

Because of the need to employ an inductive approach, this study focused on the discovery and development of a grounded theory of academic change. Grounded theory has been defined by Conrad as "theory generated from data systematically obtained and analyzed." This approach, appropriately employed in absence of existing theory, led to the generation of a theory of mandated academic change based on empirical evidence.

Why examine the dynamics of prescribed academic change from the perspective of extracurricular reform? Hefferlin contends that change in the formal curriculum, although more complex and restricted, follows the lead that research and the extracurriculum take. The volunteer activities of the extracurriculum have their own patterns and priorities. Here change and diffusion occur more rapidly due to fewer structural constraints. The dynamics are, perhaps, easier to understand and the outcomes more readily identified and measured. In turn, the impact of major extracurricular change is eventually likely to affect the formal curriculum. Athletic programs, a specific target of mandates to end sex discrimination, have long been a major aspect of the extracurriculum on the college campus. It was therefore appropriate to utilize this rich informational source as a vehicle through which the processes of academic change could be investigated and analyzed.
In approaching a solution to the theoretical problem confronting the investigator, it was necessary to examine the extent to which colleges have complied with the implementing regulations and guidelines of Title IX. At the same time, it must be made clear that this study was not descriptive in nature. The prime concern was to identify the underlying conditions leading to the effective implementation of mandated change. The research involved systematic data gathering and analysis aimed toward building a theory identifying and explaining the patterns of successful implementation.

**Overview**

The major conclusions which emerged from the review and appraisal of the literature are presented in the following chapter. Chapter III contains a description of the research tools and procedures employed, including the constant comparative method of guiding data collection and analysis. The following chapters include the presentation and examination of data, emerging variables and related theoretical components. Finally, the findings and conclusions of the study are synthesized into a set of formal propositions and the grounded theory of effective implementation of prescribed change is presented.
Footnotes for Chapter I


6. HEW is a federal agency within the executive branch of the government. Functioning as a regulatory body, HEW is empowered to: 1) grant federal assistance to programs and activities as directed by law; 2) issue regulations, requirements, and orders of general applicability consistent with the objectives of federal statutes; 3) seek compliance by institutions through voluntary means and negotiation; 4) use limited discretion in allowing institutions a reasonable time period to comply with regulations and/or take appropriate measures to evaluate and correct past discriminatory practices; 5) enforce compliance with requirements and regulations, after notice has been given, by a) termination of or refusal to grant or continue financial assistance after opportunities for hearing, and finding failure to comply with a requirement, and b) by any other means authorized by law, including referring the violation to the Department of Justice for appropriate action. HEW’s Office for Civil Rights carries a major portion of the responsibility for dealing with matters concerning discrimination. OCR assists in the interpretation and implementation of HEW regulations, deals with questions and complaints, encourages compliance and assists in determining enforcement priorities.


8. Ibid., p. 1.


14 Ibid., pp. xx, xxi.
CHAPTER II

REVIEW OF THE LITERATURE

The most comprehensive body of knowledge relating to the study of academic change focuses on innovation rather than prescribed reform. "Innovation" is defined as an idea or practice new to the potential users. An innovation is often justified on the basis of its anticipated consequences for improving capability for accomplishing organizational goals. "Prescribed change," for the purpose of the study, was described as a category of innovation in which the source, nature, and direction of change are pre-determined by agencies external to the organization. In order to provide an overview of the existing literature on the dynamics of educational reform, this chapter will review the literature on organizational change with special reference to the implementation of innovation. A review of existing research on prescribed change is also presented, with major emphasis placed on affirmative action studies; relatedly, literature dealing specifically with Title IX implementation is examined.

Innovative Change

An extensive background of literature on organizational change has influenced recent research on academic innovation. From this large body of knowledge several models have emerged to guide investigative efforts. Approaches to the study of change fall basically into one of two categories: planned change or unplanned change. The critical
factor in delimiting and categorizing alternate models centers around how the theorist perceives the dynamics of the change process within the organization itself. There appears to be consensus among authors writing on academic innovation that the source of most major change can be traced to pressures and demands external to the educational institution. The key factor is the manner in which the organization appears to respond to anticipated need for change. Are the processes and outcomes primarily influenced or controlled through internal application of a planned change strategy, or are they more likely to be unplanned reactions brought about by a complexity of organizational dynamics and external pressures? The answer to this question represents the common point of departure among leading theorists on the subject of academic change.

Unplanned Change

Clark Kerr perceives academic change as proceeding in a haphazard manner. He writes, "The academic community, regardless of the particular process involved, is more changed than changing; change is more unplanned than planned." Several theorists and researchers provide evidence that educational reform has indeed been characterized by developments unrelated to what might be considered a rational planning process. For our purposes, unplanned change can be broken down into three separate sub-categories: the complex organization model, the political model, and the grounded theory of academic change. Each one is discussed below.

Complex Organization. One approach to the study of academic change involves understanding institutions as complex organizations within the educational system and within society as a whole. The organizational structure and its components, as well as the interaction between the organization and its environment, are viewed as critical
elements in the change process. Katz and Kahn present an open-systems model of organizations which guided much of the early research on academic change. When viewed as an open-system, an organization is influenced by the forces and pressures of both external and internal constraints as change occurs. According to this view, an institution is particularly vulnerable to and continuously influenced by external forces created by the relationship between the organization and the society which it functions to serve. Proponents of the complex organization theory stress the importance of the effects of internal structures and roles, called "adaptive sub-systems," in organizational attempts to respond to pressures for reform.

Griffiths elaborates on the complex organization perspective by employing a system theory to the study of change. He argues that an organization as a system is composed of complex elements of mutual interaction and functions as a part of the larger social system. The organization is characterized by the dynamic interplay of its sub-systems and the unrelenting pressures from its supra-systems or environment.

Hefferlin reported the results of a comprehensive study on the sources of institutional vitality. Academic developments at over 100 colleges and universities were examined and systematically compared. The major goal of the study was to identify factors that stimulate enterprising educational change. Three major findings emerged. First, no single factor appears to be a sufficient or an invariably necessary element in accounting for the differences which exist among institutions in their amount of reform. Instead, a network of factors—attitudes, procedures, mechanisms, pressures—appear to be involved. Second, although administrators and faculty members tend to think that the
primary factor in the process of reform is personal orientation of the members of the institution, environmental factors appear to play an equal, if not greater role. Third, while external resources and rewards are significant in affecting the process of reform, institutional differences in orientation and structure also affect the process. He further notes, "Among these differences are the attitude of the most influential members of the institution, the distribution of influence among members, and the simple expansion of the institution itself."  

Hefferlin contends that colleges and universities, when analyzed as complex organizations, have more than the usual number of constraints and distinctive structural characteristics predisposing them toward stability. He further explains, "The key to academic reform is that of resources. . . . a new program will be tolerated if it costs no money or brings its own support. . . . it will be actively opposed and accepted only under duress if existing resources must be divided to include it."  

This tendency is viewed as the fundamental reason why the source of academic change has been and continues to be predominantly outside the education system. The resources that support the system and often the change overwhelmingly come from outside the institution.  

With regard to implementation, Hefferlin found that the introduction of "new blood" through the process of turnover among personnel was a correlate of organizational dynamism. In general, Hefferlin found that innovation and reform occur more readily in small colleges which are less complex and less decentralized. These institutions, along with the less well-established universities, are more vulnerable to external pressures and constraints.
Although proponents of the complex organization perspective do not ignore internal dynamics, they largely view educational change as a response to environmental pressures and demands. Thus, the complex organization model focuses on the underlying sources of change and serves to guide researchers in identifying factors which may enhance or inhibit an organization's ability to reform. It fails, however, to follow through with the dynamics of the change process itself, particularly with regard to the outcomes of pressures to change once the need for alteration has become known or an innovation has been introduced. The importance and internal dynamics of the implementation phase of the change process are largely ignored.

**Political Model.** The unplanned nature of academic reform has also been explained through analysis of the political dimensions and interactions within and surrounding the educational system. The political model, best described by Baldridge in his report on an in-depth case study at New York University, focuses on the formation, action, power and influence of interest groups in shaping major policy. Baldridge argues that to understand the changing modern university, decision-making activities must be seen as a political process. The study of conflict between interest groups serves as the underlying point of departure among proponents of the political interpretation of the university.

The political model has several stages which center around the policy forming processes. According to Baldridge, the system functions as follows: a complex social structure generates pressures for institutional change, many forms of power and pressure impinge on decision-makers, a legislative stage translates the pressures into policy, and a
policy execution phase finally generates feedback in the form of new conflicts. Baldridge suggests that decisions shape the organization's future and, in turn, become major points of conflict. The political maneuvering among vested interest groups attempting to influence these decisions becomes the key element describing the change process. During the constant struggle for control a new series of problems is generated and the process is characterized by dynamic self-perpetuation.

Harvey and Mills, two theorists who apply a political perspective to organizational innovation, identify bargaining among concerned groups to protect and enhance their own interests as a major dynamic in the change process. They further hypothesize that when a problem arises, routine solutions are likely to be imposed unless the pressure to change is great.

The political model suggests that the most useful approach to the study of change is through analysis of the organization's social structure, interest articulation dynamics, legislative process and policy execution. The political model provides researchers with valuable insights regarding the dynamic process of academic change, particularly with regard to the potential effects of organizational politics on decision-making. The inability to predict the direction and force of the conflict and power generated by interest groups suggests why the initiation of innovation and the resulting policy decisions are unplanned. The political approach, however, has limited applicability unless it is used in conjunction with and supported by other major theories of educational change. The model focuses explicitly on organizational politics and may break down in the implementation phase of the change process since little explanation is offered describing the course of events which follow a decision for new
policy execution. In the analytic interpretation of the university as a political system undergoing reform, the mechanistic procedures often associated with change and the conditions which act to facilitate implementation and/or compliance are largely ignored.

**Grounded Theory of Academic Change.** In a more recent investigation of the nature of academic power in the change process, Conrad focuses on the sources, internal dynamics, and agents involved in university decision-making. Following investigation and systematic analysis of the events and developments leading to curricular reform at four postsecondary institutions, an alternative model for guiding research in academic change is presented in the form of a grounded theory. The theory outlines five overlapping stages in the change process. In the first stage, change is initiated through external and internal social structural forces which threaten the status quo. Next, in response to these pressures for change, interest groups with differing values and goals emerge. Conflict occurs as groups attempt to translate opposing viewpoints into effective influence. In the third stage an administrative agent intervenes, providing impetus for re-examination of the existing program by selecting a controlling mechanism for change. Fourth, a recommendation for change is presented and, finally, policy is determined in the appropriate decision-making body. Throughout the last two stages, power is exerted and countered through faculty advocacy until only two major opposing coalitions remain in the power struggle. Administrators then enact a brokerage role between the remaining groups in order to facilitate a compromise. A decision is reached to change the academic program in the direction of the group exerting more power.

The "grounded theory of academic change" is similar in many respects to the political model, particularly with regard to the for-
mation of and conflict between interest groups and their utilization of power and influence to shape new policy. The major point of departure occurs in the role definition of the administrative change-agent throughout the last three stages of the decision-making process. Conrad perceives administration itself as a vested interest group capable of exerting a substantial amount of power. The administrative role goes beyond that of mediator as the leader acts to facilitate or resist change. The outcome of this interplay of power and influence between the administrative agent and other interest groups is reflected in the selection of the policy-recommending body. It is this understanding of who has academic power and, more specifically, how it is used that distinguishes Conrad's approach from the political model. Among the models and research on organizational change, the grounded theory comes closest to linking pressures and conflict to actual processes and policy. This model offers an insightful approach to studies of academic change which focus on initiation and formulation of policy; however, Conrad fails to address the implementation phase of the change process.

In summary, the complex organization perspective establishes the institution as an open-system responding to environmental pressures through adaptation. Change is imposed and the resulting alteration in structure or policy is essentially unplanned. In both the political model and the grounded theory of academic change, the internal social structure of the university becomes the key element in analyzing the organization's response to pressures for change; institutional change is viewed as a dynamic process influenced by the formation of interest groups and the resulting power conflicts. The political approach appears to be cyclic, encompassing a series of recurring political events in which one power shift initiates another. Conrad's grounded
theory clarifies this perspective by suggesting a set of relationships between political concepts, and links the complex organization approach to the political model by accounting for the processes through which pressures are translated into policy decisions and program changes.

When viewed collectively, the models presented suggest a fairly solid argument for describing academic change as an unplanned process. Individually, however, the models appear to be short-sighted or lend themselves only to very limited application. For example, the open-systems perspective concentrates exclusively on the initiation phase of the change process, while the "grounded theory" selectively emphasizes the internal dynamics of curricular reform. Of critical importance, however, is the fact that the theories are not contradictory. Each model builds upon the others, serving to clarify and reinforce various components and underlying premises. Together the theories link pressures to policy and specific outcomes. Yet the central question guiding this study remains largely unanswered: What occurs beyond the decision-making stage as new policy is implemented?

Although the literature on unplanned change is lacking in substantive theory with regard to implementation, two major concepts have emerged which may be useful in studying this process. First, a multiplicity of internal and external factors account for an organization's ability to respond effectively to the impetus for change. Heff erlin emphasizes the continued influence of the institution's environment throughout the change process by identifying the need for additional resources in facilitating change. Both Heff erlin and Conrad provide evidence that the power and attitude of leaders within the organization significantly affect the amount and direction of reform. The latter
study specifically describes the influential nature of the leadership role through administrative selection of particular types of decision-making bodies. Additional factors, such as reward incentive and the availability of supportive sub-systems to facilitate change, are assigned importance in the implementation phase of academic innovation.

The second viewpoint which permeates the literature on unplanned change regards the tendency of educational institutions to maintain the status quo. Leading theorists, viewing patterns of change as complex and dynamic, collectively describe the process as an approach-avoidance conflict. As the impetus for change is felt and gains momentum, it likewise triggers the organization to react to protect itself. The political predisposition of leaders and the attitudes of influential participants are perceived as critical elements in the decision-making process. If the major power base includes the well-established traditional leadership and vested interests, it appears that routine solutions are likely to be employed and "reform" is likely to consist of merely a few minor adjustments.

A combination of the major theories reviewed in this section provides a general framework for guiding further research on academic change. The studies have, however, been consistently retrospective. They begin with the outcomes of innovation and trace backward through processes and procedures to examine the sources and nature of change. The methodological necessity for approaching academic innovation from an ex post facto perspective may explain the paucity of related literature on implementation. In order to gain a clearer understanding of the entire change process, particularly with regard to implementation of innovations, it is helpful to consider the large volume of material on planned change.
**Planned Change**

The planned change perspective suggests that change processes within an organization are rational and intentional. The major focal points are the processes and participants of innovative reform, and the general consensus is that the organization can control and facilitate change. However, there is some disagreement among authors with respect to whether the source and initial impetus come from within the organization or from external pressures.

Bennis, Benne and Chin define "planned change" as a "continuous, deliberate, and collaborative effort to improve the operations of a system . . . through utilization of scientific knowledge." In the 1960s, a number of scholars reported and elaborated on concepts of social and behavioral change and offered suggestions for practical application of existing theory in a variety of systems including organizations. Early descriptions of the process of planned change focused somewhat haphazardly on how change is created, implemented, evaluated, maintained and resisted. The role of the change-agent was consistently emphasized. This material on organizational change, and particularly academic change, was largely descriptive and research findings were limited with respect to applicability. Most authors appeared to focus narrowly on one or two specific aspects or phases of the process, and no single integrated, substantive theory emerged. However, these studies did lay the groundwork for the body of literature on planned academic change and the development of change strategies which followed.

Lewin, an early proponent of planned reform, views successful change as a three-step procedure involving unfreezing a group's per-
formance or behavior level, moving to a new level, and freezing group behavior on the new level. For effective long-term change, Lewin recommends the group decision procedure to diminish opposing forces and reduce resistance. With regard to change involving social habits, values and customs, he suggests that the change-agent attempt to alter group standards rather than expect to influence individuals to adjust personal value systems.

Geiger, another theorist addressing the difficulties inherent in precipitating behavioral reform, expresses concern for the rate and success of any change which requires an alteration of social values. He argues that the major conflict is an intrinsic "cultural lag" which he defines as "the antique dualism between fact and value."

Benne suggests that deliberate change facilitates organizational growth. The concept of "growth" is described as the increased ability of a social system to face and solve its problems. Applying a problem-solving approach to change, Benne discusses the role of the change-agent and emphasizes the importance of opening communication channels and encouraging feedback. Lippitt, Watson and Westley developed the concept of the change-agent as a free agent from outside. They contend that change is likely to occur when authorities can be made confident that an innovation has the potential to produce a more desirable state of affairs within the system.

Bennis expanded the change-agent concept with a client-system approach to organizational change. He asserts that "the process of planned change involves a change-agent, who is typically a behavioral scientist brought in to help a client-system, which refers to the target of change. The change-agent, in collaboration with the client-system,
attempts to apply valid knowledge to the client's problems." Bennis believes that the change-agent can be crucial in reducing resistance to change by providing consultation and psychological support during the transitional phases of reform. He defines "power" as the ability to influence, and advocates a combination of improved management and applied knowledge from the behavioral sciences for coping effectively with pressures for change. Further, Bennis views the quality of the relationship between the change-agent and the client-system as pivotal to the success of an innovation. Bennis was one of the first theorists to isolate and emphasize the importance of implementation as a special process. He describes the implementation phase as encompassing development of an understanding of and commitment to a particular innovation, as well as creation of devices whereby change can become an integral part of the system's operation. Stressing the importance of human response, Bennis argues that most theorists tend to overemphasize the importance of intellectual understanding of the intended change. If an intended change is perceived as threatening to the social life space or self-image of individuals, safeguards must be provided to insure new forms of gratification and self-evaluation in order to induce acceptance. According to Bennis, "The change program must include emotional and value as well as cognitive . . . elements for successful implementation. It is doubtful that relying solely on rational persuasion is sufficient." 

Several researchers in attempting to identify critical variables in the academic change process support the idea that the role and influence of the change-agent are significant. A considerable body of evidence indicates that in an educational setting the change-agent is generally a member of the organization and most frequently an adminis-
trative leader. For example, Greely sought the causes of academic improvement at several Catholic colleges and found that the institutions which had made the greatest improvement were marked by independent and intelligent administrative leadership. Similarly, Davis surveyed 136 private liberal arts colleges and found the leadership style of college presidents to be highly related to innovation. Drawing from a large body of research in the social sciences, Cartwright and Zander conclude that the nature of a group's leadership clearly makes a difference to many aspects of its functioning, including its attitude and progress toward change.

Armstrong studied the impact of academic innovation on university support systems in order to identify consequences which occur as a result of major change. She found that the extent of operational change in the sub-systems was related to the degree of pressure and support of top administrative officers, the degree of commitment to the innovation by lower administrators, and the degree to which the innovation affected the clients of each sub-system.

A proliferation of diffusion and adoption studies in the 1950s and 1960s paved the way for much of the current research on acceptance of innovations. Concentrating on the processes rather than sources of change, these studies identified a multitude of factors accounting for organizational resistance to change. In turn, various strategies for successful innovation began to emerge.

In a comprehensive review of research on innovation in general, Rogers has identified eight major types of diffusion studies and proposes a model to explain why individuals adopt or reject innovations. Drawing from over 1,500 studies, he lists numerous generalizations and
categorizes empirical research which supports and/or conflicts with each major concept. Culminating this extensive review, he abstracts five policies which appear to be critical for successful academic reform: testing the effectiveness of innovations, creating a mechanism to facilitate change, improving communication on innovation, selecting faculty oriented to innovation, and using informal channels of communication to diffuse information.

Mort studied the tempo of academic change for more than two decades. In a review of his work on diffusion lag, twelve major findings emerge. Those of central concern are summarized as follows: 1) the spread of an innovation through the American school system proceeds at a slow pace; 2) the time lag, which is measured in decades, is more pronounced during the initial and final stages of innovation while the middle stage of adoption is characterized by fairly rapid, widespread acceptance; and 3) innovations that increase educational costs diffuse more slowly.

Reporting his findings on organizational change in industry, Zander defines resistance as "behavior which is intended to protect an individual from the effects of real or imagined change." He argues that when one begins implementing, the social system of the organization must be altered in some way. The creation of this change can cause the development of resistance in those influenced by the proposed change. Zander believes that resistance can be prevented to the degree that the change-agent can bring about awareness, understanding and acceptance among participants.

An extensive collection of literature on educational change in the lower schools appears in Miles's _Innovation in Education_. The author
identifies several factors which contribute to resistance to reform.
Miles contends, that, in addition to institutional "ripeness," several characteristics of the innovation itself have an effect on its acceptance: 1) innovations which are incongruent with the potentially accepting system tend toward retarded diffusibility; 2) innovations implying or requiring value changes will encounter difficulty, as will those which involve role changes among participants; and 3) innovations with built-in implementation supports generally diffuse more rapidly. He identifies three organizational "prior-state factors" which influence the change process. First, administrators are viewed as crucial to the process of change. Consequently, the tenure of key individuals in a system affects its ability to respond through change. Miles purports that the longer the tenure, the more stable the patterns of interaction, and the more difficult change becomes. Second, structure and tradition within the educational system tend to reward conformity rather than initiative and reform among participants. Third, professional ideology appears to support resistance to outside interference with regard to educational change.

According to Miles, initiation for change comes from external sources in most cases and, in turn, innovation is likely to meet with resistance in the early stages. Based upon these major findings, Miles suggests that institutions create new structures to aid implementation and systematic evaluation of innovations. He defines "strategy" as a means for causing an advocated innovation to become successfully installed in an education system, and suggests the idea of controlled conflict as a promising concept in selecting an effective strategy for implementation. Miles further attributes many adoptive failures to 1) negative or conservative reactions, 2) inadequate planning particularly in the imple-
mentation stage, 3) insufficient preparation for those who will be involved in the change, 4) lack of commitment by faculty or community, and 5) deficiencies in resources or power.

Underlying the early literature on planned academic change is a basic belief in participatory decision-making, particularly in the initial stages of innovation. In brief, this process entails mutual goal setting, collaborative efforts toward reform, and gaining consensus and support among participants through sensitive but productive leadership and open communication.

Until the current decade, authors focused on the initiation stage of the innovation process. Research on resistance and adoption was limited to the beginning phases of implementation. Recently, there has been some recognition of implementation as a vital and distinctive process which has been largely neglected in earlier research.

Cross et al. reported the findings which emerged from an intensive study of the fate of an educational innovation that was introduced in an elementary school. The research objective was to isolate factors that inhibit and facilitate the implementation phase of planned change. Four basic stages of innovation are described: 1) the introductory period, 2) the period of initiation, 3) the period of attempted implementation, and 4) the period during which the innovation is incorporated into the organization. The authors contend that the degree to which an innovation is implemented is a function of a number of variables in addition to initial resistance or receptivity to change. They argue further that innovations often fail and promising educational programs become ineffectual simply because they were never properly implemented.

Results of the case study led to the conclusion that conditions which
blocked implementation could be located in two fundamental deficiencies in the strategy employed: 1) failure to identify and articulate difficulties teachers were likely to encounter, and 2) failure to establish and use effective feedback mechanisms. 48 The overarching conclusion was that although initial acceptance is important, resistance can develop among organizational members who are positively oriented to the change after the innovation has been introduced. This latent resistance appears to be a consequence of the frustrations experienced in attempting to implement the innovation. 49

Gross and his colleagues contend that the performance of administrators can have critical bearing on the implementation of innovations not only through reducing resistance by power equalization, but also by establishing and maintaining conditions which will facilitate subordinate efforts to adapt. Specifically, subordinates have a right to expect management to 1) provide them with a clear picture of new role requirements, 2) adjust organizational arrangements and policies to make them compatible with the innovation, 3) provide necessary resources, 4) provide the required retraining experiences, 5) provide the appropriate supports and rewards to maintain willingness to make implementation efforts, and 6) be committed to an innovation it expects them to implement. The findings suggest that the extent to which these expectations are recognized by administration, built into its strategy and conformed to, will have a direct bearing on the degree to which subordinates implement organizational innovations. 50

Innovations in Organizations by Zaltman et al., represents a recent and insightful attempt to describe the variables and conditions affecting the process of innovation adoption by organizations. The
authors evaluate the characteristics of organizations in terms of structures and processes which facilitate and inhibit change, and explore the kinds of environments that are conducive to the introduction and diffusion of innovations. They present a model for the change acceptance process which involves two basic stages: the initiation stage and the implementation stage. Examining the ability of organizations to respond to environmental pressures for change, the authors hypothesize that institutions characterized by "organic" (less rigid) ways of operating are more suitable for initiating innovations. On the other hand, effective implementation of change requires greater control of a more "mechanistic" (formal) mode of operation. Ideally, an organization needs both organic and mechanistic components to initiate and implement change. The authors emphasize that in the implementation stage, a higher level of centralization and a lower level of complexity are likely to reduce role conflict and ambiguity which could impair implementation.

Zaltman views the dynamics of the implementation phase as crucial to the actual effects of planned change. Effective resistance can readily occur during implementation. Such resistance can be manifested through active rejection, lack of support, tactical manipulation at operative levels of implementation, and passive resistance through half-hearted efforts in adopting prescribed changes. The implementation stage is often characterized by considerable conflict and disequilibrium. As the innovation becomes a reality, latent animosities and feelings of loss of power are apt to become manifest. The model separates implementation into two sub-stages: initial implementation and continued-sustained implementation. It may not be until the innovation reaches this second sub-stage that organizational members become aware of all the
ramifications of change. Unanticipated problems may arise and resistance may become stronger and more widespread.

With regard to innovation at large, Zaltman contends that resistance can occur at any or all stages of the process. The authors point out numerous structural factors in organizations which are sources of resistance including stratification of the power structure, division of personnel into interest groups which are in competition for resources, role expectations which frequently function to maintain the status quo, hierarchical differentials and the accompanying fear of depreciating one's own status within the organization, and traditional reward patterns.

Zaltman and his co-workers observe that the improvement of interpersonal relations and the resolution of conflict are crucial to organizational innovation. In turn, the authority structure of the organization is a critical factor in gaining the commitment, attitudinal changes and behavioral acceptance required for successful use of an innovation. The effectiveness of innovations is often contingent upon "management-decision variables" which can be manipulated or controlled. The authors stress the importance of the decision-making process in all stages of innovative change: "Decision makers satisifice rather than maximize..." The participative approach to decision-making is viewed as facilitating innovative reform only when organizational members feel some benefit or reward for their efforts. Active participation among members, they contend, provides channels for feedback and opportunities for discontented individuals to communicate grievances. Feedback serves the purpose of "guiding and controlling" the processes of innovation adoption and implementation. The authors further recommend that the organization develop formal integrative conflict-reducing mechanisms to deal with interpersonal issues.
The studies presented by Gross and Zaltman represent the most systematic attempts at isolating and identifying variables which function to facilitate or impede innovative reform during the implementation process. Unlike the suggested administrative strategy recommended in the Gross study, Zaltman's approach to planned change incorporates components of the complex organization perspective and the political model. Two other authors have expanded this concept, presenting the combined approach to planned change.

Surveying over 4,000 studies of planned change, Havelock and his associates identified a number of attributes of a "healthy organization." The authors emphasize dissemination as the crucial phase in planning for innovation and describe three major models for studying organizational change: the research, development and diffusion process; the social interaction approach; and the problem solving approach. Viewing effective planned change as a combination of these approaches, the authors present a "linkage model," synthesizing the separate strategies into a comprehensive theory. The linkage model is supplemented by a series of guidelines for effective implementation as a combined strategy for planned change.

Expanding Havelock's work, Lindquist presents a comprehensive strategy for change which incorporates four separate models: rational planning, social interaction, human problem solving and the political approach. In his recent study of the change processes in higher education, Lindquist reviews the existing theories and then "tests" them through an examination of the case histories of seven colleges attempting to bring about major reform. He cites convincing evidence which points to the consistently documented inflexibility of educational institutions.
and suggests several reasons for the rarity of academic change. Lindquist argues that "Colleges and universities combine deeply rooted norms, values, structures, sub-groups and power relations with great complexity, low formalization and decentralization of control. Many new ideas penetrate such organizations but very few can budge the status quo . . . rarely does reform or innovation of much magnitude get implemented." Lindquist believes that the inability of educational institutions to change stems in part from a complexity of political norms and inattention to training which might lead to open collaboration. He further points to the division of the university into isolated sub-groups as a deterrent to reform. He suggests that an effective change strategy must, in turn, provide a means for building coalitions among interest groups which have very few common interests. Lindquist describes the typical college governance structure as "a maze of overlapping or competing committees and administrative offices." The corresponding and complex decision-making process perpetuates the static nature of higher education. In addition to the obstacles of change found in this type of oligarchy, he identified a blockade embodied in faculty-administrative power struggles. "The locus of power . . . will tend to lie among senior faculty leaders and high administrators who are respected and esteemed for long devotion to the status quo but whose influence is strongly checked by departmental and professional control over most teaching and research functions." Based on his analysis of empirical studies in relation to existing models and change strategies, Lindquist postulates a new, integrated theory of change which describes innovation in terms of "adaptive develop-
ment." The keys to success in each stage of the adaptive development model are "interpersonal and informational linkage, active openness, facilitating as well as initiating leadership, ownership by those who can make implementation happen and rewards both material and psychic." His major conclusion is that planned change requires the integration of several strategies, the combination of several roles and skills and the establishment of various services designed to facilitate adaptive development.

In the recent book, Dynamic Educational Change, by Zaltman et al., the authors approach planned change from a generic perspective, dealing with the mechanics of introducing change in a variety of educational settings and providing explicit guidelines and principles for the effective management of change. The authors contend that the motivating forces for institutional change can usually be traced to demands for the school to respond to the socialization needs of society or to use of the schools to solve social problems. They group the numerous factors which influence the context and process of change into three major categories including the nature of the teaching profession, the configuration of the educational system's constituencies, and the influence system (multilevel governance and control). The complex pattern of factors which characterizes the educational setting is further compounded by a variety of perspectives with regard to expectations for performance of the school system. In turn, the success of a change program may be judged quite differently, depending upon the perspectives of the individuals or groups involved. Zaltman and his colleagues suggest that a change agent or planner develop a framework for organizational/environmental diagnosis based on five analytical viewpoints: 1) the
organizational climate; 2) the nature of the organization's environment; 3) the relationship between system and environment; 4) the characteristics and perspectives of the individuals involved in the change process and/or affected by it; and 5) the nature of the intended change. The authors contend that with this background of information, effective strategies for planned change can be developed.

An insightful chapter on "Forces for and against Change in Education" appeared to be of particular relevance with regard to the study of implementing change. The authors provided useful information for identifying and analyzing expectations, resources, constraints, attitudes, perceptions, values, norms and relationships as these factors combine to influence the rate and direction of organizational change. Performance gaps were identified as providing the major force for change in education. Performance gaps can be created or intensified through unrealistic or changed expectations, new personnel or new treatment of existing personnel, technological changes, power changes, perceived change in a reference group and other factors. Resistance to change, viewed as "a necessary and healthy phenomenon," was attributed to cultural barriers and ethnocentrism, social and organizational barriers, organizational rigidity, psychological barriers, and the nature of the innovation. Other perspectives on resistance were considered, including the personality factors of organization members and incompatibility between the change advocate and the individuals involved in the change process.

The authors conclude that the complex nature of educational change necessitates a broad and flexible approach on the part of change planners. They review a number of organizational change models and analyze each model with regard to its potential application as an appropriate change
strategy. An eclectic model, the Proactive/Interactive Change Model, (P/ICM), for diagnosing, planning and changing educational systems is presented. This model is designed to guide continuous development and renewal within the organization. In brief, the P/ICM combines a problem-solving process with significant attention to the individual need dispositions of the organization's human constituency. The model's critical concepts include "open system, flexibility, system/environment linking, informed/collaborative decision making, unconstrained human interaction, and multidirectional communications flow." In applying the P/ICM as a strategy, the early change-related activities are directed toward assessing clients' needs, effective use of knowledge, and achieving implementation. During the implementation process, control (systematic manipulation of key variables) becomes important as the means for sustaining the change(s). The authors perceive a sound evaluation program as imperative throughout the implementation process.

In the final chapter, the authors summarize "essential guidelines" a change planner should follow. The guidelines are presented in the form of 300 straightforward principles derived from and organized according to the context of each preceding chapter. The "Basic Principles for Educational Change" are based on a unique combination of common sense, familiarity with the operation of the educational system, and research findings. Consequently, the authors have provided a valuable resource for efficient use by change strategists, as well as an organized list of propositions and/or checkpoints for researchers in the area of educational change.

In summary, the literature on planned change is particularly useful in explaining how innovations are initiated and received in an
organization. The importance attributed to the role of the change-agent is consistent among the researchers. Much attention is also given to the necessity of subordinate participation throughout the change process as a means for gaining acceptance of the innovation. The work by Bennis is representative of the views held by leading theorists in the 1960s. Bennis proposes a rational approach to change. His strategy suggests that the involvement of an outside change-agent to equalize the power distribution will lead to successful reform. His model focuses entirely on the policy-recommending phase and fails to explain what happens before or after this stage of the total change process. Neither can he account for the political dynamics of the organization's informal sub-systems.

Diffusion and adoption studies deal primarily with adoption rates of relatively simple organizational innovations and/or education practices. However, as crucial as specific case studies are in understanding change, they fail to explain the nature of prediction or control and provide an incomplete explanation of sources and informal processes of change. Diffusion theorists assume that communication and interpersonal influence will bring about effective reform. Rogers's model is useful in explaining why individuals accept or reject innovations, but it is of little value in explaining the dynamics of organizational change.

Several authors consider resistance to change as the major variable related to the fate of an innovation. Miles identified several attributes of innovations as well as numerous organizational characteristics which function to inhibit the change process. His work is fairly speculative, and he tends to conceive the problem of implementing change as one of overcoming initial resistance by organizational members. The consensus among most advocates of planned change is that resistance
can be prevented. It is assumed that strategic leadership by the change-agent can bring about awareness and acceptance among participants. In contrast, Zaltman (1977) views resistance as healthy and necessary. However, he supports the concept that conflict and resistance can and must be controlled during the implementation phases of organizational change.

There is little substantive evidence to support many of the theoretical components of early planned change strategies. For example, no long range studies are available to test the major assumptions that: 1) participatory decision-making as opposed to authoritative demand will facilitate planned change, 2) persuasion and motivation rather than tangible rewards lead to wider acceptance and implementation of innovations, and 3) that a change-agent, armed with a rational strategy, can overcome the political nature of shifting academic power bases in controlling the outcomes of change. The theories of the 1960s were largely normative, based on behavioral research in isolated situations, and remain substantially untested.

Researchers in the 1970s began to offer new insights into the more practical aspects of the change process, particularly with regard to implementation. Gross points out that in previous studies, the major explanation offered for the success or failure of organizations to implement innovations assumes that members are initially resistant to change and that it is the ability of management or a change-agent to overcome their resistance that accounts for the success or failure of implementation efforts. His research produces evidence that resistance can develop among members who were once positively oriented to change if certain obstacles produce frustration during adaptive efforts. Gross
suggests a practical strategy for implementing change which is useful for administrators who desire to facilitate the active utilization of a minor innovation. His strategy reflects a common sense approach, dealing exclusively with technical and procedural aspects of implementing change. Furthermore, his conclusions are based on a single case study involving innovation on a very limited scale and contribute little to the understanding of comprehensive academic reform.

Zaltman and his associates, 1973, appear to present the most coherent and useful theory on organizational innovation to date. Zaltman describes change as involving two distinct stages with fundamentally different processes: initiation and implementation. He argues that an institution requires both organic and mechanistic components to respectively initiate and implement change. Several structural changes within an organization are recommended for innovative success. These include the development of formal conflict-reducing mechanisms to deal with interpersonal issues. Current interpretation of effective participatory decision-making differs somewhat from that of earlier authors. Both Gross and Zaltman prescribe greater responsibility as well as power and authority for internal administrative leadership in implementing planned change.

Three comprehensive strategies for planned change emerged as a result of efforts to combine the numerous empirical research findings and various theoretical models available on organizational change. Havelock's linkage model reflects an awareness of the complex functioning of numerous variables affecting the change process. His theory seems refreshingly broad and insightful. The major shortcomings appear to be: 1) failure to account for the effects of power struggles and dynamic
interaction of conflicting interest groups described by the political model and verified in the grounded theory of academic change, 2) the abstract nature of the theory which precludes its practical application, and 3) the lack of empirical verification of several theoretical components.

Lindquist's work includes an especially thorough, systematic review and analysis of relevant literature and a well documented interpretation of the nature of academic institutions and educational change. Many aspects of his recommended strategy for planned change have potential for shaping reform efforts. The theory as a whole, however, lacks integration, is notably cumbersome and idealistic, and remains largely untested.

The Proactive/Interactive Change Model presented in Zaltman's recent work (1977), focuses on situational diagnosis and interaction to a greater extent than other models. In planning for educational change, Zaltman emphasizes that even the earliest change-related activities should be oriented toward achieving implementation. The extensive set of common sense principles provided for adaptation and utilization by change strategists accompanies and complements the P/ICM. Many of the principles, however, have not been empirically tested in higher education, and no attempt has been made to incorporate the guidelines into a single, comprehensive theory of academic change.

In general, the collective body of literature on planned change is helpful in identifying possible barriers to successful innovation and particularly in understanding the nature of the initiation and acceptance of change. When approaching the study of academic reform from the planned change perspective, a dichotomy becomes apparent: the research suggesting
that change is often effectively resisted is convincing, thereby undermining the fundamental assumption that such resistance can be controlled through rational planning. The planned change models lack integrity as researchers have yet to establish systematically that any of the suggested strategies can, in fact, be successfully applied to produce desired organizational change. In brief, the problems related to planning for change appear to outweigh the solutions with respect to empirical evidence and theoretical verification.

Summary

There is a large body of literature and research on innovation and organizational change in general and academic change in particular. Although researchers acknowledge that change does occur in the educational system, the overwhelming consensus is that higher education is characterized by rigidity with regard to innovation and reform. Most studies conclude that what little change does occur is initiated and shaped more by external pressures than by internal control (Katz and Kahn, Miles, Lindquist, Hefferlin, Zaltman). Collectively researchers concur that inertia, reward and structure favor tradition and perpetuate the status quo. Leading theorists further agree that innovation which is compatible with existing roles and values is more likely to succeed, whereas change which is perceived to threaten values, security or status of key personnel or influential groups or participants is unlikely to succeed (Zaltman, Geiger, Bennis, Hefferlin, Baldrige). Therefore, most scholars conclude that academic change is likely to appear as minor alterations rather than major reform.

Two major alternative approaches to academic change have been identified as planned and unplanned change. The unplanned change per-
sp ective focuses on organizational problems and dynamic processes which are difficult to control. The theories and models presented help to explain why an organization often seems incapable of facilitating change through a rational planning process (Baldridge, Conrad, Hefferlin, Katz and Kahn). Planned change theorists assume that leaders within an institution can control the rate and direction of reform through the application of knowledge gained from the behavioral sciences and/or employment of change strategies (Bennis, Gross, Miles, Lindquist, Rogers, and Zander).

At present, the literature on change includes a substantial body of empirical information and several insightful models to guide research. However, there is no adequate comprehensive theory on academic change, for existing theories fail to cover all stages of the change process. Unplanned change theorists focus on sources, initiation of changes, and internal organizational dynamics: analysis is terminated at the point where the decision to change has been made. Advocates of a planned change approach often fail to investigate the locus and influence of academic power as they affect the decision-making and initiation processes. Few models in either category focus on the outcomes or results of the innovative process (with the one exception being the implementation research by Gross et al.). It often appears that one theory begins where another terminates but there are wide gaps and several discrepancies in interpreting events, causes and processes in the collective body of material on planned and unplanned change. The result has been a proliferation of fragmented research and incomplete theoretical models. One particular study stands out among the multitude of related works. Zaltman and his associates (1973) present the most
coherent and unified approach to planned organizational innovation. They identify the two major stages of change as initiation and implementation, and suggest that these two stages involve fundamentally different processes for success to result. However, the emerging theory has yet to be applied and tested in the academic setting.

There is a scarcity of literature on implementing academic change. Existing material on managing the changes implied by adoption of innovations is largely theoretical (Bennis, Havelock, Lindquist, Miles, Rogers). Suggested strategies are based on complex theories and conceptual models. The empirical evidence that is used by authors to develop approaches to implementation has consisted mainly of descriptive case studies which are rarely designed to test or generate theory. Empirical researchers seldom examine change from the perspective of existing theory. The result has been the perpetuation of the gap in change literature between theory and practical application. An exception is Conrad's application of inductive, comparative research methodology leading to the grounded theory of academic change. His work offers a tested approach with potential for guiding and expanding the systematic study of educational reform.

In summary, while the literature on innovation is voluminous, it is also incomplete: there is no unifying theory on academic change. Moreover, the existing research is woefully inadequate in explaining the implementation process of organizational innovation.

**Prescribed Change**

Considering the increasing involvement of federal officials with higher education, literature on academic change which is induced and regulated by governmental agencies is both scarce and inconclusive.
There is very little theoretical base from which to approach the study of processes, implementation and outcomes of externally prescribed change. Empirical research is generally limited to individual case studies of a descriptive nature. Impact studies often focus on a single institution (Elfen, 1977; Peterson, 1977; Strand, 1977; Wandelak, 1977; Armstrong, 1978; Estler, 1978; Guerriero, 1978; and Hepner, 1978) or on a select group of similar institutions (Saikin, 1976; Quarles, 1977; Wamboldt, 1977; and Kane, 1978). Title IX research deals primarily with measurable outcomes through program comparisons and historical summaries (Pinson, 1977; Vargas, 1977; Armstrong, 1978; Salloway, 1978). A number of authors offer advice for gaining compliance with federal mandates, but these strategies are rarely grounded in empirical evidence nor supported by substantive theory (Dunkle, 1974; Hogan, 1976; Perry-Miller, 1976; Kelly, 1977; Cheatum, 1978; Huckle, 1978; Kennedy, 1979).

**Government Influence**

Baldridge emphasizes the importance of environmental effects such as state and federal legislation, judiciary action and government funding on university operations. He notes that the impact of research grants alone has been significant in reducing the university's ability to control its destiny and establish its own priorities. Although any educational system, as well as academic change in general, is influenced by governmental agencies, there is a paucity of systematic research describing the nature, processes and impacts of this relationship.

Johnson conducted a study to determine the effects of Title III of the National Defense Education Act on lower schools in California. He found "incentive legislation" to be effective with regard to pro-
ducing educational change. 78 Johnson's research provides evidence that Congress considers education to be an instrument of national policy. His major finding is reported as follows:

Relatively rapid and dramatic improvement of educational programs can be achieved by legislation which provides matching funds for the purchase of equipment and materials at the local level, and for expanded activity in program development and inservice training of teachers. 79

A more recent and comprehensive study by Reyes supports the above conclusion. She examined the imposition of martial law in the Philippines as a specific case to analyze the consequences of increasing political control in education. Reyes reports that there are few new structures and no actual funding incentives to facilitate compliance with authoritative political demands. Consequently, she concludes, higher education has not been effectively reorganized by the new centralist regime. 80

Reporting a study on an innovation in decision-making at the state level, Fleisch and his associates conclude that successful implementation among lower schools was due to the ability of the regulatory commission to achieve consensus on educational proposals. Consensus among educators was attributed to the nature of the proposals, none of which involved drastic nor rapid changes in the direction of academic policy. 81

In 1977, the staff at George Washington University assessed the effects of federal legislation on local university affairs including academic, research and administrative concerns. The study shows: 1) there has not been any noticeable loss of academic freedom; 2) there has been no loss of quality in academic programs; 3) if the costs of compliance continue to increase, academic quality will suffer in the future; and 4) a major concern is the trend of increasing government
intrusion along with the government's uncertainty about what will be required in order for institutions to comply with current and future legislation. 82

Collectively, the rules and programs recently promulgated through presidential executive orders and federal legislation impinge, directly and indirectly, on most areas of academic life and appear to impose significant financial burdens on higher education. In a special study covering the 1963-75 decade, the American Council on Higher Education discovered that the costs related to implementing federally-mandated programs increased considerably faster than increases in instructional costs and revenues. In order to cover the federally-initiated costs, colleges have had to cut other operating expenditures and attempt to generate additional revenue through requests for increased state appropriations. 83 In short, the implementation costs of federal mandates must be absorbed by both the universities themselves and state governments which support them.

**Affirmative Action**

Several studies address direct and indirect relationships between the federal government and the university system with regard to mandates for affirmative action. Hepner uses a "political-bargaining" model to describe this relationship. She recognizes that encompassing cultural issues are undergoing manipulation and examines the competing political forces which operate, the processes by which groups exert pressure to influence policy formation, and the relative effectiveness of competing political influences. According to Hepner, the political-bargaining model centers around three problem areas: interpretation and application of federal regulations, policy formation, and implementation of policy.
The theory focuses on the conflict of issues among interest groups in the implementation phase of the change process. Hepner further explains that the implementing and monitoring of policy by an academic institution and a federal agency culminate at a level in which special interests and concerns often erupt into "volcanic-like activity." Cultural issues are manipulated by groups which exert influence. A compromise emerges as a result of negotiations and policy is determined. Implementation of the new policy generates a new chain of conflict, change, and eventually, conformity.

Evidence in the Guerriero study indicates that the type of compliance relationship which exists between the affirmative action regulatory system and higher education is best described as the Etzioni dual compliance structure: two types of power and two corresponding types of involvement operating simultaneously and neutralizing each other. The presence of this structure, along with the absence of coercive power, apparently explains affirmative action ineffectiveness and fosters the emergence of an "oscillatory pattern of affirmative action responses" in early stages of compliance.

Estler recently studied academic decision-making related to sexual equity in faculty appointments and staff salaries at Stanford University. Attempting to apply systematic analysis to the change process, Estler found the problems and solutions surrounding the equity issue to be highly complex. She contends that the decision-making process becomes bogged down in tradition, ambiguity of purpose, and philosophical conflict. A re-evaluation of personal and institutional values appears to take place along with policy and procedural change; this re-examination, with concurrent changes in beliefs, has greater
impact on decision outcomes than the specific results of analysis. Estler concludes that ultimately the effectiveness of rational planning is undermined by an interplay of human values and beliefs, and organizational structure, norms and processes. 37

Elaborating on the conflict potential of a value-laden federal mandate, Vargas contends that the policy of affirmative action is incongruent with philosophical bases which have been developed in American education. He argues that elitism, which has characterized and still permeates higher education, opposes the newer social-service oriented policy imperatives. This situation, he concludes, has resulted in polarization within institutions and between higher education and society in terms of affecting affirmative action reform. 38

In a particularly comprehensive analysis of the status of affirmative efforts in education, Sowell points out that there has been pathetically little analysis establishing the general conditions in the academic world before or after the introduction of affirmative action policies. 39 The general principle behind affirmative action, he explains, is that a court order to "cease and desist" from a discriminatory practice may not be sufficient to undo the harm already done, or even to prevent additional harm as the result of a pattern of events set in motion by the prior illegal activity. 40 Sowell's study focuses on determining what the academic career situation for blacks and women was at the onset of affirmative action programs and how the situation has since changed. He argues that affirmative action programs in the educational world have resulted in no drastic changes as far as pay, employment, or promotions of women and minorities are concerned. What has changed drastically is that the "process of academic hiring has
become a bureaucratic nightmare, regardless of who ends up being hired.\textsuperscript{91} Sowell contends that departments, acting under heavy pressure to preserve the institution's access to federal money, engage in a complex legalistic process of recruiting, screening and evaluating candidates in order to generate enough paperwork to show "good faith efforts." He points out that statistics indicate that this practice need not, and usually does not, involve hiring a minority or female faculty member.\textsuperscript{92} His specific findings include the following: 1) women were a higher proportion of college faculty, Ph. D.s, and M. D.s generations ago than they are now; 2) female incomes in the nation as a whole were previously a higher percentage of male incomes than they are today; 3) the long decline in the career status of females paralleled decades of a rising percentage of married women educators, and the recent upturn followed a reversal in trends which tied them to domesticity - all of which occurred prior to "affirmative action."\textsuperscript{93} Sowell further suggests that affirmative action has resulted in negative side effects: achievements of women and minorities have been made to look like "the government's gift."\textsuperscript{94} He concludes that,

If the 'affirmative action' program were merely inane, futile and costly, it might deserve no more attention than other government programs of the same description. But it has side effects which are negative in the short run and perhaps poisonous in the long run. While doing little or nothing to advance the position of minorities and females, it creates the impression that the hard won achievements of the groups are conferred benefits.\textsuperscript{95}

Several other impact studies support Sowell's contention that affirmative action programs are not working to produce greater hiring, retention and/or promotion of women and minorities.\textsuperscript{96} Silvestri and Kane present empirical data suggesting reluctant institutional commitment to locate and recruit female and minority candidates for administr-
Royer examined the principles of affirmative action policies and their implementation in American businesses and universities. He describes institutions and labor unions as resistant to affirmative action and notes the following factors which appear to create this resistance: 1) regulations are often initiated in an accusatory fashion; 2) practical complications exist including lack of time and money, and excessive bureaucratic paperwork; 3) in educational institutions, the perception of affirmative action as a threat to academic freedom. Roye labels affirmative action "a charade relegated to a list of social dreams."

Bell, in a report on affirmative action programs in higher education in Illinois, identifies four barriers to effective implementation of these programs: 1) attitudes; 2) various pre-employment practices; 3) student enrollment issues; and 4) a lack of public accountability. He notes that most of the efforts in affirmative action have been spent doing what is minimally required to comply with the letter of the law, to maintain appearances, and to defend the institution in grievance procedures.

**Title IX**

The passage of Title IX of the Education Amendments of 1972 was an attempt to end sex discrimination in education. The law includes a set of athletic regulations directed toward equalizing competitive opportunities for both sexes in intramural, interscholastic and inter-collegiate sports. The vast majority of available literature of Title IX focuses on athletics. The male-dominated world of sport is described by numerous authors as being the sharpest example of sex discrimination in American society, and in higher education in particular. The federal
guidelines for implementing Title IX athletic regulations and the accompanying enforcement procedures have resulted in much heated controversy and little systematic investigation.

Considering the widespread attention received by Title IX, there has been a scarcity of empirical research. Much of the literature consists of descriptions of athletic pursuits and injustices encountered by females, and projections (generally biased in one direction or the other) of the impacts of the legislation. Approaching the topic with greater objectivity and insight than is generally the case, Cox presents an extensive overview of the background, interpretation and enforcement of Title IX and evaluates its potential effectiveness as a law. On the whole, he believes that the HEW regulation under Title IX is of greater benefit to the typical female athlete than is the fourteenth amendment. Cox explains that an equal protection attack is feasible only by women seeking to gain access to previously all-male teams. No precedent exists under which a woman can successfully sue to create separate female teams.\textsuperscript{100} Title IX regulations, however, may affirmatively require creation of separate teams if equal opportunity is not otherwise provided in an athletic program.\textsuperscript{101} Until recently, the consensus in lower courts appears to have been that Title IX did not create a private cause of legal action. Cox believes this reduced the potential effectiveness of the regulation unless it could be vigorously enforced by executive officers. As he states it, "How well the statute and the regulation will serve the needs of female intercollegiate athletes will be determined by HEW."\textsuperscript{102}

The most recent and enlightening Title IX impact study is the survey conducted through the Department of Health, Education and Welfare
in four states of the Pacific Northwest. The research design included written surveys, discussions with federal, state and local education agency administrators and employees, and interviews with a variety of representatives at educational institutions at all levels. The five major findings follow: 1) The majority of Title IX coordinators consider their institutions to be in compliance with Title IX; 2) on-site studies of Title IX implementation indicate that full compliance has not been achieved by most agencies and institutions; 3) requirements for self-evaluation, athletics and grievance procedures are the least understood; 4) limited finances are an obstacle to Title IX implementation; and 5) the process used to formulate and enforce Title IX regulations has alienated supporters. 103

During the past two years, educators have produced a variety of impact studies describing the effects of Title IX on athletic programs across the nation (Saidak, 1976; Caliendo, 1977; Hovious, 1977; Quarles, 1977; Rutherford, 1977; Wamboldt, 1977; Wandlerlak, 1977; and Kane, 1978). The general consensus among authors is that 1) Title IX has had a positive effect in providing new and better opportunities for the participation of women in intercollegiate athletics; 2) the large, male-dominated, revenue producing sports have not been adversely affected by the expansion of women's programs; 3) conflict and controversy have been crucial elements influencing the degree and rapidity of policy change and implementation; 4) although concern is expressed for equity for women in athletics, a reluctance to comply with more than minimal guidelines appears to be the norm; and 5) women's athletics have become increasingly important to university administrators and numerous interest groups due to Title IX provisions.
The major point of departure among most authors reporting on Title IX impacts concerns the effectiveness of implementation efforts. Researchers generally apply one of two basic types of criteria to measure the relative success of the regulation: 1) comparisons with past programs for women; or 2) comparisons with current programs for men. The various findings depend largely on which of these benchmarks is used.

Typical of the recent research, Shulman's 1977 study indicates that the impact of Title IX regulations has been noted in the treatment of women college students in several areas of campus life. Shulman concludes that, at a minimum, college officials have been compelled to take a look at the effects of their policies and practices with regard to students' college careers and postgraduate plans. In 1978, the National Organization for Women (NOW) conducted an investigation of the impact of Title IX on educational institutions at all levels and evaluated HEW's performance in dealing with registered complaints of unfair practices. The authors conclude that "rules and policies that perpetuate unequal treatment of males and females are still going uncorrected."

The most recent facts indicate that women's athletics on campuses across the nation have experienced enormous growth in the 1970s. Since 1971, the number of colleges offering athletic programs to women rose from 280 to 825 and the number of teams increased from 1,831 to 4,797. In 1974, only 60 colleges offered athletic scholarships to women. In 1979 there are over 500 colleges with sports scholarship programs for female students. Statistics show that women athletes in American colleges now receive twenty-one percent of the scholarship budget, fourteen percent of the operating budget and nineteen percent of the
salary budget in athletic programs. Although progress has been good, women are quick to point out that 1) the figures are far from reflecting equal per capita expenditure, and 2) that growth has occurred without damaging men's revenue-producing athletics. For example, in the last six years, the increase in budgets for NCAA Division I colleges and universities has been twice the total amount allocated to women's programs in these institutions. On a nation-wide basis, the average annual budget for men's athletics was $1.2 million in 1973. During that year, women received an average of $27,000. In 1978-79, the average men's budget had increased to $1.65 million, and women received an average of $276,000. As Chris Grant points out, men's increases alone ($450,000) were $174,000 more than the average total budget for women ($276,000).

According to Joseph Califano, Secretary of HEW, during the period from 1971 to 1976 women's participation in intercollegiate sports increased over 100 percent while the enrollment of women in institutions of higher education across the nation showed an increase of only 39 percent. He contends that "These figures dramatize two points: the growing interest of women in athletics and the efforts of colleges and universities to respond to that interest."

Lapin, in the other hand, points out the effects of the "alarming backlash to Title IX" including: 1) a significant decrease in the percentage of female coaches and administrators of women's sports; 2) the large number of complaints filed with HEW concerning institutional compliance with Title IX athletic regulations; and 3) the reluctance of the courts and HEW to enforce the law. Hogan reports that in 1977 women athletes at larger colleges and universities received approximately seven percent of available
This represents an increase from the two percent nationwide estimate of 1976. A recent study, which included 372 responding colleges and universities from all areas of the United States, shows the average budget for women's athletics in 1978-79 rose to approximately fifteen percent of the total athletic budget. This extensive report, conducted by the Association for Intercollegiate Athletics for Women (AIAW), provides a rich statistical base. However, no major attempt has been made to interpret the findings.

Regarding the status of compliance and enforcement, Pennington indicates that practically no college or university was in compliance with Title IX by the July 21, 1978 deadline. He further states that "HEW so far has not denied a penny of federal funds to any high school or college for discrimination against women in athletics." Cox concurs, adding that failure of the final regulation to provide precise standards for athletic departments, and the enforcement approach - "benign neglect" - used by HEW, have combined to weaken the law.

The issues surrounding Title IX appear to be based on broad social implications. Edward Kennedy, Chairman of the Senate Judiciary Committee, explains the reluctance to end sex discrimination from a cultural perspective: "The effort to insure that women have an equal opportunity in sports - as in all other fields - requires a basic redesign of our social structures to remove all the barriers, both conscious and unconscious, that have prevented full equality in the past." He proposed that much of the effort toward equal opportunity must take place in the legislative area. With regard to the backlog of 615 cases currently requiring investigation by HEW, Kennedy states, "Clearly government enforcement of this statute has been less than
adequate." One reason for the lack of action appears to have been the confusion in the courts about whether or not individual citizens had the right to sue for enforcement.\textsuperscript{119} Kennedy believes the only path to effective enforcement is to allow broad rights for individuals to sue.\textsuperscript{120}

In light of the apparent difficulty in gaining compliance and enforcement, several authors suggest the application of specific change strategies by concerned participants. Huckle's work focuses on the demand by women for greater resources and choices in the world of athletics, and the resulting political and economic struggles to foster and prevent change. She describes the "old boy network" in athletics as consisting of the National Collegiate Athletic Association (NCAA), major institutions, and several powerful athletic directors. Huckle contends that, "These persons or groups interact with one another to decide the competitive structure of athletics and to define membership as well as control allocation of resources."\textsuperscript{121} The author applies two theories of political behavior to describe the dynamics of the conflict: Lindblom's model of incremental decision-making and Schattschneider's discussion of socialization and control of political conflict. From this perspective, she views intercollegiate athletics as a system of interacting and interdependent pressure groups, each functioning in their own perceived best interest. "Athletic directors, as rational and traditional persons, will be reluctant to change the status quo. In making decisions which affect athletic programs, those involved will prefer short-run, minimal change over drastic upheaval."\textsuperscript{122} She offers four alternate strategies for change, and recommends one in particular. The suggested tactic involves the use of external systems (the courts, media, legis-
lators) to redefine the character of the conflict by shifting it to the public world. This strategy increases outside cognition and intervention framed in terms of wider societal goals of equality and fairness. An effort toward symbolic change thereby replaces the narrow internal battle for economic resources.123

A recent article by the Women's Equity Action League (WEAL) reflects the current thinking among many Title IX proponents directly involved in institutional reform efforts. The authors contend that, "When women employed by colleges and universities challenge long-standing practices and policies of male-dominated administrative and athletic systems, the women often suffer irreparable political and career damage."124 In order to avoid this problem, two kinds of strategies have been developed: 1) strategies to bring about the desired change, and 2) strategies for protecting employees and students working for the change. The protective strategy, best articulated by Cheatum, involves: 1) the use of outside support agencies; 2) maintaining "headless committees"; and 3) developing special systems for handling correspondence, signatures on documents, membership lists and meeting arrangements.125 The state of the literature clearly reflects the emotional, dynamic and controversial nature of anticipated change initiated by the federal government in an attempt to eliminate sex discrimination in higher education.

The most recent controversy over Title IX focuses on the 1978 proposed policy interpretation released by the Office for Civil Rights (OCR) in December, 1978. The proposal, which outlines the criteria for evaluating an agency's efforts to comply, has spawned much political action characterized by the formation of various coalitions of colleges, organizations and interest groups. The policy draft was originally
scheduled to be finalized by April 1979, but controversy surrounding the
document has delayed HEW's implementation and enforcement efforts. The
greatest source of conflict appears to be OCR's recommendation that
institutions begin to proportionately equalize per capita expenditures
for male and female athletes. Although the political scene is in a
state of rapid change, identifiable trends and common viewpoints are
emerging.

Equal rights advocates are basically in favor of adopting the
proposed policy interpretations, including the application of per capita
expenditures to assess compliance. Proponents recognize the proposed
policy as a constructive move toward implementation of Title IX, but
have criticized the new regulations as being overly ambiguous and failing
to move institutions far enough toward equality. Support for this
position comes from a variety of educational, feminist and civil rights
organizations including the American Alliance for Health, Physical
Education, Recreation, and Dance (AAHPERD); the National Association
for Girls and Women in Sport (NAGWS), an AAHPERD sub-structure; the
Women's Equity Action League (WEAL); the American Civil Liberties Union
(ACLU); the National Organization for Women (NOW); the Association for
Intercollegiate Athletics for Women (AIAW), the governing body for
college athletics for women; the Women's Sports Foundation; and the
National Coalition for Women and Girls in Education. The arguments
commonly expressed in support of equalizing per capita expenditures for
male and female athletes can be summarized as follows:

1. For the past seventy years, female students have paid the
same tuition and fees as male students. However, until three years
ago, ninety-five percent of the money spent on athletics went into
men's programs. Today, women constitute fifty-one percent of the undergraduate enrollment across the nation and receive an average of fourteen percent of the athletic operating budget.\textsuperscript{126}

2. Throughout the century, parents of female students have paid the same taxes. Tax monies allocated to schools and colleges have benefitted only men's athletic programs.

3. The donations to men's athletic programs have been tax-deductible, creating a loss in state and federal taxes which could have been used to benefit all students.

4. Very few male "revenue-producing" sports do, in fact, produce revenue. For example, the statistics show that in 1977 eighty-one percent of all intercollegiate football programs operated at a loss.\textsuperscript{127}

5. In response to arguments that equal opportunities for women in athletics will destroy men's intercollegiate sports, proponents of Title IX point out that budgetary increases in men's programs since 1973 have been almost twice the amount of the total budget spent on women's athletics. Therefore, it is argued that although women's programs have made great strides toward compliance with Title IX, this progress has not "bankrupted" men's athletics.\textsuperscript{128}

6. Since the proposed policy interpretation of Title IX requires that expenditures be proportional to the number of male and female athletic participants, the budgets should generally reflect this proportion. The national average participation ratio is currently seventy percent male and thirty percent female.\textsuperscript{129} The new Title IX policy, however, allows for greater per capita expenditures for members of one sex if funding differences are based on non-discriminatory factors (i.e. accommodating spectators). In turn, an individual college may
declare certain legitimate exceptions to the seventy/thirty percent expenditure ratio. Thus, proponents of equal opportunity contend that the proposed policy contains more than adequate flexibility for application to individual institutions in spite of the diversity of programs across the nation.

7. Since the vast majority of "big-time" college athletic budgets are spent on football and basketball for men, exemption of these sports could mean an exemption of sixty to eighty percent of the entire athletic budget. To totally discount these enormous expenditures before dividing up the budget would "relegate women to perpetual inequality . . . making a mockery of our national commitment to equal opportunities for all."130

8. In response to compromise plans submitted by the opposition which suggest that institutions assume individual responsibility for developing their own compliance procedures, Title IX proponents point out that institutions were expected to have done this in 1976. Chris Grant, president-elect of AIAW, views such plans as "simply an effort to see that institutions can continue in discriminatory practices in athletics."131

9. Extracurricular activities are generally viewed as an extension and outgrowth of the formal curriculum. The viewpoint that the extracurriculum (which encompasses intercollegiate athletics) is integral to the system of higher education as a whole, stems from the potential of such activities in enhancing the prestige, goals and objectives of the entire institution.132 The latter includes the academic program itself, which often relies heavily on federal assistance for growth and existence. In turn, exempting college athletics from
Title IX because they are not directly supported by funds, is inconsistent with the holistic philosophy of higher education and the interrelatedness of its many components, goals and programs.

Among the various opponents of the HEW proposed policy interpretations are the National Collegiate Athletic Association (NCAA), the governing body for intercollegiate athletics for men; the National Association for Collegiate Directors of Athletics (NACDA); the National Federation of State High School Associations (NFSHA); a new Coalition of 300 colleges and universities with high-power and/or well-established men's athletic programs; and a large number of sports editors from local newspapers across the nation. Viewpoints of the opposition include the following arguments:

1. Institutions cannot comply with Title IX because the regulations are vague and the colleges do not understand their responsibilities.

2. The people who drafted the HEW policy interpretation are not familiar with the history and complexity of intercollegiate athletic programs and, therefore, are not qualified to write the regulations.¹³³

3. OCR has been unable to set up national standards which are flexible enough to be applied to the diverse collegiate athletic programs across the nation. The problem of providing equal opportunity for women must be solved on each individual campus. It isn't "that difficult to determine if each school is making a good faith effort" to comply with the spirit of the law in general. The problem is one of government interference through too many ambiguous but constraining regulations.¹³⁴
4. For 100 years men have organized teams and competed in athletics. Programs and public relations were gradually developed through hard work and planning. Now HEW says "count the girls in." In turn, equal opportunity is seen by many as allowing the women a chance to develop their own programs from scratch rather than from funds generated by and/or for men's athletics.

5. Many people believe that women's sports are not equal in marketability to men's sports. Thus, the potential for increasing revenue through increased expenditures for women is not seen as a realistic possibility by a large number of college administrators. In fact, many college presidents and athletic directors claim that the creation of equal opportunities for women in sports will destroy men's intercollegiate programs. By sharing revenues with women rather than reinvesting the money back into the men's programs, erosion of quality programs could occur at a rapid pace.

6. A large number of NCAA institutional representatives contend that Congress never intended for athletics to be included in Title IX. They argue that since federal funds are not used to finance college athletic programs directly, the Title IX regulations should be more appropriately applied to the academic and research areas of higher education which benefit directly from government funding.

7. NFHSA, among others, views Title IX as an invasion of states' rights to determine how and what programs should be offered in public education institutions.

Controversy over the proposed policy interpretation resulted in increased political activity on Capitol Hill where the revised bill (Title IX) is again in conference. Since 1975, Congress has been asked
and has refused on five separate occasions to exempt revenue-producing sports from Title IX. There have been several additional attempts to tack riders to the legislation in order to limit the equal education act to those programs that specifically receive federal funding. All have been defeated, usually in committee. Since January, 1979, approximately 300 colleges and universities have contributed money to hire a Washington publics relation firm, De Hart and Associates, to lobby for the exemption of revenue-producing sports from Title IX coverage. Most institutions in "The Coalition" are NCAA members, particularly the Division I universities across the nation which conduct large-scale basketball and/or football programs. In a counter-lobbying effort, a coalition of women's organizations, led by AIAW and NAGWS, has been established. The women, with positional support from various educational organizations, contend that exemption of revenue-producing athletics from Title IX would actually result in losses for many women's programs currently in operation.139

A second trend which has become clear within the past three years, is the increasing involvement of college presidents in the Title IX athletic debate. In May, 1978, Terry Stanford, President of Duke University, submitted to HEW a "Counter-Proposal for Compliance with Title IX." Endorsed and supported by sixty-one college presidents from prestigious institutions across the nation, the "Stanford Plan" recommends that each college be allowed to develop its own plan for Title IX compliance rather than being required to adhere to a set of national standards or regulations for athletic program development, revision and/or operation.140 There have also been reports of recent visits to Washington by college presidents in efforts to influence Congress to
exempt either entire athletic programs, or major portions of the programs, from Title IX. 141

In other recent action, the United States Commission of Civil Rights filed comments on the HEW proposed Title IX policy interpretation. In a Statement issued in June, 1979, the Commission supported stronger policies and enforcement of the statute, but suggested that football expenditures be phased into the per capita calculations over a five year period. After three months of hearings in the HEW proposed policy and its own recommendations, the Commission revised its position, withdrawing the football phase-in period and calling for "equal per capita expenditures for financially measurable factors in all sports without delay." 142

Recent court action on three separate issues may have a profound effect on athletics as well as other campus programs in the near future. In August, 1979, the Justice Department asked the Supreme Court to review two rulings by federal appeals courts that employees are not covered by Title IX in federally assisted education activities. The Justice Department argued that the language and legislative history of Title IX clearly show that it was meant to cover employees as well as students. 143 More than half the complaints currently pending under the law concern employment, and a good number of these are cases involving jobs and salaries in athletic programs.

On May 14, 1979, in Cannon v. University of Chicago, the United States Supreme Court issued a decision making clear the right of a private individual or group affected by allegedly discriminatory practices of an institution to sue the institution directly for violating Title IX. In addition, the Court held that private litigants need not
file complaints with HEW nor wait for HEW action on previously filed complaints before filing court action. The court noted that private actions may provide a "more appropriate means of accomplishing the statutory purpose of obtaining the nondiscriminatory benefits the individual or group seeks than does 'severe' sanction of terminating federal financial support to the discriminating institution." In effect, the Cannon decision appears to open an entirely new vehicle for Title IX enforcement.

Finally, a coalition of feminist and education groups, including the Women's Equity action League, went to court in July, 1979, in an attempt to force HEW to resume investigations of complaints charging sex bias in intercollegiate athletics. The HEW investigations were suspended in June until the Department could reach a final decision on the controversial guidelines for measuring whether educational institutions are providing equal opportunity for male and female athletes. The case is pending.

Summary

Considering the degree of involvement of the government with higher education, literature on academic change which is induced and regulated by federal agencies is relatively meager. There is very little theoretical base from which to approach the study of the structures and processes which facilitate and impede externally prescribed change.

Five major findings emerged from the limited body of available material:
1) the actions of federal agencies have had an impact on higher education, resulting in policy and procedural change; 2) incentive legislation appears to be most effective in producing educational change; 3) proposals which involve rapid or drastic changes, particularly with regard to
existing social values, are difficult to implement; 4) the lack of clarity, resources, and enforcement structures often accompanying a new federal regulation tends to inhibit the change process; and 5) the trend toward increasing government involvement and related costs of compliance with federal mandates are becoming major concerns in higher education.

Affirmative action studies probably provide the best resource base for understanding the relationship between the government and academia as well as the effects of prescribed change on the higher education system. Two major approaches have been used to describe the government-university relationship: the political-bargaining model and the Etzioni dual compliance model. The conclusion in both cases is that government power is neutralized through political conflict and pressure group interaction or by the nature of dual control by two different structures and processes.

The general consensus among authors is that affirmative efforts have not been effective in accomplishing the goals articulated by government agencies. The lack of successful implementation of affirmative action programs has been attributed to a number of factors including, among others, the following: 1) the conflict potential inherent in a mandate prescribing changes in social roles and values; 2) the practical complications experienced in attempts to implement the complex legislation; 3) the perceived threat of federal involvement to academic freedom; 4) the inflexibility of traditional academic attitudes and practices; and 5) the manner in which government directives are articulated and enforced. The actual results of affirmative action efforts in higher education have been described as: 1) increasing bureaucratic mechanisms
and procedures for the sake of appearing to comply with federal mandates; and 2) an emerging stigma that the accomplishments of women and minorities are merely conferred benefits. 148

So far, the response to Title IX regulations has focused primarily on anticipated changes in athletic programs and has been largely philosophical and emotional. Empirical data describing the outcomes of reform efforts are meager, and systematic research related to the processes, agents and dynamics of implementing the prescribed change is virtually non-existent.

A variety of impact studies show that: 1) Title IX has had a positive effect in increasing the opportunities for female participation in athletics; 2) the male-dominated, revenue producing sports have not yet been adversely affected; 3) the guidelines for implementing the regulation lack clarity and have produced much heated controversy among various interest groups; 4) enforcement procedures have been less than adequate; and 5) the issues surrounding Title IX have broad social implications. Researchers generally apply one of two types of criteria to measure the relative success of the regulation: comparisons with past programs for women or comparisons with current programs for men. The interpretation of the effectiveness of implementation varies according to which of these two approaches the analyst emphasizes.

Several authors have suggested specific change strategies for promoting institutional compliance with Title IX. These strategies, as well as evidence of continued and increasing legal and political activity, reflect the dynamic nature of the controversy surrounding the federal regulation but contribute little to the understanding of the change processes.
There is no research describing the change process within higher education institutions as they attempt to implement Title IX or the athletic regulations. How are decisions being made and who is making them? What structural and/or policy changes have occurred as a result of Title IX? These questions remain unanswered. In short, there is no adequate theory describing the conditions which tend to facilitate implementation of a federal mandate.
Footnotes for Chapter II


8. Ibid., p. 39.


10. Ibid., p. 109.

11. Ibid., p. 141.

12. Ibid., p. 146.


15. Ibid., pp. 21-26.


21. Ibid., p. 5.


23. Ibid., pp. 236-37.


28. Ibid., p. 167.

29. Ibid., p. 175.

30. Ibid., pp. 175-76.


39 Ibid., pp. 543-46.


41 Ibid., pp. 640-47.

42 Ibid., pp. 654-57.

43 Ibid., p. 18, p. 649.

44 Ibid., p. 659.


46 Ibid., p. 1.


48 Ibid., pp. 193-94.

49 Ibid., p. 198.

50 Ibid., pp. 201-02.


52 Ibid., pp. 90-91.

53 Ibid., p. 92.

54 Ibid., pp. 67, 92-93.

55 Ibid., pp. 86-90.

56 Ibid., p. 53.

57 Ibid., pp. 53-54.

58 Ibid., pp. 81, 146.

59 Ibid., pp. 147, 155, 162.


62 Ibid., pp. 29-30.

63 Ibid., p. 25.

64 Ibid., p. 25.

65 Ibid., p. 28.

66 Ibid., p. 243.


68 Ibid., p. 3.


70 Ibid., p. 16.

71 Ibid., pp. 21 and 47.

72 Ibid., p. 47.

73 Ibid., pp. 44-45.

74 Ibid., pp. 180-82.

75 Ibid., p. 182.

76 Ibid., p. 248.

77 J. Victor Baldridge, op. cit., pp. 130-33.


79 Donald W. Johnson, "Title III and the Dynamics of Educational Change in California Schools," in Innovation in Education, 1964, pp. 157-82.

80 Ibid., p. 176.


85 Ibid., p. 177-79.


90 Ibid., p. 48.

91 Ibid., p. 57.

92 Ibid., p. 57-58.

93 Ibid., p. 64.

94 Ibid., p. 64.

95 Ibid., p. 63.


101 The final HEW regulation retreated from the original proposal by deleting language requiring "affirmative action" to increase opportunities for women. Although the terminology has been dropped, affirmative efforts are still implied by the document's requirement of separate teams. The regulation specifies that equal opportunity means equal participation opportunity and thereby indicates that the respective differences between the proposed and final regulation may be minimal. (Thomas A. Cox, Ibid., pp. 63-4.)

102 Thomas A. Cox, op. cit., p. 64.

103 "Title IX Status in Region X: An Evaluation of Models and Barriers to Implementation of Title IX of the Education Amendments of 1972, Government Region X of HEW" as cited by the Project on the Status and Education of Women in On Campus With Women, Washington, D. C.: Association of American Colleges, Spring, 1975, p. 3.


107 Christine Grant, AIAW President-Elect, mimeographed transcript of "Current Views on Title IX" Panel, Georgia Institute of Technology, Atlanta, Georgia, June 27, 1979, p. 3.


109 Christine Grant, op. cit., June 27, 1979, p. 2.


116 Thomas A. Cox, op. cit., p. 64.


118 Ibid., p. 13.

119 On May 14, 1979 the U. S. Supreme Court ruled in Cannon v. University of Chicago that individuals do have a private right to sue under Title IX. This decision cleared up the confusion generated in lower courts during the past three years on this issue.

120 Kennedy, op. cit., p. 13.


122 Ibid., p. 382.

123 Ibid., p. 381.


126 Christine Grant, op. cit., June 27, 1979, p. 2.


129 Ibid., p. 8.
130 Ibid., p. 10.
131 Christine Grant, op. cit., June 27, 1979, p. 3.
133 Ben Carnevale, President of NACDA, private interview held at The College of William and Mary, Williamsburg, Virginia, September 11, 1979.
134 Ed DeHart, Coordinator of The Coalition, mimeographed transcript of "Current Views on Title IX" Panel, Georgia Institute of Technology, Atlanta, Georgia, June 27, 1979, p. 3.
135 Furman Bisher, Sports Editor, Atlanta Journal, mimeographed transcript of "Current Views on Title IX" Panel, Georgia Institute of Technology, Atlanta, Georgia, June 27, 1979, p. 1.
136 Ibid., p. 1.
137 Women's Sport Foundation, September, 1979, op. cit., p. 62.
138 Ibid., p. 62.
140 Ed DeHart, op. cit., p. 3.
144 Geraldine G. Cannon, Petitioner v. University of Chicago et al., The United States Law Week, XLVII (May 15, 1979), 4549-68.
145 Margot Polivy, Attorney at Law in a mimeographed Memorandum to the AIAW Executive Committee, May 24, 1979.
CHAPTER III

METHODOLOGY

The research question guiding this investigation was: What are the key variables which influence, and how do they interact to influence, an institution's ability to effectively implement change, especially when precipitated by a federal mandate? The major objective of the study was to answer this question through the discovery of a theory, based on empirical data, which could be subjected to verification throughout its development. Chapter III provides a detailed description of the research design including methodology and procedures. The final section of the Chapter includes a brief presentation of the major components of the theory.

Because the search for an appropriate research strategy led to the rejection of a methodology based on verification of arbitrarily selected hypotheses, experimental and quasi-experimental approaches were rejected. The type of research necessary to conduct this study required a methodological approach which encouraged the identification of variables and relationships between variables, and allowed for discovery of the theoretical properties of each variable both as it functions independently and as it relates to other variables. The constant comparative method, which is described in the following section, was selected as the major method of investigation. The constant comparative method is a multi-faceted, inductive investigative
approach, consisting of an open-ended, on-going process of qualitative and quantitative data collection and analysis directed toward the gradual emergence of a tested theory.

The Constant Comparative Method

The constant comparative method provides specific procedures for dealing with the flow of discoveries, contingencies, relationships, modifications and options which emerge throughout the open-ended, inductive type of investigation required for generation of new theory. This method has most recently been described and employed by Conrad in the discovery of "A Grounded Theory of Academic Change." Simply stated, the comparative method combines systematic data collection, coding and analysis with theoretical sampling in order "to generate a theory that is integrated, consistent, close to the data, and in a form clear enough to be operationalized for testing in quantitative research." Using the constant comparative method, initial data collection is guided by the major research question(s). The investigator immediately begins coding and categorizing the events and observations. Each single incident or item is assigned into as many analytical categories as possible. The comparison of incidents applicable to each category completes the first of four stages included in the comparative method. The second stage occurs as new categories emerge and as existing categories are revised or expanded with regard to emerging data. The researcher examines and analyzes the theoretical properties of each variable (category); these include its dimensions, its relationship to other variables, and the conditions under which it functions. Each further incident is thus compared with properties of the category or variable that resulted from the initial comparisons of incidents in the
first state. This process involves a "continual returning to the data until the categories become theoretically saturated." In the third stage, analysis and refinement of categories and their relationships gradually leads to delimitation of a set of higher level concepts. These concepts begin to form the components of the emerging theory. When the investigator is confident that the theory is satisfactorily integrated and that the requirements of theoretical saturation have been met, the theory is presented in the form of a set of related propositions. Writing the integrated theory completes the fourth and final stage of the comparative method. In order to facilitate understanding and application of components of the constant comparative method, an elaboration of the principles and procedures appears in the sections below.

**Collection and Treatment of Data**

There are no set procedures nor limits to the techniques for data collection. Initially, data collection strategy is consistent with the research question(s) asked and the methodological requirements of theoretical sampling and theoretical saturation. Theoretical sampling, which will be described below in greater detail, is the process of collecting data for comparative analysis in order to facilitate the generation of theory. Theoretical saturation occurs when no further data can be found which expand, explain, alter or refute a variable or category; or when nothing new appears to be coming in which would further embellish the theory.

Using the constant comparative method, the researcher begins by collecting and recording a broad variety of facts, perceptions and/or incidents. An observation or experience becomes a significant datum
when it can be put to use as a background or context, as a discovered property, or as a detail which helps clarify or define a category of events. Observations are continually and systematically coded, sorted out, and analyzed. From time to time, categories may be shifted in order to accommodate the emergence of new variables, questions, or concepts. As broader concepts or categories emerge, the analyst can become increasingly more selective in determining the significance of original and additional data. In turn, the research strategy is continually redesigned in light of emerging concepts and interrelationships among variables. Once the research is under way, the processes of data collection, comparative coding, and analysis are controlled simply by the emerging theory. The range of techniques available throughout the entire data collection process can include any number of unobtrusive measures as well as statistical measures.

Selection of Comparison Groups

The constant comparative method, through the use of theoretical sampling, also provides a systematic means for dealing with the research population. Comparison groups are selected on the basis of their theoretical relevance, that is, their ability to further the development of emerging concepts and categories. In the initial stages of research, groups are selected for their maximum similarity. This produces a broad span of comparable data which serves to form a basis for the emerging theoretical framework. Central variables and categories can be identified, basic properties are generated, and sets of conditions can be established on a tentative basis. New theoretical questions will arise as linkages and concepts emerge. The investigator then follows these leads by turning to the appropriate comparative groups.
At this point, the researcher maximizes the differences in comparison groups, thereby increasing the diversity of data. Criteria for maximizing differences are provided by the research questions and by components of the emerging theory. Different groups offer different perspectives. Variables can be observed as they function under differing sets of conditions. Properties of the variables are clarified, and key concepts and relationships can be examined in greater depth. The scope of the study begins to narrow, thereby stimulating refinement of the theory.

**Generating a Grounded Theory**

For grounded theory to be made meaningful, the analyst must transform the process used for research into an integrated conceptual framework which has established its own validity and identity.\(^1\) The constant comparative method allows flexibility for new questions to be asked, answered, and verified throughout the investigation. Throughout the research process, the analyst must be free to pose informal hypotheses or propositions along the way, for as new kinds of data are conceptualized, new problems and hypotheses will naturally emerge.\(^2\) The discovery process and the questions raised by the researcher need not be related to any prior theory, especially in the early stages of the investigation. The researcher is free to explore all plausible theories and assumptions. However, there is opportunity for utilizing some of the theoretical perspective provided by the review of related literature for gaining conceptual entry into the subject matter and for raising relevant questions.

As soon as the initial mass of data has been collected, coded, and organized, the researcher immediately begins analysis by examining
possible variables and attempting to identify their properties, their relationships, and the conditions under which they are maximized and minimized. This process serves the purpose of allowing the investigator to adjust observational strategies, shifting emphasis toward increasingly relevant inquiries while still maintaining control over emerging concepts by simultaneously testing the validity of apparent findings.

The tasks of establishing categories or classes of incidents, identifying the properties which characterize them, and discovering the linkages or relationships between them are mandatory requirements when the research objective is substantive theory. The constant comparative method, together with theoretical sampling, stimulates the gradual development of salient categories for analysis. Ideally, some of these categories will eventually be supplemented or supplanted by grounded concepts.

The analyst is forced to create propositions dictated by the emerging theory as research progresses. Initial hypotheses or propositions are often disposed of because they are unsupported or refuted. Simultaneously, new hypotheses are being developed as properties of variables are identified and related. These propositions, however tentative, lead to other observations and sources of data until the point of theoretical saturation has been reached.

Verification of Theory

Assuming the researcher has taken the necessary precautions to insure the validity of data and the reliability of sources and instrumentation, the comparative method provides optimal opportunity for verification of theory and theoretical concepts. Toward the end of the study, most of the time is spent searching for additional evidence to
support or reject key propositions or hypotheses. The major concepts and relationships which have emerged are tested against existing data and verified in the field. Negative evidence of lack of sufficient supporting evidence leads to rejection or revision of the theory.

In original field research, the investigator characteristically deals largely with qualitative data and is therefore unable to demonstrate the validity of findings through statistical measures. The validating procedures exist within the process of systematic analysis. Each proposition is a derivative of data which are demonstrably empirical and the data are empirically and logically related to the propositions stated. The propositions are, in turn, grounded and the researcher should have found no sufficient negative evidence bearing directly upon them. The researcher must pinpoint and check out every major proposition by making sure that each is derived from the data, is tested again by returning to the data, and is tested for logical consistency with every other major proposition. What emerges is a grounded theory based on and validated by empirical evidence.

Guidelines for Research Strategy

Six major considerations guided the research strategy as the constant comparative method was applied in this investigation. First, a substantial amount of quantitative data was collected in order to provide a broad base of factual information for the comparison of programs and practices within the population examined. Second, data was required which covered a span of time beginning with the period prior to the enactment of Title IX and extending through the voluntary action and required compliance phases of the legislation. This data provided a basis for longitudinal analysis and assessment of the rate
and degree of implementation within each institution. Third, the method employed enabled inquiry to proceed from examination of a broad population base to the systematic identification of a smaller sample to be used for in-depth observations and analysis. Fourth, a sufficient amount of qualitative data was obtained from representatives of universities participating in the implementation process in an effort to understand their perceptions, attitudes, performance and relationships as attempts were made to implement the legislation. This source of data helped to guide the investigator toward the discovery of variables which facilitate implementation of change. Fifth, the research strategy provided for the use of a variety of techniques for obtaining data. And, finally, the design allowed the researcher to continually check the reliability and validity of emerging conceptual components as the findings were analyzed and integrated into theory.

The six considerations discussed above guided the processes of sample selection and data collection. Both of these processes are described below.

Sample Selection

Applying the principles of theoretical sampling, institutions were selected for the purpose of initial data collection based on established criteria for maximum similarity. Specifically, colleges in the original sample were state-supported, four-year co-educational institutions in Virginia which had sponsored athletic programs throughout the time period under investigation (1974-1979). Application of the above criteria produced an original population which was broad enough to provide for adequate sample selection and similar enough in structure and background to provide a basis for program comparisons.
The rationale for limiting the sample to public institutions was the need for uniformity in application of the federal mandate. State colleges are typically supported with a variety of federal funds through student-aid, research grants, and other programs. The study focused on four-year institutions in Virginia owing to practical considerations related to limited time and resources, and the policy of the Virginia Community College System which discourages organized intercollegiate competition in two-year colleges. Theoretical considerations controlled the necessity of selecting sample institutions in which changes in policies and athletic programs could be examined over a span of time which corresponded to the enactment and evolvement of Title IX. Since pre-existing conditions were important to the identification of variables which function to produce effective implementation, the status of men’s and women’s athletics prior to the enactment of Title IX was theoretically relevant in the initial stages of investigation. Finally, analysis of change resulting from a mandate ordering elimination of sex discrimination required the existence of a coeducational student body. The potential for elimination of sex discrimination through implementation of change must have existed at the institution for at least five years.

Because of its theoretical relevance, the sample selection process was of critical importance throughout this study. (The entire selection procedure is described in detail in a forthcoming section under "Procedure".) The goal of the sampling process was to identify four institutions which were similarly situated (met the criteria for maximum similarity) when Title IX went into effect: two of which emerged with relatively successful athletic programs as prescribed by
the mandate, and two of which have been relatively unsuccessful in attempting to implement the athletic regulations.

There are (with the exception of community colleges) sixteen state-supported institutions of higher education in Virginia, fourteen of which are four-year, coeducational colleges or universities. In applying the criteria for maximum similarity, this population was further reduced based on: 1) an examination of the history and status of the male-female enrollment proportions; and 2) the availability of accurate data. By employing an initial screening process, the research population that emerged included those colleges which provided appropriate models for objective and systematic comparison as public four-year institutions.

Once the screening process had been completed and initial data had been collected and organized, theoretical considerations for maximizing differences in comparison groups controlled delimitation of the sample. The first step of this procedure was to identify institutions in which implementation of Title IX athletic regulations had been the most effective. Second, the comparison groups had to be identified. The comparison groups, those characterized by maximum differences, were institutions in which implementation of Title IX had been relatively unsuccessful. In order to make the distinction between institutions with respect to the effectiveness of implementation efforts, a mathematical formula which provided a "Change Index" for each college was developed and applied. Using this criterion, the final sample was identified. In turn, the culminating stages of in-depth investigation took place in four institutions selected initially by characteristics of similarity and, finally, by degrees of difference.
A Formula for Assessing Change

A mathematical formula was developed in order to provide an objective measure of the relative effectiveness of Title IX implementation among the colleges from which the final sample would be selected. The documents issued by HEW, particularly the 1978 proposed policy interpretation, provided the guidelines for constructing the formula. The major purpose of the 1978 policy statement was to establish a more formal method of evaluating athletic program compliance at individual institutions. Examination of per capita expenditures was recommended as the principal criterion for assessing the legality of existing programs. Also considered were increases in the breadth of existing programs which were to have been expanded to offer competitive opportunities to more female athletes.18

After studying the guidelines and collecting an ample supply of regional and national survey data on the status and development of women's intercollegiate athletic programs, the basic formula was designed. The major goal was to produce a single figure (the Change Index) for each institution which would accurately describe progress toward equal opportunity in athletics. Several variations of the original formula were carefully tested against existing survey data on out-of-state colleges as well as on imaginary data on a number of "mock institutions." Based on the results of this testing procedure, the most valid and reliable variation was selected as the final formula.

Specifically, the formula was designed to reflect change toward equal opportunity in athletics based on quality (measured by per capita expenditures) and quantity (measured by percentages of participants) of experiences offered. The final variation has three components. The
first \((100C/D - 100A/B)\) measures change in the proportions of per capita expenditures for male and female athletes over a five year period (1974-75 through 1978-79). The second component \([(F-E) - (H-G)]\) compares change in the percentage of male and female students participating in athletics over the same five year period. The third component, \((F)\), the percentage of female students participating in athletics in 1978-79, serves to stabilize the operation of the formula. The "F" component is not sensitive to enrollment shifts and, further, the inclusion of this component was necessary to avoid penalizing colleges in which the athletic program serves a relatively large percentage of the female student population. Without the "F" component, the formula tended to over-emphasize per capita expenditures, and was not as valid in measuring change in colleges where the philosophy accompanying program expansion included breadth of opportunity.

The Change Index for each college was computed by application of the formula shown and described below.

Where:

\[X = \text{the Change Index, and}\]

\[A = \text{1974-75 per capita expenditures for female athletes}\]
\[B = \text{1974-75 per capita expenditures for male athletes}\]
\[C = \text{1978-79 per capita expenditures for female athletes}\]
\[D = \text{1978-79 per capita expenditures for male athletes}\]
\[E = \text{percent of female students participating in athletics in 1974-75}\]
\[F = \text{percent of female students participating in athletics in 1978-79}\]
\[G = \text{percent of male students participating in athletics in 1974-75}\]
\[H = \text{percent of male students participating in athletics in 1978-79}\]

Then:

\[X = (100C/D - 100A/B) + [(F-E) - (H-G)] + F\]
All enrollment figures were based on actual head-counts of full-time undergraduate students. Per capita expenditures were computed from operational and scholarship budgets. Due to complex variations in the manner in which athletic staff members are hired and paid, salary figures were not included in budgetary computations. The academic years selected for comparison represent pre- and post-Title IX compliance periods. In 1974-75, the federal documents prescribing implementation in athletics had not been received by colleges and universities. The voluntary compliance period began in July, 1975, and institutions were mandated to have reached compliance by July, 1978. The 1978-79 academic year represents the period after which compliance efforts should have become clearly discernible. This latter year is also the most recent academic period for which data were available.

It is important to note that the ratios in the first component of the formula \((C/D - A/B)\) were multiplied by 100 in order to change the fraction to a percent value comparable with the other components, all of which are percentages. Although the per capita component functioned most effectively when set up as a ratio, it was not possible to do this with the participation component \([(F-E) - (H-G)]\) due to a tendency for negative numbers to appear in fractional divisors.

The formula functions so that the larger Change Index numbers reflect greater progress toward equality for women. A Change Index of zero would indicate that both men's and women's programs had grown at the same rate and that there was no differentiation in the direction and degree of growth between male and female athletic programs. A negative Change Index reflects greater gains in an institution's athletic program for men than that which had occurred for women over the five year period.
The formula is appropriately applied to all cases in which the per capita expenditures for male athletics were greater than those for female athletes in the same institution during the 1974-75 academic year. In Virginia, all public colleges which provided intercollegiate athletic programs for men and women in 1974-75 spent more (per capita) on male athletes. Had the reverse been true in any situation, the formula would have been altered to determine progress toward equality for male athletes. This process simply would have involved interchanging the male and female data in each component of the formula. In brief, the question to be answered was: How much change with respect to eliminating sex discrimination has occurred at each institution during the five year period under investigation. The formula provided an objective means for assessing the extent of change toward equal opportunity.

Pilot Study

A pilot study was conducted at the researcher's home institution, Virginia Commonwealth University. Since this institution was not considered for selection as a comparison group, it provided an opportunity for testing and refining research techniques, survey instruments, and initial procedural strategy. The design of the pilot study paralleled that of the regular investigation with regard to data collection, identification of theoretically relevant sources, and the systematic coding and analysis of information. In addition to gaining perspective into the subject matter, the researcher was able to 1) practice and improve interview skills; 2) elicit feedback on survey questions, forms, letters, skills and procedures; 3) become familiar with the type and range of quantitative data available and the sources from which it could
be obtained; and 4) gain experience in recording, coding, organizing and analyzing qualitative as well as quantitative data.

During the pilot investigation, personal interviews were held with seventeen different sources. The process involved gathering facts and perceptual data from a broad representation of university constituents who were potentially connected with or affected by efforts to implement Title IX. Interviewees included athletic administrators, athletic staff members (coaches and sports information personnel), a special assistant to the President, central administrators, the Affirmative Action Director, members of the Athletic Advisory Committee, faculty, and student-athletes. Additional data were gathered from HEW forms, reports, documents and correspondence; minutes from the Board of Visitors and the Athletic Advisory Committee meetings; records, reports, memorandums and correspondence from personal files; and other printed material (published and unpublished) describing policies, programs and events related to progress toward sexual equality on campus.

The extensive investigation conducted in the pilot study provided the researcher with interview experience and an increased understanding of the complex nature of dealing with mandated change in an educational institution. The pilot study was also valuable in learning how to uncover and locate a variety of potentially significant data sources. Most important, the study filled a need for gaining experience in using the process of theoretical sampling for data collection within an institution. This involved discovering and selecting sources and information on the basis of theoretical relevance, and then delimiting the data according to its usefulness in generating theory. For example, during the pilot study it became clear that perceptual descriptions of
single events and relationships between events varied considerably among sources, and often were unsubstantiated by the facts provided in the quantitative data base. In summary, the researcher became aware of the importance of and processes necessary for 1) seeking out a representative sample of constituents with varying viewpoints, 2) evaluating information on the basis of theoretical relevance, and 3) verifying critical data.

Procedure

The design of this study involved three phases of research. Each phase employed a number of data gathering techniques, and each had its own purpose or primary focus for obtaining different types of data. In Phase I an informal telephone interview was used for purposes of defining the population, gaining entry, and establishing rapport. After the initial choice of institutions had been made, Phase II followed, consisting of an introductory letter and telephone interviews for collecting the data necessary for delimiting the sample. Personal interviews were the predominant source of data in Phase III. At this stage, the focus narrowed and inquiry was directed toward the discovery of a grounded theory of implementing prescribed change. The constant comparative method, along with the guidelines for theoretical sampling, were employed throughout all three phases of the investigation.

Phase I

The initial contact with each institution was done through a brief and informal telephone conversation with the coordinator or director of women's athletics. The rationale for selecting this individual as the original contact included the probability that he or
she: 1) had adequate knowledge of the background and status of the institution and its athletic program; 2) was familiar with Title IX and the accompanying guidelines for implementation; 3) could provide leads to other sources of information; 4) would be interested in the nature and outcomes of the study; and 5) would, in turn, be cooperative and supportive as data needs arose in later stages of the investigation. In retrospect, this strategy was effective and produced the desired results.

The primary purpose of the initial contact was to determine whether each institution did, in fact, meet the requirements for suitability as a comparative group for further study. The process simply involved collecting a limited data base (guided by the aforementioned criteria for maximum similarity) for making the decision on theoretical relevance of the sample. Information compiled from the introductory interviews and from various printed sources was recorded on preliminary data sheets (see Appendix B). This summary of data provided a brief institutional profile of each college included in the initial population. In institutions which met the requirements for maximum similarity, the brief interview was helpful in mapping out tentative procedures for investigation in Phase II at each college.

A secondary, but important, purpose of the opening interview was to determine appropriate persons at each institution who were willing to provide additional information pertaining to the research. The names of additional sources, particularly those in central administrative positions, were requested for verification of data if and when the need arose. In each case, as the primary sources were identified, they were contacted, informed about the research project, and requested to assist as interviewees. The initial contacts often proved invaluable
In generating the interest and support of key personnel for further investigation.

Of the sixteen state-supported colleges and universities, three were eliminated immediately. These three included Virginia Military Institute, which has an all-male student body; Richard Bland College, which does not offer a four-year degree program; and Virginia Commonwealth University, the home institution of the researcher. After completing the informal telephone interviews, one more institution, Longwood College, was technically eliminated from the sample. Longwood College had no full-time male students enrolled during the 1974-75 academic year, and therefore failed to meet the criteria previously established for maximum similarity. However, since this institution had a long and impressive history of women's intercollegiate athletic competition, the College was included in Phase II research as a supplementary source of data.

Once the initial population (twelve colleges and universities) had been defined and an appropriate source for data gathering had been identified and informed, introductory letters were sent providing the groundwork for Phase II investigation. The letter explained the purpose of the research, requested cooperation with the data gathering process, and outlined the investigative procedure. A sample of the Phase II research questions was enclosed (see Appendix C). The letter, accompanied by a self-addressed post card for convenient response, also requested that the administrator or institutional representative establish a date and time for a telephone interview. This formal correspondence served to establish credibility and rapport, and to gain the confidence and support necessary for continuing research. The
strategy employed in Phase I was particularly effective in facilitating collection of quantitative data. Respondents were provided with the scheduling flexibility and preliminary information necessary for researching the requested facts and figures. The procedure resulted in a series of meaningful interviews with well-informed sources.

**Phase II**

From the evidence gathered in the literature review, it was clear that a multitude of factors needed to be examined in any study of academic reform. An extensive array of qualitative and quantitative data was needed at the outset in order to identify characteristics and relationships which were relevant and important to the generation of a grounded theory and the selection of an appropriate sample. The major data gathering process was initiated in Phase II and carried out more extensively in Phase III.

Three research objectives guided inquiry in Phase II. The first and primary objective was to continue application of guidelines for theoretical sampling. This phase of the investigation focused on 1) identifying the institutions which did not meet criteria for maximum similarity and 2) identifying the institutions which became the four final comparative groups. The second objective for Phase II was to collect an accurate and adequate data base which would be helpful in formulating and analyzing specific research questions. Thirdly, it was important to identify a number of sources at each institution who would be willing and able to provide relevant information of a qualitative nature with regard to implementation of Title IX.

The primary means of data collection and verification throughout Phase II was the telephone interview. Lack of time and resources
prohibited visitations to the large number of public institutions which originally met the criteria for maximum similarity. Therefore, personal interviews at each campus were rejected as the major investigative approach at this point of the study. The reluctance of many people to complete extensive questionnaires and the need for an open-ended survey method led to the rejection of a mail survey. Telephone interviewing appeared to be an appropriate compromise and was used effectively in a study of similar design conducted by the Institute of Higher Education. Hefferlin, in reporting the results of this research, described telephone interviews as providing a "balance between the personal contact of direct communication and the anonymity of distance." His report guided the development of interviewing strategy used in Phase II of this study, as well as the skeletal framework for the introductory letter. This researcher found the combination of the letter, post card, and telephone interview to be highly efficient and satisfactory. Although many follow-up calls had to be made, there was a 100 percent response from the 12 institutions included in the Phase II investigation.

The telephone interviews were divided into two parts: 1) a structured and formal standardized list of questions to obtain quantitative data; and 2) a series of open-ended questions designed to ascertain the interviewee's perceptions about the processes, impact and effectiveness of Title IX implementation in his or her institution. Due to the controversial nature of the federal mandate, each interview began with a set of opening remarks indicating the importance and purpose of the interview and reassuring the respondent with respect to anonymity and confidentiality.

A list of the quantitative data gathered from each institution appears in Part I of the survey form in Appendix B. This information,
when compiled for all colleges selected for comparison in Phase II, provided a strong empirical data base for ranking and delimiting the sample. Analysis of data collected over the five-year time span enabled the researcher to develop a valid and reliable measure of the rate and degree of implementation within and among public colleges in Virginia. Verification of the accuracy of "hard" data was done by checking figures against published and unpublished reports wherever possible, and through contact with additional campus representatives whenever cross-validation appeared necessary.

Following the standardized set of formal questions to obtain factual information, the emphasis of the interview shifted toward a search for qualitative, impressionistic data. A broad set of open-ended questions, systematized only to the extent that they provided for codable and unforced response, was developed and was carefully employed. Every attempt was made to insure objectivity and impartiality on the part of the interviewer. Because the attitudes and relationships of faculty members and administrators appeared to be crucial to the process of academic reform, part of the telephone interview focused on ascertaining perceptions about the intent, interpretation and enforcement procedures of the legislation as well as perceptions related to the progress and status of Title IX implementation at the institution. Prior to closure, respondents were asked to identify other members whose knowledge and perceptions might provide additional data and/or alternate perspectives.

During the interview, detailed notes were taken and responses were coded whenever feasible. Quantitative data was recorded on a structured form (see Appendix D). Immediately following the conversation, the most important comments were complied and summarized, and all
Interview data were reviewed and completed with notations for immediate verification and further analysis.

Analytic summary sheets were prepared for each institution included in Phase II of the study. Once the information was complete and had been verified, these systematized summaries provided the data base for delimiting the population and selecting the sample.

During the selection process, the population was gradually reduced to a total of eight colleges and universities from which the final sample of four comparative groups would be determined. One institution, Clinch Valley College, simply had no records of athletic budgets or numbers of participants for the 1974-75 academic year. Since these figures were critical in assessing program change over the five year period under investigation, Clinch Valley was eliminated as a comparative group. However, the 1978-79 figures were recorded and two open-ended interviews, one with an administrator and one with a female coach, were conducted.

After all Phase II data had been gathered, three more colleges were eliminated according to criteria established for maximum similarity. One college, Christopher Newport College, had been a branch institution of The College of William and Mary through the 1975-76 academic year. Furthermore, the data obtained from sources at Christopher Newport was confusing and could not be verified due to lack of time and willingness to respond on the part of key administrators. Because the College had not gained status as an autonomous institution until recently and because of the problems encountered in validating data, Christopher Newport College was eliminated as a potential comparative group.

Two other institutions were similarly rejected due to enrollment characteristics which affected the nature and direction of change
In their athletic programs, Radford College and Mary Washington College had both been predominately women's colleges throughout the early 1970s. In 1974-75 the percentages of full-time undergraduate males were 20.18 and 2.48 respectively. By 1978-79 the Radford student body was 28.37 percent male and that figure at Mary Washington had climbed to 16.21 percent. Attempts to increase male enrollment had been paralleled by efforts to develop athletic programs for men. In both institutions, sources reported that the development of men's athletics was partially a result of institutional efforts to attract more male students. It became clear to the researcher that the combination of atypical enrollment proportions, the rate of increase in the percentage of male students, and institutional priorities with respect to balancing enrollment proportions resulted in unique patterns of change in the athletic programs. It would have been extremely difficult to isolate and study the impact and effectiveness of Title IX under the conditions described.

The Phase II data on each institution was collected and analyzed. However, both colleges were eliminated as potential comparative groups primarily because their patterns of development were significantly different from the other state-supported institutions during the time period under investigation.

The final population, from which the sample for in-depth research would be selected, included eight coeducational four-year public colleges and universities in which 1) no more than two-thirds of the enrollment was either male or female, 2) there had been no enrollment shifts greater than ten percent with respect to proportions of male and female students between 1974 and 1979, 3) were autonomous institutions throughout the five year time span under investigation, and 4) quantitative data was available and had been obtained and verified.
The Change Index formula was the means used to determine maximum differences in the final theoretical sampling procedure. A Change Index was computed for each of the eight remaining institutions. The two colleges with the highest Change Index value were selected as the models for in-depth investigation focused on the discovery of conditions which facilitate implementation of federal mandates. The two colleges with the lowest Change Index numbers were selected as the comparison groups in which emerging theoretical components could be further examined and validated. In summary the final sample consisted of four institutions selected from the ends of a continuum based on degree of reform as reflected by the Change Index. In order to protect the anonymity of the institutions involved, the four colleges comprising the final sample will henceforth be referred to as Northern Virginia University (NVU), Central Virginia University (CVU), Eastern Virginia University (EVU), and Southern Virginia University (SVU).

Throughout Phase II an extensive amount of quantitative and qualitative data was gathered, summarized and analyzed. In most cases, two telephone interviews were conducted at each institution. The primary interview was with the coordinator or director of women's athletics. A follow-up interview was frequently necessary and helpful in verifying data and providing new perspectives with regard to the open-ended response items included in the survey. The sources used in the follow-up interviews were either central administrators with responsibility for some aspect of the athletic program or athletic staff members of the opposite sex of the initial interviewee. A single telephone interview was all that appeared necessary in four cases. Two interviews were conducted in seven of the institutions and three interviews were needed in each of two colleges.
The information collected in Phase II investigation was compiled and summarized in the following manner. First, an analytic summary sheet was prepared for each institution. The summary sheet provided a profile of relevant information on institutional characteristics and athletic program status and development. Perceptual observations of interviewees and of the researcher were summarized and included where appropriate. (A sample form of the Phase II analytic summary sheet is included in Appendix E.) Secondly, a large reference table of numerical data and mathematical computations (including the Change Index) was compiled for all institutions in the original population. This table included all thirteen four-year coeducational colleges and universities plus the organization used in the pilot study. The statistical information available in the table provided a valuable and efficient reference source on numerous occasions, particularly with respect to sample selection and, again, during later stages of comparative analysis. (A summary of the table of numerical data appears in Chapter Four.) Third, a summary chart describing institutional differences and similarities was developed. The chart (which is summarized in Chapter Four) was used for initiating, eliminating, and validating a number of research hypotheses during Phases II and III of the study. Finally, a cumulative list of responses to the major research question, "What conditions facilitated the implementation of Title IX at your institution?", was compiled. Every response elicited during Phase II interviewing was included. The list was then supplemented by the researcher's observations of "potential variables" as they occurred throughout the entire investigation process. The list was long, fragmented, and cumbersome during the initial stages of research, particularly during the culmina-
tion of Phase II and the beginnings of Phase III. The items on this worksheet were continually modified, integrated, synthesized, expanded and delimited as theoretical propositions began to emerge. By constantly returning to the list of "potential variables," the researcher was confident that there were no plausible responses, or even seemingly minor observations, left uninvestigated. A number of responses were eliminated prior to Phase III research simply by returning to quantitative data and the comparison chart on "institutional differences and similarities" for validation. When factual evidence indicated that a response was invalid, it was rejected. Other responses and observations were written into primitive hypothetical statements or questions to be investigated and analyzed during Phase III research. Chapters Four and Five describe the process used to generate theoretical propositions, including the rejection, acceptance and modification of responses included on the "potential variables" list.

The closing strategy for Phase II involved sending a letter to each interviewee acknowledging his or her contribution to the research and indicating whether or not the institution had been selected for further study. All analytical summary sheets, tables, and charts were reviewed at this point for the purpose of identifying and clarifying potentially significant variables functioning to facilitate implementation of Title IX. A primitive set of hypotheses in the form of a series of specific research questions emerged during this transition between the last two phases of the investigation.

Phase III

Once the four comparison groups had been selected for in-depth study, a series of personal interviews was conducted at each of these
institutions. During the initial visit, data collection was guided by research questions generated in Phase II, the results of Phase II interview(s) at the particular institution where the visit took place, and the guidelines suggested by experience gained in the pilot study. As Phase III progressed, interviews were oriented toward discovering, elaborating and refining theory. Theoretical requirements controlled by emerging questions and concepts, along with the methodological requirements of theoretical sampling of sources, guided the entire data collection process. In order to obtain a sample of people who approached issues from different perspectives, factors such as age, sex, tenure, and position of potential interviewees guided the strategy for establishing the initial interview schedule.

At each institution in the final sample, the principal source used in Phase II investigation was contacted by telephone, informed that the institution had been selected for further study, and requested to assist the researcher in establishing the initial interview schedule. Sources in all four institutions expressed willingness to cooperate. During each telephone conversation, a preliminary list of potential interviewees was created. In all four cases, the names and phone numbers of specific primary sources were requested and obtained. Several additional prospective interviewees were suggested by the principal contact in each institution. The primary sources included at least one central administrator in the athletic chain-of-command, the affirmative action director, a member or chairman of the athletic advisory committee, an athletic administrator of the opposite sex of the principle contact, an athletic staff member or faculty member who had worked with the program during the past five years, and any full-
time personnel connected with the women's athletic program who had been hired within the past three or four years. The list of interviewees additionally recommended by the principal contact varied among institutions.

Once the preliminary list of sources had been determined, each potential interviewee was contacted by telephone, briefly informed of the nature and purpose of the research, and requested to participate as a respondent. A tentative time and date was established for an interview in order to facilitate the organization of a research calendar for campus visitations. Each source, in turn, was requested to provide additional names of potential interviewees. Immediately following the telephone conversation, an introductory letter describing the research and assuring anonymity and confidentiality of sources was sent. A summary of Phase III survey questions was enclosed (see Appendix F). With the exception of three university presidents, each candidate with whom an interview was requested did, in fact, participate as an interviewee. Each of the three presidents, however, cooperated by discussing the survey questions with an administrative assistant, who then represented the president as an interviewee. In the fourth institution, the personal interview with the college president was conducted.

The procedure used for arranging initial campus visitations was efficient and effective. The pre-arranged schedule called for two to three full days of interviewing and data collection on each campus. In organizing the schedule, specific blocks of time were set aside as openings for additional interviews as new sources were uncovered. This flexibility proved invaluable as a means of avoiding unnecessary return visitations to each campus. The schedule also allowed time for ample perusal of written and printed material available at each institution.
Phase III research began the institution (Northern Virginia University) in which implementation of Title IX had been most effective as reflected by the Change Index. Following two days of extensive investigation at the University, the researcher visited one of the two comparison groups (Eastern Virginia University) in which implementation efforts had been relatively unsuccessful. Approximately half of the primary interviews were conducted at the latter institution. The third campus visitation, two days in duration, was conducted at the second ranking institution with respect to effective Title IX implementation (Central Virginia University). The researcher then returned to the aforementioned comparison group (Eastern Virginia), completed the schedule of primary interviews and followed up on all additional leads and sources. The next series of interviews took place at the institution characterized by the lowest Change Index in the final population (Southern Virginia University).

After all data had been reviewed, categorized, and analyzed, a return visitation was necessary in every case except Eastern Virginia University. The same consecutive order was followed for the return visits: Northern Virginia University, Central Virginia University, and finally, Southern Virginia University.

During the campus visitations, personal interviews provided the main source of data. A minimum of eleven interviews were conducted on each campus. The average number of respondents was twelve, and the maximum was fourteen. In each case, every candidate on the list of primary sources (previously presented) was interviewed. This list accounted for at least seven of the sources interviewed on each campus. The remaining respondents varied according to institutional characteristics.
and dynamics, and according to theoretical relevance. In addition, a conscious effort was made to identify and interview proponents and opponents of change related to federal mandates on each campus. Beyond the principal sources, the list of interviewees included current and former athletic staff members, additional administrative personnel (particularly those involved with university finances), student-athletes, and faculty leaders concerned with or directly involved with campus athletics or other programs where sex equity had been an issue. Examples of the latter included an examination of reported changes in career counseling, housing, employment opportunities, and female representation on major committees and governing boards.

The importance of interviewing sources who had recently experienced changes in job status became increasingly clear. Locating faculty and staff members who had been released or had resigned from athletic positions and had moved out of the state or region proved difficult. Once these people were located, telephone interviews were conducted. Data obtained in this manner was eventually instrumental in refining and verifying key propositions in the theory.

The researcher was conscious of the need for broad representation in collecting interview data. Every attempt was made to interview a variety of sources, as well as a balanced sample of proponents and opponents of change attributed or related to the mandate. Since sex discrimination was a basic issue, it was important to seek out sources of both sexes at all levels of the college constituency. This was difficult in some cases where few women held positions as athletic staff members and/or university administrators. The problem was often solved by locating knowledgeable women who were active faculty feminists in
leadership positions, ex-coaches, and/or special assistants to the presidents. By the completion of Phase III, forty to fifty percent of the interviews at each institution had been conducted with women.

The procedure at each institution was to conduct an opening interview with an athletic administrator closely connected with the women's athletic program. In three cases this source was a female (the director or coordinator of women's athletics), and in one case the initial source was a male athletic director responsible for the total intercollegiate sports program. After the opening interview, the pre-arranged research schedule was followed and supplemented as new sources were identified and interviewed.

Each interview lasted from forty-five minutes to one and one-half hours. Demographic data was requested as necessary, but primary emphasis was on gathering perceptual data and, eventually, on theory verification. Inquiry was guided by a series of general questions designed to allow for open-ended response and to facilitate systematic recording and coding of data. In addition to developing a code for emerging categories and properties, the researcher employed the notation procedures advocated by Schatzman and Strauss (see Appendix G). This method facilitates distinction among observational notes, theoretical notes, and methodological notes. Following each interview, the researcher's notes were reviewed, clarified, and organized. The more important comments and information were dictated onto a tape. After every round of interviews at each institution, the survey forms, notes and tapes were reviewed and relevant information was recorded on analytic summary sheets.

Toward the end of the interviewing schedule on each campus, emerging theoretical variables and possible relationships among variables
guided the inquiry. Interviews became less structured and specific responses on certain items on the survey form became unnecessary. As new insights came into focus, participants were often asked to interpret or explain specific events, processes or interactions. Considerable care was taken to avoid influencing the direction of the response in any manner. During the return visits to each campus, inquiry was based on clarifying data and verifying theoretical components. These final interviews provided the researcher ample opportunity to test and validate emerging theory.

In addition to data generated through interviews, information was gathered from written material as described in the pilot study. Of particular importance were accounts of past events by local media; minutes from meetings of the boards of visitors and athletic advisory committees; membership lists of state, regional and national athletic organizations characterized by varying political viewpoints on the relationship of Title IX and college athletics; institutional reports compiled for HEW; institutional self-studies conducted as a result of Title IX guidelines; and memorandums and correspondence from personal files of interviewees. In each case, the written material was used to supplement and validate data gathered during the interview process. Written accounts of incidents and events were also subjected to cross-validation and verification in order to be considered admissible evidence.

Throughout the entire Phase III research process, the analytic summary sheets on each institution, as well as charts on "variables, properties and relationships," were continuously and systematically expanded, revised, and integrated. These references guided the
researcher in planning and conducting the follow-up interviews during
the return visitations. Consistent application of the interdependent
processes of theoretical sampling and returning to the data led to the
development of higher level concepts and, eventually, to elaboration and
refinement of the theory.

A number of procedures were employed for determining the reliability
and validity of interview data and theoretical components. Ini-
tially, evidence was cross-checked against quantitative data, minutes,
printed material, reports, and written correspondence. Written reports
and correspondence were, in turn, checked against other printed sources
and through the interview process. Single events were frequently veri-
ified by consensus among a variety of respondents. Determining the
credibility of key sources was largely a matter of assessing the intent
and ability of the individual to deal with inquiries objectively. Indi-
viduals with a long history of involvement and responsibility in
university operations related to the issues being discussed generally
proved to be informed, reliable and objective. Faculty members with
tenure tended to be more relaxed and open, and offered the most unguarded
opinions and revealing interpretations of events. Due to the contro-
versial nature of Title IX athletic regulations, it was helpful to
examine the extent of involvement of each individual with respect to
both campus and, particularly, off-campus organizational affiliations.

In cases of conflicting evidence, the information and the source
were reevaluated. A specific criterion allowing for contingencies
had been developed for verifying data and was applied in cases in which
consensus could not be reached. With regard to interpreting single
events or relationships between events, at least three well-informed
Individuals serving in different capacities (i.e. not three female athletic personnel) must have supported a particular position for it to become admissible evidence. In addition, the three supportive sources were evaluated according to similarity of organizational affiliations. In cases where special interests appeared to be common among two or more of the sources, at least two additional sources without similar organizational ties were sought out as a means of verifying data. Thirdly, if the interpretation was not in serious conflict with the perceptions of others or with the facts provided by quantitative data, the information was judged to have met the criteria for admissible evidence. There was very little difficulty validating data of a quantitative nature. Facts, events and patterns were generally verifiable by cross-checking through the use of institutional records and written reports. However, with regard to data generated through the interview process, it was sometimes necessary to revise or even dismiss potential qualitative evidence. For example, one highly credible source stated that the Board of Visitors at another institution had made a broad (and theoretically relevant) athletic policy decision in 1972. The researcher followed this lead by checking with sources at the institution in question, and by examining the minutes and annual reports of the Board of Visitors of the 1969 through 1976 academic years. No evidence was available to support the statement made by the original source. In fact, all initial interviews at the institution in question had provided evidence to the contrary. The decision made by the researcher was that the individual had been misinformed, and the data he provided were not considered as valid or admissible as evidence.

In another instance, several sources at one institution contended that acceleration in efforts to comply with Title IX were related to
a series of campus investigations by HEW and the Equal Employment Opportunity Commission (EEOC). The institution, also concerned with racial minority proportions on campus, appeared to be receptive to an expansion of women's athletics in order to discourage further governmental probes into university records and affairs. This interpretation, although not supported by university administrators, was not contradicted by other evidence. Nor did any source directly disagree with the possibility that the interpretation was valid. Therefore, lacking conflicting data and contradictory interpretations, this information was considered to be admissible evidence.

Verification of each component of the final theory was accomplished in a similar manner. During each step of the research, the variables, properties, categories and relationships had been verified by returning to the data and validated through the interview process. Then, in the closing phases of each follow-up interview, the theoretical propositions were explained, examined and discussed. In every case, there was agreement among respondents that the proposition was valid and that the variables functioned in the hypothesized manner. As a final check on validity of the emerging theory, the researcher would occasionally introduce an unexplored or unsubstantiated concept as one of the propositions. In all but one instance, this "false proposition" was refuted by the interviewees. In the latter situation, a return to the quantitative data and an examination of the organizational affiliations of the respondent clarified the invalidity of the "false proposition." By the completion of Phase III, all theoretical components, and the relationships between the components, had been validated through several different on-going procedures.
A total of ninety interviews were conducted throughout the investigation: twenty-four in Phase II, forty-nine in Phase III, and seventeen during the pilot study. Closure at each institution occurred when it became clear that 1) no new data was available to further embellish the theory, 2) no new sources had been identified, 3) the relevant data compiled had been verified, and 4) each theoretical proposition had been tested against the existing data and systematically validated. The follow-up procedure involved correspondence acknowledging the cooperation and support of participants. Brief summaries of selected findings of the study were enclosed.

The conclusion of Phase III involved integrating the propositions (components) into a meaningful and unified theory. This was accomplished by carefully examining how each variable functioned in each category, and by further exploring the relationships and effects of the variables and their properties. By continually returning to the data for verification, the grounded theory of prescribed academic change emerged.

Limitations

Practical considerations limited this study to state-supported institutions in Virginia. In turn, the theory may apply only to public colleges and universities where federal financial involvement in educational programs is significant and comparable. Second, the descriptive evidence used to generate the theory may be subject to regional trends, values and interpretations.

Another major limitation is related to the selection of athletic programs as the component of the university system through which the processes and impacts of forced change were explored. This may limit the generalizability of the study to the extracurriculum. The theory
will need to be tested in other settings, including the formal curriculum, in order to be generalizable to higher education as a whole.

Fourth, since compliance policies involve penalty through loss of federal funds, the theory applies only to government mandates with similar enforcement procedures. Reform due to incentive-based programs inspired by the government may be characterized by an entirely different set of dynamics. Finally, it should be noted that the mandate under investigation is value-laden and has stirred much controversy. The change process under these conditions is likely to occur at a different rate and in differing degrees than would take place during reforms in which identities, attitudes, and/or role expectations of participants are not altered.

Summary of Methodology

Due to the lack of an existing theoretical model from which relevant hypotheses could be drawn and tested, the research design focused on systematic procedures toward the discovery of a grounded theory of effective implementation of prescribed change. The constant comparative method, a multi-faceted and inductive investigative approach, was selected as the research strategy. The comparative method allowed for flexibility in data collection procedures and instrumentation. Sample selection among and within institutions was guided by the principles of theoretical sampling. This basically involved selection of comparison groups according to characteristics of maximum similarity, and then delimitation of the sample according to maximal differences. The comparative method combined systematic data collection, coding, and analysis with theoretical sampling in order to generate an integrated theory based
on empirical evidence and subjected to verification. One major research question guided the development of the procedural strategy: What are the variables which influence, and how do they interact to influence, effective implementation of a federal mandate?

Thirteen four-year public colleges and universities in Virginia were included in the initial population. Following a pilot study conducted at Virginia Commonwealth University, investigation proceeded in three phases. Phase I was oriented toward 1) gathering background information on each institution and selecting those which met the criteria for maximum similarity for further study; and 2) gaining entry and support for the research as well as establishing credibility and rapport.

During Phase II quantitative and qualitative data were collected, sorted and analyzed for the purpose of delimiting the population to a smaller, theoretically relevant sample. Four institutions were selected for in-depth investigation in the next phase of the study. Selection criteria included the use of a mathematical formula designed to differentiate among institutions with respect to the degree of change which had occurred in response to the athletic regulations of the federal mandate.

The primary means of data collection in Phase II was a series of telephone interviews with selected college representatives. An analytic summary sheet was prepared for each institution. These summaries provided the basis for development of a primitive set of hypotheses and for establishing further theoretical sampling procedures.

Phase II was directed toward answering the major research question and developing the theory. The major source of data was personal interviews. Respondents were chosen according to representativeness and theoretical relevance. An open-ended interview form was
constructed and administered to allow for systematic data collection without forcing specific responses. Analytic summary sheets were revised and expanded throughout the interviewing process. As concepts and relationships were clarified, a set of related propositions began to take form. Each incident, event, and interpretation was examined, categorized and subjected to verification by existing data and in the field. As variables emerged, their properties and their relationships to other variables were, in turn, analyzed and verified. Once the reliability of the sources and the validity of the components of the theory had been established, and theoretical saturation had eliminated the need for additional data, the formal propositions were written and integrated into a theoretical whole. The major components of the theory are summarized below.

A Theory of Conditions Facilitating Implementation of Federal Mandates

The events and processes describing institutional response to federal mandates took place in four related, but distinct, stages. The stages are consecutive and are dependent upon the processes and activities, reactions to events, and level of progress in each preceding stage. Of even greater importance, however, are the effects and impacts of three major variables (hereafter referred to as categories) on the degree, direction and nature of the activities characterizing each stage. Further, the variables function to determine an institution's rate of progress and, in fact, its ability to progress through the consecutive stages of change. In turn, the very nature of prescribed (mandated) change implies that an underlying impetus exists, influencing movement through the various stages toward implementation and change. Consequent-
ly, this external motivation to proceed in the direction of reform activates and influences the dynamic properties of the variables. The result is a complex and multidirectional set of relationships and linkages among and between the major variables and the principal stages of reform. Figure 1 is a graphic representation of the major components and interrelationships of the theory. The stages, major categories, and the key variables associated with each category are briefly described below. Henceforth, it is appropriate to assume that all incidents, evidence, variables, relationships and theoretical components have met the established criteria for verification and validation as previously described.

**Stages of Response**

Application of the constant comparative method in combination with the principles of theoretical sampling resulted in an investigative procedure characterized by breadth as well as depth. As the researcher examined a large number of public institutions on a limited basis, the data provided an overview of the extent of Title IX implementation across the Commonwealth. Analysis of the data obtained on the broader spectrum, together with the results of in-depth investigation in the final sample, clearly indicated that progress toward implementation of the federal mandate occurred in stages. Evidence also indicated that institutions differ in the rate at which they proceeded through the stages. Very few institutions have, in fact, reached the fourth and final stage of response to Title IX. Why is this so? In order to answer this question, one must turn to an examination of the variables and the manner in which they function to facilitate change. First, however, it was necessary to focus on exploring and defining the characteristics and
Category A.
ADMINISTRATIVE STRUCTURE

Stage 1
INFUSION

Stage 2
PREPARATION & POLICY FORMATION

Stage 3
TRIAL AND TRANSITION

Stage 4
POLICY EXECUTION

Category B.
ATTRIBUTES OF KEY PERSONNEL.

Category C.
INTERVENTION

Normal Relationships

Unique Relationships (creating potential for reversal of normal relationships or progress)

Two way ←→
One way ←
Contingent upon Category B. ←→
Contingent upon Category C. ←→

FIGURE 1

STAGES OF IMPLEMENTATION AND CATEGORIES OF VARIABLES AFFECTING PROGRESS TOWARD IMPLEMENTATION OF FEDERAL MANDATES
dimensions of the stages of institutional response to the mandate. Four consecutive and related, but distinct, stages emerged during this analysis. Each stage begins with an initial activity calling for some type of administrative response. A series of events follow, and lead to administrative action. The nature of this administrative response, in turn, generates the potential for conflict, reaction, and response on the part of constituents within and surrounding the university community. This feedback generally represents the culmination of one stage and the beginning of another.

The first stage, "Infusion," begins with the reception of the mandate as it is introduced to the institution and to the higher education system as a whole. The process of Infusion is characterized by a number of activities occurring simultaneously or sporadically by the potential participants (including administrators) of anticipated change. These activities, or sub-processes of Infusion, include: 1) introduction of the mandate to various personnel in a formal or informal manner; 2) inquiry into the reaction of external organizations with which the university and its constituents are affiliated; 3) introspective analysis including an examination of the social values of the mandate from the perspective of the individual's personal value system and priorities; 4) formal or informal discussion among various university constituents, including upper level administrators; 5) projection by groups and individuals with regard to potential effects of the mandate on the institution; 6) interpretation of the mandate by leaders, and particularly key administrators; 7) articulation and communication of the institutional interpretation of the requirements of the mandate; and 8) feedback from university constituents in the form of conflict, reaction and/or response.
The second stage, "Preparation and Policy Formation," reflects the attempts of institutions, and particularly college administrators, to adjust to potential reform. The process begins with investigation, generally in the form of the institutional self-study prescribed by HEW or other government agency responsible for enforcement. This is followed or accompanied by: 1) an evaluation of internal and external receptivity to change; 2) an examination of potential conflict, risks and options; 3) interpretation of the results of the self-study and a decision with regard to how this information will be utilized and; 4) a declaration of intent to comply with the federal mandate. The declaration of intent takes the form of a real or implied institutional policy, which may be tentative in nature. The reaction and response of the constituency represents the final activity in stage two.

The third stage, "Trial and Transition," is characterized by cycles of decision-making, conflict, action, reaction and adjustment. This is generally a period of recommending and testing possible options for dealing with the mandate. The institution takes steps toward implementation and change occurs. Because the real impact of the mandate is being experienced to some degree by a number of college constituents, the activity-conflict-response patterns in stage three are heightened and/or accelerated. It is during "Trial and Transition" that key variables exert maximum influence on the implementation process. Toward the end of stage three, formal institutional policy on implementing the mandate has been established, clarified, and articulated. The stage ends as the university community responds and reacts to this policy.

Stage four, "Policy Execution," is characterized by gradual acceptance and implementation of institutional policy. The action-
conflict-response cycle is often less pronounced and change is more likely to be planned and systematic rather than sporadic and tentative in nature. An organization which reaches stage four in the implementation process is nonetheless subject to the influence of key variables and may thus be vulnerable with regard to maintaining stage four status. The potential exists for an institution to regress back to the third, or even an earlier, stage.

**Categories and Variables**

During the investigative process as observations were constantly recorded, sorted and analyzed, a number of key variables emerged and were further examined, clarified and validated. In exploring each variable, analysis focused on examination of: 1) its dimensions and importance; 2) its properties and/or components; 3) its relationships to other variables; 4) the conditions under which it is maximized and minimized; and 5) the degree and direction in which it functions to facilitate change. Three higher level variables, or categories of variables, emerged. The major categories include: 1) administrative organization; 2) roles and attributes of key personnel; and 3) intervention. The categories, although closely related, are distinct and capable of functioning independently to produce significant impact on institutional efforts to reform in response to the mandate. Brief descriptions of the categories and the key variables operating within each category appear below.

**Administrative Organization.** This category focuses on the importance and activities of internal administrative systems in higher education as they function to provide the link between government intentions and institutional reform. Once the decision to implement the
mandate has been made by central administrative leaders, the institution will adapt, structurally and procedurally, to accommodate progress toward change. In order to provide for effective implementation of the mandate administrators must create and utilize supportive sub-structures for the purpose of facilitating change. Further, the type and extent of support services provided by the sub-structures is contingent upon: 1) the real or perceived power resources of the principal administrative leader; and 2) specific variables related to each sub-system, such as a department or division, in which changes are required by the mandate.

Attributes of Key Personnel. Because changes in social values and priorities are often implied by federal mandates, the variables in this category relate to personal as well as professional traits and behaviors of key personnel. The administrators and participants of prescribed change differ in many ways within and among institutions. In exploring the effects of these differences, five related variables (attributes of key personnel) surfaced as having particular theoretical relevance: 1) ability to influence; 2) organizational affiliations; 3) major assumptions; 4) priority decisions; and 5) strategy and action.

In-depth analysis of this theoretical component uncovered the importance of seeking out and identifying the most influential personnel and examining the roles they performed in the change process. Specifically, the roles of change agents include those of institutional leader, procreator and gatekeeper. Other key participants are categorized and defined as traditionalists, progressives, opportunists, and catalysts. The existence, function, and attributes of each of these key figures, individually and collectively, significantly influences the effectiveness
of implementation of a federal mandate within a given institution.

**Intervention.** This category of variables relates directly to the rate at which an institution progresses through any or all of the stages of implementation and, in turn, indirectly to the degree and effectiveness of efforts toward change. Intervention may occur in the form of a single major event, a series of related or isolated events, or as a relatively continuous, but uncommon, influence. An intervention is distinguished by such attributes as being out-of-the-ordinary and outside of the scope of routine events and influences. It is unplanned and coincidental in nature. Intervention may occur in any stage of the implementation process or may never occur. Because intervention is unplanned and because it occurs in some institutions and not in others, the theoretical relevance of this category of variables is critically important. Often it is through intervention that a performance gap is felt, acknowledged, and considered from an objective, problem-solving perspective. The ensuing transition enables personnel to focus on developing a change strategy, and is often accompanied by a decrease in rhetorical debate centered around values and assumptions.

In the case of federal mandates, a unique potential exists for a special type of variable to function as an intervention. When the law, accompanying regulations, or enforcement procedures are altered through legislation, executive orders or court action, it is possible that this event may create an acceleration or even a reversal of established relationships and normal progress through the stages of implementation. The effects, if any, of changes in the status and interpretation of the mandate are, in turn, dependent upon categories and variables previously described. This potential for change in the mandate itself (characteris-
tic of highly controversial legislation) adds to the complexity of relationships between the stages and categories of the theory, but further elucidates the critical nature of the principal components of the theory.

In summary, the theory of prescribed academic change consists of seven major components; four of which describe the consecutive stages of progress toward implementation of the mandate, and three of which are major categories of key variables affecting the rate and degree of institutional progress through the four stages of implementation. A complex and multidirectional set of relationships exists among and between the stages, categories, and variables within each category. The development of formal propositions and the rationale for each theoretical component and each proposition are described in the chapters which follow. The integrated theory is then presented and examined with regard to related literature and implications in a separate and final chapter.

Presentation of the Theory

The findings from Phase II investigation, which are presented and analyzed in Chapter IV, provide an overview of the impact of Title IX in Virginia. This background of quantitative data, together with a summary of perceptual descriptions of the effectiveness of implementation efforts at institutions throughout the state, describes the framework from which potential variables emerged and clarifies the sample selection process. A brief overview of the final comparison groups is included and is followed by a description of the procedures used to analyze potential variables which emerged as the preliminary findings were examined.
Chapter V contains an examination of each of the major components and key variables of the theory. The theory is developed as variables and sub-categories are defined. Emphasis is placed on describing the derivation, development, properties, and functions of each variable. Based upon the research findings from investigation in the four sample institutions, a set of theoretical propositions is formally stated. The plausibility of each proposition which comprises the emerging theory is discussed, and in each case a rationale is offered and the proposition is supported by empirical evidence. The propositions are stated in a manner which clearly describes the conditions which facilitate implementation of federal mandates.

In Chapter VI, the integrated theory, grounded in empirical evidence, is presented as a unified whole. The relationships between and among variables, categories and stages are examined. The theory is examined in terms of related existing theories described in the preceding review of literature. Several implications for application of the major findings of this study and the theory of prescribed academic change are then suggested.
Footnotes for Chapter III


2Ibid., p. 102.

3Ibid., p. 102.

4Ibid., p. 102.

5Ibid., pp. 102-3.

6Ibid., pp. 102-3.


8Conrad, op. cit., p. 103.

9Ibid., p. 103.

10Ibid., p. 103.

11Schatzman and Strauss, op. cit., p. 104.


13Conrad, op. cit., p. 104.

14Schatzman and Strauss, op. cit., p. 104.

15Ibid., p. 56.

16Ibid., pp. 133-4.

17The sixteen institutions include: Christopher Newport College, Clinch Valley College, The College of William and Mary, George Mason University, James Madison University, Longwood College, Mary Washington College, Norfolk State College, Old Dominion University, Radford College, Richard Bland College, University of Virginia, Virginia Commonwealth University, Virginia Military Institute, Virginia Polytechnical Institute and State University, and Virginia State University.


19Although large proportions of the enrollment in urban institutions in particular are part-time students, the treatment of data necessitated the use of figures based on full-time students. For example,
according to NCAA and AIAW eligibility rules, student athletes must be full-time undergraduate enrollees in order to compete in intercollegiate sports. In turn, the type of enrollment figures used throughout this study were consistent for purposes of mathematical calculations and systematic comparisons.

20 The researcher's home institution, Virginia Commonwealth University, was eliminated from this investigation as a potential comparison group due to extensive personal involvement in the athletic program during the past seven years. This decision has been made for the purpose of insuring objectivity throughout the study.


24 The final population included The College of William and Mary, George Mason University, James Madison University, Norfolk State College, Old Dominion University, University of Virginia, Virginia Polytechnical Institute and State University, and Virginia State University.

25 The fictitious names for the colleges comprising the final four comparison groups were selected arbitrarily and are not related to the actual location of the institutions in the sample. For example, "Northern Virginia University" is not located in northern Virginia.


27 In two separate instances, tenured faculty members who had long histories of involvement in women's athletics provided the researcher with evidence that central administrators strongly discouraged activities which challenged existing athletic programs and policies. Both interviewees openly discussed the dissatisfaction and dissonance among personnel and gave examples of administrative interference with their efforts to encourage compliance with Title IX athletic regulations. One respondent showed the researcher a letter from the college president strongly reprimanding her for taking an active position with respect to equalizing the workload between coaches of men's and women's sports. The second respondent produced a memorandum from a vice-president warning her to "exercise caution" in advocating further change with regard to increasing opportunities for female athletes. In both instances, the researcher consistently experienced a reluctance to disclose information of a potentially controversial nature among non-tenured and recently hired interviewees at these institutions.

CHAPTER IV
PRELIMINARY FINDINGS

Two major research objectives guided the collection and analysis of data in Phases I and II of this study: 1) sample selection through use of the principles of theoretical sampling and 2) the generation and preliminary analysis of potential variables affecting implementation of Title IX through use of the constant comparative method. The simultaneous application of these procedures yielded a broad and informative base of quantitative and qualitative data. Once the data had been sorted and verified, and information from individual institutional profiles had been analyzed and synthesized, a useful description of the status and impact of Title IX within and among the colleges in Virginia emerged. The empirical data provided the base necessary for theoretical sampling, as well as the initial framework for systematic and objective analysis and verification of several potential variables. The perceptual data obtained through the interview process supplemented the statistical findings and led to the emergence and testing of a number of primitive research hypotheses. The following sections contain a report of the major findings in Phase I and II of this study, a description of the institutions selected as the final comparison groups, and a description of the procedural analysis used to assess the validity and theoretical relevance of potential research variables which emerged during the first two phases of investigation.
Sample Selection

Use of the constant comparative method, together with the principles of theoretical sampling, demands that the researcher proceed inductively. In this study, the process of induction began with a broad data base which was gradually delimitated through in-depth study of a narrow, theoretically relevant sample. As a point of departure, it was appropriate to first ask "Where are the colleges in Virginia with respect to Title IX implementation?" The next logical question was "How much progress has been made since Title IX went into effect?" In the later stages of research, the major focus was on "What processes took place during progress toward implementation?" and "How does one account for this progress?" Throughout the entire investigative process, two key questions were imperative and were considered simultaneously with all other research questions: "How do institutions compare in their ability to effectively implement the mandate?" and "Why are some colleges more capable of effective implementation than others?" Keeping the latter two questions in mind, the systematic task of induction began with an attempt to determine the current status of Title IX implementation within a broad context.

The Status of Men's and Women's Intercollegiate Athletics in Virginia in 1978-79

In order to discover conditions facilitating the implementation of Title IX, it was imperative that the researcher gain a clear understanding of the current nature and impact of this mandate in the public colleges in Virginia. An analysis of relevant statistical data at twelve major institutions provided an overview of the degree of compliance in athletic programs across the state, thereby facilitating the sample selection process and, eventually, the generation of theory.
For the initial purposes of breadth, clarity and comparison, twelve state institutions were included in the process of data analysis which provided an overview of the status of men's and women's athletic programs in the 1978-79 academic year. In addition to the eight colleges which emerged as the final population, the findings from investigations at Longwood College, Mary Washington College, Radford College and Virginia Commonwealth University (the site of the Pilot Study) were included in the original statistical analysis.¹ Clinch Valley College, an extension of The University of Virginia, was not included in this phase of data analysis. The full-time enrollment at Clinch Valley in 1978-79 was 586 students, or less than twenty-five percent of the next smallest public institution in the state. Although the 1978-79 figures were available, Clinch Valley was eliminated from the forthcoming data analysis due to 1) an affiliation with another institution involved in the study, and 2) the probability that use of these figures would disproportionately influence statistical averages. The other college eliminated prior to all stages of statistical data analysis was Christopher Newport College, until very recently a branch institution of The College of William and Mary. The empirical data on Christopher Newport was incomplete and could not be verified.

The data necessary for assessing and comparing the status of men's and women's athletics in the twelve public colleges in Virginia has been summarized and is presented in Tables 1 and 2. All national averages were obtained from a recent study conducted by the Association for Intercollegiate Athletics for Women (AIAW). The AIAW survey included responses from 372 four-year colleges and universities across the nation.²
Table 1 provides demographic data on enrollments and athletic participants as well as a brief description of the scope of men's and women's athletic programs. Comparing state averages with national norms, it appears that: 1) state and national male-female enrollment proportions were very similar (approximately 51 percent of the students were women); 2) the proportion of female athletes (36.67 percent) in Virginia was nearly seven percent greater than the national percentage of athletes which were women (30 percent); 3) Virginia (in which 39.63 percent of the varsity sports were women's teams) provided the average equivalent of seven percent fewer women's varsity sports (approximately one and one-half teams) per institution when compared with the national norm (46.67 percent of the teams in institutions across the United States were women's teams); and 4) the percent of athletic scholarships awarded to women (17.33 percent) in Virginia was less than half the national average (35 percent).

Table 2 shows that Virginia failed to meet national averages in all three budget categories analyzed. In comparison with colleges across the nation, women in Virginia received .68 percent less of the combined operating and scholarship budgets, and 8.48 percent fewer scholarship dollars. The per capita expenditure percentages reflect the percent of the male per capita expenditure which was allocated to each female athlete. On the state level, each female athlete averaged 31.46 percent of the per capita allocation to her male peer. Across the nation, women received 44.76 percent of the men's per capita average. In short, based on national figures, the data reflected an average deficit of 13.3 percent, or approximately $200.00 per female athlete in 1978-79 in Virginia as compared with the average American woman athlete.
### TABLE 1

**COMPARISON OF MALE AND FEMALE ATHLETIC PROGRAMS IN TWELVE PUBLIC COLLEGES IN VIRGINIA: 1978-79**

<table>
<thead>
<tr>
<th>Category</th>
<th>Items</th>
<th>Enrollment</th>
<th>Student Athletics</th>
<th>Percent of Students Who Were Athletes</th>
<th>Number of Varsity Sports Teams</th>
<th>Number of Scholarships Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Men and Women</td>
<td>Total</td>
<td>83,202</td>
<td>4,360</td>
<td>18.7%</td>
<td>169</td>
<td>1,085</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>19,750</td>
<td>850</td>
<td>18.9%</td>
<td>30</td>
<td>247</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>2,387</td>
<td>153</td>
<td>1.87%</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>6,933.5</td>
<td>333.63</td>
<td>5.24%</td>
<td>14.08</td>
<td>95.64</td>
</tr>
<tr>
<td></td>
<td>Nat'l. Average</td>
<td>5,743</td>
<td>340</td>
<td>5.92%</td>
<td>15.47</td>
<td>82.0</td>
</tr>
<tr>
<td>B. Men</td>
<td>Total</td>
<td>40,721</td>
<td>2,761</td>
<td>10.2%</td>
<td>102</td>
<td>897</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>13,263</td>
<td>620</td>
<td>23.87%</td>
<td>15</td>
<td>225</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>307</td>
<td>84</td>
<td>2.81%</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>3,393.4</td>
<td>230.08</td>
<td>8.78%</td>
<td>8.5</td>
<td>81.55</td>
</tr>
<tr>
<td></td>
<td>Nat'l. Average</td>
<td>2,814</td>
<td>238</td>
<td>8.46%</td>
<td>8.0</td>
<td>53.0</td>
</tr>
<tr>
<td>C. Total</td>
<td></td>
<td>42,481</td>
<td>1,599</td>
<td>5.67%</td>
<td>67</td>
<td>188</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>6,487</td>
<td>335</td>
<td>13.4%</td>
<td>15</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>2,000</td>
<td>25</td>
<td>1.26%</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>3,540.1</td>
<td>133.23</td>
<td>3.78%</td>
<td>5.38</td>
<td>17.09</td>
</tr>
<tr>
<td></td>
<td>Nat'l. Average</td>
<td>2,929</td>
<td>102</td>
<td>3.48%</td>
<td>7.0</td>
<td>29.0</td>
</tr>
<tr>
<td>D. Percent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>State</td>
<td>51.06%</td>
<td>36.67</td>
<td>39.63%</td>
<td>17.33%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nation</td>
<td>51.0%</td>
<td>30.0</td>
<td>46.67%</td>
<td>35.0%</td>
<td></td>
</tr>
</tbody>
</table>

---


*b* All enrollment figures are based on actual head-counts of full-time undergraduate students.

*c* Scholarship data includes full and partial scholarships, and is based on figures from eleven institutions.
### TABLE 2

**Comparison of Male and Female Athletic Program Expenditures in Twelve Public Colleges in Virginia: 1978-79**

<table>
<thead>
<tr>
<th>Category</th>
<th>Items</th>
<th>Athletic Budgets</th>
<th>Scholarship Budgets</th>
<th>Per Capita Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$53,349,940</td>
<td>$1,903,245</td>
<td>$3,349,940</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$1,489,000</td>
<td>$624,498</td>
<td>$2,106.08</td>
</tr>
<tr>
<td>A. Total</td>
<td></td>
<td>$30,520</td>
<td>$0</td>
<td>$107.09</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$462,495</td>
<td>$190,324.50</td>
<td>$1,272.92</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$466,000</td>
<td>$121,000</td>
<td>$1,370.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$44,644,513</td>
<td>$1,653,839</td>
<td>$2761 athletes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$1,400,000</td>
<td>$567,582</td>
<td>$2,526.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$10,740</td>
<td>$0</td>
<td>$107.40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$361,211.08</td>
<td>$155,583.90</td>
<td>$1,700.30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$361,000</td>
<td>$95,000</td>
<td>$1,642.86</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$855,407</td>
<td>$247,406</td>
<td>$1599 athletes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$249,012</td>
<td>$69,000</td>
<td>$1,200</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$15,000</td>
<td>$0</td>
<td>$106.92</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$71,283.92</td>
<td>$24,740.60</td>
<td>$534.96</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$75,000</td>
<td>$26,000</td>
<td>$735.29</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>$65.68%</td>
<td>100%</td>
<td>99.55%</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>6.0%</td>
<td>4.89%</td>
<td>23.77%</td>
</tr>
<tr>
<td></td>
<td>State</td>
<td>15.41%</td>
<td>13.0%</td>
<td>31.46%</td>
</tr>
<tr>
<td></td>
<td>Nation</td>
<td>16.09%</td>
<td>21.48%</td>
<td>44.76%</td>
</tr>
</tbody>
</table>


*bAthletic Budget figures in this column include both operational expenses and scholarship funds. Salaries were omitted.

*Scholarship expenditures were based on data from ten institutions.

*Total Athletic Budget divided by Total Athletes (see Table 1) in each category.
In summary, although in 1978-79 the proportion of female athletes per college was greater in Virginia than in the average American college, female participants in the state had 1) fewer teams from which to choose; 2) fewer opportunities to obtain scholarships; and 3) less money available in programs, scholarship funds, and per capita expenditures than the average female athlete in the United States.

Of greater importance than assessing the status of state athletic programs in terms of national norms, however, is a comparison of men's and women's programs within the state with regard to equal opportunity for student athletes. A cursory examination of the data presented in Tables 1 and 2 provides evidence that during the first full year (1978-79) in which compliance with Title IX had become mandatory, Virginia fell far short of eliminating sex discrimination in intercollegiate athletics. For example, nearly thirty-seven percent of the athletes were women, yet only seventeen percent of the available scholarships were awarded to female athletes. Women received only 15.41 percent of the combined operating and scholarship budgets; and the average per capita expenditure ratio ($1700.30 for each male athlete and $735.29 for each female athlete) clearly indicates that in 1978-79 the average woman athlete received less than one-third of the amount allocated to her male peer.

An examination of the ranges within each category provides a general perspective of the variance among state colleges with respect to each item compared. Specifically, the range in percentages of athletic budgets which were allocated to women's sports varied from 6 percent at one institution to 65.68 percent at another. Per capita expenditure ratios ranged from 23.77 percent to 99.55 percent. In the latter case, this figure indicates that, at least in one college, each male and
female athlete received virtually equal per capita allocations in 1978-79. It thus becomes apparent that some institutions have made much greater progress than others toward ending sex discrimination in athletics. The problem now becomes one of determining the range and degree of progress toward compliance with Title IX which has occurred since institutions received the mandate and related guidelines in July, 1975. In turn, it is necessary to examine the nature and extent of changes which had occurred within and among the institutions during the appropriate time span (1974-1979).

Delimiting the Population

According to the guidelines and procedures described in the preceding chapter, a total of eight public colleges and universities were selected as the final population from which the comparison groups were chosen. The large number of institutions included in the 1978-79 overview of athletic program status provided the breadth of data necessary to assess general progress toward Title IX compliance throughout the state. As the researcher applied the principles of theoretical sampling, it became clear that all further data analysis should focus on the eight institutions which were similarly situated when Title IX first went into effect. In this manner, it was possible to establish and apply objective criteria for assessing and comparing change in the athletic programs.

For purposes of objectivity, Virginia Commonwealth University (the home institution of the researcher) was eliminated as a potential comparison group. Three other colleges were eliminated due to theoretical guidelines initially prescribing maximum similarity among sample institutions. These three institutions had been women's colleges until
1972 when the Commonwealth of Virginia mandated that they become co-educational. By 1974-75 there had been limited progress toward compliance with the state mandate, however, and at least eighty percent of the student body at each institution was still female. During the next five years, the proportion of male students at the three colleges increased by an average of 12.44 percent. Concurrently, a major focal point in athletics on each campus was the development of programs to accommodate and attract more male students. Since this situation was unique with respect to other institutions across the state, the researcher determined that the three colleges did not meet criteria for maximum similarity. They were, in turn, eliminated as potential comparison groups. Finding no evidence which indicated further delimitation of the sample was necessary, a decision was made to include the eight remaining institutions in the final population.

As a point of departure prior to examining change in the final population, it is interesting to note briefly the status of athletics at the predominately female colleges. As one administrator stated it, "Our problem in eliminating sex discrimination in athletics was one of building opportunities for men." Within this context, several factors related to the program changes which occurred at the colleges deserve consideration. First, the data shows that all three institutions were, in fact, able to make the necessary adjustments to develop and/or expand athletic programs for men which were, by 1978-79, comparable to those for women. Secondly, in each institution the per capita expenditures for female athletes were lower than those for males in 1974-75 (in the two colleges which had males enrolled) and in 1978-79. Third, by 1978-79 the per capita expenditures for male and female athletes
differed only by a relatively low average of 0.28 percent. In other words, women athletes at these colleges received an average of over ninety percent of the per capita allocations for males. Fourth, as men's athletic programs were being developed, the programs for women showed evidence of continued growth in all three colleges. Finally, several interviewees at these institutions contended that Title IX had been influential in protecting women's athletic budgets and in preserving the quality and competitive status of women's programs as the men's programs were being developed. A female source at one of the institutions aptly summarized the majority of respondents' perceptions of the situation as follows:

As the number of male students on campus increased, the expansion of men's sports was inevitable. Title IX provided us with the leverage to maintain reasonable equilibrium in athletics as a whole, and prevented the destruction of a well-established and successful women's sports program. Thus far we have shown that colleges can offer quality athletics and still provide equal opportunity for men and women. What happens to this balance in the future remains to be seen, and may be highly dependent upon the interpretation and enforcement of Title IX.

Although of interest and limited relevance to the findings of this investigation, the study of changes attributed to state and federal mandates within and among the three institutions discussed above suggests a potential topic for an entirely separate research project. Therefore, the institutions were not considered for further study herein with regard to data analysis, sample selection or generation of theory. The subsequent phases of sample selection focused on assessing and comparing change in the eight institutions which comprised the final population.

Eight Colleges Change

Having defined the population from which comparison groups would be selected, research priorities shifted toward the application of the
theoretical sampling criterion of maximal differences. Assessing differences between institutions with regard to the degree of change brought about by Title IX implementation involved: 1) comparing athletic program status at each college prior to and following the compliance deadlines of the mandate; 2) using this comparison to define the extent of program change at each institution; and 3) ranking the colleges according to the degree of change which had occurred.

In order to measure and compare institutional change in an objective manner, a systematic evaluation procedure was applied. First, specific quantitative data on each institution's athletic program were collected for the 1974-75 and 1976-79 academic years. This five year period covered the time span necessary to provide information which would describe program status before and after the mandate would have had major impact on an institution. Secondly, a mathematical formula, designed to measure program change toward equal opportunity for women athletes, was applied for the purpose of ascribing a numerical Change Index to each institution. The formula, which is described in detail in Chapter III, is a means of assessing program change through the measurement of both quality (reflected by per capita expenditures) and quantity (reflected by percentages of students who participate as athletes) in men's and women's athletics over the five year period. Once a Change Index had been calculated for each institution, the two colleges in which the Index was highest (indicating that the greatest amount of change had occurred) were selected for study among the final sample. Applying the criterion for maximum differences, the two colleges with the lowest Change Indexes (those showing the lowest degree of change) were selected as comparison groups. In summary, the final
sample of four colleges was selected on the basis of maximum differences from a population characterized by maximum similarity, thereby meeting the requirements of theoretical sampling.

An examination of the nature and degree of change in athletic programs among the population as a whole provided an appropriate frame of reference from which to approach further analysis of the data and in-depth investigation at the four sample institutions. A summary of the major findings based on data from the eight colleges comprising the final population is included below.

Table 3 provides a comparative summary of the average increases in athletic opportunities for women as reflected by numbers of participants and the availability of teams and scholarships. Enrollment figures indicate that women accounted for more than half (55.46 percent) of the increase in full-time undergraduate students during the five year period. During the same period, the number of women athletes showed proportionately greater increases (48.75 percent) than that of men (16.18 percent); however, women accounted for only 51.69 percent of the total increase in athletic participants. In turn, it appears that "player for player" competitive opportunities for men and women increased at approximately the same rate, that is, approximately one-half of the athletes accounting for increases in player participation since 1974 have been women.

Athletic programs among the eight colleges resulted in participation of an average of approximately five and one-half percent of the student body. Very little change occurred in the percentage of total students participating in athletic programs (.1 percent). Women accounted for 100 percent of this increase.
### TABLE 3
COMPARISON OF CHANGE IN MALE AND FEMALE ATHLETIC PROGRAMS IN EIGHT COLLEGES IN VIRGINIA BETWEEN 1974-75 AND 1978-79

<table>
<thead>
<tr>
<th>Category</th>
<th>Item</th>
<th>Enrollment</th>
<th>Number of Athletes</th>
<th>Percent of Students Who Were Athletes</th>
<th>Number of Years</th>
<th>Number of Scholarships</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>51,567</td>
<td>63,196</td>
<td>4,396</td>
<td>123</td>
<td>130</td>
</tr>
<tr>
<td></td>
<td>Range: High</td>
<td>14,683</td>
<td>19,750</td>
<td>627</td>
<td>26</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Range: Low</td>
<td>3,837</td>
<td>3,787</td>
<td>114</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>6,443.9</td>
<td>7,099.5</td>
<td>344.28</td>
<td>15.380</td>
<td>17.25</td>
</tr>
<tr>
<td></td>
<td>Total Increase</td>
<td>11,629</td>
<td>681</td>
<td>1,453.63</td>
<td>13</td>
<td>3-2</td>
</tr>
<tr>
<td></td>
<td>Mean Increase</td>
<td>1,453.63</td>
<td>85.13</td>
<td>1,875</td>
<td>12.22</td>
<td>53.87</td>
</tr>
<tr>
<td></td>
<td>Percent Increase</td>
<td>22.5%</td>
<td>24.72%</td>
<td>.10%</td>
<td>6-11</td>
<td>3-2</td>
</tr>
<tr>
<td>B.</td>
<td>Total</td>
<td>28,936</td>
<td>34,116</td>
<td>2,033</td>
<td>76</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>Range: High</td>
<td>9,706</td>
<td>13,263</td>
<td>462</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Range: Low</td>
<td>919</td>
<td>1,065</td>
<td>85</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>3,617</td>
<td>4,264.5</td>
<td>254.13</td>
<td>9.5</td>
<td>9.9</td>
</tr>
<tr>
<td></td>
<td>Total Increase</td>
<td>5,180</td>
<td>329</td>
<td>647.5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Mean Increase</td>
<td>647.5</td>
<td>41.13</td>
<td>375</td>
<td>3-3</td>
<td>31.29</td>
</tr>
<tr>
<td></td>
<td>Percent Increase</td>
<td>17.9%</td>
<td>16.10%</td>
<td>.11%</td>
<td>3-5</td>
<td>35.44</td>
</tr>
<tr>
<td>C.</td>
<td>Total</td>
<td>22,631</td>
<td>29,080</td>
<td>722</td>
<td>47</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Range: High</td>
<td>4,917</td>
<td>6,487</td>
<td>202</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Range: Low</td>
<td>918</td>
<td>2,122</td>
<td>20</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>2,828.9</td>
<td>3,635</td>
<td>90.25</td>
<td>5.8</td>
<td>7.4</td>
</tr>
<tr>
<td></td>
<td>Total Increase</td>
<td>6,449</td>
<td>352</td>
<td>806.13</td>
<td>12</td>
<td>122</td>
</tr>
<tr>
<td></td>
<td>Mean Increase</td>
<td>806.13</td>
<td>44</td>
<td>1.5</td>
<td>17.43</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percent Increase</td>
<td>26.5%</td>
<td>40.75%</td>
<td>.50%</td>
<td>25.33</td>
<td>813.33%</td>
</tr>
<tr>
<td>D.</td>
<td>Total</td>
<td>60,459</td>
<td>59,474</td>
<td>42,172</td>
<td>50</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td>Range: High</td>
<td>34,151</td>
<td>33,742</td>
<td>13,511</td>
<td>16.7%</td>
<td>16.7%</td>
</tr>
<tr>
<td></td>
<td>Range: Low</td>
<td>43,898</td>
<td>45,022</td>
<td>26.2%</td>
<td>14.1%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>43,898</td>
<td>45,022</td>
<td>16.7%</td>
<td>16.7%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Percent Increase</td>
<td>2.37%</td>
<td>14.11%</td>
<td>.0%</td>
<td>26.75%</td>
<td>7.1%</td>
</tr>
<tr>
<td></td>
<td>Women('s) Proportion of Total Increase</td>
<td>55.44%</td>
<td>51.69%</td>
<td>100%</td>
<td>80%</td>
<td>35.7%</td>
</tr>
</tbody>
</table>

*Based on actual head-counts of full-time undergraduates
*Based on data from seven institutions
*Increase per college
The most extensive growth in participation opportunities for female athletes is reflected in increases in the numbers of sports teams and athletic scholarships available to women. Eighty percent of the team increases were in women's sports. Scholarship opportunities for female athletes increased more than 800 percent in the five year period. However, the overall statistics among the eight colleges show that women received only 35.78 percent of the additional scholarships awarded.

Table 4 summarizes the average change in athletic program expenditures from 1974-75 to 1978-79 and provides a comparison of increases in expenditures for male and female athletes. Proportionately, women received notably greater gains in all three categories, showing average increases of 356.91 percent in the overall athletic budget, 4532 percent in scholarship funds, and over 200 percent in per capita expenditures. Similar budgetary increases for men were proportionately lower, averaging 50.94 percent in overall expenditures, 68.24 percent in scholarship funding, and 29.91 percent in per capita expenditures. However, when considering the combined (men's and women's) increases in expenditures, women received an average of only 28.06 percent of additional money allocated to athletics and less than 25 percent of the additional scholarship funds during the five year period.

With regard to per capita expenditures, by 1978-79 each female athlete received an average of approximately thirty-seven percent of the average per capita allocation to each male athlete. In this category alone, women received an average of more than fifty percent of the total gain throughout the five year period.

In summary, Tables 3 and 4 provide evidence that throughout the five year period: 1) both men's and women's athletic programs experienced
## Table A

**Comparison of Change in Male and Female Athletic Program Expenditures in Eight Colleges in Virginia Between 1974-75 and 1978-79**

<table>
<thead>
<tr>
<th>Category</th>
<th>Item</th>
<th>Athletic Budgets(a) 1974-75</th>
<th>Athletic Budgets(a) 1978-79</th>
<th>Scholarship Budgets(b) 1974-75</th>
<th>Scholarship Budgets(b) 1978-79</th>
<th>Per Capita Expenditures(c) 1974-75</th>
<th>Per Capita Expenditures(c) 1978-79</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>($3,031,179)</td>
<td>($3,080,718)</td>
<td>($959,053)</td>
<td>($1,779,515)</td>
<td>($3,031,179)</td>
<td>($3,080,718)</td>
</tr>
<tr>
<td>A.</td>
<td>Total</td>
<td>($3,031,179)</td>
<td>($3,080,718)</td>
<td>($959,053)</td>
<td>($1,779,515)</td>
<td>($3,031,179)</td>
<td>($3,080,718)</td>
</tr>
<tr>
<td>Range:</td>
<td>High</td>
<td>($856,481)</td>
<td>($849,900)</td>
<td>($490,000)</td>
<td>($624,498)</td>
<td>($1,418.52)</td>
<td>($1,418.08)</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>($42,090)</td>
<td>($126,116)</td>
<td>(2,490)</td>
<td>(57,846)</td>
<td>(351.18)</td>
<td>(595.03)</td>
</tr>
<tr>
<td>Mean(d)</td>
<td></td>
<td>($376,399.63)</td>
<td>($628,389.75)</td>
<td>(156,505.50)</td>
<td>(296,505.93)</td>
<td>(1,092.99)</td>
<td>(1,664.12)</td>
</tr>
<tr>
<td>Man and</td>
<td>Total Increase</td>
<td>($2,013,539)</td>
<td>(846,482)</td>
<td>(371.13)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woman</td>
<td>Mean Increase(e)</td>
<td>($252,442.38)</td>
<td>(140,080.33)</td>
<td>(875.20)</td>
<td>(33.96)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percent Increase</td>
<td>(87.07)</td>
<td>(82.52)</td>
<td>(33.96)</td>
<td>(33.96)</td>
<td>(33.96)</td>
<td>(33.96)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>($2,852,358)</td>
<td>($4,305,245)</td>
<td>($334,559)</td>
<td>($51,572,279)</td>
<td>($2,033)</td>
<td>($2,362)</td>
</tr>
<tr>
<td>Range:</td>
<td>High</td>
<td>($862,481)</td>
<td>($1,400,000)</td>
<td>($490,000)</td>
<td>($567,582)</td>
<td>($2,041.32)</td>
<td>($2,526.01)</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>($35,790)</td>
<td>(101,456)</td>
<td>(2,490)</td>
<td>(50,934)</td>
<td>(421.06)</td>
<td>(724.53)</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>($356,544.75)</td>
<td>($538,135.63)</td>
<td>(153,759)</td>
<td>(262,046.50)</td>
<td>(1,403.03)</td>
<td>(1,822.71)</td>
</tr>
<tr>
<td>Man</td>
<td>Total Increase</td>
<td>($1,452,887)</td>
<td>(637,720)</td>
<td>(419.68)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean Increase(e)</td>
<td>($181,610)</td>
<td>(106,268.67)</td>
<td>(419.68)</td>
<td>(419.68)</td>
<td>(419.68)</td>
<td>(419.68)</td>
</tr>
<tr>
<td></td>
<td>Percent Increase</td>
<td>(68.24)</td>
<td>(68.24)</td>
<td>(39.01)</td>
<td>(39.01)</td>
<td>(39.01)</td>
<td>(39.01)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>($138,821)</td>
<td>($725,473)</td>
<td>($4,474)</td>
<td>($207,726)</td>
<td>($156,821)</td>
<td>($725,473)</td>
</tr>
<tr>
<td>Range:</td>
<td>High</td>
<td>($26,428)</td>
<td>($249,012)</td>
<td>($4,474)</td>
<td>($69,000)</td>
<td>(600)</td>
<td>(1,200)</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>($10,800)</td>
<td>(15,000)</td>
<td>(0)</td>
<td>(6,912)</td>
<td>(112.63)</td>
<td>(343.22)</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>($19,852.63)</td>
<td>($90,084.13)</td>
<td>(745.67)</td>
<td>(34,539.33)</td>
<td>(218.97)</td>
<td>(675.49)</td>
</tr>
<tr>
<td>Women</td>
<td>Total Increase</td>
<td>($366,652)</td>
<td>($202,762)</td>
<td>(455.52)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean Increase(e)</td>
<td>($70,831.50)</td>
<td>(33,793.67)</td>
<td>(455.52)</td>
<td>(455.52)</td>
<td>(455.52)</td>
<td>(455.52)</td>
</tr>
<tr>
<td></td>
<td>Percent Increase</td>
<td>(35.91)</td>
<td>(35.91)</td>
<td>(35.91)</td>
<td>(35.91)</td>
<td>(35.91)</td>
<td>(35.91)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>($230,010)</td>
<td>(4,532,013)</td>
<td>(207,083)</td>
<td>(207,083)</td>
<td>(207,083)</td>
<td>(207,083)</td>
</tr>
<tr>
<td>Range:</td>
<td>High</td>
<td>($22.84)</td>
<td>($28.14)</td>
<td>(5.9)</td>
<td>(8.73)</td>
<td>(65.66)</td>
<td>(82.80)</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>($1.62)</td>
<td>($6.02)</td>
<td>(0)</td>
<td>(24.42)</td>
<td>(7.87)</td>
<td>(23.05)</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>($5.27)</td>
<td>($14.42)</td>
<td>(0.48)</td>
<td>(13.62)</td>
<td>(15.68)</td>
<td>(37.06)</td>
</tr>
</tbody>
</table>

\(a\) Includes operating expenses plus scholarship budgets in all eight institutions.

\(b\) Includes data from six colleges and universities.

\(c\) Includes total budget (operating expenses plus scholarships) divided by total athletes from all eight institutions.

\(d\) Represents average per college except in per capita expenditure column in which the figure represents the average per athlete.

\(e\) Represents average increase per college except in per capita expenditure column where mean increase equals average men's per capita increase plus average women's per capita increase ($449.68 + $455.52 = $875.20$).
growth in participation, number of sports offered, number of scholarships available, and budgetary allocations; 2) proportionately, women's programs grew at a faster rate than those of men in all areas considered; 3) when total increases were considered, participation opportunities for women accounted for larger proportions of program expansion than those for men; and 4) with the exception of per capita expenditures, women received an average of less than thirty percent of the increases in athletic budgets and scholarship funds. In spite of the accelerated growth in women's sports as reflected by each item considered, female athletic programs continued to lag far behind those of men with regard to equal opportunity, the essence of what is mandated by Title IX. For example, the increase in scholarship and operating budgets for men during the five year period ($1,452,807) was more than twice as large as the total budget allocated to women's sports in 1978-79 ($725,473).

A cursory examination of the ranges in each category indicates that the degree of change toward providing equal opportunities in athletics among the eight institutions varied considerably. This variation in the amount of change which occurred was of particular importance to the sample selection process, and is further examined in Tables 5 and 6.

Table 5 provides an overview of the degree of change among and within the eight institutions in three major categories. In the first category, the percent of athletes which were women, the mean increase over the five year period was 5.06 percent. In one college, the percentage of female athletes decreased. The extent of change in the proportion of female athletes among the eight institutions varied nearly twenty-two percentage points. In the second category, the percent of the athletic budgets allocated to women's sports, one college experienced a
| College | Female Percent of Total Athletes | Percent of Budget Allocated to Women | Per Capita Ratio<sup>b</sup> 100A/B 100C/D Dif. <sup>c</sup> 
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>23.39% 32.11% 8.72%</td>
<td>8.6% 28.14% 19.5%</td>
<td>25.0% 82.8% 57.73%</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>32.15% 39.41% 7.26%</td>
<td>3.6% 22.0% 18.4%</td>
<td>7.8% 43.3% 35.46%</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>16.91% 12.31% - 4.6%</td>
<td>1.62% 6.0% 4.4%</td>
<td>7.98% 45.3% 37.32%</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>14.80% 32.14% 17.34%</td>
<td>3.0% 10.8% 7.6%</td>
<td>17.88% 25.0% 7.12%</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>62.17% 44.87% 2.7%</td>
<td>22.86% 25.5% 2.7%</td>
<td>40.6% 41.0% 0.47%</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>13.51% 16.34% 2.83%</td>
<td>5.4% 6.7% 1.3%</td>
<td>36.5% 38.5% 2.0%</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>25.44% 33.96% 8.52%</td>
<td>14.97% 19.59% 4.62%</td>
<td>51.59% 47.37% - 4.22%</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>29.18% 31.58% 2.4%</td>
<td>21.3% 15.7% - 5.6%</td>
<td>65.66% 40.36% - 25.29%</td>
<td></td>
</tr>
<tr>
<td>Mean&lt;sup&gt;d&lt;/sup&gt;</td>
<td>26.2% 32.26% 5.06%</td>
<td>3.27% 14.42% 9.15%</td>
<td>15.68% 37.04% 21.38%</td>
<td></td>
</tr>
</tbody>
</table>

| Range: | 17.34% 19.5% | 57.75% |
| High | - 4.6% | - 5.6% | - 25.28% |
| Low | Difference | 21.94% | 25.1% | 33.03% |

<sup>a</sup>Budget includes operating expenses and scholarship funds.
<sup>b</sup>Per Capita Ratio represents the percent of the male per capita expenditure allocated to each female athlete.
<sup>c</sup>Difference = 100C/D - 100 A/B
<sup>d</sup>Based on overall figures (i.e. total athletes and total expenditures among the eight colleges).
decrease of 5.6 percent, while all others showed increases in proportionate spending for female athletes. The range in this category varied more than twenty-five percentage points. The greatest extent of change occurred in the third category, per capita expenditure ratios. The variance among institutions was also much more pronounced in this category. The percent of male per capita expenditures allocated to female athletes increased in five cases, remained the same at one college, and decreased in two of the eight institutions. The range shows a difference of more than eighty-three percentage points among the colleges in the population. In summary, while women's athletics showed mean increases in all three of the major categories over the five year period, the degree of change among the colleges varied considerably, particularly with respect to per capita expenditure ratios.

Selection of the Final Sample

Table 6 provides a summary of the data used to calculate the Change Indexes which, in turn, were used to select the four comparison groups. Seven of the eight institutions had positive numerical Change Indexes, indicating that some general progress toward equal opportunity for women in athletics had occurred during the five year period. Women's athletics at one institution, having experienced a rather sharp decline in the proportion of per capita expenditures, appeared to have endured losses in the struggle toward equality in sports during the transitional period in which Title IX was to have been implemented.

The range difference in the Change Indexes was equivalent to more than eighty percentage points. The figures clearly indicate that institutional progress toward compliance with Title IX varied extensively in both nature and degree. Some institutions appear to have focused
### TABLE 6

**Summary of Calculations for the Change Index for Each College in the Final Population**

<table>
<thead>
<tr>
<th>College</th>
<th>Percent of Female Students Who Were Athletes</th>
<th>Percent of Male Students Who Were Athletes</th>
<th>E</th>
<th>F</th>
<th>P - E</th>
<th>G</th>
<th>H</th>
<th>H - G</th>
<th>(E - G)/100</th>
<th>(E/F) * 100</th>
<th>Change Index</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A*</td>
<td>1.4 %</td>
<td>1.2 %</td>
<td>.3 %</td>
<td>3.0 %</td>
<td>3.5 %</td>
<td>.5 %</td>
<td>- .2 %</td>
<td>- .2 %</td>
<td>57.75 %</td>
<td>59.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B*</td>
<td>7.96 %</td>
<td>13.4 %</td>
<td>5.42 %</td>
<td>15.07 %</td>
<td>25.67 %</td>
<td>10.6 %</td>
<td>- 5.38 %</td>
<td>- 5.38 %</td>
<td>33.46 %</td>
<td>43.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>1.9 %</td>
<td>1.34 %</td>
<td>.56 %</td>
<td>4.78 %</td>
<td>4.67 %</td>
<td>.09 %</td>
<td>- .47 %</td>
<td>- .47 %</td>
<td>37.32 %</td>
<td>38.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>1.82 %</td>
<td>3.79 %</td>
<td>1.97 %</td>
<td>6.64 %</td>
<td>6.91 %</td>
<td>.27 %</td>
<td>1.70 %</td>
<td>7.17 %</td>
<td>12.66</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>5.73 %</td>
<td>6.62 %</td>
<td>.89 %</td>
<td>9.83 %</td>
<td>9.34 %</td>
<td>.49 %</td>
<td>1.38 %</td>
<td>4.47 %</td>
<td>8.47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>.83 %</td>
<td>.76 %</td>
<td>.07 %</td>
<td>6.34 %</td>
<td>5.52 %</td>
<td>.82 %</td>
<td>.76 %</td>
<td>0.2 %</td>
<td>1.52</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G*</td>
<td>3.162</td>
<td>3.34 %</td>
<td>.18 %</td>
<td>9.25 %</td>
<td>7.82 %</td>
<td>1.97 %</td>
<td>2.15 %</td>
<td>4.22 %</td>
<td>1.27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H*</td>
<td>4.072</td>
<td>2.83 %</td>
<td>- 1.24 %</td>
<td>9.82 %</td>
<td>7.61 %</td>
<td>- 2.01 %</td>
<td>.77 %</td>
<td>- 25.28 %</td>
<td>-21.68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3.19%</td>
<td>3.69%</td>
<td>.502</td>
<td>7.03%</td>
<td>6.92%</td>
<td>- .11%</td>
<td>.61%</td>
<td>21.38%</td>
<td>25.68</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Range:**
- **High:** 5.42 %
- **Low:** -1.24 %
- **Difference:** 6.66 %

### Notes:
- From Table 5
- Change Index Formula: \( \Delta = \frac{100(E/D - 100A/B)}{[(P - E) - (H - G)] + P} \)
- Based on overall figures (i.e., total students and total athletes in the eight colleges)
- Colleges selected as final comparison groups
primarily on increasing budgets for women while others expanded the scope of programs by offering competitive opportunities to greater numbers of female athletes. Four colleges were able to do both, increasing the breadth and depth of athletic opportunities for women. Two institutions were apparently unable to do either.

In order to determine why extensive differences in the degree of change existed and, specifically, what conditions facilitated implementation of the mandate, in-depth investigations at selected institutions were imperative. In turn, on-campus research was conducted at the four colleges characterized by maximum differences as reflected in the Change Indexes. Colleges A, B, G, and H from Table 6 were selected as the final comparison groups. Hereafter, these institutions will be referred to as Northern Virginia University (NVU), Central Virginia University (CVU), Eastern Virginia University (EVU), and Southern Virginia University (SVU) respectively. Descriptive backgrounds of these colleges, including their athletic programs, are presented below.

The Four Comparison Groups

The group of colleges selected for in-depth comparison included two well-established, traditionally residential institutions (CVU and SVU) and two rapidly expanding urban institutions with large part-time enrollments (NVU and EVU). Table 7 summarizes enrollment, participation and budget data which has not previously been provided. Three of the institutions (CVU, EVU, and SVU) were similar with respect to full-time enrollment figures. The fourth college (NVU) had a much larger full-time student body. Three of the institutions (NVU, EVU, and SVU) were similar with respect to the size of athletic budgets and the number of student athletes. The athletic program in the fourth college (CVU)
TABLE 7
SUMMARY OF DEMOGRAPHIC DATA ON THE FOUR COMPARISON GROUPS

<table>
<thead>
<tr>
<th>Category</th>
<th>Enrollment</th>
<th>Athletic Budget</th>
<th>Number of Athletes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>6,860</td>
<td>$626,724</td>
<td>622</td>
</tr>
<tr>
<td>Low</td>
<td>1,837</td>
<td>$42,090</td>
<td>114</td>
</tr>
<tr>
<td>Mean</td>
<td>4,338</td>
<td>$234,214</td>
<td>282</td>
</tr>
</tbody>
</table>

served a much larger proportion of the student body and was, in turn, supported by a substantially higher athletic budget. The vast majority of internal institutional similarities and differences were not discovered until on-campus visitations had been conducted and will be discussed in Chapter V. The following descriptions include a brief overview of each institution and provide perspective for later analysis of the changes which occurred during the Title IX implementation period.

Northern Virginia University

Northern Virginia is an urban university with a current enrollment of nearly 14,000 students. Approximately sixty percent of the students are full-time undergraduates and twenty-three percent are enrolled in graduate programs. The remaining seventeen percent are part-time undergraduates. Off-campus extension programs serve between 2,500 and 3,000 additional part-time students annually. NVU was founded in the 1930s as a division of a well-established state-supported institution,
and gained independence through state legislative action in the early 1960s. The institution officially achieved university status several years later.

The past two decades, in particular, have been characterized by extensive increases in enrollment and expansion of facilities. Major change has occurred with regard to the increasing proportions of women students, the addition of graduate programs, and the expansion of on-campus housing facilities. In brief, the college has become more residential in nature, serves approximately equal numbers of male and female students, and offers opportunity for advanced degrees in a variety of graduate studies.

Intercollegiate athletics began with men’s football and basketball in the early 1930s. A number of sports for men were added throughout the next two decades. Football was eliminated from the extracurriculum in the 1940s as a result of national priorities during World War II, and was never reinstated as a varsity sport. Athletics floundered for approximately thirty years until the institution gained independence. NVU then began to reorganize administratively as growth and expansion accelerated, and the men’s athletic program became organized and gained status. Attempts to provide sports opportunities for women occurred throughout the 1960s, but it was not until the current decade that women’s athletics amounted to more than sporadic efforts to compete with nearby opponents.

In 1974 the college began to implement a comprehensive plan for improving and expanding the athletic program. The plan was based on an assessment of student interest, institutional resources and priorities, and the competitive success potential of each sport considered. Through-
out the next five years, implementation occurred in stages. By 1978-79, Northern supported seven sports for men and had moved into the NCAA Division I competitive category. Similarly, the women's program had been upgraded and consisted of four AIAW Division I sports teams.

Overall, in 1978-79, NVU had the best win-loss record among the major public institutions in the state, and had received national recognition in several sports. Plans for the following biennium included the addition of two sports for both men and women, the addition of two other sports teams for women, the expansion of athletic facilities, and the continuation of efforts to upgrade the quality of several existing sports which had not yet achieved status as national contenders. On-campus research produced evidence that initial efforts toward implementation of the above plan had occurred.

The athletic department at NVU is a sub-structure of the Division of Health, Physical Education and Athletics. The Division is chaired by a single administrator, who, in the case of athletics, answers indirectly to the University President through the Vice President for Planning and Student Services. In athletics, the administrative level below the Division Director consists of two assistant athletic directors. One assistant is a woman who is primarily responsible for women's athletics, and the other is a man with similar responsibilities for the men's program. The two positions are equivalent in title, status, workload, and salary.

An Athletic Advisory Committee, appointed by the University faculty Executive Committee, functions primarily to facilitate communication between administrators and students and faculty. Decision-making and policy formation have remained within the jurisdiction of athletic
personnel and central administrators. Except for granting approval on items of major importance, the University Board of Visitors has had little, if any, direct impact on athletic programs and policies.

Coaches are generally hired as "assistant instructors" on non-tenure tracks. Most coaches teach part-time in physical education. Academic loads vary from thirty to seventy percent of overall contracts. Two coaches, one male and one female, who have no assigned teaching responsibilities.

Numerous personnel changes have occurred during the past five years. These include changes in titles, positions and hierarchy, as well as individuals, among the athletic and administrative personnel. Most changes apparently focused on improving: 1) the quality and quantity of coaches; and 2) the efficiency of the administrative structure.

Financially, athletics are supported by student fees, gate receipts from men's and women's sports, and fund raising projects. A full-time public relations director coordinates the efforts of fund raising committees for each sport. Rapport between the University's athletic program and the surrounding urban community is excellent. Many community members are avid supporters of NVU athletics with respect to both spectator participation and supplementary financing as needs arise.

Tables 5 and 6 summarize some of the measurable gains in athletic participation and expenditures for men and women at NVU (College A) during the five year period between 1974-75 and 1978-79. As reflected in Table 6, the percent of male and female students participating in athletics showed a limited increase (approximately 4 percent). Despite a twenty-one percent increase in the number of full-time undergraduates during the same five year period, athletic programs for both men and women
continued to serve an increasing proportion of the student body. Men showed slightly higher gains with respect to percentage of the student body served by the athletic program. This difference may have been partly due to changing male-female enrollment patterns; the proportion of female students rose from forty-five percent to forty-nine percent during the five year period.

The athletic budget for operating expenses and scholarships more than doubled during the time period under investigation. Men's budgets increased eighty-eight percent while the expenditures for women increased more than 675 percent. Women athletes received approximately forty-two percent of the total budgetary increase during the five year period. Table 5 shows that the percentage of athletes which were female increased 8.75 percent, while budgetary increases were more than twice this amount (19.5 percent). The most vivid example of gains for female athletes was reflected in change in the per capita expenditure ratio. By 1978-79 each female athlete received nearly eighty-three percent of the per capita expenditure allocated to each male athlete — a gain of almost fifty-eight percent from the 1974-75 per capita ratio.

In summary, Northern Virginia: 1) was below the mean throughout the five year period with respect to the percentage of both male and female students served by the athletic program; 2) was slightly above average by 1978-79 with respect to the proportion of athletes who were women; 3) ranked first among the colleges with respect to 1978-79 allocations and increases in athletic budgets for women; 4) provided, by far, the most equitable per capita expenditures for male and female athletes by 1978-79; 5) although the female per capita ratio in 1974-75 was above average for the population examined, ranked first among the
colleges with regard to increases in per capita expenditures for women during the five year period; and 6) ranked first among the colleges in demonstrating measurable change toward greater equality for women as reflected by the Change Index (see Tables 5 and 6). The data consistently indicated that Northern Virginia University had clearly made the greatest progress toward eliminating sex discrimination in athletics when compared with the seven other colleges in the population.

Central Virginia University

Central Virginia is a small, residential coeducational university. Approximately eighty percent of the students are full-time undergraduates. Graduate programs serve slightly over fifteen percent of the student population. Founded early in the history of the Nation, CVU attempts to offer a high quality academic experience and provide for the development of the student as a whole individual. Campus life as well as educational objectives are heavily influenced by this philosophy and by institutional tradition. The institution has had a coeducational student body for more than sixty years. In 1978-79, approximately fifty-four percent of the full-time undergraduates were women.

Choosing to maintain high standards of academic excellence, CVU's enrollment has remained selective and limited in size, particularly at the undergraduate level. Primarily because of this decision, Central Virginia has not experienced the rapid growth and expansion which characterized many public institutions throughout the past two decades. The major thrust for growth at the University has been toward the development of quality instructional, graduate and research programs.

The extracurriculum at Central is considered an integral part of the educational process. Because of the potential contribution of
quality sports program to the total development of the student, and because Central Virginia is residential in nature, campus athletics serve a large proportion of the student body. Established in the nineteenth century, the men's intercollegiate program, in particular, has traditionally provided a wide variety of competitive opportunities for male athletes. Women's athletics began with competition in field hockey in 1920, and have gradually expanded over the past fifty-nine years.

The college currently fields thirty separate sports teams; fifteen for men and fifteen for women. The men's program (which includes football) has periodically earned regional and national recognition in minor sports. Central Virginia has had long standing membership in NCAA Division I and currently competes in football in prestigious Division I-A. Female athletes currently compete in AIAW Division II in most sports. Three well-established and highly successful women's sports teams compete in AIAW Division I. Women's athletics at Central have had a long history of successful competition at the state level, and many teams have progressed to earn regional and national recognition within the past three years. The major priorities in both men's and women's programs have been: 1) providing broad opportunities for student participation, and 2) maintaining the quality of sports at a level at which teams can successfully compete against other major institutions within the state.

The administrative structure of athletics at CVU is unique among public colleges in Virginia with respect to the total separation of male and female personnel. Both the Director of Men's Athletics and the Director of Women's Athletics answer directly to the University President. Men's and women's athletic departments coexist in a dual structure characterized by separate budgets, facilities and staff.
The faculty Athletic Advisory Committee, appointed by the University President, has had a history of active involvement in the assessment of athletic needs and services within the college as well as in recommending changes in athletic policies and procedures. Certain recent major recommendations by the Committee, however, have not been approved or implemented. Operating with an equivalent amount of interest and involvement, and backed by authority to act, the Athletic Committee of the Board of Visitors has apparently had greater influence on the nature and direction of athletics at CVU than the faculty Advisory Committee. With the exception of major change in policy or priorities, the decision-making process is confined to the two athletic departments. Departmental recommendations and policies are subject to approval of the University President and, in the case of budget requests, other appropriate administrators, officials, and boards for financial review.

Women's athletics have, until very recently, been under the direction of the Women's Physical Education Department. In 1979, separate administrators were designated for physical education and athletics, however, both programs are still closely aligned. Women's teams are coached by female coaches, many of whom are regular physical education faculty members on tenure tracks. Most of the women coaches have teaching assignments which amount to more than half of their contracted responsibilities. The men's athletic department functions autonomously with regard to the Men's Physical Education Department. Most male coaches do have some teaching responsibilities, but are hired primarily to coach and are not on tenure tracks. The turn-over among male and female coaches and athletic administrators has been minimal during the past five years.
Athletics are primarily financed by student fees (included as part of the general tuition), gate receipts from men's basketball and football, and donations solicited through an alumni foundation. Traditionally, the major contribution of the foundation has been to provide money for men's football scholarships. The college alumni, in general, are avid supporters of the traditional sports for men and are particularly dedicated to football.

Tables 5 and 6 summarize the nature and extent of change toward equality in athletics at Central Virginia (College B) during a recent five year period. Athletics at CVU clearly served a larger proportion of the student body in 1974-75 than any other institution in the population. This proportion continued to increase throughout the five year period for both males and females. The figures reflect greater gains for men (10.8 percent) than for women (5.42 percent) in the proportion of students participating in athletics. A portion of the difference in male and female increases may be due to the eight percent decline in the proportion of full-time undergraduate male students at the University during the five year period.

The data in Table 5 indicates that by 1978-79 nearly forty percent of the athletes were women. These figures reflect a 7.26 percent increase in the proportion of female athletes during the five year period. Operating and scholarship expenditures for women's sports increased more than eighteen percent. In 1974-75 women's athletics received only 3.6 percent of the budget, and by 1978-79 this figure (22.0 percent) had climbed well above the population mean (14.42 percent). Per capita expenditure ratios showed similar gains for the female athletes. The Change Index for Central Virginia was 43.48, second highest among the population of eight institutions.
In comparison with the seven peer colleges, CVU's athletic program: 1) served the highest percentage of male and female students; 2) ranked second in 1978-79 in percent of women athletes; 3) ranked fourth in proportionate increases in the percent of athletes which were women; 4) ranked third with respect to the percent of the 1978-79 total budget allocated to women's sports, and second with respect to increase in the percent of monies allocated to women; 5) ranked eighth with respect to the per capita expenditure ratio for women in 1974-75, and had moved above the mean into the fourth ranking position in this category by 1978-79; 6) showed the third highest increase in per capita expenditures for female athletes; and 7) ranked second among the institutions in overall progress toward equal opportunity for female athletes as reflected by the Change Index. In summary, the women's athletic program at Central Virginia still offers more opportunities for females to compete than any other college in the population, and has progressed from being one of the most poorly funded programs to become one of the most equitably financed.

Eastern Virginia University

Eastern Virginia University was established in the late 1940s as an extension center for a large, well-established state university. In 1956, Eastern became a coeducational two-year branch college and three years later was given community college status. In the mid 1960s, the General Assembly authorized expansion of the college and in 1972 Eastern became an independent, four-year institution with university status. EVU is located in a rapidly growing, densely populated suburb on the outskirts of a large metropolitan area. The University offers professional, graduate and undergraduate degree programs.
The number of full-time undergraduates at EVU has more than
doubled during the past five years, and in 1979 this segment of the
student population accounted for approximately thirty-six percent of the
total enrollment. Approximately fifty-three percent of the full-time
undergraduate students are women, reflecting a three percent increase in
the female proportion of the enrollment during the five year period.
Slightly more than half of the student body is enrolled on a part-time
basis, and the remainder of students are enrolled in graduate programs.
A large majority of the students commute and an estimated eighty percent
work full- or part-time while pursuing their education. Five hundred
undergraduates are currently housed on campus and this figure is pre-
dicted to double in the next two years as more residential facilities are
developed.

Eastern Virginia is one of the fastest growing universities in
the state. Future plans include the completion of facilities capable of
accommodating 16,000 students, including some 4,000 residents, by 1988.
Although growth and expansion in all phases of University development
have occurred at a remarkable pace throughout the 1970s, the characteris-
tics of the student body are following three distinct trends: 1) the
average student age has gradually lowered; 2) the proportion of full-
time students is increasing; and 3) the undergraduate portion of the
college is becoming more residential in nature.

Because of other priorities created by sheer necessity during
the rapid growth and expansion of the college, the athletic programs at
EVU have only recently received any serious attention by University
administrators. The major emphasis in sports has been predominantly
recreational in nature. The construction of the single gymnasium on
campus (with extremely limited seating capacity) reflects the recreational and educational priorities articulated by college administrators and personnel involved in University planning.

Men's athletics began with National Association for Intercollegiate Athletics (NAIA) basketball, cross country and baseball competition in 1967-68. Four other sports for men soon followed. By 1974, Eastern Virginia was an affiliate of NCAA and competed in seven different men's sports. In 1978 a decision to move completely into NCAA competition was made, and the college dropped the NAIA membership. There are currently ten men's teams competing in NCAA Division I. Considering the short length of time the program has been in operation, and the limited budget within which it operates, men's athletics have been quite successful in state and regional competition.

The women's athletic program was initiated in 1973 with competition in two sports. A third sport was added in 1974. By 1978-79, a total of seven women's teams had been organized. The four teams established in the early part of the decade now compete in AIAW Division II, and the remaining teams compete in Division III. The women's teams are generally similar in competitive quality with the small public and private colleges throughout the state. One team has been particularly successful and has repeatedly gained regional recognition.

Future plans for men's athletics include upgrading the quality of existing teams and escalating promotional efforts. Developmental activities in the women's program purportedly will focus on improving the credentials of the coaching staff, expanding the participation opportunities for female athletes, and increasing the amount of financial aid awarded on the basis of athletic ability. Personnel and administrators
in both programs are working toward the development of a more effectively organized administrative structure.

Until 1979, athletics were administered by physical education and intramural personnel. The intramural director (also the track coach) functioned as an athletic director. His contract during the 1978-79 academic year included a combined workload of athletic administration (twenty-five percent), teaching physical education (fifty percent), and directing intramural sports (twenty-five percent). Much of the responsibility for operational management in athletics was delegated to a male physical education teacher who was given an additional stipend to coordinate the business affairs of athletics and intramurals. In 1975 a local female high school teacher was hired on a part-time basis (as a wage employee) to coordinate women's sports. She functioned in this capacity for a period of approximately two years. In 1978 the University hired her on a full-time basis as a salaried faculty member in physical education. Her academic load is currently one-half teaching responsibilities and one-half "released time" as Coordinator of Women's Sports. Until recently, athletic administration at EVU was the sole responsibility of these three individuals, who functioned not only autonomously as a unit but also somewhat independently in conducting various aspects of the program. An elected faculty Athletic Council functioned as an advisory board and had limited influence on the development and direction of the athletic program. Until 1976, central administration appears to have had very little involvement with college athletics.

During the past two years several key structural and personnel changes have occurred with respect to athletic administration. In 1979, athletics received departmental status. The position of Athletic
Director was created and an experienced male administrator was hired to fill the position in September, 1979. The Coordinator of Women's Sports now answers directly to the Athletic Director. He, in turn, is accountable to the Vice-President for Student Affairs, who has recently been delegated responsibility for approving athletic policies, plans and budgetary requests. The Vice-President is directly accountable to the President. The University President has been on campus for approximately eighteen months and appears to be giving the program a new general sense of direction. For example, plans for construction of an athletic complex are currently underway.

The Advisory Council has also undergone recent structural change. Approximately half of the Council is now appointed by the President. The remaining members are still elected; two by the student government and four by the Faculty Senate. Thus far, the University Board of Visitors has not been directly involved in college athletics.

Most coaches are hired part-time as wage employees. A limited number of faculty members supplement the coaching staff as volunteers. The result has been a preponderance of male coaches for both men's and women's athletics. In addition, the turnover rate among athletic personnel has been high throughout the past five years.

Athletics are financed by student fees and other limited income from college auxiliary enterprises. Gate receipts and supplementary donations are negligible.

The data presented in Table 6 shows that the athletic program at EVU (College G) served 3.34 percent of the women students in 1978-79, reflecting an increase of .18 percent since 1974-75. The percentage of male participants declined during the five year period. At the same time,
it appears that expansion in the athletic program for women kept pace with enrollment growth at the University, while men's athletics failed to do so. Table 5 shows that the percent of athletes which were women increased by 8.52 percent from 1974-75 to 1978-79. At the same time, the percent of the athletic budget allocated to women's sports increased only 4.62 percent. Female athletes incurred the greatest losses in the per capita expenditure ratio category. In 1974-75 each female athlete received more than fifty-one percent of the per capita allocation for each male athlete. By 1978-79 this ratio had dropped to approximately forty-seven percent, showing a decrease of over four percent. The Change Index for the college was 1.27, which indicates that, overall, slight movement toward equalizing sports opportunities for women occurred.

EVU ranked seventh among the eight institutions in the population with respect to the Change Index, and was thus selected as a comparison group.

In summary, although the increase in the proportion of female athletes was above the population mean, the corresponding budgetary increases, and particularly increases in per capita expenditures, fell below the mean. In turn, the degree of change toward equal opportunity for female athletes at Eastern Virginia was reflected by a low positive numerical Change Index. Consequently, Title IX appears to have had very little impact on athletic program development at the University.

Southern Virginia University

Established in the early 1880s, Southern Virginia University is a residential, coeducational public institution. Southern is located in a suburban area within one-half hour of two densely populated metropolitan areas. The University offers baccalaureate and graduate degrees in several academic and professional fields. Approximately eighty-two
percent of the total enrollment are full-time undergraduate students, the majority of which reside in campus housing. Most of the remainder of the students are enrolled in graduate programs. The proportion of female undergraduate students increased from less than fifty percent in 1974-75 to over fifty-six percent in 1978-79. The total full-time enrollment increased by thirteen percent during the same period.

Southern Virginia gained university status in 1979 through legislative action by the General Assembly. Institutional goals are multi-purpose in nature and include emphasis on the development of non-traditional career programs, cooperative education, individualized instruction, continuing education and traditional graduate and undergraduate programs. Research objectives are oriented toward problem solving in various areas of the behavioral sciences. Future plans and priorities are in the process of being defined. The current President (hired in July, 1976 as the third president in three years) is attempting to assess University needs and constraints prior to presenting a long range plan.

Men's athletics have been a part of the extracurriculum for more years than the sports records have been kept. The University competes in both NAIA and NCAA Division 1 and has had long standing membership in a well-established regional conference. In 1976, purportedly in response to the demands of Title IX, Southern Virginia "declared a moratorium" on three men's sports in order to upgrade women's athletics. There are currently seven sports teams for men, including football. Men's athletics have experienced a fair amount of competitive success within the conference during the last several decades, particularly in basketball, football and track.
Women's athletics grew out of an extramural sports association established in the 1960s and sponsored by the Department of Physical Education. Competition was limited to voluntary student participation at various "Sports Days" with neighboring colleges. Intercollegiate athletics for women achieved varsity status in 1972. This same year several partial athletic scholarships were awarded to women basketball players. In 1978-79, Southern sponsored four competitive teams for female athletes. The women compete in AIAW Division I in one sport and in Division II in the remaining three sports. Women's basketball teams have been fairly successful in state-wide competition throughout the past several years, however, none of the women's teams from SVU have gained recognition as serious contenders at regional or national levels.

Men's and women's athletics are administered by a male Athletic Director who is directly accountable to the University President. A coordinator of women's sports is appointed by the Athletic Director from among personnel on the coaching staff. The coordinator's position is basically an unpaid, part-time responsibility. Consequently, it appears that very little authority has been delegated to coordinators of women's athletics in the past.

Prior to the arrival of the current President, the Athletic Director was directly accountable to the Vice-President for Student Affairs and, during one nine month period, to the Executive Vice-President. Since fall, 1979, the Athletic Director has been accountable only to the President. The latter individual appears to have delegated most of the responsibilities for decision-making, policy formulation and program administration to the Athletic Director.
The Athletic Advisory Committee is appointed by the President, based on recommendations by the Athletic Director. The Committee has not been involved in athletic policy formulation or in making decisions which require major change. For the past two years, this body has worked closely with the Athletic Director in assessing and recommending options for promotion of SVU athletics. Their current project is focused on increasing community involvement in campus athletic events.

The University Board of Visitors has had some active involvement in athletic operations during the past several years due to frequent changes in personnel in key central administrative positions. Since the current President arrived, the Board has had very little influence on athletic programs or policies until August, 1979. At this time, the administrative branch of the state government became concerned about the increasing annual deficits in various budgetary categories at SVU, including athletics. Government officials cited "inadequate marketing of athletics" as a contributing factor to the deficit problem. The University Board of Visitors subsequently issued a directive to the President stating that the marketing of intercollegiate athletics must be strengthened. Part of the plan includes drawing additional gate receipts in football and men's and women's basketball. In the past, the Board has offered recommendations, however, this was the first mandate of record they have issued with respect to athletics.

Coaches in the men's athletic program, as well as the Athletic Director, all have some teaching responsibilities. Pay is calculated on a percentage basis depending upon the ratio of academic/athletic workload. The teaching portion of employment contracts ranges from approximately thirty percent for head basketball and football coaches.
(and less for the Athletic Director) to more than fifty percent for coaches of minor sports and assistant coaches. Few male coaches are on a tenure track.

Coaches in women's athletics traditionally have come from within the ranks of female physical education faculty. Coaching in the women's program was primarily voluntary. Women's sports assignments were distributed among various female faculty members and given the same workload equivalency as membership on an ad hoc committee. With the inception of Title IX, many women faculty members became concerned about the inequities in pay and workload between male and female coaches. When no efforts were made to rectify the situation, they turned to full-time teaching and refused to provide further voluntary service within the athletic program. The coaching staff in women's athletics during the past three years has been predominately male. In some cases, graduate and undergraduate students have been hired to coach. In other instances, men who were released from the male athletic program have been moved into roles as coaches for women's sports. The remainder of the positions have been filled by young male and female physical education faculty.

There has been an extremely high rate of turn-over among coaching personnel throughout the past several years. Attempts to staff women's sports have led to controversy among athletic and physical education personnel and administrators, particularly between 1976 and 1978 when the greatest amount of change occurred in the age, sex, and tenure status of personnel utilized to coach women's sports.

Athletics at Southern Virginia are financed primarily through student fees. A Booster Club of alumni, directed and staffed by volunteers, generates limited income through fund raising projects.
Alumni donations have traditionally been minimal, but have increased approximately five percent during the past five years. Gate receipts from football and men's and women's basketball are gradually increasing, but even these sports are far from self-supporting. In turn, the athletic program at SVU has been characterized by a long standing financial deficit.

The data in Tables 5 and 6 summarize and compare the extent of change which has occurred in CVU (College II) athletic programs between 1974-75 and 1978-79. Examination of Table 6 shows that the proportion of the student body served by the athletic program has decreased for both males and females. In 1978-79, the college remained above the mean in the percent of male students participating in sports. That figure for women, had been above the mean in 1974-75, but dipped below the average for the population in 1978-79. This decrease may have been due, in part, to the increasing proportion of females enrolled at SVU on a full-time basis. 14

The data in Table 5 indicates that the percentage of athletes which were women was above the mean throughout the five year period, and showed an increase of 2.4 percent. During the same period, the percent of the budget allocated to women's sports decreased by 5.6 percent. The college was well above the mean in this category in 1974-75 when 21.3 percent of athletic monies went to women's athletics. The decrease in relative expenditures for women lowered this figure at SVU to slightly more than one percent above the mean by 1978-79. The per capita expenditure category suggests even greater losses for women's sports. In 1974-75, each female athlete received 65.66 percent of the per capita allocation to each male athlete. This figure was well above the population mean and may have reflected the fact that SVU was among the first
colleges in the state (1972) to provide athletic scholarships for women. By 1978-79, female athletes received only 40.38 percent of male per capita expenditures. The college remained slightly above the mean in this category, however, women athletes incurred a loss of more than twenty-five percent with respect to the per capita expenditure ratio during the five year period. This loss was reflected in the negative numerical Change Index (-21.68). CVU ranked last among the population in this category.

In brief, the figures indicate that although CVU appeared to have somewhat of a head start among the colleges in providing equal opportunities for women in athletics, the college was not able to increase or even maintain this status, particularly with respect to budgetary allocations and per capita expenditures. The college has clearly regressed in five years with regard to change toward more effective compliance with Title IX.

In summary, the four colleges selected as comparison groups represent a variety of public institutions with respect to: 1) location in urban and non-urban settings; 2) the size and characteristics of the student body; 3) institutional goals and priorities; 4) the rate of expansion with respect to enrollments and construction of facilities; 5) the age and stage of development of the institutions and their respective athletic programs; 6) the administrative structure and chain of command within athletic programs; and 7) the goals, priorities and competitive status of athletic programs. Of critical importance to this study is the assessment of institutional differences and similarities and their relationship, if any, to capabilities for effectively implementing a federal mandate. The following section describes the
procedures used to analyze the preliminary findings of this investigation in terms of potential theoretical relevance.

**Analysis of Potential Variables**

A number of responses and observations associated with the preliminary phases of research led to the emergence of several potential variables affecting institutional change toward compliance with federal mandates. Each suggested variable was examined, evaluated, and reviewed in terms of its relevance and validity as data were analyzed and additional information became available. Although the development of formal theoretical propositions occurred during the final stages of research, the transition between Phase II and Phase III investigations involved the organization and delimitation of potential variables through the following three-step procedure.

The first step included broad examination of the demographic data and general description of each of the four comparison groups. The purpose of this examination was to determine whether any major institutional characteristics or obvious relationships existed which might explain differences in the respective numerical Change Indexes among colleges in the final sample. The second stage involved compiling a summary chart of suggested and observed variables which could be systematically analyzed using comparative data on the eight colleges in the final population. The chart was particularly useful in assessing the feasibility of further consideration of several theoretical propositions which had been suggested by interviewees (see Table 8). The third step in the process involved review and examination of suggestions and observations of a more abstract nature than those included in the aforementioned chart.
The three-step procedure led to the temporary rejection of several potential variables and, in other instances, allowed the researcher to develop a number of primitive theoretical propositions for further examination. Analysis of the preliminary findings also provided a background of knowledge and a general sense of direction and priorities for further investigation in Phase III research. Each stage of the procedure, as well as the initial series of primitive hypotheses, is presented and discussed below.

Analytical Procedure

A cursory examination of the demographic data on the colleges selected as the four comparison groups made it clear that certain institutional characteristics alone did not account for ability or receptivity to comply with Title IX. For example, the two colleges which showed the greatest progress toward equalizing opportunities for women in athletics varied considerably with respect to location in urban and non-urban environments, characteristics of the student body, and institutional background, goals and priorities. Further, each of the two colleges selected for their apparent inability to progress toward more effective compliance with Title IX appeared to have more general institutional attributes in common with one of the two top ranking comparison groups than with each other (see previous section describing the four comparison groups). It became obvious that the factors contributing to effective implementation of federal mandates consisted of variables other than major institutional attributes and general characteristics of the student body.

During Phase II research, each interviewee was asked to describe conditions which have facilitated the implementation of Title IX. Re-
Responses included a variety of descriptive analogies, emotional reactions, excuses for non-compliance, and apparently logical theoretical and practical explanations which were compiled and examined in step two of the analytical procedure. In some instances, similar responses were given by several interviewees. Frequently, however, specific explanations and suggestions reflected conflicting points of view among respondents. All responses were recorded and a summary list was compiled. During collection and organization of Phase II data, several additional potential variables were observed by the researcher. The observations were recorded and supplemented the list of responses obtained from interviewees. Subsequently, items on the list of "Potential Variables" were categorized and examined with respect to the preliminary findings of this study.

Table 8 includes a summary of data from a much larger chart which served as a worksheet for compiling and analyzing interviewees' responses to the major research question: "What conditions at your institution, if any, appear to have facilitated effective implementation of Title IX?". Responses and observations were sorted and organized into twelve categories of potential variables. Each numbered column represents one of these twelve categories. Several categories were broken down into sub-categories to facilitate comparative analysis. The eight colleges in the final population were listed in rank-order according to their respective Change Indexes, and institutional data in each category was presented. In the discussion of analysis of potential variables which follows: 1) the category is defined in terms of potential variables; 2) the responses or observations which led to the development of the category are presented as potential theoretical
## TABLE 8

**CATEGORIES OF POTENTIAL VARIABLES**

**INFLUENCING INSTITUTIONAL COMPLIANCE WITH TITLE IX**

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<td>49%</td>
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<td>139%</td>
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<td>3</td>
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<td>56%</td>
<td>1</td>
<td>87%</td>
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<td>70%</td>
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<td>67%</td>
<td>71%</td>
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*aEnrollment sub-categories were established as follows: sub-category 1 = more than 12,000 full-time undergraduates students; sub-category 2 = 8,000-12,000; sub-category 3 = 4,000-7,999; sub-category 4 = less than 4,000.

bSport budget: sub-category 1 = over $1,000,000; sub-category 2 = $400,000-$999,000; sub-category 3 = $200,000-$399,999; sub-category 4 = less than $200,000.

cSince institutions are allowed to compete in more than one AIAW Division, the division in which the majority of women’s sports team compete is listed first for each college.

dRevenue sports: sub-category 1 = football and men’s basketball; sub-category 2 = men’s basketball; sub-category 3 = little or no revenue produced by any team; sub-category 4 = women’s basketball.

eDevelopmental stages: sub-category 1 = athletic program established more than 20 years ago; sub-category 2 = 10-20 years; sub-category 3 = less than 10 years.
propositions and briefly analyzed with respect to available data;

3) the decision of the researcher with respect to temporary acceptance or rejection of the proposition or category as a potential variable is presented; and 4) the rationale for each decision is offered.

Enrollment Size - Column 1. Several respondents indicated that an institution's ability to comply with Title IX was related to the size of its student body. There were two frequently stated responses in this category.

PROPOSITION I: Larger institutions have a greater number of available options and resources for increasing athletic budgets; therefore, women's programs can be upgraded without having to take money from existing men's sports and Title IX can be implemented with less internal conflict and delay.

PROPOSITION II: Larger colleges have larger problems in attempting to rearrange priorities within the athletic program. Men's sports schedules are established years in advance and contracts must be honored. There is not enough flexibility within the budget to allow for major change except on a gradual, long-term basis.

Table 8 shows the largest gap in Change Indexes occurred between College C (38.19) and College D (12.66). Column 1 indicates that the size of enrollment varied considerably among the top three colleges. Although the enrollment among the lower four colleges was somewhat smaller overall than that of the top four colleges, the data presented did not effectively support either proposition. In view of this evidence, and particularly because of the conflicting nature of the responses, both propositions were rejected as having theoretical relevance in this study.

Rate of Growth in Enrollment - Column 2. Several respondents stated that the rate of institutional growth was related to opportunities for equalizing men's and women's athletics.
PROPOSITION: When an institution is experiencing rapid expansion, the increases in student fees continually provide additional revenue for expansion of the athletic program. Growing colleges have the advantage of being able to use this resource for increasing budgets for women's sports, and thus compliance with the mandate is financially possible.

Data in Column 2 clearly indicated that there was no empirical evidence to support this proposition and it was rejected. While it may be true that an increase in students is accompanied by an increase in athletic resources, the utilization of additional monies to improve the status of women's sports does not necessarily follow.

Percent of Female Students - Column 3. Several respondents, aware that the number of women attending colleges across the nation has recently surpassed that of men, suggested that this category was related to institutional receptivity to change.

PROPOSITION: Where more than half the students paying fees on campus are women, the college is obligated to provide equal opportunities for females in athletics, particularly where programs are heavily dependent on student fees to meet annual expenses. Increased numbers of female students also lead to greater interest and participation in women's athletics. This, in turn, provides a college with the incentive to develop equitable programs.

Because the percentages of women students listed in Column 3 provides no evidence to support this proposition, it was rejected. Further, review of the data in Tables 5 and 6 in a preceding section of this chapter indicated that increases in the percent of females in an institution, as well as increases in the proportion of athletes which were women, were not necessarily characterized by similar increases in budgetary allocations or per capita expenditures.

Size of Athletic Budget - Column 4. This category, although closely related to several others, was established independently to cover a common point of view held by several respondents and national leaders in men's athletics as well.
PROPOSITION: In colleges with large athletic budgets, most of the money has traditionally been spent on men's sports. Because the extent of the difference between male and female sports budgets prior to the inception of Title IX, it is much more difficult for these colleges to equalize expenditures. In other words, "catching up with the men" is easier in an institution with a $100,000 budget that it is in one with a $1,000,000 budget.

Returning to the data in Column 4, this proposition is not supported by the evidence gathered for this study. Three of the top four colleges (as ranked by respective Change Indexes) had athletic budgets in excess of $1,000,000. All other budgets were well below this amount. While the ultimate goal (equality in athletic expenditures for male and female athletes) may be difficult to achieve in colleges with traditionally large budgets for men, the relative amount of progress toward equal opportunity for women athletes in these institutions during the past five years has been good. The proposition was rejected.

Growth in Athletic Budget - Column 5. Responses and observations in this category were related to the propositions in Columns 1 through 4 and are summarized below.

PROPOSITION: A substantial growth in the size of an institution's athletic budget indicates that the resources for compliance with Title IX are available. The availability of resources, in turn, facilitates implementation of the mandate.

The most common cause of non-compliance with federal mandates among institutions of higher education has been reported as the lack of financial resources to make the necessary changes. The percentages of budget increases listed in Column 5 indicate that six out of eight colleges were able to increase athletic expenditures by more than sixty percent during a five year period. Comparing budgetary increases with the respective Institutional Change Indexes indicates that much of the additional money went into men's athletics regardless of the extent of increase (see also Tables 4 and 5). Further, in two out of three cases
where athletic budgets more than doubled in five years, the largest proportion of the increase was used to improve the competitive divisional status of men's sports. Consequently, the proposition was rejected.

**Divisional Status - Columns 6 and 7.** Two different viewpoints were articulated by respondents with respect to competitive divisional status and are included in the propositions which follow.

**PROPOSITION I:** Institutions that compete in NCAA Division I offer quality programs in men's athletics. The prestige, status and visibility of men's sports are important among university constituents. Therefore, in order to avoid potential embarrassment and risk the loss of a reputation for quality athletics by fielding inferior women's teams, the institution will comply with Title IX and upgrade women's sports.

**PROPOSITION II:** Colleges competing in NCAA Division I are required to spend large sums of money in men's athletics in order to maintain divisional and competitive status. Considering the current rate of economic inflation, these institutions cannot afford to simultaneously maintain the quality of men's athletics and equalize women's budgetary allocations.

In comparing the men's and women's competitive categories in Columns 6 and 7, it is apparent that no evidence existed which clearly supported either of the propositions stated above. Both were rejected. Seven out of the eight colleges compete in NCAA Division I. The other college (College F) offered only one AIAW Division I sports team for women in 1978-79 as compared to five Division II (NCAA) teams for men. The data in Columns 6 and 7 merely provide further evidence that greater competitive inequities exist among the lower ranking colleges as reflected by the Change Indexes.

**Varsity Football - Column 8.** Across the state and nation, male athletic directors and university presidents contend that colleges which sponsor football teams should not be expected to include ex-
penditures for this sport when measuring and reporting differences between men's and women's athletic budgets. The major supportive arguments for this position are included in the proposition stated below.

**PROPOSITION:** College athletic programs which include football incur far greater expenses in men's sports due to: 1) the large numbers of athletes and scholarships required to field a football team; 2) the high cost of constructing and maintaining the necessary facilities for competition in football; and 3) the high costs associated with equipment and insurance for each football player. Since no comparable sport exists for women, compliance with Title IX is far more difficult in colleges sponsoring men's football (particularly those competing in NCAA Division I-A or I-AA).

Evidence in Column 8 indicates that the above proposition lacked theoretical relevance with respect to this study. Although equalizing per capita expenditures for male and female athletes may be a problem for colleges with football teams, progress toward equalizing opportunities for women in athletics during the past five years appears not to have been adversely affected solely because of football. Consequently, the proposition was rejected. Of further interest was the fact that each of the two colleges in the population which did not sponsor varsity football were selected in the final sample; one because of apparent success in attempting to comply with Title IX, and one because of apparent inability to progress toward compliance with the mandate.

**Revenue-Producing Sports - Column 9.** This category is closely related to those in Columns 3 and 4, and is based on responses related to the reluctance of male athletic directors to: 1) use revenue from specific men's sports to support other institutional athletic teams, and 2) to promote women's sports in such a manner that they might become revenue-producing.
PROPOSITION: When a substantial portion of an institution's athletic budget is based on revenue from men's sports, the revenue-producers are reluctant to share this income. Athletic directors contend that the re-investment of this income back into the sport from which revenue was drawn is the only way to prevent major losses in overall program finances. The use of this revenue to provide equal opportunity for women in athletics, they argue, would lead to the destruction of a quality men's program. For this reason, Title IX compliance is more difficult in colleges with revenue-producing sports than in colleges where budgets consist primarily of student fees.

The sub-categories in Column 9 are based on institutional reports describing the amount of gate receipts produced by specific sports. Only one institution sponsoring a major sport (football or basketball) for men reported negligible revenue, and it appears that this institution had greater difficulty in attempting to comply with Title IX than most colleges with one or two revenue producing sports. The data, although limited, did not support the proposition and it was rejected as a theoretically relevant variable in this study.

Of greater interest to the researcher was the fact that three out of the top five colleges reported substantial gate receipts from women's basketball in addition to the revenue generated by men's major sports. In order to further examine the potential theoretical relevance of this related variable, a primitive research hypothesis was developed.

Percent of Women Coaches - Column 10. This category was included for examination primarily because a section of Title IX specifically addresses the issue of equality in employment for men and women in educational programs (see Appendix A). Further, several respondents stated that one of the most obvious examples of sex discrimination was the preponderance of male coaches. They further contended that employment practices affected the degree of change toward equality for female athletes.
PROPOSITION: The lack of qualified women coaches in an institution's women's sports program inhibits progress toward compliance with Title IX and perpetuates existing inequities between men's and women's athletic programs.

The data indicated that this proposition deserved further examination. Consequently, the proposition was included among the series of primitive hypotheses generated from the preliminary findings. The percentages listed in Column 10 show a general decline in the percentage of women coaches as institutional Change Indexes decrease. The percent of women coaches in the top four colleges (seventy-four percent) was above the population mean (seventy-one percent), and that percent in the remaining colleges (sixty-eight percent) was below the mean. Although the proposition was not strongly or consistently supported by the evidence, it was not contradicted and could not be rejected as a potential variable.

Developmental Stages of Athletics - Columns 11 and 12. A variable frequently cited as having influence on an institution's ability to change athletic procedures and priorities can be described as the "stage of development" of athletic programs. Responses in this category are summarized in two columns (11 and 12), with one column for men and one column for women. Based on the responses from interviewees, three separate propositions were examined.

PROPOSITION I: Well-established men's athletic programs are strongly influenced by tradition and characterized by administrative and alumni support for maintaining the status quo. The prevailing attitude among influential constituents was aptly stated by one particular interviewee: "The men here have worked hard for more than fifty years to develop quality athletics, good public relations, and alumni support. Let the women do the same . . . during the next fifty years." Because these attitudes, traditions and priorities have had time to develop at colleges with well-established programs in men's athletics, progress toward compliance with Title IX will be a slow and difficult process.
PROPOSITION II: Women coaches in well-established women's athletic programs hold traditional values and philosophies with regard to competition. Many view emphasis on winning, recruiting, and scholarships as being educationally unsound. Fearing the possible exploitation of female athletes and the loss of equilibrium with respect to emphasis on athletics over academics, they oppose efforts to escalate women's athletics to the current status of existing men's programs. Consequently, change toward compliance with Title IX will occur slowly in institutions with well-established, traditionally oriented women's sports programs.

PROPOSITION III: A well-established athletic program for women is more capable of growth and expansion than recently developed women's sports programs because of: 1) existing organizational structures and leadership experience on the part of personnel which serve to facilitate effective change; 2) long-term recognition and support from university constituents which provides added incentive for institutional administrators to meet requests for higher budgets; and 3) the desire among institutional and departmental leaders and constituents to maintain the competitive status of women's sports as programs at peer colleges show signs of growth and expansion.

Examination of the sub-categories listed in Column 11 indicates that the developmental stage of men's athletic programs as reflected by age alone has made little difference in the impact of Title IX among the eight institutions. The same was true with regard to women's programs (Column 12). Using the stage of development of the various programs as the sole criteria, all three propositions were rejected. However, each proposition clearly contained a number of variables which could not be measured in terms of the length of time a program has been in existence. The data provided in Phase II investigation failed to include any information on several key components within each proposition. For example, are the traditional coaches and leaders in well-established athletic programs still coaching and leading within a given institution? Recognizing the limitations of the available data, the researcher identified several "untested" variables within this category and included them in the series of primitive hypotheses.
In summary, among the twelve categories analyzed through use of the data provided in Table 8, eight potential variables were rejected and four were accepted for further examination. Because data were extremely limited and because the purpose of this phase of analysis was solely to gain perspective for further investigation, the acceptance or rejection of each proposition was tentative. For example, the rejection of a proposition did not mean that the included variable(s) would be totally disregarded if new evidence indicated re-examination was appropriate. It was clear that the variables which were rejected may later be found to operate in specific institutions in combination with other variables to effect the rate and degree of change. However, as the data shows, the categories which were rejected did not appear to explain institutional ability to implement a federal mandate among the population examined. When a category led to unanswered questions or contained a number of variables which could not be adequately examined through use of available data, the category or proposition was accepted for further consideration as having potential theoretical relevance.

The "accepted" potential variables were re-stated in primitive hypotheses which are presented near the end of this chapter. Briefly, analysis of the propositions within the twelve categories showed further examination was necessary to determine the theoretical relevance of the following items: 1) the male/female ratio of coaches within a women's athletic department; 2) the development of women's sports with regard to having revenue-producing potential; 3) the existence and effects of traditional attitudes and values regarding the role(s) of women's athletic programs among male and female personnel and university constituents; 4) the effect of well-established administrative structures
in women's athletics on change and development; and 5) the effects of traditionally successful competition in women's sports in well-established programs.

The results of this stage in the analytical procedure, although tentative in nature, were important to the completion of this study for several reasons. First, a large number of varied responses from interviewees were summarized, categorized, examined and delimited. Second, the researcher became aware of potential limitations in the validity of several commonly stated (and publicly reported) opinions and beliefs with regard to why institutions can or cannot progress toward implementation of Title IX in athletics. Third, several potential variables emerged, some of which eventually proved helpful and meaningful in the generation of theory. Finally, and of greatest importance, the results of this phase of systematic analysis clearly established a need for in-depth research on the major topic of this study.

In summary, the examination and comparison of broad institutional characteristics did not sufficiently explain differences in the degree of Title IX implementation across the colleges. It thus became apparent that subsequent research should focus on internal institutional factors related to mandated change. At this point, the need for a limited number of comparison groups for in-depth investigation became apparent, and the final sample was selected as previously described.

The final stage of the three step procedural analysis of preliminary findings involved a review and examination of responses and observations which could not be evaluated through the use of statistics or demographic data. As interviewees were asked to describe conditions which facilitated implementation of Title IX, a large number of responses
were abstract in nature or descriptive of internal institutional factors and processes and could not be examined by means of cross-institutional comparisons on a broad scale. A random sample of responses of this type is included below. 16

Question: "What conditions at your institution, if any, facilitated implementation of Title IX?"

Answers: "The commitment of the President to provide for equal opportunity."

"Our athletic director has had no recent involvement in coaching a major sport for men."

"New positions within the chain of command were created for dealing with the mandate."

"The organizational affiliations of female athletic staff members have helped to raise the level of consciousness among faculty, students and administrators -- who eventually understood the need for change."

"The President was capable of making decisions and delegating responsibility for implementing decisions to change."

"The open communication between athletic administrators and central administrators."

"Our President supports Title IX, but he has other items of higher priority which come first. It would help if we knew who was responsible for interpreting and implementing Title IX."

"The President's wife was a strong supporter of equal rights for women and took an active interest in women's athletics here."

"Our major stumbling block is a sexist athletic director who is devoted to men's sports. As long as he holds the power to make decisions on personnel and budgets, little progress can be made. He and the President are close allies."

"The ability of female leaders to make informed decisions and reasonable budgetary requests has created a favorable attitude among central administrators toward change."

The accumulation of responses and observations such as those described above provided further evidence that internal factors related more
to progress toward implementing mandated change than broad institutional characteristics. Since the suggested variables included within responses of this nature could neither be confirmed nor eliminated, they were considered to be potentially relevant to the development of the theory; that is, they deserved further examination through in-depth investigation in the four comparison groups. The responses were categorized and synthesized into preliminary research hypotheses. The combined series of primitive hypotheses, including those derived from categorical analysis (Table 8) and the responses discussed above, is presented in the following section.

**Preliminary Research Hypothesis**

The following hypotheses were judged to contain potential variables of change resulting from the cumulative analysis of preliminary research findings. Although primitive in nature, the hypotheses served to guide in-depth investigation by making the researcher aware that certain theoretical possibilities had emerged which indicated further examination. The hypotheses are presented categorically as a series of four major propositions, three of which contain a number of potential variables. At this point, no attempt was made to delineate the relationships among variables within each category or among the categories.

1. The structure and function of athletic administration, including central administrators who are part of the athletic chain of command, will facilitate or inhibit effective implementation of Title IX in athletics at a college or university, depending upon: a) the clarity of responsibility of each administrator directly involved; b) the effectiveness of communication and channels of communication;
c) the ability to adjust roles and positions to accommodate change in needs, priorities, policies and procedures; and d) the extent to which vested interests or organizational affiliations affect administrative roles and practices.

2. Characteristics of the non-administrative personnel reflect institutional ability and receptivity to implement Title IX in athletic programs, particularly with respect to: a) the nature and degree of turnover among staff members throughout the past five years; b) the proportion of male and female coaches in a women's sports program; c) the degree of awareness of inequities in institutional programs and practices and of the provisions in the mandate for alleviating existing inequities; and d) the values and attitudes of staff members with regard to promoting equal opportunity for women in athletics.

3. The nature, extent and priorities of institutional leadership (particularly the college president) as well as the relationships among individual leaders within a college or university, will determine the degree and effectiveness of implementation of a federal mandate in terms of: a) the compatibility of attitudes, values and beliefs of key administrators and influential personnel with the values reflected in the spirit and nature of the mandate; b) the nature and extent of involvement of institutional leaders with regard to the manner in which their attitudes and values actively influence the interpretation and implementation of the mandate; c) response to federal mandates and the accompanying enforcement procedures in general; and d) in the case of Title IX as applied to athletics, the extent to which influential leaders perceive women's sports as having the potential for marketability and/or increasing institutional status or visibility.
4. Effective implementation of a federal mandate depends upon the existence of some type of added incentive to comply (whether real or perceived) other than that provided by the mandate alone.

Summary

Chapter IV contains a report of the major findings in Phases I and II of this study, particularly as they related to the sample selection process; a description of each institution selected as a final comparison group; and a description of the procedural analysis used to assess the validity and theoretical relevance of potential research variables which emerged during the preliminary phases of investigation.

Use of the constant comparative method, together with the principles of theoretical sampling, necessitated the collection and systematic analysis of a broad data base. The information was gradually recorded, categorized and synthesized throughout the sample selection process. During the process of selecting the four final comparison groups, the population was examined with respect to status and progress toward compliance with Title IX. In addition to facilitating systematic sampling procedures, the sequential comparative analysis of data enabled the researcher to identify and examine potential variables affecting implementation of the mandate.

The presentation of preliminary findings occurred in two stages. First, a summary of the 1978-79 data collected from representatives at twelve public colleges and universities provided a statistical overview of the degree of compliance with Title IX as reflected by participation and expenditures in athletic programs across the state. In most cases,
similar figures from national data were available and provided a basis for comparison. In brief, the findings of this stage of data analysis indicated that although in 1978-79 the proportion of female athletes per college was greater in Virginia than in the average American college, female participants in the state had: 1) fewer teams from which to choose; 2) fewer opportunities to obtain scholarships; and 3) less money available in programs, scholarship funds, and per capita expenditures than the average female athlete in the United States. In comparing participation opportunities and budgetary allocations for male and female athletes among colleges in the state, the evidence clearly indicated that the average male sports program was still receiving a much larger proportion of athletic resources.

The second stage of data analysis focused on the nature and extent of changes which had occurred over a five year period in eight institutions which were similarly situated, with regard to independent institutional status and enrollment patterns, since Title IX went into effect. Assessing differences between institutions with respect to the degree of change brought about by implementation of the mandate included: 1) comparing the athletic program status at each college prior to and following the Title IX compliance deadlines through the use of a mathematical formula designed for the calculation of a numerical Change Index; and 2) selection of the final sample of four comparison groups based on maximum differences as reflected by their respective Change Indexes.

In addition to facilitating sample selection, an examination of the nature and degree of change in athletic programs in the final population provided an appropriate frame of reference for the final phase of research. In brief, the data provided evidence that: 1) both men's
and women's athletic programs experienced growth in participation, number of sports offered, number of scholarships available, and budgetary allocations throughout the five year period; 2) women's programs grew at a faster rate than those of men in all areas considered; 3) when total increases were considered over the five year period, women received less than thirty percent of the increases in athletic and scholarship budgets, but more than fifty percent of the increases in proportionate per capita expenditures; and 4) the degree of change over the five year period varied considerably among the eight colleges, particularly with regard to per capita expenditures.

The data clearly indicated that institutional progress toward compliance with Title IX varied extensively in both nature and degree. Some institutions appeared to have focused primarily on increasing budgets for women while others expanded the scope of programs by offering competitive opportunities to greater numbers of female athletes. Four colleges were able to do both, increasing the breadth and depth of athletic opportunities for women. Two institutions were apparently unable to do either.

In order to determine why extensive differences in the degree of change existed and, specifically, what conditions facilitated implementation of Title IX, in-depth investigations at selected institutions were imperative. The two colleges with the highest Change Indexes (indicating that the greatest extent of change toward equal opportunity for men and women in athletics had occurred) were selected for the final sample. The two groups selected for comparison (based on maximum differences as reflected by their inability to progress toward equality), were those with the lowest numerical Change Indexes.
These institutions were referred to throughout this study as Northern Virginia University, Central Virginia University, Eastern Virginia University, and Southern Virginia University.

The final sample included two well-established, traditionally residential institutions and two rapidly expanding urban institutions with large part-time enrollments. A brief overview of each university was presented and included demographic data, developmental histories, major goals and priorities of the institution, characteristics of the student body, and general backgrounds on the status, structure, and recent history of men's and women's athletic programs.

A number of responses and observations associated with the preliminary phases of research led to the emergence of several potential variables affecting institutional change toward compliance with federal mandates. Each suggested variable was examined and evaluated in terms of its validity and potential theoretical relevance. A three-step analytical procedure, designed to organize and delimit the list of potential variables was applied.

The first step included broad examination of the demographic data and general description of each of the four comparison groups. The purpose of this examination was to determine whether any major attributes or obvious relationships existed which might explain differences in the respective Change Indexes among the four colleges. A brief analysis of the patterns of differences and similarities among these institutions indicated that the factors contributing to effective implementation of federal mandates consisted of variables other than major institutional attributes and general characteristics of the student body.
The second step of the analytical procedure involved compiling, categorizing and analyzing specific responses of interviewees and observations of the researcher which were suggested, or appeared to have potential, as variables affecting implementation of Title IX. After the responses and observations had been summarized and sorted into appropriate categories, they were presented as propositions and systematically analyzed through the examination of related data on the eight colleges in the final population. This process was particularly useful in assessing the feasibility of further consideration of the numerous conditions affecting implementation of change which had been suggested by interviewees. Most of the propositions were rejected because they lacked validity and theoretical relevance. However, several potential variables emerged and were included in a series of primitive research hypotheses. Consequently, the inability of the comprehensive accumulation and analysis of descriptive data to answer the major research question of this study clearly supported the need for in-depth investigation in the four comparison groups. Because broad institutional characteristics (such as size of enrollment, location, size of athletic budget and type of sports offered) did not appear to be strongly related to effective implementation of Title IX, the focus of the study was narrowed to examination of internal factors related to change.

The third step in the procedural analysis involved a review and examination of responses and observations which could not be evaluated through the use of statistics or demographic data. Since the suggested variables described internal institutional conditions and could neither be confirmed nor eliminated, they were considered to be potentially relevant to the development of theory and were synthesized into preliminary research hypotheses.
Finally, a series of four primitive hypotheses, each containing several potential variables affecting implementation of mandated change, were developed and presented. These hypotheses were helpful in later stages of investigation by making the researcher aware that a number of specific unanswered questions, each with potential theoretical relevance, had emerged during the extensive preliminary investigations and subsequent analysis of findings.
Footnotes for Chapter IV

1 See footnote number twenty-five in Chapter III for a complete listing of the eight colleges which comprised the final population.


3 In order to protect the anonymity of sources, the names and specific positions of interviewees who are quoted throughout this study have been withheld. However, in each instance where a direct quote has been included, it was copied verbatim from a written transcript from a telephone or personal interview.

4 HEW issued the implementing regulations for Title IX in July, 1975. Explicit athletic program regulations and interpretations followed in September, 1975. The deadline for compliance with all regulations issued on both dates was July, 1978.

5 In order to further protect the colleges with regard to anonymity, the institutional backgrounds presented in this chapter were limited to provide only the essential demographic data and descriptive information.

6 Sources used in obtaining the information presented on "Northern Virginia University" included the 1979-80 undergraduate catalog; the minutes and annual reports of the meetings of the University Board of Visitors from 1970 through 1979; the August 27, 1979 issue of the campus newspaper; printed brochures describing University athletics; and information gathered through the interview process.

7 NCAA sponsors and regulates intercollegiate athletic competition in three major Divisions. Membership in Division I, the most prestigious of the three, is based on an institution's ability to meet specific requirements in the areas of scheduling, scholarships, and number of varsity sports offered for men. Division I is further divided into two competitive categories for football, Division I-A and Division I-AA. In order to compete in football in Division I-A, a college must meet additional standards with respect to stadium seating capacity, amount of paid attendance at home games, and the provision of additional varsity sports for men. Division I members which cannot meet these additional requirements compete in Division I-AA in football. NCAA Division II criteria limits the amount of recruiting and scholarship expenditures among member institutions. Regulations for the scheduling of comparable opponents and the provision of a minimum of six varsity sports teams for men are also included. Division III membership is limited to colleges which do not provide financial aid to student athletes except when based solely on need. Source: National Collegiate Athletic Association, 1979-80 Manual (Shawnee Mission, Kansas: National Collegiate Athletic Association, 1979), pp. 95-101.
The three AlAW competitive divisions are based primarily on the amount of financial aid awarded to athletes in member institutions. Colleges may declare membership in different competitive divisions by sport. For example, a single institution may compete in three different divisions in three different sports, depending upon the amount of financial aid received by athletes on each team. Once an institution has declared the division in which each sport team will compete, no changes in divisional status are allowed for a period of at least three years. Teams competing in AlAW Division I are permitted, but not required, to provide up to 100 percent of the financial aid permitted by general AlAW regulations. In Division II, institutions are permitted to award up to fifty percent of the maximum allowable financial aid. Colleges with teams competing in Division III may not award financial aid based on athletic ability in excess of ten percent of the permissible limits in each sport. Source: Association for Intercollegiate Athletics for Women, AlAW Handbook, 1979-1980 (Washington, D.C.: Association for Intercollegiate Athletics for Women, 1979), pp. 1, 43, and 56.

Sources used in obtaining the information presented on "Central Virginia University" included the 1979-80 undergraduate catalog; selected minutes and reports of the actions and recommendations of the University Board of Visitors from 1974 through 1979; selected copies of the alumni newsletter; printed brochures on men's and women's athletics; and information gathered through the interview process.

Sources used in obtaining the information presented on "Eastern Virginia University" included the 1979-80 undergraduate catalog; mimeographed reports and personal accounts of actions of the Board of Visitors from 1974 through 1979; the 1976 self-study on University athletics; and information gathered through the interview process.

Sources used in obtaining the information presented on "Southern Virginia University" included the 1978-80 undergraduate catalog; publications in campus and local news media; minutes, reports and correspondence from personal files of faculty members and administrators; and information gathered through the interview process.

The current college catalog still describes the existing women's athletic program in these obsolete terms.


The percent of full-time female undergraduate students increased in six out of eight institutions in the final population. The mean increase among the eight colleges was 2.13 percent (see Table 3). The proportion of female students increased in each of the four comparison groups. The range of this increase among the latter institutions was from 3 to 8 percent, with a mean increase of 4.6 percent.
It was of interest to the researcher to note the replies of several respondents to the question, "Is your institution currently in full compliance with Title IX?" Often the answer was "Yes, if you don't include football." In institutions which did not sponsor football teams, a similar reply was "Yes, if you don't count men's basketball." Of even greater interest was the tendency for representatives from colleges which had shown little if any progress toward compliance with Title IX to answer, as one respondent did, "Yes, we are in full compliance across the board."

The responses included in the list of answers were randomly selected and then directly quoted from written transcripts of interviews with Phase II participants.
CHAPTER V

THE DEVELOPMENT OF A GROUNDED THEORY OF PRESCRIBED CHANGE

This chapter presents a "Theory of Prescribed Academic Change" which describes conditions facilitating the implementation of federal mandates in institutions of higher education. Use of the constant comparative method, together with the principles for theoretical sampling, resulted in the development of a theory which is grounded in empirical evidence generated through extensive and systematic study of the implementation of Title IX in public colleges in Virginia. A broad scale, cross-institutional survey provided a series of primitive research hypotheses, indicated the need for in-depth study of internal institutional factors related to change, and guided the sample selection process. The theory which emerged is based largely on investigations conducted at the four institutions selected as comparison groups.

In brief, the theory consists of seven principal components; four of which describe the consecutive stages of progress toward implementation of federal mandates, and three of which are major categories of variables affecting the rate and degree of institutional progress through the four stages of implementation. A complex and multidirectional set of relationships exists among and between the stages, categories, and variables within each category. Chapter V focuses on the explanation and examination of the content and function of each theoretical component. The integrated theory is formally presented as a comprehensive whole in Chapter VI.
In order to facilitate discussion and provide perspective, a summary of the research procedures and a brief overview of the change process in each of the four comparison groups precedes the presentation of theory. The major portion of this chapter is devoted to systematic explanation and analysis of each theoretical component. The procedure established for presentation and discussion of the stages, categories and variables comprising the theory is described and subsequently applied as each component is considered.

**Title IX Implementation at Four Institutions**

The four comparison groups selected for in-depth investigation were characterized by maximum differences in observable progress toward implementation of Title IX. Two of the colleges, Northern Virginia University and Central Virginia University, appear to have been more effective than other state institutions in their efforts to implement the mandate. Extensive on-campus research at NVU and CVU led to the development of a primitive theory describing internal institutional conditions which facilitated change. Each theoretical component was then examined with respect to the existence and operation of related variables in the remaining comparison groups, Eastern Virginia University and Southern Virginia University. The latter institutions, having been selected for their apparent inability to effectively implement the mandate, served as "testing centers" for validation of the emerging theory. For example, when evidence indicated that a particular variable functioned to facilitate change at both NVU and CVU, the nature, function and properties of the variable were further examined through research at EVU and SVU. Often the validation process indicated that the properties (characteristics) of the variable were distinctly different in the latter
pair of institutions, or that the nature of the change processes at EVU and SVU was such that the variable did not exist or its function was impeded or neutralized. Follow-up visitations to each institution were conducted as necessary until each variable, proposition and theoretical component had been cross-validated from all viewpoints among the comparison groups. During the final stages of validation, the relationships between variables and categories gradually became clear. Eventually, the requirements for theoretical saturation had been met as no additional evidence could be found to further embellish, substantiate or refute the theory.

The following sections summarize the events and change processes which occurred in each of the comparison groups following the enactment of Title IX. Together with the institutional descriptions presented in Chapter IV, these overviews provide a general frame-of-reference for forthcoming discussions which focus on the development of theory.

Northern Virginia University

Prior to 1975, the athletic program at NVU consisted of several non-revenue producing sports for men and women plus a men's basketball team. Most efforts toward program development had focused on upgrading men's basketball. In 1974 the chairman of the division including athletics initiated a four-year plan for the development of men's and women's athletics. Following an assessment of institutional resources and student interests, the Division Chairmen developed a plan which focused on upgrading the quality of those existing sports which appeared to have success potential in terms of student participation, community interest or producing revenue. Several sports were eliminated and others were scheduled for varying magnitudes of expansion in a progressive,
phase-type procedure. The overall improvement of women's sports was a high priority item within the framework of the four-year plan.1

In brief, the plan included classifying each intercollegiate sport into one of four categories: clubs, non-revenue sports, potential revenue sports, and revenue sports. The results of the institutional self-study (prescribed in HEW implementation guidelines) served as the initial basis for classification. Of particular importance with respect to Title IX implementation was the policy which declared that when men and women had teams in a particular sport, both teams were placed in the same category. The classification system guided the direction and emphasis of efforts toward athletic program expansion throughout the four-year period. Budget decisions, in particular, were based on the categorical standings of specific teams. Flexibility within the general framework of the plan itself, and the periodically scheduled re-assessment of student needs and interests, allowed for the upward mobility of existing teams and the addition of other sports. The major underlying principle was one of investing money in people and places that held the potential for offering the greatest returns in terms of improving the quality and visibility of NVU athletics.2

In the fall of 1974, the plan was presented to and approved by the University President and then the Board of Visitors.3 By spring, 1975, the implementation process had begun. During this period, two developmental activities occurred which deserve special consideration. First, two highly credentialed and nationally recognized women coaches were hired (one in basketball and one in field hockey) to provide leadership and expertise in the expansion of specific sports for female athletes. Second, the administration provided the time and resources
for the new coaches to work toward upgrading the quality and status of their respective teams. Specifically, teaching responsibilities in physical education (included in each job assignment) were limited to a part-time basis, and additional finances were available for operational expenses. Further, progress had been made toward generating scholarship funds for women basketball players.

During the 1975-76 academic year the operation and quality of men's and women's sports programs began to equalize. Many minor changes were made to provide for comparable equipment, practice times, support services and game schedules. Because of the combined effects of high quality coaching and intensified recruiting efforts, the competitive status of women's teams improved. In 1976, the University hired a new president who strongly advocated both equal rights and intercollegiate athletics. The central administration focused on promoting effective communication and public relations between the University and the surrounding community. The citizens responded by supporting university athletics (for both men and women) as spectators and through contributions to fund raising projects.  

By 1977, under the dynamic leadership of an ambitious and controversial coach, one of the women's teams had gained national prominence. Although much progress had been made toward equal opportunity for women in athletics, immediate requests for equal treatment and financing for men and women players in this particular sport became an open issue. The focal point of the debate between the women involved and the administrators was the rate of progress toward full Title IX compliance. Tension increased as the heated controversy was reported and interpreted by state and local news media. The problem was resolved in 1978 when
the coach accepted employment in another institution. Meanwhile, the women's team had gained popularity, status and credibility as a top-ranked contender. An administrative decision to replace the departing coach with an equally competent successor insured, and eventually strengthened, the position of female athletes at NVU.

Several factors indicated that progress toward equal opportunity for women in athletics at NVU will be continued, or at least maintained. First, the growth in women's athletics has been financed through a variety of resources including increases in student fees, University/community fund raising committees, and gate receipts from women's sports. In essence, this strategy involved tapping new resources rather than tampering with existing program budgets or traditional funding sources for men's athletics. Second, new positions had been created for the administrative and support systems necessary to conduct and operate the expanding women's sports program. Finally, hiring practices appear to have been consistent with the commitment to equal opportunity espoused by University administrators. Several key positions with respect to athletic personnel and central administration are currently held by newly hired, highly qualified individuals (mostly women) who actively support the concept and spirit of Title IX.

The consensus among interviewees at Northern, with respect to the impact of Title IX, was that the law supported, rather than initiated, University efforts toward development of quality athletics for men and women alike. The mandate provided direction and leverage for implementing changes which had been conceived and considered to be educationally sound prior to its enactment. The majority of University constituents, particularly central administrators, appear to hold values
which are harmonious with the values reflected in Title IX. The status and degree of Title IX implementation at Northern indicated that the commitment toward equal opportunity, which was articulated by University leaders, amounted to more than rhetoric or tokenism. Substantial change had occurred above and beyond the obvious, such as additional dollars allocated to women's sports.

Central Virginia University

Progress toward compliance with Title IX at CVU has been characterized by conflict and controversy stemming from powerful internal and external forces for and against change. In order to understand the nature and influence of events related to implementation of the mandate at the University, it was important to gain a clear perspective with regard to the developmental background and underlying philosophy of campus athletics.

Men's and women's athletic programs at CVU evolved and developed as separate entities. The development of this dual structure was reinforced by the availability of separate facilities for men's and women's sports. The two programs emerged with different goals and priorities as well as separate and distinct internal administrative systems.

The men's program is highly traditional in nature, scope, and developmental history (see Chapter IV). Priorities within the department included the production of successful football and basketball teams. The emphasis on developing winning teams in selected, male-dominated sports has apparently been supported by alumni and by the governing board. The major countervailing influence on the traditional nature of men's athletics at CVU is rooted in a long-standing University
commitment to academic excellence. In general, the faculty and students have argued for an athletic program which: 1) focused on breadth of opportunity in terms of student participation; and 2) was consistent with the academic priorities of the institution. These widely held priorities have resulted in periodic episodes of heated controversy over athletic policies and practices. Both the traditional and the academic points of view have influenced the development of men's athletics. Football and men's basketball continue to dominate the campus sports scene. On the other hand, the overall program is characterized by broad and varied opportunities for student participation, and the majority of student athletes meet the selective admissions requirements of the University. However, the long-standing conflict over purposes, direction and priorities of men's athletics at CVU has not been resolved. More important, by the time Title IX implementation became an issue on campus, the precedent and climate for internal response to the mandate had already been established.7

Historically, women's athletics at Central were an outgrowth of the women's physical education program and developed gradually, primarily from student interest. Women's sports were conducted and governed by the female physical education faculty. The chairperson of this department generally assumed a similar leadership role in women's athletics. By the early 1970s, the women's athletic program was well-organized, firmly established, and functioned harmoniously within the traditional value system of an academically oriented and relatively conservative university setting. Emphasis was placed on broad participation opportunities and competitive priorities remained secondary to educational values. Women's teams, however, were relatively successful
in intercollegiate competition within the state. Consequently, prior to the inception of Title IX, there was no apparent desire among female personnel or participants for equality in athletics in terms of comparable men's and women's programs.

Program expansion in women's athletics at CVU, as well as in most colleges across the nation, was based on comparison with women's sports programs at peer institutions. As Title IX came to the forefront in higher education, many women began to focus on men's athletics within their own institutions for purposes of program comparison. Initially, this was not the case at CVU. However, the accelerated expansion in women's athletic programs among Central's traditional opponents had a significant impact on the ultimate development of women's sports at the University. The coaching staff was placed in a position where values and practices needed to be reexamined before decisions regarding the nature and degree of change could be made. On one hand, the coaches and participants had grown accustomed to the college's reputation for quality performances and success in statewide competition, and change was imperative if this pattern were to continue. On the other, personal and professional value systems, rooted strongly in traditional beliefs and academic priorities, favored the status quo. What evolved was gradual movement toward more progressive and contemporary attitudes and practices, punctuated by a series of events which served to accelerate the change process.

Early in 1974, a CVU woman student (who was not an athlete) became aware of obvious discrepancies in the practices of and provisions for female athletes as compared to male athletes on campus. In an attempt to persuade college officials to rectify the apparent injus-
tices, she filed a formal complaint with HEW. Government officials notified the University that the complaint had been filed and that the allegations would be investigated.

Organized preparation and planning for the implementation of Title IX at CVU began shortly after the complaint had been filed. The women's athletic staff, aware that specific regulations for implementing the portion of the mandate which dealt with athletics were forthcoming, undertook the responsibility of reexamining the sports program and formulating a plan to upgrade athletic opportunities for female students. The plan which evolved was based on anticipated needs as measured by three major criteria: 1) serving the students; 2) remaining competitive with peer institutions; and 3) complying with the mandate. In order to guide the process of planning and budgeting for program expansion, a list of priorities was established. Based on the results of the needs assessment and strongly influenced by the value systems of the women's athletic personnel, the list of priorities emphasized upgrading and expanding competitive opportunities for women already on campus. Funding for scholarships was last on the list, and recruiting was not even mentioned. Program development initially focused on increasing the coaching staff and the amount of money available for operational expenses.

Two other events occurred simultaneously with the planning efforts of the women's athletic personnel. First, HEW followed through on intentions to send an official investigator to the campus. Although no formal action resulted from the investigation, it was clear that the college would be subjected to some degree of government scrutiny with respect to implementation of Title IX. Second, the central administration
appointed an ad hoc Athletic Policy Committee to: 1) evaluate the needs and resources of the University in response to Title IX compliance; and 2) to make recommendations concerning athletic policies based on the results of the evaluation. The Committee found that compliance with the mandate necessitated the appropriation of funds for scholarships for women athletes, and eventually recommended that the University eliminate one major sport for men in order to facilitate Title IX implementation. This recommendation met with immediate and intense resistance from male athletic personnel and alumni, and was promptly vetoed by the governing board.

The plan designed by the women's athletic staff was presented to the President for consideration and approval. It was accompanied by a request for a large increase in funds for salaries and operating expenses. No request was made for immediate increases in expenditures for athletic scholarships for women. The plan was approved and the women's athletic budget for the forthcoming year (1975-76) was increased substantially.

A similar series of events periodically recurred as the struggle toward Title IX compliance continued. In 1975 a woman basketball player, who wanted an opportunity to receive an athletic scholarship at CVU, filed a second formal complaint. HEW visited campus again and recommended that the University take steps toward initiating an equitable scholarship program for women athletes. At the same time, women's sports teams, competing against colleges in which scholarships and recruiting efforts had been increased, began to feel the impact of Title IX in their win-loss columns. The attitudes of the women's athletic staff toward offering athletic scholarships gradually changed.
The decision-making process was partially influenced by several younger and less conservative female coaches, who had been hired during the recent expansion process. By 1976, budget requests reflected the change in priorities and the University began to implement the mandate in its entirety.

Since 1974, annual budget increases for women's athletics have been substantial. The primary funding source has been student fees. Two increases in student fees have been approved and implemented since 1974. Compared to the men's athletic program, the workloads, operational expenditures, and support services for women had begun to equalize by 1979. During the fall of that year, a separate position for a women's athletic director (with no administrative responsibilities in physical education) had been created and filled. The scholarship situation was changing to accommodate more and better women athletes, and the women's athletic program as a whole had regained status and recognition among peer competitors.

While the quality of women's athletics has continued to increase, the surrounding environment has changed very little. First, the conflict over athletic priorities in general has not been resolved. The Athletic Policy Committee has been renamed the "Athletic Advisory Committee," and the purpose and function of the Committee have been altered accordingly. Alumni groups and men's athletic personnel are attempting to generate funds and support for more men's major sports facilities, a move which has been met with much resistance from faculty and many students. The faculty has maintained a limited amount of control over the athletic program from a recruiting standpoint. A faculty-dominated committee decides on general admission standards and determines the number and
allocation of "special admissions" slots. Recently this number has been kept at approximately ten percent of the total admissions, and there is evidence that it may decline in the future. This alert faculty committee also keeps abreast of changes and developments with respect to athletic policies and responds to various issues as they arise.  

Secondly, Central has once again been reported to HEW for allegedly violating anti-discrimination laws through athletic practices. The latest complaint, filed by a former women's coach, involved age discrimination in employment. The case was turned over to the Equal Employment Opportunity Commission (EEOC), which sent an official to investigate. Although the complaint did not address Title IX, the athletic program at CVU was under scrutiny by HEW for the third time in four years.

Finally, central administration has continued to approve the program changes and budget requests initiated by women's athletic personnel, as long as the requests have been "reasonable". There is evidence of only a single incident in which a request was actually denied. The case in point involved a University donation (approved by the President) to a national lobbying firm hired by a coalition of colleges, primarily for the purpose of persuading legislators to exempt revenue producing sports from Title IX compliance standards. Women athletic staff members, in conjunction with the Faculty Women's Caucus, responded by requesting that an equivalent sum be donated to the AIAW political action fund. The request was denied by the President. Neither the request nor the denial directly affected Title IX implementation at CVU.

Eastern Virginia University

Change toward implementation of Title IX at EVU was subtle and uneventful in the early stages. As student enrollment increased, new
sports were gradually added to the women's program. In some cases, the expansion of opportunities for women to compete merely involved adding a group of female athletes to an existing team for men. In this manner, two sports emerged as coeducational programs which were staffed by male coaches and financed largely through resources allocated to men's athletics.

Throughout most of the 1970s, the part-time Business Manager of Athletics assisted the Athletic Director in ordering equipment, scheduling for use of facilities, and making travel arrangements. The Business Manager was aware of Title IX and supported the spirit of the mandate. He conscientiously attempted to provide for equal opportunity among male and female athletes insofar as his authority and responsibility allowed. Consequently, the women gradually gained equal access to practice, training and medical facilities. Allocations for travel, equipment and supplies were equitable on an item-for-item basis. The major discrepancies apparently existed at a higher level and were specifically reflected in comparisons of the total scope of participation opportunities, the overall budgets, and the quality and number of coaches in men's and women's athletics.

Few major changes related to Title IX occurred in the athletic program at EVU prior to 1976. In the spring of that year, several women athletes voiced complaints to the Athletic Director and central administration. Their two primary concerns were: 1) lack of participation and scholarship opportunities; and 2) a need for qualified and dependable coaches for women's sports. In response to these complaints, a Student Committee composed of seven volunteer female student-athletes was formed to conduct the mandated institutional self-study on athletics. The
Committee focused on assessing the degree of compliance with respect to Title IX regulations. The findings were reported to the Athletic Director who, in turn, discussed the preliminary report with athletic staff members. The report was then supplemented with additional data, revised, and presented to the Vice-President for Student Affairs. The self-study process eventually resulted in the appropriation of funds to: 1) begin a limited scholarship program for female athletes; and 2) employ a coordinator of women's sports on a salaried basis.

Since 1977, the turnover in key personnel affiliated with the administration of University athletics has been substantial. Concurrently, there have been efforts to re-structure the chain of command and organize the management and procedural aspects of the program. By Fall, 1979, the President, Athletic Director and the Coordinator of Women's Sports had each been in their respective positions less than eighteen months.

During the past five years, both men's and women's athletics have experienced growth in student participation as well as financial allocations. The impetus for expansion came primarily from sheer numbers of additional full-time undergraduates who were interested in sports. When students or coaches were able to convince an administrator that need and interest indicated a particular sport should be added or financially upgraded, their efforts were generally supported. However, at the time of this study, there appeared to be little consensus among interviewees with respect to the present or future priorities, plans, or direction of the EVU athletic program.

Now that responsibilities have been clarified and key positions have been filled, most interviewees expressed optimism that the pro-
cesses of reevaluation and planning would receive immediate attention among administrative leaders. How the University will respond to Title IX in the future is still unclear. One interviewee summarized the current situation as follows: "We have not implemented Title IX — nor has there been any serious effort to do so in athletics."22

**Southern Virginia University**

Women's athletics as a whole at SVU have failed to keep pace with the growth of men's athletics. Even though three minor sports for men were eliminated, purportedly in response to a need to upgrade women's sports budgets, the annual financial gains were not comparable to those in men's budgets. Most of the additional funding for women has been spent on female athletes in the basketball program. Scholarship opportunities, as well as schedules and operating expenses, have improved for the women basketball players. The women's athletic staff is comprised totally of part-time and "voluntary" personnel. Although there has been a substantial turnover rate among coaches, no major changes have occurred with respect to key personnel within the administrative structure. With few exceptions, SVU has not effectively responded to Title IX athletic regulations.23

**Comparative Summary**

Before proceeding to the discussion of theoretical components, it may be helpful to summarize several of the more obvious differences and similarities describing the change processes in the comparison groups. The relationships and comparisons included below are presented as an introductory overview, and will be analyzed and discussed in detail in forthcoming sections of this Chapter. Of particular importance with
regard to the processes involved in Title IX implementation were the events and responses at Northern and Central, where the greatest degree of change occurred.

At Northern, there was consensus among key personnel as they interpreted and implemented the mandate. In addition, the opinions and beliefs of individuals in decision-making positions were apparently harmonious with the social values reflected in the mandate. Consequently, the lack of conflict appeared to create a climate conducive to change and progress. In contrast, the change process at Central was characterized by conflict rather than consensus. As issues arose and differing viewpoints were articulated, greater numbers of groups and individuals became involved. Eventually the forces for compliance with the mandate overcame the resisting forces, and change occurred.

A second factor which deserved major consideration was the difference in the roles played by the two university presidents. At Northern, the President assumed a leadership role by articulating his position and intentions with regard to the mandate and by supporting University efforts toward implementation. At Central, the chief administrator's position on Title IX was often unclear. His management style reflected a desire to appease as many of the diverse political interest groups as possible. Ultimately, the governing board was responsible for determining athletic policy at CVU, while the President took major responsibility for the decision-making process at Northern.

Also of interest were the different approaches used to initiate and fund the expansion of women's athletics. Northern emphasized development based on quality and expertise. Top caliber players were recruited and awarded financial aid. Highly credentialed coaches were
hired in selected sports and were expected to promote their own programs. Central, on the other hand, focused on increasing the breadth of opportunities for currently enrolled students to participate and on maintaining the competitive status of existing teams. Scholarships were given very little priority in initial efforts toward change. Notable differences between the two universities were also reflected in their approaches to funding. Northern met the need for budget increases by attempting to generate revenue, at least partially, through the use of new and untapped resources (i.e. community fund-raising projects and gate receipts from women's athletics). Central relied on traditional resources, primarily student fees. In both cases, however, the money required for implementing program changes was provided.

Finally, the use and interpretation of Title IX itself was different in each of the two institutions. Officials at Northern interpreted and implemented Title IX according to the spirit of the mandate. The goal was to provide equal opportunity for both sexes in the athletic program. Other than through general review and periodic program evaluation, little attention was given to the accompanying regulations and guidelines. Title IX was considered to have facilitated the expansion of women's athletic opportunities at Northern, while the mandate was viewed as providing major impetus for change at Central. Officials and personnel at the latter institution tended to focus on the details of the regulations in an attempt to comply with the minimal standards set forth by the law. In essence, the document itself received more attention at CVU, and was attributed to hold relatively greater importance in initiating and sustaining change, particularly by women involved in the change process.
Components of the Theory

Because the theory of prescribed academic change describes progress toward implementation of federal mandates in stages as well as categories of variables, the discussion of theoretical components occurs in two parts. First, the stages of progress toward implementation are described and examined. Second, the variables influencing the rate and degree of institutional progress through the stages are presented and analyzed. The relationships between variables or categories and the stages of implementation are examined and clarified in Chapter VI, which focuses on integrating the major components of the theory into a meaningful whole.

The Four Stages of Implementation

The events and processes describing institutional response to federal mandates took place in four related, but distinct stages. The stages are consecutive and are dependent upon the processes and activities, reactions to events, and level of progress in each preceding stage. In brief, each stage begins with an initial activity calling for some type of administrative response. A series of events follows, and leads to administrative action. The administrative action, in turn, generates the potential for conflict, reaction and response on the part of constituents within and surrounding the university community. The feedback or response generally represents the culmination of one stage and the beginning of another. However, the response may have the opposite effect -- retarding progress toward successive stages of implementation or, in some instances, causing regression back to a former stage of progress.
Evidence gathered in both Phase II and Phase III of this investigation clearly indicated that institutions differed in the rate at which they proceeded through the stages. By 1979, few institutions across the state had reached the fourth and final stage. The nature of activities within each stage, as well as the rate of progress through the four stages, are heavily dependent upon several variables in each major category. (The function and effects of the variables as they relate to the stages of implementation will be discussed in the forthcoming chapter.)

Following is a formal proposition related to the four stages of implementation. Each stage included in the proposition is described and discussed individually and as it relates to other stages. A rationale for the theory of stages is offered, and supportive evidence derived from research findings is presented. Figure 2 is a graphic representation of the four stages of implementation and the relationships between the stages.

**Proposition:** Progress toward effective implementation of a federal mandate must occur in four consecutive stages: 1) Infusion; 2) Preparation and Policy Formation; 3) Trial and Transition; and 4) Policy Execution.

**Stage 1: Infusion**

Infusion begins with the reception of the mandate as it is introduced to the institution and to the higher education system as a whole. Through organizational affiliations, media news releases, and preliminary communiqués from government sources, many university constituents are aware of the nature of the mandate prior to the arrival of related official federal documents. Consequently, this stage may occur earlier in some institutions than in others, depending upon the affiliations, communications, priorities, and degree of awareness among key personnel.
F I C H E 2

THE FOUR STAGES OF IMPLEMENTATION

STAGE 1: Infusion

STAGE 2: Preparation and Policy Formation

STAGE 3: Trial and Transition

STAGE 4: Policy Execution

Normal Relationships

Unique Relationships created by the influence of categories of variables
The process of infusion is characterized by a number of activities occurring simultaneously or intermittently by the potential administrators of and participants in anticipated change. These activities, or sub-processes of Infusion, include: 1) introduction of the mandate or proposed mandate to various personnel in formal or informal methods; 2) inquiry into the reaction of external organizations with which the university and its constituents are affiliated; 3) retrospective analysis including an examination of the social values of the mandate from the perspective of the value systems and professional priorities of the individuals involved; 4) formal or informal discussion among various university constituents, including upper level administrators; 5) projection by groups and individuals with regard to potential effects of the mandate on the institution and its peers; 6) interpretation of the mandate by leaders, particularly key administrators; 7) administrative articulation and communication of the institutional interpretation of the requirements of the mandate to university personnel; and 8) feedback and response from university constituents in the form of support, conflict or resistance. Although they do not necessarily occur in any particular order, the eight sub-processes are closely related and frequently interdependent. A brief discussion of the activities within, and the relationships between, the sub-processes is presented below.

Introduction. Administrators and personnel become aware of mandates and related regulations in a variety of ways, such as affiliations with national organizations, intra-campus correspondence, news media, formal and informal discussions at meetings or social events, and official correspondence from governmental agencies. The manner and time-frame in which these initial activities occur are likely to influence the nature and duration of other activities in the Infusion Stage.
Inquiry. University administrators and personnel are often affiliated with external organizations concerned with the broad implications of a federal mandate. A second source of inquiry includes other educational institutions, particularly prestigious universities and peer colleges. Individuals turn to these groups for advice and assistance in interpreting the mandate and its potential impact. Although the process of inquiry occurs continuously or sporadically throughout the first three stages of implementation, activity of this nature is generally intensified during Infusion. Early in the change process, inquiry may serve to aid colleges in establishing direction in planning. Conversely, opinions derived or supported through inquiry can serve as a basis for forthcoming internal conflict at other colleges. Depending on the mixture, type and strength of organizational affiliations, the results of inquiry may periodically retard or facilitate progress toward compliance.

Introspective Analysis. This sub-process is closely related to "inquiry" and "discussion," but focuses on individual efforts toward clarification of values. Both the social and occupational implications of recent federal mandates create a climate in which individuals concerned with anticipated change are likely to experience a reexamination of personal and professional goals, values and priorities. Introspective analysis may take the form of an ongoing process throughout all stages of implementation, but generally appears to be more pronounced during the initial stages of change. The results of this sub-process may bring individuals closer to consensus on change-related issues, thereby facilitating compliance. Conversely, the results of the values clarification process may contribute to the formation of opposing political forces within an institution.
Discussion. Internal institutional discussions, which focus on interpreting and understanding a new federal mandate, generally begin on an informal basis among academic peers; administrators confer with fellow administrators, coaches consult colleagues, and so forth. As preparations for an institutional self-study become imminent, formal discussions often occur within previously established academic (or athletic) committees and departments. During the discussion process, viewpoints are expressed by some participants and clarified by others. Through discussion, the degree of receptiveness of constituents to change and the relative importance assigned to the mandate by administrative leaders (and possibly by different interest groups) are articulated and observed.

Projection. Based on information gathered during the four previously mentioned sub-processes, as well as on a general knowledge of institutional resources and internal and external constraints, various university constituents tend to speculate on potential effects of the mandate. Options with respect to different implementation strategies are considered and possible outcomes related to each option are projected. In the initial stages of the projection process, groups and individuals tend to focus on the potential impact of the mandate on existing practices and programs within the institution, and on established roles and responsibilities of employees likely to be affected by the anticipated changes. As inquiry and discussion continue, projections tend to broaden and begin to center on the potential impact of different implementation strategies on the university as it functions within the system of higher education and within society as a whole.
Interpretation. Because they address a large and diverse population, federal mandates to educational institutions are rarely explicit in terminology or procedural requirements. The nature of the accompanying documents often allows significant latitude in interpreting specific regulations as well as the intent of the mandate in general. For example, research in this investigation revealed that there were nearly as many interpretations of the word "equitable" (which was used frequently throughout Initial Title IX documents) as there were interviewees. Following the reception of the federal correspondence and regulations related to the mandate, the documents are read and interpreted by university officials and other interested personnel. The procedures for interpretation may be formal (from a legal standpoint, for example) or informal (from administrative "brainstorming" sessions, for example) and the end result may be largely influenced by the nature of events described in the aforementioned sub-processes. The decision of institutional leaders, and particularly key administrators, with regard to the initial institutional interpretation of the mandate is extremely important in facilitating or impeding the rate of progress through subsequent stages of implementation.

Articulating the Interpretation. Once a preliminary institutional interpretation of the mandate and related requirements for implementation has been formulated by key administrators, priorities and strategies for compliance begin to emerge. During the Infusion Stage, the extent of articulation and communication of upper level administrative decisions depend on the nature of the initial interpretation of the mandate as well as the priority assigned to its implementation. Administrators who, for various reasons, wish to respond to the mandate,
are likely to openly and formally acknowledge its reception. In some instances, written communiqués are distributed to faculty or departmental chairpersons. Administrative leaders then begin to lay the groundwork for a self-study, often by appointing an ad hoc committee to proceed with the institutional assessment and make related recommendations. The leadership and membership of this committee may reflect administrative attitudes toward and interpretation of the mandate. Administrators who elect not to assume a leadership role in response to the mandate, usually are delaying any formal action. In most cases, the initial institutional interpretation is rarely communicated per se, but is unobtrusively passed on to university personnel through change-related activities or by a lack of action.

**Feedback.** Once formal action begins, or a significant period of time has elapsed in which no action has been taken, various individuals and interest groups throughout the university community respond. The response may take the form of cooperation with administrative leadership, negative feedback on administrative actions, or the application of pressure to initiate administrative action. Consequently, the transition into the second stage of implementation may be characterized by cooperative efforts to prepare for change or by open conflict.

**Stage 2: Preparation and Policy Formation**

The second stage of implementation is characterized by activities of a more formal nature which are designed to facilitate the decision-making process. It is also a period of adjustment to the recognition that changes are likely to occur. The Preparation and Policy Formation process begins with investigation, generally in the form of an institutional self-study prescribed by HEW or some other government agency.
responsible for regulating and enforcing compliance with the mandate. (In the case of Title IX, government regulations required colleges to complete a self-study during the initial voluntary compliance period, 1975-76.) The survey — which is intended to assess institutional conditions, needs and resources related to compliance standards — is often accompanied by continued evaluation of internal and external receptivity to change, and examination of potential conflicts, risks and options related to anticipated change. Eventually, the results of the self-study are interpreted and a decision is made regarding the proposed utilization and application of the information which has been gathered and analyzed. Finally, a declaration of intent to comply with the federal mandate is issued by top level university officials.

Throughout most of Stage Two, activities are predominantly task-oriented. Interactions spurred by underlying political issues tend to subside as participants focus on the more mechanistic and routine procedures of preparing and administering a survey, gathering related data and materials, and preparing reports. Administrators review and up-date information gathered during the Infusion Stage and begin to develop a primitive strategy or general perspective for the interpretation and implementation of the self-study results and the accompanying recommendations. There are six sub-processes within this stage. Each is discussed below.

The Institutional Self-Study. A variety of methods are used in conducting self-studies. The most common approach appears to be the use of a student survey instrument developed and administered by an ad hoc committee appointed by central administrators. The survey results are generally compiled and analyzed by the committee, and a report contain-
ing a summary of the results and a list of related recommendations is presented to the appropriate administrative official(s). Student survey information is often supplemented by reports from standing committees and department chairpersons. During the self-study process, a greater proportion of university clients and personnel may become aware of the mandate and its potential implications, and often have formal opportunities to express related needs, interests and concerns. The number of groups and individuals participating in the assessment process varies according to the scope and importance of the mandate and related informational needs as perceived by administrative leadership. The nature, breadth, and applicability of self-studies are contingent upon: 1) the method(s) selected for assessing institutional needs and status with respect to compliance; and 2) the manner in which this process is initiated and conducted. As a result of increased involvement, new interest groups or support groups of proponents and/or opponents of major reform may develop. New centers of power or sources of conflict may emerge and influence institutional progress toward implementation. For example, previously established committees, departments or boards may take issue with the recommendations of the ad hoc committee. Other personnel (such as students or administrators) may surface as interest groups supporting the recommendations, and overt conflict may result.

Evaluation of Potential Receptivity to Change. During the preparation process, central administrators become increasingly aware that decisions regarding the rate and magnitude of mandated change are imminent. Based on information and insight gathered during the Infusion Stage, the self-study process, and renewed contacts with selected external organizations (particularly professional organizations, peer
institutions, and government agencies), administrators attempt to assess the political climate within and surrounding the institution.

**Examination of Risks and Options.** This sub-process generally involves administrative examination of: 1) the self-study results with related reports and recommendations; 2) the institution's financial resource potential; and 3) the attitudes and characteristics of key personnel. A formal or informal analysis of the factors listed above, coupled with some degree of awareness of the political climate and conflict potential on campus, leads to the development of a primitive change strategy. Various risks and options related to major reform are examined, and the perceived institutional ability to proceed with and adapt to change influences the emerging compliance strategy.

**Interpreting and Utilizing Results of the Self-Study.** This sub-process includes the final interpretation of self-study results and the analysis of reports and recommendations from various departments and committees. Plans for implementing the mandate are dependent upon administrative perceptions of institutional resources and potential adaptability to change as well as on reported evidence indicating a need for reform. When administrators or influential leaders recognize that a discrepancy exists between current practices and expectations with regard to the mandate, this realization is likely to accelerate efforts toward change. On the other hand, if no such discrepancy (or performance gap) is felt or if its existence is minimized in importance, delay in compliance may result.

Based on both factual and perceptual data, a list of priorities related to compliance with the mandate is established. Subsequent plans for implementing the mandate are determined on the basis of these pri-
orities. Recommendations from various committees, departments and individuals are considered, and may or may not influence the initial administrative plans and priorities for implementation and compliance.

Declaration of Intent. During the second stage of implementation, university officials formally acknowledge acceptance of the mandate through a written statement of intent to comply. The statement often appears in intra-campus memoranda, annual catalogs and correspondence with prospective students and staff. The statements may be vague, tentative, or explicit; may reflect real or implied institutional policy; and may or may not be supported by decisions and activities directed toward compliance.

Feedback. The feedback from university constituents is likely to focus on specific administrative decisions and activities which accompany the declaration of intent. The following events in particular appear to initiate response or to generate conflict: 1) the manner in which officials dealt with the recommendations of various groups involved in the self-study; 2) a lack of tangible evidence of forthcoming change implied by declared intentions to comply; or 3) the failure of officials to alleviate concerns that decisions related to change may have a negative effect (such as budgetary decreases) on existing programs. The nature and extent of the feedback may, in turn, influence the rate of progress toward and throughout the third stage of implementation.

Stage 3: Trial and Transition

At this stage, implementation efforts focus on internal events, influences and constraints as attempts are made to comply with the mandate according to the previously determined institutional interpretations
and policies. The change process is characterized by cycles of decision-making, change-related activities and events, and response. Response may take the form of alternating periods of conflict or confusion and adjustment. Decisions, as well as activities, may be preceded or followed by open conflict. In turn, the nature and degree of response related to implementation efforts are likely to influence subsequent decisions.

In brief, this is a period of developing and testing possible options for complying with the mandate. Through major reform or minor (sometimes token) alterations, the institution takes steps toward implementation and change occurs. Because the real impact of the mandate is being experienced to some degree by various college personnel, the activity-conflict-response patterns which often characterize Stage Three are likely to be heightened or accelerated. It is during "Trial and Transition" that variables in Category B (attributes of key personnel) exert maximum influence on the implementation process.

Eventually, the organization adjusts to administrative decisions as well as the events and processes accompanying change. Priorities are clarified and change-related efforts and activities are gradually integrated into developmental plans. At this point, constituents become increasingly aware of administrative policies related to implementation of the mandate. The policy may be formally articulated in an official statement or may be informally (and sometimes unobtrusively) communicated throughout the college community. If key personnel react negatively to administrative policy and developmental strategies, the institution re-enters another period of Trial and Transition. However, when policies
and procedures have been clarified and are generally accepted, the
institution moves into the fourth and final stage of implementation.

**Stage 4: Policy Execution**

The final stage includes gradual adjustment to and implementation
of institutional policies related to compliance with the mandate. In-
stitutional policies may differ widely among individual colleges and
universities and are dependent upon the impact of interactions, events
and responses which occurred in earlier stages. In some instances, ad-
justment may mean that personnel become accustomed to the effects of
major change. In others, adjustment may occur in the form of realization
and acceptance that compliance-related change efforts will be minimal.
In any case, the action-conflict-response cycle is less pronounced and
change is more likely to be planned and systematic rather than sporadic,
experimental and tentative in nature. A climate of consensus, rather
than conflict, prevails.

An organization which reaches the fourth stage in the imple-
mentation process is still subject to the influence of key variables
and thus may have difficulty in maintaining stage four status. The
potential always exists for an institution to regress back to the third,
or even an earlier, stage of implementation.

**Rationale**

In higher education, change which has been precipitated by a
federal mandate is largely a matter of interpreting and implementing
the statute. The source, direction and impetus for change are implied
by the nature of prescribed reform. However, because organizational ad-
justment to mandated change often requires reexamination and alteration
of values, priorities and resources, the rate and degree of progress
toward compliance will vary among institutions. In essence the institu-
tion must progress through various phases of "readiness" before decisions
and activities resulting in sustained change can occur. Specific and
essential phases of readiness accompany each step of the stage theory
of implementation and account for the linkages between the four stages.

Current change strategists generally support the stage theory
with regard to educational reform. Authors appear to be particularly
aware of stages of progress and receptivity within the implementation
phase of the change process. Both research and common sense indicate
that effective change occurs in an organizational climate conducive
to the actual implementation of new policies and regulations. Whether
change is planned or largely incidental, progress toward reform is
sensitive to the organizational climate. The process of developing an
atmosphere of readiness and receptivity is gradual, is strongly in-
fluenced by several key variables, and occurs in phases. As this process
evolves, the organization progresses from one stage to the next.

Evidence

Prior to the enactment of Title IX, administrators, faculty and
students had already begun to experience the impact of federal leg-
islative and judicial action on higher education. Several events pre-
ceded the anti-sex-discrimination legislation and influenced the social
and institutional climates for its reception. The introduction of
Title VI of the Civil Rights Act and the Equal Pay Act, along with well-
publicized reports of law suits by female athletes seeking equal pro-
tection under the Fourteenth Amendment, brought discrimination issues to
the attention of American society, education and athletics in the 1960s. Early in the next decade, colleges and universities had begun to develop procedures and mechanisms for dealing with increased federal involvement, and many administrators across the nation were aware that forthcoming legislative procedures designed to promote equal opportunities for the sexes might be patterned after those evolving from attempts to end racial discrimination.  

As Congress worked to develop and pass the Higher Education Amendments of 1972, considerable controversy arose over the inclusion of athletics in Title IX of the Amendments. By the time the law was passed and had been released to HEW to regulate and enforce, conflicting viewpoints regarding the proposed mandate had surfaced and various university-affiliated interest groups had become involved. Consequently, initial activities related to institutional preparation for implementing the mandate were occurring in several public colleges in Virginia prior to the arrival of HEW regulatory documents. Depending on the nature and extent of these activities (which were previously described as sub-processes in the Infusion stage), some institutions gained early momentum in proceeding through the four stages of implementation.

Phase II investigations produced evidence that, in general, those colleges which responded openly to the mandate (or proposed mandate) through early involvement in activities described in Stage One, progressed at a more rapid pace toward subsequent stages of implementation. For example, administrative leaders at different levels of the academic hierarchy at the five top ranking institutions in the final population (as determined by the Change Index), were actively involved in organizations and workshops which focused on introducing, interpreting and
clarifying the new legislation during the 1974-75 academic year. In turn, these individuals shared the information with campus colleagues and university officials, generating some initial impetus and support for change. In other cases, institutions delayed response to Title IX, even after the official regulations had been distributed by HEW. The reasons for initial failure to respond varied. In some instances, the guidelines and implications related to the mandate were considered low priority items by campus administrators, or simply were not openly acknowledged among the college constituencies in general. At some point prior to 1979, however, each public institution across the state had passed through the Infusion stage. In each case, interviewees reported having experienced direct or indirect involvement in activities related to all or most of the eight sub-processes of Infusion.

The preparation dates of the required institutional self-studies ranged from spring, 1974 to spring, 1976. Through the interview process, the researcher discovered that colleges had to reach the stage of "readiness" associated with the culmination of Infusion activities prior to proceeding with tasks related to the self-study. For example, respondents from three colleges in the final sample related experiencing involvement in numerous discussions and meetings prior to the initiation of self-study procedures. One interviewee remarked, "We almost had to be able to project the results of the survey and anticipate the impact before we felt comfortable enough to question the students directly." Once the assessment process had begun, however, progress toward Stage Three generally occurred in uninterrupted succession until a declaration of intent to comply had been issued and the institution entered the third stage of implementation. The transition into Stage Three followed as
changes based on the interpretation of the self-study and the mandate itself occurred. At this point, change-related activities commonly included substantial budgetary increases for women’s sports, a shifting of administrative responsibilities and personnel, and some alteration in the number of available sports teams for men or women. Following the self-study process, one or more of the above events occurred in each of the eight institutions considered as the final population in Phase II research. Consequently, at the time of this study, all eight colleges had entered either the third or final stage of implementation. In summary, each institution had progressed successively through the processes related to: 1) interpretation of the mandate and its implications; 2) self-study; and 3) decision-making and some degree of related demonstrable change.

In-depth investigation at the four institutions selected as comparison groups provided evidence which described, supported, clarified and validated the stage theory suggested during Phase II research. The Infusion process began early at Northern Virginia. Plans to upgrade women’s athletics had been initiated prior to reception of Title IX implementation regulations. The institutional climate and state of "readiness" were such that activities in the Infusion stage progressed smoothly and rapidly. In addition, a preliminary assessment of needs and resources for expanding university athletics had preceded the initial planning process and, in turn, facilitated administration of the mandated self-study.

The initial activities of Infusion began prior to reception of government regulations at Central Virginia as well. Through active affiliations with professional organizations which closely monitored
government involvement in education, athletic personnel and administra-
tors were aware of and informed of the potential implications of
Title IX. Because of conflicting viewpoints (as well as the influence
of variables which will be discussed in the next section of this chapter),
progress through the sub-processes of Infusion was slow and intermittent
in comparison to that at Northern. Eventually, however, Central became
involved in self-study procedures and emerged into the second stage of
implementation. 34

Analysis of the research findings clearly indicated that although
the rate of progress through each stage and sub-process varied, both
primary comparison groups (Northern and Central) experienced a similar
series of consecutive events leading to decisions and activities re-
sulting in observable change. The same was true at Eastern and Southern
universities, both of which had progressed at slower rates through the
Infusion stage. Interviewees at all four institutions voluntarily dis-
closed having experienced personal and professional growth as a result
of activities eventually defined as sub-processes of Infusion; inquiry,
introspective analysis, discussion, and projection. Many participants
reported gradual, and sometimes painful, changes in attitudes, values
and opinions. As transcripts of interviews were reviewed and analyzed,
the nature and importance of the Infusion stage became evident.

Interviewees at both Northern and Central described a similar
chain of events which accompanied and followed the self-study and the
initial efforts to promote reform. As this information was gathered
and compared, the sub-processes which comprise the Preparation and Policy
Formation stage began to emerge in primitive form. These sub-processes,
as well as the distinction between the four stages, were further defined
and clarified through subsequent research in the remaining two comparison groups and from the results of return visitations to Northern and Central. For example, interviewees frequently elaborated on the processes involved in attempting to assess institutional needs, student interests, and financial resources. The evaluation of potential receptivity to change in each institution also focused on the apparent internal political climate of the organization and on related activities occurring in the surrounding external environment. Through further questioning and a comparison of responses the researcher was able to identify distinct sub-processes in Stage 2. In each case, the events and interpretations of events which occurred in the second stage led to the first measurable change-related activity, which represented the beginning of Stage 3. Investigation at the four institutions also indicated that the colleges which focused on comprehensive and well-directed assessment and preparation procedures experienced less difficulty during the Trial and Transition stage. In general, when a college emerged from Stage 2 with relatively clear plans and policies for implementing the mandate, and the plans and policies were based on a reasonable awareness of institutional resources and constraints, unimpeded progress through Stage 3 was most likely to occur.35

Activities and influences in the Trial and Transition stage differed significantly among the four comparison groups. At Northern, decisions and change-related activities were based on a developmental plan which paralleled the implementation regulations of Title IX and had been clearly articulated by administrative leaders. The majority of participants responded with acceptance and cooperation. As options were tested and changes occurred, university policies and strategies
for implementation were revised and clarified. With relatively minimal conflict or confusion, Northern had emerged into the fourth stage of implementation (Policy Execution) by Fall, 1978. Administrators at Central Virginia University, experiencing greater internal institutional conflict and vulnerability to external influences and constraints, had far more difficulty formulating acceptable policies and procedural strategies. Eventually, as decisions were made and changes occurred, an administrative policy evolved which could be interpreted and incorporated into the planning process by personnel involved in the mechanics of implementation. Although a comprehensive administrative policy was never formally articulated, University constituencies achieved a status of general agreement and mutual understanding with respect to the rate and level of Title IX implementation which would be acceptable and, at the same time, effective. Consequently, Central was able to move into the Policy Execution Stage.

Throughout the research phase of this study, both Eastern Virginia and Southern Virginia universities remained in the Trial and Transition stage. Both institutions appeared to have emerged from the first two stages without evidence of clearly established plans, policies or procedures for implementing Title IX. Reform status at these institutions was still characterized by the cyclic occurrence of decision-activity-response patterns which describe the third stage of implementation. Numerous examples of activity cycles of this nature were evident throughout the investigative process, and many have been discussed in previous sections of this paper as the change-related events at each institution were described. Until administrative policy can be determined and an integrated plan is developed, this stage theory predicts that
transition into the Policy Execution stage will be delayed at Eastern and at Southern.

In summary, the portion of the theory of prescribed change which describes implementation of federal mandates in terms of four distinct but related stages of institutional reform resulted from an analysis of both broad-scale and in-depth investigative procedures. Public institutions throughout Virginia were found to have had similar experiences in the early phases of efforts to interpret and implement Title IX. As it became clear that the rate and degree of progress toward compliance with the mandate had varied among institutions, evidence indicated that: 1) these differences were the result of the interaction and influence of certain identifiable variables; and 2) each institution had to achieve a particular state of "readiness" (or receptivity to change) before additional progress could be made.

The remainder of this chapter is devoted to discussion of that portion of the theory which describes the change variables and their attributes, functions and relationships. An understanding of the influence of the variables on the implementation process is critical to comprehension of the theory as a whole. Equally important is an awareness of the nature of institutional progress through the stages of implementation. Neither the explanation of stages nor the combined influence of the variables alone account for effective implementation of a federal mandate. Together, however, the multidirectional relationships between stages and variables appear to explain the conditions which facilitate implementation of mandated change in institutions of higher education.
Categories and Variables

Throughout Chapters 4 and 5 of this study, several variables affecting the rate and degree of implementation of Title IX at various colleges and universities have been suggested, implied and, in some instances, examined through the analysis of preliminary research findings. The broad range of data gathered during Phase II provided a basis for exploring a number of potential variables which emerged as a result of the initial interview process. Where possible, suggested variables were tested against this data base. Some were eliminated because evidence indicated they lacked validity or theoretical relevance. Others could not be adequately examined or refuted through use of available evidence, and were summarized into primitive research hypotheses. The series of hypotheses alerted the researcher to several factors which may have accounted for effective implementation of Title IX as Phase III investigation began. During this latter phase of research, new variables were discovered, and each potential variable (including those derived from Phase II analysis) was further examined, clarified and validated or eliminated. At the close of the investigative process, three major categories of variables emerged.

The three categories of variables include: 1) administrative organization; 2) attributes of key personnel; and 3) intervention. The categories are closely related and interdependent in many respects. However, the combined attributes of each category make it distinct and capable of functioning independently to produce a significant impact on institutional efforts to reform in response to a federal mandate. Each category contains key variables which are related and operate to facilitate or impede implementation. In exploring each category and
variable, analysis focused on the examination of: 1) its dimensions and importance; 2) its properties and components; 3) its relationship to other variables and to the stages of implementation; 4) the conditions under which it was maximized or minimized; and 5) the degree and direction in which it functioned to influence change. The results of this analysis are presented below.

In the discussion which follows, each category will be described in general and in terms of its component variables. A core proposition for the category will be stated in order to provide the framework for discussion and to serve as the formal statement of the theory. The propositions are derived from systematic and continuous analysis of data during Phase III research. Each proposition will be elucidated, and definitions of terms will be included as necessary. Following the introductory discussion, a rationale and theoretical explanation for the plausibility of the proposition will be offered. The evidence from which each proposition was derived will then be presented.

Two of the three core propositions are supplemented and clarified through formally stated sub-propositions. The sub-propositions are directly related to and derived from the variables within each major category. The same general format will be used in the development of sub-propositions as has been used with the core propositions.

Once all propositions in a particular category have been presented, a synthesis and summary of the information in that section will follow. Further discussion will focus on examining the relationships between categories and among variables within the categories. In Chapter VI, the relationships between the stages and categories are clarified and the theory as a whole is summarized and integrated.
**Category A: Administrative Organization**

In order to implement major change in a complex organization, the mechanisms and procedures of governance and administration must allow for effective communication and control. Once the decision to change has been made by administrative leaders, the institution will need to adapt, structurally and procedurally, to accommodate progress toward reform. The variables in this category describe the adjustment process as it occurs with respect to changes in administrative organization.

**Core proposition:** The principal vehicle for implementing a federal mandate in a college or university is the central administration. The rate and degree of institutional progress toward implementation depends on the development and utilization of facilitative sub-structures by administrative leaders who favor change.

This core proposition focuses on the importance and impact of internal administrative systems in institutions of higher education as they function to provide the link between government intentions and reform. According to this proposition, administrative leaders, in institutions in which implementation of a federal mandate has been relatively effective, have created and utilized supportive sub-structures for the purpose of facilitating change. Conversely, institutional leaders in colleges in which implementation has been unsuccessful have not been willing or able to organize effective sub-structures designed to facilitate progress toward compliance. Further, the type and extent of support services provided by the sub-structures will vary among institutions, depending upon the real or perceived power resources of administrative leaders. Two sub-propositions describing the purposes and utilization of specific sub-structures will be stated and examined in a forthcoming section.
The existence of a federal mandate (and accompanying regulations) alone will not automatically lead to the type of administrative activity and support necessary to effectively implement the law. The development and use of administrative sub-structures for facilitating change is contingent upon several factors, some of which are described and examined in Categories B and C (attributes of key personnel, and intervention). Two additional conditions precipitate the type of administrative leadership described in the core proposition: 1) the existence of a change agent within each sub-system in which reform is required by the mandate; and 2) when a significant amount of change is required, a favorable status of the sub-system with respect to the institutional priorities of top level administrators. The major components of the core proposition, as well as the two precipitating conditions stated above, are graphically summarized in Figure 3. In the discussion which follows, the core proposition and the precipitating factors are examined and clarified. Subsequently, two sub-propositions are presented which explain and elucidate the theoretical properties of the core proposition by defining the purposes and uses of administrative sub-structures.

Definitions of Terms. The following definitions of terms will apply throughout the remainder of this study. University governance refers to the total system of authority and control within and directly related to the institution, and includes the activities of the boards of visitors, faculty executive committees and faculty senates, student government bodies, state regulatory agencies, and so forth as well as those of institutional administrators and officials. Administrative organization is a term used to describe the administrative system as a whole including the formal hierarchial structure, supplementary sub-
FIGURE 3
CATEGORY A: ADMINISTRATIVE ORGANIZATION

Federal mandate is enacted and distributed to college officials

Central Administration decides to implement the mandate

Sub-systems are evaluated in terms of priorities for implementing change

Sub-systems are created and utilized to facilitate change

Administrative change agent assesses available power resources

Sub-structures are utilized as mechanistic and political support services

Sub-structures are utilized as mechanistic support services

Change occurs in sub-systems in which a change agent exists and limited practical reform is needed

Change occurs in important sub-systems in which extensive reform is needed and a change agent exists

Sub-structures are utilized as mechanistic and political support services

KEY:
Action
Decisions and Processes

Direct determinants of related processes or activities
Indirect determinants of related processes or activities

*The left side of Figure 3 (which refers to the sub-systems) describes processes and activities related to the preciptants of effective administrative leadership. The right side (which refers to the sub-structures) describes processes and activities directly related to the theoretical propositions in Category A.*
structures, and the functions and relationships of components within the organization and its sub-systems. **Administration** refers to all levels of administrators (and administrative activities) from those of assistant chairpersons or coordinators up through the university president. **Management** is used to describe activities, responsibilities and behavior related to conducting and carrying out administrative tasks, and is considered to be a function of administration. The latter term encompasses the direction and control, as well as management, of university affairs. **Central administration** is limited to the president, provosts, vice-presidents and their immediate aides and officials.

The term **structure** is used to define the framework established for carrying on administrative functions, and describes the institutional chain of command as well as the mechanisms and sub-structures for management and control. A **procedure** refers to the mode of action utilized for conducting routine affairs, including established patterns for decision-making, communication, and other administrative practices and activities. **Sub-structures** are mechanisms within the overall administrative framework which are designed or utilized to accomplish specific purposes, and are the means by which procedures are conducted. The **sub-systems** of an institution include the various schools, departments, student services, and support services. Sub-systems are to be distinguished from sub-structures (or mechanisms) such as councils, committees, the business office, the affirmative action office, and so forth. As a helpful guideline, the reader can think of implementation occurring within the sub-systems as facilitated by the sub-structures. **Change agents** are individuals (generally administrators) within the university community who are responsible for initiating, planning, controlling, monitoring, or
implementing change, and who willingly and actively participate as leaders or facilitators in the change process.

Rationale. When institutional change is required by external agencies such as the federal government, the primary vehicle for implementing change, particularly in early stages, is the central administration. From the perspective of government officials and campus participants alike, the major responsibility for compliance with a mandate rests with institutional administrators. Further, most government mandates address the institution as a whole and may be applicable to any or all of its sub-systems. Government and university intentions must be interpreted and communicated through a complex network of various levels of administration before effective change can be made within the numerous sub-systems. Because of the source and scope of mandated change, the implementation process necessarily involves central administrators, and usually the college president. The development of purposeful administrative sub-structures and procedures which provide the means for initiation and coordination of mandated change is necessary to enhance implementation efforts in the sub-systems and to facilitate overall institutional adjustment to reform.

The operation of variables included in the core proposition, as well as in the two sub-propositions which follow, is contingent upon an administrative decision to implement the mandate. A number of variables in other categories interact during the Infusion Stage to precipitate the decision to change. For example, an administrative leader may perceive the mandate as being educationally sound or as having potential for enhancing the visibility of the institution and, in turn, may place a high priority on its implementation. In other
instances, the decision to implement the mandate may be precipitated by intervention. (See Categories B and C.) However, once the decision to change has been made by a high level administrative leader, two conditions pertaining to the organizational composition directly influence the rate and degree of change within each sub-system: 1) the existence of a change agent within the sub-system; and 2) the favorable status of the sub-system with respect to the priorities of institutional leaders. The basis for this principle stems from the possibility that administrators may elect to implement the mandate in varying degrees within different sub-systems. For example, the conditional variables appear to be maximized in sub-systems where extensive change involving alterations in roles and traditional practices, as well as increased expenditures, are required. If a capable and cooperative change agent is known to exist within such a sub-system, and the activities and outcomes of the sub-system are generally viewed as being important to the overall mission of the university, it may be logical to assume the central administrators will include the sub-system when developing the institutional compliance strategy. When neither condition exists, central administrators may find it easier to ignore the sub-system or to delay efforts toward initiating substantial change within it.

The section which follows is three-fold in purpose: 1) to present a background of information which will facilitate discussion of the core proposition and each sub-proposition; 2) to clarify and substantiate the two conditions which precipitate action described in the core proposition; and 3) to substantiate the components of the core proposition. The evidence is organized and presented accordingly.
Evidence. The implementation of Title IX was an expensive undertaking at most institutions, particularly as it involved intercollegiate athletics. Prior to the arrival of the mandate on campus, women's sports programs at many colleges operated on very limited budgets, while men's athletics had expanded into million dollar enterprises. Among the eight public colleges in the final population in this study, the difference between the operating (and scholarship) expenditures for men's and women's athletics in 1974-75 totalled $2,693,537.40 In the four comparison groups, the total difference between expenditures for male and female athletes for that academic year was $796,720.41 In order to provide equal programs for men and women in athletics, full compliance with the spirit of the mandate would have cost each college in the sample an average of $200,000 for operational expenses alone. The costs for equalizing salaries for administrative, coaching and support personnel in women's sports would, at least, have doubled that figure in most instances.42

The timing of the passage of Title IX also contributed to the potential economic strain the mandate placed on institutional resources. Title IX was enacted and introduced to higher education at a time when national inflation had begun to escalate and college enrollments had shown signs of stabilizing or declining. Maintaining academic and men's athletic programs at existing levels had become increasingly more difficult as resources tightened and expenses soared.43 Further complicating the issue were the implications of the mandate with respect to anticipated changes in the roles and traditional practices of university personnel involved in the athletic program. Financial and social considerations increased the level of difficulty associated with implementing
the mandate in athletic programs, and in so doing appeared to accentuate the influence of variables which served to facilitate or impede progress toward implementation.

Title IX had far reaching implications in higher education with respect to various university sub-systems. The mandate addressed employment, admissions, textbooks, career counseling, residence hall life, and curricular issues as well as the extra-curriculum. Since the implementing regulations allowed for a three year adjustment period prior to the required compliance date, change in many institutional sub-systems at each of the four comparison groups occurred gradually and with a minimum of difficulty. In some cases, implementation was inexpensive and involved only minor alterations. For example, all four colleges had already established some coeducational residence facilities, and most academic courses and departments accommodated both men and women prior to the arrival of Title IX. In these instances, due to the relative simplicity of managing and implementing change, departmental chairpersons responded favorably to required adjustments and willingly served as change agents. However, in areas where change required substantial alterations in funding priorities and traditional practices, the existence and utilization of voluntary change agents were critical factors in terms of institutional reform. This was particularly the case in intercollegiate athletics, an area in which vast changes would be required in order to equalize opportunities for both sexes.

During Phase III research, evidence indicated that at the two colleges which had progressed the furthest in implementing Title IX (hereafter referred to as the primary comparison groups), administrative sub-structures had been created and/or effectively utilized in the change
process. Further, in both institutions, two conditions existed which appeared to be related to the use and development of the sub-structures. First, an administrator directly responsible for the women's athletic program voluntarily assumed a role as change agent, encouraging institutional compliance with the mandate. Second, the sub-system which the change agent represented was viewed as an important component of the university community by influential groups and individuals. As will be noted in the forthcoming discussion, conditions in the other two sample institutions differed considerably from those in the primary comparison groups. By the close of the investigative process, the analysis of data confirmed that the two conditions were critically relevant to the development and use of administrative sub-structures in implementing federal mandates (see below).

Figure 4 graphically summarizes the administrative organization relevant to the implementation of Title IX in athletics at each of the 48 sample institutions during the 1975-76 academic year. Although many similarities existed among the four governing systems, no two were identical in structure or in function. At Northern Virginia the primary change agents were the University President and the Divisional Director. The two individuals were directly connected in the hierarchical structure and worked cooperatively toward implementing the mandate. By 1974, the Divisional Chairperson had initiated a long range plan for the development of college athletics which specifically included upgrading the quality of women's sports. By 1976, the University had hired a President who strongly supported Title IX and worked actively to facilitate implementation of the mandate. Top level administrators and other university constituents took pride in the achievements of male and female
FIGURE 4
GOVERNANCE OF INTERCOLLEGIATE ATHLETICS: 1975-76

Northern Virginia University

- Board of Visitors
  - University President
    - Athletic Advisory Committee
    - Divisional Director for Health, Physical Education, and Athletics
      - Assistant Athletic Director and Coordinator of Women's Sports

Central Virginia University

- Board of Visitors
  - University President
    - Vice-President for Business Affairs
    - Director of Men's Athletics
    - Chairperson of Women's Physical Education and Athletics

Eastern Virginia University

- Board of Visitors
  - University President
    - Athletic Policy Committee
    - Affirmative Action Officer
    - Chairperson of Women's Physical Education and Athletics

Southern Virginia University

- Board of Visitors
  - University President
    - Athletic Council
    - Director of Intramural and Intercollegiate Sports
    - Coordinator of Business Affairs - part-time
    - Coordinator of Women's Sports - part-time

Key:

- Indicates direct channels of authority and communication
- Indicates indirect or supplementary channels of responsibility and communication
sports teams, and considered athletics to be an integral part of the extra-curriculum. Several interviewees attributed the popularity and prestige of athletics to two factors in particular: 1) the program was educationally sound and had developed gradually and rationally as a result of student interest and within the scope of available resources; and 2) the athletic program was closely aligned with the academic programs in health and physical education. As one interviewee stated it:

"Athletics [at NVU] has its roots in physical education and is built on principles which are educationally sound. The two programs complement each other -- the physical education majors feed the athletic program and many athletes want to major in physical education. This is very helpful in recruiting. Equipment and facilities are also shared, which makes good economic sense. Because of the single administrator, coaches who also teach in health or physical education do not have two bosses to answer to. Communication is excellent, schedules allow for dual responsibilities, and workloads and expectations are realistic. It is good to have strong ties with the physical education program, and it helps to have an athletic director who has 'academic pull'."

At Central Virginia University a similar set of circumstances was apparent. The principal change agent was the Chairperson of Women's Physical Education and Athletics. She and several members of the women's coaching staff had held faculty positions and had interacted with many members of the academic community as fellow educators for a number of years. Supportive relationships developed from the educational interactions and were carried on when the expansion of women's athletics became an issue on campus. Historically, the women's sports program complemented the collegial atmosphere of the University and accommodated a large percent of the student body (See Chapter IV). The women coaches recognized the academic demands placed on participants, and attempted to offer a program which was in harmony with University priorities. The
program won the approval of many college personnel, including top level administrators. When Title IX came to the forefront and change in women's sports was imminent, the paths of communication had already opened and a base of support had been developed. At Central, as at Northern, a direct line in the chain of command existed between the change agent (the Chairperson of Women's Athletics) and the University President. Both worked toward implementing the mandate, keeping priorities within the broad objectives of the college. Though change occurred amidst periodic conflict and resistance, a general spirit of cooperation between the change agent and central administrators was evident. The high status attributed to women's athletics and the effective leadership of the change agent directly responsible for the program, combined to influence administrative efforts toward facilitating reform.

The administrative structure at Eastern in 1975-76 was similar to that at Northern. A direct line of communication existed between the Director of Intercollegiate Sports and the University President. There were, however, two notable differences: 1) the line of communication and authority was rarely used; and 2) the potential change agents were two part-time classified employees with respect to their athletic responsibilities. Efforts to initiate major change were not coordinated, supported nor sustained. Direct communication between the change agent(s) and central administrators was further complicated by the turnover in University presidents. In addition to the lack of a change agent in a position of authority within the athletic administration, the sub-system itself lacked clarity and recognition. It was not until fall of 1979 that athletics were given departmental status and a full-time Director was employed. Men's and women's athletics at Eastern
were characterized by a climate of confusion and a lack of recognition and direction when the federal implementing regulations for Title IX were issued. The statement of one interviewee points out the ease with which central administrators found it possible to overlook athletics as a sub-system in initial plans to implement the mandate:

General confusion reigns throughout the system. The administrators say they are confused because HEW is confused. The University isn't sure what it [the college] wants of athletics in general. Coaches, presidents and affirmative action officers come and go. There is no continuity, no staff with which to plan, and no direction from above. The Athletic Director supported change in women's sports from the beginning, but he didn't know what to do. Now that we are recognized as a legitimate enterprise on campus, we may make greater progress toward equality.58

The 1975-76 chain of command at Southern included a second central administrator, the Vice-President for Student Affairs, between the President and the Athletic Director (see Figure 4). The Vice-President favored change and worked toward implementing the mandate in various sub-systems for which he was responsible. Initially he included women's sports in the overall plan for compliance. In Fall, 1977, under the leadership of a new President, the chain of command was altered. For one year, the structure included the Executive Vice-President (hired by the President) in the slot which had formerly been occupied by the Vice-President of Student Affairs. In 1979, the Executive Vice-President was removed from the structural hierarchy established to govern athletics, and the Athletic Director answered directly to the President.59

The potential change agents within the sub-system were two women physical education faculty members who had been coaching for a number of years. In spite of the reluctance of the Athletic Director to initiate or support major reform, the women were able to communicate with the Vice-President for Student Affairs. During the years when the latter in-
individual was associated with the athletic program, it appeared that the potential for change existed. As the governance structure changed, the alterations eventually resulted in eliminating the change agents from the chain of command. The Vice-President for Student Affairs continued to implement Title IX in other sub-systems which did not include athletics, and the women chose to leave the athletic program and devote their time and energy to teaching. As the governance structure changed, the alterations eventually resulted in eliminating the change agents from the chain of command. The Vice-President for Student Affairs continued to implement Title IX in other sub-systems which did not include athletics, and the women chose to leave the athletic program and devote their time and energy to teaching. One college administrator, who was indirectly involved with athletics and not included in the chain of command, summarized the situation as follows:

It was an error to remove the Vice-President of Student Affairs from the athletic chain of command. He had his finger on the pulse of the students, and the faculty as well. This move may well account for the absence of a leader to outline and implement change. The University has not made a commitment to athletics as a whole. We have not had a winning program for thirty years. The women have been relegated to a subsidiary role in athletics. People are hired to teach physical education and then told to coach. The latter assignment has the workload equivalency of an ad hoc committee assignment.

The remarks noted above were reiterated and supported by a majority of interviewees. It was clear to the researcher that by 1977 there was no active change agent at any level of the administrative organization who could influence athletics. In addition, it appeared that women's athletics, as a sub-system, was accorded very little status among those responsible for implementing Title IX. The events described above may, in part, account for the fact that SVU was the only college among the population studied which generated a negative Change Index. This evidence, combined with the data obtained through the interview process, showed that women's athletics at Southern had lost ground in the struggle for equal opportunity after Title IX was enacted.
In summary, the weight of evidence gathered at the four sample institutions linked the precipitating conditions to administrative activities directed toward implementing the mandate. In the two primary comparison groups, athletics were recognized as an important sub-system by university administrators, and a change agent held a responsible position within that sub-system for the entire time period under investigation (1974-79). Neither condition existed at Eastern or at Southern, the two colleges in which progress toward equality in athletics was minimal.

The core proposition has two major components. One part focuses on the involvement of central administrators in implementing federal mandates. The second addresses the method utilized to promote effective change -- the creation and use of administrative sub-structures. Figure 5 is a graphic representation of the administrative organization governing athletics in each sample institution in 1978-79. Examination and comparison of Figures 4 and 5 show that: 1) the governance of college athletics directly involves top level central administrators; and 2) in each institution, related administrative sub-structures were altered or added between 1975 and 1979.

By 1979, the athletic director (or equivalent administrator) answered directly to the president in three of the four comparison groups. In the fourth (Eastern Virginia), a Vice-President was added to the chain of command and positioned in a direct line between the President and the Director of Athletics. In the two primary comparison groups, a second central administrator functioned as an indirect or supplementary channel of authority. The diagrams clearly indicate that central administrators are situated in positions where they are capable
FIGURE 5
GOVERNANCE OF INTERCOLLEGIATE ATHLETICS: 1979-80

Northern Virginia University
- Board of Visitors
- University President
- Vice-President for Planning and Student Services
- Divisional Director for Health, Physical Education and Athletics
  - Assistant Athletic Director for Men's Sports
  - Assistant Athletic Director for Women's Sports

Central Virginia University
- Board of Visitors
- University President
- Vice-President for Business Affairs
- Athletic Advisory Committee
- Director of Men's Athletics
- Director of Women's Athletics

Eastern Virginia University
- Board of Visitors
- University President
- Vice-President for Student Affairs
- Standing Athletic Committee
- Athletic Director
- Director of Athletics and Recreational Sports
- Assistant Athletic Director for Business Affairs

Southern Virginia University
- Board of Visitors
- University President
- Affirmative Action Office
- Athletic Advisory Committee
- Director of Athletics
- Voluntary Coordinator of Women's Sports

KEY
--- indicates direct channels of authority and communication
------ indicates indirect or supplementary channels of responsibility and communication
* denotes change from 1975-76 governance structure

*The 1979-80 academic year was selected for the basis of Figure 5 because it reflects changes which occurred as a result of events which took place in 1978-79, the year which preceded this research.
of having a significant impact on the development and direction of athletic programs. In addition, interviewees at all of the sample institutions consistently repeated that the person who initially received and responded to the federal mandate was a central administrator. When the administrative response was generally favorable, it appeared that efforts toward implementation were soon underway. When the response was negative or purely rhetoric, change was impeded or delayed.

Once an initial decision had been made with respect to institutional priorities related to implementing the mandate, specific responsibilities were often delegated to other officials or sub-structures. However, during the initial stages of implementation, the primary vehicle for change was the central administration. Even after responsibilities had been delegated, and personnel within the sub-structures assumed more active roles in implementing the mandate, central administrators maintained direct lines of communication and authority with the sub-system in which related change was anticipated.

In the two primary comparison groups, three principal administrative sub-structures facilitated implementation of the mandate: 1) a second central administrative office; 2) an athletic committee; and 3) the affirmative action office. The two colleges also altered the administrative organization within the sub-system to facilitate the change process.

The greatest amount of structural change occurred at Northern Virginia. An Affirmative Action Director and the Vice-President for Planning and Student Services were employed and included in the organizational structure to facilitate Title IX compliance. Interviewees reported that this change resulted in a clarification of policies,
priorities and responsibilities, and served to enhance the upward and downward flow of communication. The addition of a second central administrator in the hierarchial structure was effective in providing for continuity and efficiency of progress, particularly during times when the University President was not immediately available for consultation with other administrative personnel. The second structural change included the addition of an Assistant Athletic Director for Women's Sports. Although the duties of the two assistant athletic administrators were not divided entirely according to the sex of the athletes on a particular team, the change placed a qualified female in a responsible position, close to numerous participants in the change (the students and coaches).

Data gathered during the interview process, as well as a review of quantities of material and correspondence, indicated that both the University President and the Divisional Director utilized all three administrative sub-structures in facilitating implementation efforts. In addition, during interviews with representatives of each sub-structure, it was evident that the respondents were knowledgeable and aware of both the requirements of the mandate and the activities of the athletic program. Equally involved and aware of both aspects was the female Assistant Athletic Director. By the close of Phase III research it was evident that NVU had not only adapted the organizational structure to accommodate change but had utilized the sub-structures consistently and effectively. As one interviewee explained it:

Growth in women's athletics was a cooperative effort. Additional finances came from the President. He also created the position for a woman assistant A.D., hired a new Sports Information Director with an assistant for women's sports, and hired a full-time Public Relations Director who promotes sports for both sexes. The Divisional Director hired quality coaches and saw that increased
financial resources were invested wisely — in people who could do the job. The central administration took steps to initiate and sustain change by placing key people in key committees and positions, and then delegated responsibility accordingly. The Vice-President for Student Services, the Athletic Committee and the Affirmative Action Committee are continuously involved in program development. They form valuable links between athletics and the President. Responsibilities are clear cut and the policies are formally established and well known, but the plans are flexible and allow for alteration without chaos. The keys to implementation of Title IX have probably been in the hiring practices used and in the re-organization of personnel into positions, groups and channels which facilitated change.***

Most of the sub-structures which had to be created at Northern were already in existence at Central when Title IX went into effect. The only structural change which occurred involved a change in the title and responsibilities of the Women's Athletic Director, shifting her workload to accommodate the increasing demands of administering intercollegiate athletics. More important, according to the majority of interviewees, were the changes which did not occur. The President was periodically under pressure from various sources to combine men's and women's athletics into a single department. In view of the history of vast differences in the philosophies, priorities and practices of the two programs, many administrators and faculty members alike reported that such a move would have increased the power and influence of proponents of the status quo and impeded progress toward change in the quality of women's sports. The President decided not to make the organizational change and thereby protected the direct line of authority and communication between himself and the Women's Athletic Director. In response to this decision, one female source contended that: "If the women's athletic staff and leadership had to answer to the current men's A.D., our entire program would be thrown back into the dark ages."
There was ample evidence of cooperation and bi-directional communication between the central administration, the Women's Athletic Director and the three administrative sub-structures. The Athletic Advisory Committee was particularly active in the change process, and the Affirmative Action Officer, as well as the Vice-President for Business Affairs, performed specific roles in facilitating implementation.

One interviewee described the situation as follows:

Roles and responsibilities have been clear. There have been battles, but they have been open. Issues were allowed to surface, but because of effective checks and balances, they were not allowed to block efforts to comply with Title IX. The administrative sub-structures provided an informational network and a support system which allowed plans for upgrading women's sports to be put into action even though opposition was strong at times.

The administrative and athletic governance structures at Eastern Virginia were in the process of re-organization during this study. Three administrative sub-structures related to the implementation of Title IX had been established or altered by 1979. At the sub-system level, a woman had been hired in a full-time position to coordinate women's sports, and a new Athletic Director was hired and recognized as having authority to conduct the athletic program. Reports of interviewees indicated that the roles and responsibilities of various personnel were still unclear, however. The athletic program had begun to receive attention and direction from the Vice-President for Student Affairs. The latter individual had been placed in a position of direct authority between the President and the Athletic Director, but did have a significant amount of direct contact with the Coordinator of Women's Sports. The Athletic Council was being reorganized, changing from a body of elected faculty representatives to an administrative sub-structure
in which some members served by appointment of the President. The Affirmative Action Office had undergone numerous personnel changes and administrative roles, and efforts by sub-system representatives to utilize this Office to facilitate compliance had been unsuccessful. Because the entire athletic governance system was in the process of re-organization, the sub-structures had not yet been utilized to facilitate implementation. The general sense of confusion, misunderstanding, and lack of communication experienced by many interviewees is reflected in the comments below. One administrator viewed the situation as follows:

"There is much dissension among the lower ranks which is not expressed honestly or openly. There is unobtrusive deviation from University goals. This is not good."  

A second source stated:

The college has a history of hiring inferior leaders in administrative positions. Many are retired military personnel who lack the skill and knowledge to perform effectively in higher education. Their attitudes and practices have the effect of minimizing the concerns of women — especially women athletes. Without administrative direction and support, change is very difficult.

Organizational change at Southern Virginia included the removal of a second central administrator from the athletic chain of command, and creation of an Affirmative Action Office and Athletic Advisory Committee. Officials and members in both sub-structures were appointed by the President. In the latter case, appointments were based on recommendations of the Athletic Director. No changes occurred in the administrative organization within the sub-system. There was no evidence of interaction between the Affirmative Action Officer and the Athletic Director, even with respect to the hiring practices for athletic personnel. In view of the combined effects of eliminating the Vice-
President for Student Affairs from the chain of command and the process used to re-structure and appoint Athletic Advisory Committee members, administrative reorganization efforts appeared to perpetuate the status quo at Southern. One interviewee contended that, "Only massive house-cleaning of administrative personnel will bring about change in athletics at this institution."  

In summary, across the four institutions administrators tended to manipulate and adjust the organizational structure in ways that positively or negatively affected progress toward implementation of the federal mandate. When the priorities of central administration included the implementation of Title IX in athletic programs, and when change agents were available in key positions within the athletic system, administrative sub-structures were created and utilized to facilitate effective change. In other instances, reorganization or delay in creating operational sub-structures served to perpetuate the status quo. The capability of central administrators to facilitate or impede mandated change through manipulation of the administrative organization was aptly described in the following response of one interviewee:

It makes a difference how the President decides the thing [mandate] will be interpreted. When his decision has been made, he does not always follow conventional lines of communication. If he feels a certain official is not supportive of his viewpoint, he will replace him or circumvent him. The President wants the mandate interpreted and implemented in a certain way. His action or lack of action reflects his intentions and serves to induce change or protect the status quo accordingly.

Two sub propositions in Category A serve to clarify the purposes of specific administrative sub-structures and the manner in which they function to facilitate implementation of federal mandates. Both sub propositions address the leadership styles, roles, and strategies of central administrators who, out of commitment or necessity, function as
change agents in implementing federal mandates.

**Sub-proposition 1:** When the administrative change agent can exert considerable power, effective implementation of a mandate is contingent, in part, upon the development and utilization of sub-structures for providing mechanistic support services and for performing task-oriented functions.

Depending upon the political history of an organization, the attributes of the change agent and the amount of influence accorded him by nature of his position, capabilities or personality, the power limitations of comparable central administrators will vary among institutions. The extent to which an administrative change agent saw himself as being able to control and influence decision-making processes affected his strategy in designing and utilizing sub-structures to facilitate change. In brief, when the change agent was confident in his ability to lead and control, the sub-structures were used to assist with specific tasks related to the initiation and management of practical reform.

**Rationale.** Power can be described as the ability to act with force, influence and authority. Among organizational leaders, several sources of power are available: 1) **coercion** or the threat of punishment for noncompliance; 2) **expertise** associated with superior knowledge or ability in a particular area; 3) **legitimacy** or the right to influence on the basis of one's position; 4) **information** or persuasive communication presented by the influencing agent; 5) **reward** offered for compliance and cooperation; 6) **reference** which stems from the identification of influences with the agent or from charismatic influence granted by influence. Power execution occurs when an agent or administrator uses one or more of the available resources to influence decision-making -- in this case, to induce the implementation of mandated change.
With respect to implementing Title IX in athletics, two additional conditions in particular influenced the nature and extent of power resources available to administrative change agents: 1) the type, amount and accessibility of the funds necessary to implement change; and 2) the priorities and viewpoints of other influential university constituents, including superiors. In essence, when an administrative change agent could find the means for implementing change without dipping into financial resources allocated to other sub-systems or existing programs and without taking great risk in terms of potential conflict with other powerful institutional forces, his power resources were greater. The use and purpose of newly-created or available sub-structures will, in turn, reflect the administrative change agent's perceived or real assessment of his capability to exert power. As shown by the evidence presented below, in situations where considerable power can be exerted by the change agent alone, the sub-structures are less likely to be involved in decision-making processes, major policy formation, and interpretation of the mandate itself. Priorities and intentions are articulated and clarified, and then tasks are delegated to officials in the sub-structures for consideration and completion.

The mechanistic support services required for effective implementation of Title IX included three major provisions: 1) a reliable and efficient network for communication and information; 2) assistance in generating additional revenue for financing reform; and 3) a system of sub-structures in which responsibilities could clearly be defined and tasks assigned accordingly. The task-oriented functions most commonly performed by personnel within the sub-structures included conducting institutional self-studies, compiling and reporting information requested
by government agencies responsible for enforcing the mandate, and managing the procedural technicalities involved in budgetary and personnel changes. Evidence related to the core proposition showed that the vehicles most commonly utilized to provide these services included an affirmative action office, an athletic advisory committee and a second central administrator (or administrative office). The three administrative sub-structures were designed or adapted to perform the necessary tasks and mechanistic services in both primary comparison groups.

Evidence. Even under the most powerful leadership, implementation of change, and mandated change in particular, required support and assistance. Although all three sub-structures were utilized in the primary comparison groups as support systems for implementing the mandate, the nature and extent of this involvement varied. Paradoxically, the two instances in which central administrators appeared to exert significantly greater degrees of power were at Northern and Southern universities — the two institutions at opposite ends of the continuum with regard to effective implementation of Title IX. One president utilized the administrative system to facilitate change, and the other to perpetuate the status quo. In one respect, the results were the same: each president effectively exerted power through the manipulation of personnel and sub-structures so that his intentions and expectations were realized.

Several environmental factors at Northern Virginia contributed to the power resources of the University President. First, the institution is a rapidly expanding university in a large metropolitan area. Due to the diversity of citizens within the surrounding community and University clientele, as well as the pattern of accelerated growth, administrative leaders were not bound by traditional practices and influences. The
Age, growth, location and athletic history of the institution provided a climate conducive to change and a constituency which responded favorably to dynamic administrative leadership which supported current social values. With regard to Title IX, interviewees agreed that the President set the tone and established the priorities for immediate and full compliance as soon as he took office.

Second, due to recent expansion in academic programs, flexibility existed within the organizational structure which enabled the President to create new sub-structures and hire key personnel with the capabilities and inclinations necessary to implement change according to his values and priorities. He sought out change agents with similar attitudes in various sub-systems for the same purpose.

Third, the diversity of funding sources made implementation possible without placing heavy demands on any single sub-system. Additional finances were generated through multiple resources including student fees, increased gate receipts, community projects and promotional endeavors. The availability of diversified funding sources eliminated the possibility of implementation efforts being blocked by one or two key individuals who happened to control the institutional purse strings. This, in turn, effectively increased the President's power potential.

Within the existing climate, the President at NVU relied heavily on power resources such as expertise, information, and reference, as well as legitimacy. One source, close to the President, described the latter's role as change agent as follows:

He spent little time trying to convert people who didn't agree. Instead, he focused on optimal involvement of those who supported him. All implementers [sic] of change, even those at the lowest levels, are in a position to obstruct or facilitate change through operational decisions -- even when top leadership is committed to change and provides the resources ... The President was able to spot potential implementers [sic] and used them. It doesn't
pay to be distracted by the opposition when it is clear they
will not change their opinions.87

At Southern Virginia, as at Northern, the power resources of
the President appeared to be partially derived from environmental con-
ditions. First, there were few major opposing forces within the
organizational system to interfere with the implementation of his values
and priorities. Secondly, the governance system was described as
"chaotic upon his arrival," and many constituents felt a need for strong
control by administrative leaders.88 Sources disclosed that, due to
several consecutive personnel changes in the University presidency, the
faculty senate had gained considerable power prior to the arrival of
the current President. One interviewee aptly summarized the events which
followed:

The President made it clear that he did not want faculty to
have power. He immediately put a clamp on the Senate and, within
a year, disbanded it. There is currently a faculty task force
to reorganize the Senate, but three years have elapsed since
he came and we still have no means for faculty governance. I
guess [that] after having seven presidents in ten years, it was
a relief to some people to be able to let the administration
make decisions for awhile.89

With regard to Title IX, the source added:

When a new president can get away with eliminating an entire
faculty senate, it is obviously no problem for him to ignore
and put the crunch on a few women coaches and athletes.90

In summary, the President at SVU recognized and utilized his
power resources to implement his values and priorities. In contrast
with the philosophy of the President at Northern, the priorities of the
President at Southern did not include the implementation of Title IX in
women’s athletics. In both cases, the administrative organization
was altered accordingly.
At both Northern and Central, the athletic committees functioned to facilitate implementation efforts by assisting with the institutional self-study, serving as an informational resource and as a communication link among the university constituencies (including the administration), exploring possible options for financing reform, and by recommending change strategies based on the findings of their research and analysis.91 In contrast, the athletic committees at Eastern and Southern functioned solely as sounding boards for the presidents and athletic directors.92

The affirmative action officers at Northern and Central assisted with much of the bureaucratic paper work which accompanied the increased federal involvement, acted as liaisons and legal interpreters when necessary, distributed pertinent information, and monitored implementation activities within the sub-system and the university as a whole to be sure that the requirements for compliance were being met. Wherever appropriate, the affirmative action officers in both institutions extended their services and responsibilities to include students as well as faculty.93 This practice differed greatly from the narrowly defined roles and responsibilities of affirmative action officers at Eastern and Southern. In the latter instances, services were limited to personnel matters.94

In addition to facilitating continuity in the change process in absence of college presidents, the vice-presidents included in the structural hierarchy (see Figure 5) at Northern and Central functioned in two distinctly different roles. At Northern, the Vice-President had broader responsibility for coordinating activities in each sub-system with respect to the broad objectives and overall plans and priorities of the university. Since this process involved a continual awareness of
students' needs and interests, he was also indirectly involved in periodic assessment procedures, interpreting survey results, and reviewing recommendations for change. The Vice-President for Business Affairs, the second central administrator involved in the change process at Central Virginia, functioned in a more limited capacity. His primary responsibility included facilitating the financial decision-making processes. Since the use of multiple funding sources did not appear to be a feasible option at Central, budgetary considerations were critical.

Because of the nature and importance of his task, the Vice-President performed a key role in facilitating implementation. He worked closely with the primary change agents in developing and administering procedures designed to provide the resources necessary to finance implementation of Title IX.  

The second administrator at Eastern, the Vice-President for Student Affairs, had been directly involved in interpreting and implementing Title IX in many sub-systems throughout the University. Since 1976, his administrative responsibilities had included athletics. As his title and position indicate, the amount of legitimate power available to him is significant, although not as great as in the other comparison groups where the administrative change agent was the university president. In the past three years, the Vice-President has exerted an increasing amount of influence over the athletic program, and has focused primarily on re-organization of the sub-system with respect to personnel, financing, and administrative responsibilities. He was not involved in the Title IX self-study process until after the survey had been conducted and the report and interpretation had been written. He has, however, been influential in budgetary decisions and in the alloca-
tion of resources. During an interview, he expressed concern about the implications of Title IX on the university as a whole, stating that the mandate "can help some programs and injure others." Evidence indicated that prior to the fall of 1979, sub-systems other than athletics had received more direction and support from his office with regard to implementing Title IX. By Fall, 1979, there was no second central administrator at Southern involved with Title IX implementation efforts in athletics (see Figure 5).

In summary, three administrative sub-structures functioned effectively in the two primary comparison groups for the purpose of facilitating the implementation of Title IX by: 1) providing information and resources; 2) opening new channels of communication; and 3) performing managerial tasks associated with the specific responsibilities of the sub-structure. In institutions where the administrative change agent was able to exert sufficient power, the sub-structures were task-oriented and functioned specifically to perform the mechanistic support services necessary to comply with the mandate according to the priorities of the administrative leader. In one instance the result was a well-organized and cooperative move toward compliance in all sub-systems throughout the institution. In another case, the sub-structures which existed functioned in a limited capacity which, as one interviewee remarked, "included paper shuffling, acting as sounding boards and little else."

Sub-proposition 2: When the administrative change agent is unable or unwilling to exert power directly, effective implementation of a mandate is contingent, in part, upon the development and utilization of sub-structures as a means of balancing resistant forces as well as for providing mechanistic support services.
Another purpose of administrative sub-structures, that of providing political support for the administrative change agent, may be equally as important as are the mechanistic support services. The operation and significance of this variable was maximized in situations in which the administrative leader had limited capacity or opportunity to exert power in controlling the implementation process.

Rationale. Top level administrators may have limited power resources due to environmental constraints and/or may elect not to utilize available power resources in an open and direct manner. If, for example, situational restraints create a loss of power derived from reference and expertise, alternatives to direct decision-making and the formal articulation of administrative policy must be found before desired changes will be implemented. Depending upon the administrator's perception of the type and influence of potential opponents of change, the ultimate purpose of various sub-structures may include political support as well as task-oriented functions.

The utilization of sub-structures for political support generally includes involving a greater number of university constituencies in policy formation, decision-making, the interpretation of regulations, and the assessment and evaluation of institutional needs and resources. Administrative policies, priorities, and intentions are not clearly defined and articulated, thereby distributing responsibility and accountability among several groups and officials within the organizational system. Although administrative policies and intentions may be less clear to participants, the process is far from being chaotic in nature. Instead, it requires thoughtful and unobtrusive utilization of key personnel as an auxiliary source of power. Through informal communication
and guidance from the administrative change agent, leaders within the
sub-structures become aware that change is desirable. The priorities
and policies of central administration become clearer as the change agent
selects the vehicles for assisting with implementation, appoints or
recommends the inclusion of particular individuals to serve within the
sub-structures and assigns related tasks. Through further communication
and cooperative efforts to facilitate change, institutional policy and
administrative priorities are gradually interpreted by the participants
of change. In essence, by the time potential reform becomes an open
issue on campus, coalitions of proponents of change have been established.
When resistance and conflict ensue, the central administrator is in a
position to arbitrate and negotiate. He is then using legitimate power
to analyze objectively the recommendations and concerns of opposing
forces and to reach a decision (or find a solution to the problem) which
will be in the best interest of the university as a whole.

Conditions which precipitate the need for utilizing sub-structures
for political support are related to the leadership style of the admin-
istrative change agent, and to environmental constraints. (The attributes
of administrative leaders are discussed in Category B.) With regard to
environmental constraints, an administrative leader may perceive his
power resources as being limited due to: 1) the political history of
the institution; 2) the status and influence of his superiors; 3) the
values, attitudes and priorities of superiors; and 4) financial constraints.
When one or more of the four conditions present potential obstacles to
effective change, and the administrator favors change, sub-structures
appear to be politically (as well as mechanismically) essential in
facilitating reform.
Evidence. The evidence supporting Sub-proposition 2 was derived from on-campus research at Central Virginia. Central was the only institution among the four comparison groups characterized by a climate in which power constraints on the President necessitated the use of administrative sub-structures for political support, thereby making in-depth analysis of the sub-proposition possible. At Northern, the President was able to exert considerable power in initiating and controlling the Title IX implementation strategy. At Southern and Eastern, there was no evidence that central administrators favored the major reforms necessary to implement the mandate in athletics. Consequently, this portion of the theory was grounded in the events and processes related to Title IX implementation at Central. The other three comparison groups provided a means of verifying theoretical components to the extent that the variables were non-existent or functioned in a different direction in these instances.

The political history at Central related to athletics is interesting and complex. In order to gain a clearer perspective of events and interactions which preceded and accompanied implementation of Title IX, the reader may refer to the institutional backgrounds provided in Chapter IV as well as the summary of the change process at Central which was presented earlier in this Chapter. Briefly, a number of interest groups had periodically taken stands on issues involving athletic policy, and had used whatever power sources were available to them in attempts to influence the decision-making process. The positions and tactics of the various interest groups were well known to central administrators prior to the arrival of Title IX.
Two events in particular had served to escalate open conflict and clarify the viewpoints of the diverse interest groups. The first was an eligibility and recruiting "scandal" in the 1950's which eventually focused on the academic records and capabilities of athletes as well as the integrity of certain individuals on the men's athletic staff. The second was heated controversy over student fees which surfaced as a campus-wide issue on two different occasions, with the first major conflict occurring in 1974. In addition to clarifying the position of various interest groups, the conflicts resulted in the emergence of certain patterns of behavior among opposing forces as they worked to influence decision-making. From an administrative viewpoint, the pattern and positions became quite predictable. When Title IX was enacted and stimulated nation-wide controversy, both internal and external environments at Central created a climate in which implementation of the mandate was likely to produce further political conflict. Consequently, in order to facilitate implementation, change agents had to consider the political nature and the history of the University in developing a strategy for change. More importantly, because viewpoints, patterns of behavior, and sources of open conflict were relatively predictable, this information could be used effectively in delegating responsibility and in selecting and utilizing sub-structures to facilitate change.

Although he did not surface as a powerful leader committed to the implementation of Title IX, there was general consensus among interviewees that the University President favored change toward equalizing athletic (and other) opportunities for women. One source appropriately stated: "The President has probably moved about as far toward compliance [with Title IX] as forces will permit him to move." Operating somewhat
unobtrusively as the administrative change agent, the President's perception of the power resources available to him was no doubt influenced by six conditions in particular.

First, he had experienced a lack of support from the governing board in connection with several critical issues concerning athletics. Secondly, the Athletic Foundation, a potential source for generating increased funding for upgrading women's sports, had close political ties with the Board of Visitors. Both groups, supported by influential alumni, favored a traditional athletic program and opposed any change which threatened their goals.

Third, the Board of Visitors had a history of using legitimate power resources to interfere with athletic policy decisions when major issues were involved. For example, during the 1974 student fee controversy, faculty, students and the Athletic Policy Committee voiced a collective opinion that it would be in the best interest of the University to move men's athletics to a lower competitive division in NCAA. The recommendation, which was formally presented by the Athletic Policy Committee, was vetoed by the Board on two separate occasions.

Fourth, financial constraints were a major problem in promoting any type of expansion in athletic programs. The athletic foundation defined itself as a private enterprise, operating exclusively for the purpose of soliciting scholarships for men's major sports. Several interviewees contended that the use of multiple resources, including community support services, did not appear to be a reasonable alternative to increasing athletic finances. The majority of activities within the total athletic program (other than football and men's basketball) were funded through student fees. Through the formation of pressure
groups, the use of campus media, and by mass demonstrations, the students have voiced complaints with respect to the use of student fees for supporting certain aspects of college athletics. Two of the more common viewpoints expressed during interviews were: 1) a dislike by some students for the idea of subsidizing other people's education through athletic scholarships; and 2) a commitment by many college personnel to an athletic program which provides broad and diverse opportunities for participation as opposed to financing the support and expansion of one or two major sports. For these reasons, direct attempts to generate additional revenue through increased donations, student fees and/or gate receipts from men's major sports was likely to lead to resistance.

Fifth, the faculty as a whole, and a faculty affairs committee in particular, had a history of involvement in athletic issues. One faculty representative explained the situation as follows:

In most colleges, faculty don't care about athletics. Here there is a greater sense of community and the athletic programs and policies concern us. There is an institutional faculty position which favors broad participation and opposes big-time sports emphases which tend to lower academic standards and performance. The faculty does not make athletic policy decisions, but wishes it did. Administrators must accommodate faculty demands in these areas.

Although not directly involved in athletics, the faculty committee had, on occasion, addressed athletic issues in support of or in opposition to specific plans, policies and procedures. One of the key members of the committee was described by one source as "probably the most powerful man on campus." This opinion was supported by several other interviewees, one of whom added:

The President often consults [this individual] on critical matters of any nature, including athletics. He was not hired by the President, has been on campus for many years, and is not an easy person to manipulate.
Considering the history of faculty involvement in major campus issues, it was undoubtedly clear that faculty viewpoints and potential behavior would be considered by change agents when in developing Title IX implementation strategies.

Finally, a relatively recent women's movement had begun to have impact on administrative affairs at the institution. Originating as an ad hoc Committee on the Status of Women, a group of female faculty members had exerted pressure toward the organization of an affirmative action office. The Committee eventually evolved into a Women's Caucus. The efforts and accomplishments of women faculty in the 1970's had raised the "consciousness level" among many University constituents with regard to women's concerns and expectations. The Caucus achieved the status of a pressure group and was acutely aware of administrative activities in general.

In summary, six conditions related to the political climate on campus appear to have influenced the President's perception of his available power resources and, in turn, the manner in which various sub-structures and sub-systems were utilized to facilitate the implementation of Title IX. The conditions included: 1) a lack of support from the Board of Visitors; 2) the traditional attitudes and values of the Athletic Foundation, a potential source of additional revenue; 3) a history of intervention by the Board whenever the status quo of men's athletics was seriously threatened; 4) financial constraints evolving from student opinion and activism, as well as the traditional and conservative values of those who controlled various funding resources; 5) a history of faculty involvement and intervention in major athletic issues; and 6) the growth and impact of an organized women's movement.
on campus. In assessing the total political climate in terms of potential proponents and opponents of change, it was possible to predict that:

1) attempts to implement Title IX would generate conflict among various interest groups; and 2) the power resources of change agents could be increased by effective use of the sub-structures and key personnel most likely to support reform efforts.

As Central progressed through the various Stages of Implementation, conflict did occur and many activities associated with functions performed by administrative sub-structures had political overtones and impact. The political activities appeared to have been equally as important as the mechanistic and task-oriented support services provided by the three primary sub-structures in facilitating change.

One sub-structure, the Athletic Policy Committee (composed primarily of faculty representatives appointed by the President), conducted a thorough study and evaluation of institutional needs and resources with respect to compliance with Title IX. The self-study culminated with a recommendation that a major sport for men be eliminated from the University athletic program in order to equalize budgets and scholarship opportunities for male and female athletes. The recommendation tended to be supported by faculty and students, to be resisted by alumni and men's athletic personnel, and was eventually vetoed by the Board of Visitors. The process was accompanied by open conflict and controversy on the campus, which was escalated when the recommendation and related activities were publicized by the news media. The committee lost status as a major policy-determining body, and some members were replaced by more traditionally-oriented appointees. However, the impact and importance of the recommendation and the events and processes
which preceded it were significant in influencing subsequent change-related activities. First, as the issues surfaced, so did the various interest groups. As each group voiced opinions and concerns, coalitions of proponents as well as opponents of change evolved. Behavioral patterns and power bases could, in turn, be identified. Second, because the recommendation was extremely threatening to forces which favored the traditional program, its support and eventual rejection paved the way for less threatening progress toward reform. The more conservative and gradual changes requested by leaders in women's athletics appeared to be far more reasonable to the opposition than the earlier change recommendations of the Athletic Policy Committee.

The events which precipitated the Board's rejection of the recommendation to eliminate a major sport for men led to the establishment of a standing Athletic Committee on the Board of Visitors. This movement appeared to reflect a power shift away from central administration, but in essence had little influence on continued progress toward Title IX implementation. Having recently vetoed a proposal which had been accompanied by strong support from a large segment of University constituents, the Board members (and the standing Committee) were not in a position to interfere with the steps being taken toward compliance. It appeared that as long as internal progress could be made without directly affecting the traditional status of men's major sports, the change agents were allowed the freedom to decide on Title IX implementation strategy. In retrospect, the Athletic Policy Committee (wittingly or unwittingly) had provided an important service to women's athletics and central administrators alike.
During the implementation process, the Affirmative Action Director served to form a communication link between proponents and opponents of change, and between government officials and various University constituents (including central administrators) during HEW's periodic investigations. Politically, his contributions appeared to include three major accomplishments: 1) he was able to "unofficially" interpret, articulate, and communicate the institutional policy and administrative intentions with respect to compliance with Title IX; 2) he kept key participants aware of the growing support for equality for women among influential campus personnel; and 3) he negotiated for limited scholarship assistance for women athletes through the athletic foundation.

The institutional policy, as it eventually became clear, was such that political forces on either side were hard-pressed to argue against it. Although never written, the policy was stated almost identically by at least six interviewees. The interpreted policy, in the words of one of these sources, was: "Our institutional policy on Title IX compliance is this: 'Don't break the law, but don't do more than is necessary to comply and to keep peace with the women on campus.'"

As was pointed out in the former presentation on the Stages of Implementation, institutions must develop and communicate recognizable policies and procedures prior to advancing to the fourth and final stage. The policy which emerged at CVU did not lend itself to formal statement by central administrators. Nonetheless, as it became clear through informal communication, primarily through the Affirmative Action Office, key participants became aware of administrative intentions and were able to use this information in planning for and implementing change.
With respect to the Affirmative Action Officer's interaction with the Athletic Foundation, the group gradually reached a decision to make an effort to promote women's sports in general as public relations materials soliciting scholarship funds were distributed. Donations could still be earmarked for specific teams or purposes, but women's sports "appeared on the check-list" and this was a major breakthrough in terms of the attitudes of Foundation members. At the very least, another channel for communication had been opened.

The Vice-President for Business Affairs (who had been hired by the President) had a significant amount of responsibility for helping to solve the funding problems precipitated by decisions to implement Title IX. The two central administrators met in response to requests for additional funding from the Women's Athletic Director, and agreed that the women's budget would be best supplemented by increasing student fees. Fees were increased in 1977 and again in Fall, 1978. A major portion of both fee increases was allocated to women's sports.

Decision-making with regard to financial affairs at Central is fairly complex, and involves various student and faculty committees throughout the process. However, the authority to decide rests with the Vice-President for Business Affairs, subject to the approval of the President and the Board of Visitors. With regard to the student fee increases for women's athletics, one interviewee stated:

Fee increases are rarely met with approval by students and faculty. The committees are kept informed of financial needs and requests for budget increases, and function to advise and recommend on funding issues appropriate for their consideration. The decision to increase fees is made at top administrative levels, and is subject to approval by the Board. The students and faculty had taken strong positions for the advancement of women's sports during an earlier controversy, and maintained this stance when requests were made for additional resources for this purpose. There was very little resistance encountered in gaining the necessary approval in this case.
The Vice-President worked closely with the Women's Athletic Director in budget preparations, the generation of increased funds, and in the allocation of resources. Each kept the other informed of needs, intentions and forthcoming events. In addition, both individuals used the available direct lines of communication with the President, keeping him informed of plans and progress and soliciting feedback. It was through this three-way network of communication and cooperative effort that change-related activities were coordinated, resources were gradually provided, and implementation occurred as a step-by-step process. Although political activity and controversy in the surrounding environment no doubt influenced planning and decision-making at all stages and levels, at the core of the change process there was little external interference from college constituents, and progress was relatively smooth.122

Two key factors related to the exertion of power helped to create a situation in which effective change was possible. One was the President's decision to continue the dual structure of men's and women's athletics. One official contended that:

Although costly to finance and administer, maintaining dual programs protected the administrative linkages necessary to facilitate Title IX. It kept the major opposition on the other side of campus and out of the way so that rational change could proceed.123

A second factor which allowed change agents to work cooperatively in facilitating reform was the manner in which they operated. Through gradual implementation, based on an awareness of the political influences and broad objectives of the University, they were able to sustain the support of influential faculty members. As one source stated it: "Nobody steam rolled Title IX at [Central]. If they had,
there would have been very little support from the faculty and, likely, from the students."  

In summary, the President's perception of the power resources available to him in early stages of implementation caused him to focus on gaining perspective and support from various administrative sub-structures. As initial attempts to implement Title IX occurred, open conflict surfaced among proponents and opponents of change-related events. The political controversy eventually created a climate conducive to proceeding progressively toward implementing the mandate. In essence, political debate surrounding the principal change agents increasingly focused on football, allowing them to work cooperatively, and almost unobtrusively, in effecting major reform in women's athletics.

In order to verify Sub-proposition 2, the variables related to the administrative use of sub-structures at Central were explored at the other three comparison groups. Evidence indicated that: 1) the precipitating conditions for use of sub-structures as political support systems did not exist; and 2) the sub-structures were not utilized as political support systems to facilitate implementation of Title IX.

Conditions at Northern Virginia indicated that there was very little need for the political support potentially available through use and manipulation of the sub-structures. The President made the decision to implement the mandate, and exerted the power necessary to affect reform. Change at Northern occurred with very little conflict, controversy or political confrontation. According to all available data, the sub-structures functioned as mechanistic, rather than political, support services. Consequently, no evidence was found at Northern which would, in any way, refute this theoretical component (Sub-proposition 2).
The same verification process was used at Eastern and Southern universities. In these instances, there was apparently no real attempt to utilize power resources of any nature, including the use of sub-structures, to facilitate implementation of Title IX. The sub-structures performed few support services in general as compared to those involved in change processes at the primary institutions. Because the involvement of most sub-structures was limited and ineffective, and because no major reform occurred as a result of the mandate, there was no evidence which indicated that the proposition might be invalid. In summary, when administrative change agents did not perceive that a need existed for utilizing sub-structures as a source of power to balance political opposition, the sub-structures were not actively involved in organizational politics; nor did the leaders within the sub-structures exert power or influence in support of or in opposition to change.

Summary

The variables in Category A (Administrative Organization) described how institutions adjust structurally and procedurally to facilitate the implementation of mandated change. The core proposition focused on the creation and use of administrative sub-structures for this purpose. Evidence indicated that due to the source and scope of mandated change the principal vehicle for implementing change was the central administration. Secondly, the research indicated that in colleges which were able to implement the mandate successfully: 1) an administrative decision had been made that the institution would comply; and 2) specific administrative sub-structures had been created and/or utilized to facilitate change (see Figure 3). The sub-structures most
commonly used in implementing Title IX in athletics included an athletic advisory committee, an affirmative action office, and a second central administrative office.

Two conditions precipitated the effective organization and use of the administrative sub-structures. First, it was imperative that a change agent exist within each sub-system in which practical reforms were required. Secondly, when a significant amount of change was required (as was the case in athletics), the sub-system must have been viewed by administrative leaders as an important part of the university in terms of institutional priorities.

The core proposition was supported and clarified by two related sub-propositions which focused on the specific purposes and functions of the sub-structures as they relate to the amount of power exerted by administrative change agents. It was found that when sufficient power could be exerted by central administrators, sub-structures were designed and utilized to perform mechanistic and task oriented support services. In contrast, when power resources were perceived to be limited, central administrative leaders utilized the sub-structures to gain political support in addition to performing mechanistic support services.

The first sub-proposition addressed the use of sub-structures as task oriented support systems. Due to a perceived lack of constraints on necessary and potential power resources, some administrative change agents were confident of their abilities to lead and control implementation of Title IX. In these instances, sub-structures were needed primarily to provide three mechanistic support services: 1) a reliable and efficient network for communication and information; 2) assistance in generating additional revenue for financing changes; and 3) a system in which re-
Responsibilities could be clearly defined and tasks assigned accordingly. The mechanistic support services provided by the sub-structures indirectly influenced the rate and degree of implementation which occurred within various university sub-systems.

The second sub-proposition addressed the political activities of the sub-structures as they functioned to facilitate reform. Research indicated that when an administrative change agent was unable or unwilling to exert power in bringing about desired change, the sub-structures were used as a means for balancing resistant forces as well as providing mechanistic support services. In essence, the sub-structures themselves became a supplementary source of power in instances where internal institutional conditions and past practices appeared to limit the usual power resources available to top level administrative change agents. The political support services of the sub-structures appeared to have a direct impact on the degree of implementation which occurred in sub-systems, and particularly those in which extensive reform was needed to comply with the mandate. In colleges where such sub-structures were developed and utilized effectively, progress toward implementation of Title IX was enhanced. The mechanistic and political support services provided by administrative sub-structures facilitated change as the institutions proceeded through the various stages of Implementation and major reform occurred.

Category B: Attributes of Key Personnel

The focus in Category A was on variables related to the administrative organization of a college or university and on the decisions, activities and processes which occurred within the administrative system to facilitate change. Although it is difficult to differentiate between
variables related to administrative organization and those which characterize the key personnel within it, Category B addresses educational change as a process and product of the characteristics of the people involved as they interact and function in various roles which may or may not be related to their formal positions within the organizational system.

Category B identifies three principal roles played by various change agents, and, more importantly, describes five related sub-categories of attributes of the change agents which were found to influence their effectiveness in precipitating change. A sixth major variable in this Category, which had a significant impact on the effectiveness of the change agents, included the number, distribution and attributes of other key personnel as they functioned in four specific roles as participants in the change process. Relatively, the effectiveness of the performance and influence of these participants of change was determined, in part, by the same five sub-categories of personal attributes.

The principal roles of change agents were identified as those of institutional leader, procreator, and gatekeeper (see "Definition of Terms," which follows the presentation of the core proposition). The roles of other key participants were defined as traditionalists, progressives, opportunists, and catalysts. The five sub-categories of attributes identified as determinants of the effectiveness of change agents, as well as other participants of change, include: 1) ability to influence; 2) organizational affiliations; 3) major assumptions; 4) priority decisions; and 5) strategy and action. Figure 6 provides a graphic representation of the variables and relationships which comprise Category B.
Core Proposition: Specific characteristics, attitudes, values and behaviors of key participants of change influence the rate and degree of institutional progress toward implementation of a federal mandate.

The core proposition is a general statement encompassing all aspects of the preceding introduction to this category, and focuses on the roles and attributes of key participants of change as they combine to influence institutional progress toward compliance with a mandate. Subsequently, two sub-propositions will be introduced to facilitate examination of the major components of Category B.

Definition of Terms. Several specific terms are used in connection with this category and in subsequent discussions to describe the major roles of change agents and other key participants of change. For the purpose of this study, the terms describing the various roles are defined below.

The roles played by change agents include those of institutional leaders, gatekeepers, and procreators. An institutional leader is a member of the central administration (usually the college president) who guides, controls, directs or influences progress toward change and implementation of change. A gatekeeper is a staff member (generally an administrator) who has sufficient control over a channel of communication so as to be able to control the type and amount of information which flows, both in upward and downward directions. A procreator is an innovator of change; one who supports, initiates, generates and produces change.

The roles of other key participants of change include传统ists, progressives, opportunists, and catalysts. A traditionalist is a conservative and a proponent of the status quo who adheres to and places importance on traditional values, customs and practices thereby resisting
efforts to reform. A *progressive* is characterized by interest in new ideas, is an advocate of reform and is not constrained by tradition. An *opportunist* is an individual who (with some risk) turns an opportunity or event to his or her own advantage. Although the institution or its constituents may realize some benefits or suffer some losses due to this behavior, there is general disregard for the more conservative practices and viewpoints of others, particularly outsiders. An opportunist usually functions in a specific manner as an active proponent of innovation and change. A *catalyst* is an individual (usually indirectly involved with the change process) who causes or changes interactions between persons and events without being changed himself.

For the purposes of this study, an *attribute* is defined as a property or quality ascribed to a person, including primarily one's attitudes, values, characteristics, and behaviors. The attributes of various key participants of change (including change agents) have been grouped into five specific sub-categories. Each sub-category is described below.

The first sub-category, *ability to influence*, includes power, position and status of various participants of change. The second, *organizational affiliations*, includes memberships, offices, leadership roles and interactions with external organizations concerned with the implications or implementation of a particular mandate. The third sub-category, *major assumptions*, includes the suppositions, propositions or postulates of participants, which take for granted the future course of events. The fourth, *priority decisions*, includes the degree of commitment, precedence and level of importance attributed to implementing a particular mandate, and encompasses the ability of the leader to make
related priority decisions. The fifth and final sub-category, **strategy and action**, concerns the ability to act in support of one's priorities, values and opinions, and includes the strategy employed in dealing with conflict, risk and resistance.

**Rationale.** Zaltman and associates content that:

Educational institutions are inextricably caught up in the ebb and flow of societal change. The school is contemporary society's most salient educational institution. It is expected to carry the double burden of maintaining traditional values while preparing society's young members to deal with a changing world.\(^\text{128}\)

Zaltman's contention, although related to elementary and secondary schools, may be equally valid in describing a dilemma of colleges and universities as they attempt to adjust and adapt in response to federal mandates. The nature of federal mandates is such that changes in social values and attitudes among college constituents are implied, and related behavioral change is required. Research indicates that social values and attitudes are rooted in cultural backgrounds and group affiliations.\(^\text{129}\) Evidence also indicates that although attitudes and behaviors are closely related, it is easier to change the latter (at least on a temporary basis) than to induce the underlying attitudinal changes which precipitate long-term behavioral adjustments.\(^\text{130}\)

The problem in implementing a value-laden federal mandate becomes one of producing changes in behaviors and practices of numerous constituents who may or may not agree in principle with the values implied in the mandate. Attitudes may also be influenced by a general resistance to the pressures and effects of external (government) interference with job-related responsibilities, programs and practices in general. The nature and results of interactions between those who (initially or eventually) share values supportive of the spirit of the mandate and
those who resist it, will influence institutional progress toward compliance. As this process occurs, the roles performed by change agents, and the relationships between change agents and other key participants in change, become critical factors affecting implementation and reform.

Once the primary roles played by change agents and other participants of change were identified during the investigative process, the researcher focused on the discovery of attributes which appeared to enhance the effectiveness of various individuals as they functioned to facilitate or impede change. Volumes of literature and research have been published on characteristics and attributes of effective leaders, administrators, change agents and developmental planners. Personality types and traits have been explored in terms of their impact on group performance. A variety of suggestions have been offered for improving one’s effectiveness as a leader, manager, change planner, group member, and so forth. On the whole, however, investigators are beginning to conclude that personal and professional traits and abilities may be based on and influenced by situational circumstances. Assessing much of the literature on leadership and group performance, Cartwright and Zander suggest that an individual’s behavior will vary considerably according to the situation. Further, the manner in which individuals function in roles as leaders and participants is largely rooted in the nature of the task as well as the related expectations and attitudes of peers and colleagues. For example, Cartwright and Zander state: "The traits of the leader that are necessary and effective in one group or situation may be quite different from those of another leader in a different setting."
If one accepts the situational explanation of behavior, it becomes clear that the nature and significance of specific characteristics, attitudes, and behaviors, of key participants functioning in response to a federal mandate may be quite different from those exhibited in similar roles in the educational setting under different circumstances. Because the methodology used in this study was inductive, no attempt was made to examine large numbers of personal or professional attributes which might have influenced a participant's effectiveness as a change agent or as a proponent or opponent of change. The researcher was guided primarily by the evidence presented by interviewees and was eventually able to define, categorize and verify several key variables (attributes) specifically related to the effective implementation of mandated change at the four institutions in the sample. Additional factors which may or may not have influenced the effectiveness of participants performing in change-related roles undoubtedly remain to be explored. Several additional variables may be suggested to the reader as he or she examines the evidence accompanying the propositions and related principles.

Depending upon the number and distribution of key participants of change (including change agents) and the interactions and relationships between the participants as they function effectively or ineffectively in various roles to induce or impede change, progress toward implementation of a mandate will be influenced accordingly. Consequently, the effectiveness of change agents is also determined by a sixth variable: the existence and effectiveness of other key participants of change.

Evidence. The specific evidence for the components of the core proposition is the composite of evidence presented with each of the two
sub-propositions in this category which follow. There was, however, evidence of a general nature which helped to explain why certain individuals functioned actively in various roles as key participants of change. The anticipation of alterations in roles and daily routines of potential participants of change appeared to stimulate many individuals to reexamine their goals, priorities and values in terms of various implications of the mandate. Title IX held the potential to change the status, responsibilities, and work-related activities of numerous administrators, staff and participants. The potential changes were viewed as threatening to some and challenging to others.

Some administrators and other university personnel at various levels of the athletic and academic hierarchy had experienced lengthy involvement as players and/or coaches in men's intercollegiate athletics. They held strong commitments to traditional roles and customs. The same was true for many women, particularly athletic administrators and coaches. As a result of social and career-related implications of Title IX, many individuals were forced to reexamine or justify the traditional roles and practices of college athletics. As a result of this assessment process (which reportedly occurred on a personal level in most instances) some participants clung steadfastly to previously held values and traditional customs, while others temporarily vacillated between accepting and rejecting the value and role changes implied by the mandate and often emerged with different opinions and changed perspectives. A limited number of participants appeared to have held values harmonious with the spirit of the mandate throughout the change process. Consequently, as personal values and priorities were gradually clarified, individuals began to function accordingly (as facilitators, proponents, or opponents of reform) in various roles as key participants of change.
Many interviewees, who were eventually identified as change agents or proponents of change, voluntarily disclosed having experienced personal growth and changes in attitudes and values related to sex roles in athletics throughout the various Stages of Implementation. Some experienced an acceleration of the growth process during the Infusion Stage as a result of introspective analysis (explained earlier in this chapter). Others experienced changes in beliefs and attitudes during later stages, such as Trial and Transition, as a result of recognizing the potential and capabilities of women athletes, coaches and administrators as they functioned in programs characterized by fewer constraints and more opportunities.

The frequency of responses indicating that interviewees had experienced periods of personal growth and re-orientation of values varied among the four sample institutions. Evidence of recent changes in attitudes and beliefs related to sex roles in athletics was notably apparent in the two primary comparison groups, latent but occurring at the third institution, and markedly absent at the fourth.

At Northern Virginia, the two principal change agents generally favored equal opportunity for both sexes in the early stages of reform. The events which transpired to produce a nationally recognized competitive women's program served to strengthen and re-affirm their positions. As more people became involved in the program and in the change process, the attitudes of more organizational members changed — until there appeared to be a university-wide commitment to equality among the participants of change and among peers and colleagues as well. As one administrator remarked:
Our women have shown enough quality in sports that the average man on the street pays for a season ticket to women's basketball. Even university people have come to respect the potential and success of female personnel and athletes, and they support women's efforts to achieve.

Changes in attitudes and values were more gradual and, perhaps, more difficult at Central Virginia. The conservative climate which characterized the university was balanced by an equally significant condition: most college personnel were socially aware and well-informed. Feminist issues had surfaced on campus prior to the reception of Title IX, raising the consciousness level of many faculty, students and administrators. The greatest degree of change in attitudes and priorities appeared to occur among female leaders in the women's athletic program (see the section on the change process at CVU which was presented earlier in this chapter). The events and open conflicts which accompanied progress toward implementation of Title IX apparently created an environment which precipitated and supported introspection and analysis of individual values, priorities and beliefs for a number of those involved. The result was a move toward more progressive attitudes and practices, particularly among the leaders in women's athletics. This change was supported (in large part) by faculty, students and central administrators.

Interview data obtained at Eastern Virginia University indicated that even by Fall, 1979, principal change agents were still struggling (individually and interpersonally) with issues related to the values implied in the mandate. In turn, the attributes of individuals in various roles as participants in change were less clearly defined. On several occasions, interviewees sincerely requested the guidance of the researcher in attempts to gain greater insights and awareness with re-
aspect to issues and possible strategies related to Title IX compliance. In such situations, the researcher had to make a conscious effort to avoid becoming the interviewee. Throughout the investigation, it was apparent that processes of introspection and values clarification were occurring, but were in relatively primitive stages of development.

Interview data gathered at Southern Virginia University reflected a lack of awareness, as well as concern, with related issues and implied value changes accompanying Title IX. Only one interviewee offered evidence of having experienced growth in terms of altering personal values and opinions, and she was no longer involved in the athletic program. Near the close of an interview with the final respondent at Southern, the researcher questioned him on an apparent lack of awareness and apathy among females toward the institution’s inability to comply with the mandate. He responded: "The students and many of the female faculty members were brought up in the South and are used to discrimination. They accept it."

In summary, the extent and degree of personal growth experiences which resulted in changes in attitudes, opinions, and priorities varied among individuals and among the populations within the four comparison groups. The results of these experiences determined, in part, subsequent participation in various roles related to the implementation of Title IX. In the two primary comparison groups, environments which encouraged introspection and re-examination of beliefs and practices appeared to have been a factor in encouraging individuals to assume roles in which they became facilitators or proponents of change.

**Sub-proposition i:** One or more of the five sub-categories of attributes will influence the effectiveness of change agents as they function in roles as institutional leaders, gatekeepers, and procreators in the change process.
Category A addressed the creation and use of sub-structures to facilitate change and the importance of the perception and use of power by various institutional leaders as they functioned within the administrative organization in response to a federal mandate. The conditions which resulted from interaction of the variables in Category A were contingent upon several factors, the most important being a major precipitant influencing all activities related to the effective implementation of Title IX: the decision had to be made by an institutional leader to implement the mandate. The variables in Category B explain, in part, how and why the decision to change was made, sustained, reinforced or resisted, and implemented both in terms of the attributes of leaders and the nature and extent of influence by other key participants of change.

Sub-proposition 1 addresses the former set of determinants — the five sub-categories of variables directly related to attributes of the change agents (the principal facilitators of change).

Various university constituents (including the institutional leader) may function as gatekeepers and as procreators of change. Acting in one or more of these roles, change agents are vulnerable to internal and external influences described in the sub-categories of variables. These variables (or attributes) were found to affect the performance of the change agents, and in turn, the effectiveness of institutional progress toward implementation of Title IX.

Rationale. The principal rationale for Sub-proposition 1 was included in the rationale stated for the core proposition from which this sub-proposition was derived. Simply stated, change agents are human beings characterized by different backgrounds, abilities and beliefs, and they function in a people-oriented (educational) system.
Organizational change occurs as a result of communication and interaction among associates, and its effectiveness is related to the attributes of the individuals involved. As one source put it, "You can't legislate changes in attitudes, values and personalities. Implementation of a mandate means that people must change -- and only people can change people."\textsuperscript{141}

The existence and activities of change agents within an organization are significant in the process of reform, regardless of whether the initial impetus for change comes from internal or external sources. The importance of change agents acting as institutional leaders was emphasized in Category A throughout discussions related to the activities of college presidents. The location of change agents in various university sub-systems was also found to be crucial to the implementation process. In the case of athletics, where extensive change was required in order to comply with Title IX, capable and innovative leadership from the change agents in the sub-system was important in facilitating reform. In the two athletic departments in which effective implementation occurred, these change agents functioned as procreators who initiated, generated and produced change and provided major impetus for reform.

Also crucial to the change process is an effective system of gatekeepers which allows for and encourages the reciprocal flow of ideas, information and concerns. According to Zaltman, in order to work toward effective change of any nature, organizational members need to be informed.\textsuperscript{142} Communication among university constituents occurs through a variety of formal and informal modes and networks. The flow of information may be interrupted or the content of messages, intentions and ideas may be distorted in any number of ways. The distribution and activities of gatekeepers performing roles as change agents within the
organizational system can prevent confusion and delay caused by lack of information or misinformation as other participants work toward interpreting and implementing the mandate. When individual gatekeepers function to impede, obstruct or enhance open (or facilitative) communication among change agents and other university constituents, they also serve to impede, obstruct or enhance progress toward implementation.

Evidence. The format used for presentation of evidence includes: 1) the introduction of each sub-category of variables, including a review of the major attributes considered in the sub-category; 2) a formally stated principle related to the research findings and associated with the sub-category; and 3) an explanation of how certain variables in the sub-category influenced the effectiveness of participants of change as they performed in various roles as change agents.

The evidence is derived solely from Phase III research at the four sample institutions. Because of the nature and scope of Category B as a whole (Attributes of Key Personnel), its various components are closely interrelated with other major categories of variables, as well as with the Stages of Implementation. In turn, the evidence tends to be interwoven with that presented in previous discussions. In an effort to avoid duplication and redundant explanations, brief presentations of evidence accompany the discussion of certain principles. For example, the evidence may be summarized and the reader will be referred to an earlier presentation. Further, each variable within the sub-categories did not apply to all three roles performed by change agents at each sample institution. Therefore, evidence is presented only as applicable and appropriate. The evidence, however, combines to support the validity and theoretical relevance of each sub-category as a whole.
Principle 1: The effectiveness of change agents (including those functioning in roles as institutional leaders, gatekeepers, and procreators) is determined, in part, by their ability to influence other participants in change.

In the case of institutional leaders, this principle was examined in detail in preceding discussions related to variables in Category A. Briefly, evidence indicated that: 1) with regard to implementing Title IX in athletics, institutional leaders were most likely to be college presidents; 2) in colleges where presidents assumed roles as change agents, implementation occurred; and 3) the president's perception of the power resources available to him was reflected in the strategy he employed in utilizing administrative sub-structures to facilitate change. By using the power resources available to him (including additional personnel and the political support from administrative sub-structures), the institutional leader was able to exert considerable influence on college constituents, thereby enhancing progress toward compliance with Title IX.

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A second factor which affected implementation of Title IX in the sample institutions was the ability of the procreators to influence others involved in or concerned with the change process. Ability to influence was determined primarily by the position, status and power resources of the procreators of change.

At Northern Virginia, the procreator was the Divisional Director (see Figure 4) who chaired a large sub-system including health and physical education as well as athletics. The nature of his position, in addition to the direct line of authority which existed between him and the President (the institutional leader), provided the procreator with the appropriate status and power resources necessary to initiate
and implement desired and practical reforms within the athletic sub-
system. (Also see evidence presented in Category A.)

Interviewees at Central Virginia University identified the
procreator as the Women's Athletic Director, who also chaired Women's
Physical Education throughout most of the time period during which
Title IX implementation occurred. Similar to the situation at Northern,
the ability of the procreator to influence was largely derived from her
position (Chairperson of a well-established and relatively prestigious
sub-system) and her status among faculty colleagues and academically
oriented administrators. Once again, a direct line of authority existed
between the procreator and the college President, providing a suitable
mechanism for utilizing her power resources to influence superiors.
(Also see evidence presented in Category A.)

In both instances (at Northern and Central) procreators of
change were located in positions from which they were able to influence
a substantial number of subordinates as well as central administrators.
In addition, their status as respected educators within the academic
community and their popularity among colleagues augmented the power
resources available to them for influencing others and promoting change.

In contrast, the primary procreator of change at Eastern during
the early stages of Title IX implementation was a physical education
instructor who received supplementary wages to act as the Coordinator of
(athletic) Business Affairs. A second potential procreator was a woman
who taught in a local high school and worked part-time at the University
as the Coordinator of Women's Sports. By virtue of their positions
(part-time employees) in the sub-system, their power resources were
extremely limited. The lack of existence of an institutional leader who
favored major reform in the sub-system, as well as the absence of a
direct line of authority between the procreators and central administration,
compounded the problem. Ability to influence was, in turn, limited to
directing the activities of subordinates. The latter group consisted
primarily of volunteers or part-time coaches and student athletes, and
amounted to a relatively weak base of support. At Southern Virginia
University, there was evidence of limited and occasional attempts to
initiate change; however, no procreator could be identified within the
sub-system or the institution as a whole.

The ability of gatekeepers to influence the change process
appeared to depend primarily on their number, distribution and status.
In the case of Title IX, institutional leaders, procreators and several
additional personnel held positions related to the functions of gate-
keeping. Central administrators were responsible for interpreting the
mandate with respect to implementation within each of the various
sub-systems. This responsibility was, in some cases, delegated or shared
by athletic advisory committees and affirmative action officers.
Administrators in the athletic chain of command performed in gatekeeping
roles as they interpreted related program evaluations, assessed and
communicated the needs and concerns of subordinates to superiors, and
interpreted the policies, decisions and intentions of superiors to
staff and students within the sub-system. The gatekeeping systems which
characterized each comparison group during the process of implementing
Title IX in athletics paralleled the respective administrative structures
(see Figures 4 and 5).

At Northern Virginia, there were three principal gatekeepers:
the President, the Vice-President for Planning and Student Services, and
the Divisional Director. The President interpreted the mandate and articulated his intent to comply. His policy involved change in all major sub-systems including those in which extensive reforms would be required. He maintained a direct line of communication with the Divisional Director and added supplementary channels for the flow of information through the Vice-President, Athletic Advisory Committee and Affirmative Action Director. The system functioned to provide an effective and efficient network of communication, facilitated the flow of information to and from a large portion of the college constituency, and prevented direct interference or obstruction of communication between the two primary change agents involved in implementing Title IX in athletics. Because the Vice-President and the Divisional Chairman were known as advocates of the change-related policies and intentions of the President, they were accorded the appropriate status and power, and participated actively in the change process as gatekeepers. In turn, the influence of each gatekeeper was a positive factor in facilitating reform.\[149\]

The gatekeeping system at Central was similar to that at Northern. A direct line of communication existed between the two principal change agents (The President and the Women's Athletic Director) and was supplemented by a network of sub-structures utilized to gather data and disseminate information to various college constituents. Although the President at Central delegated a larger portion of the responsibility for interpreting the mandate and establishing institutional policy related to its implementation than did the President at Northern, the former administrator apparently did not act to impede the flow of communication. A second central administrator (a vice-president), who was trusted by the President and the Women's Athletic Director, was
accorded gatekeeping responsibilities with respect to information related to financial affairs. The Director of Women's Athletics was highly respected by administrators, faculty, and women coaches. Her status provided her with a power base for effective performance as a gatekeeper as well as a primary change agent. Information flowed freely among participants of change, and particularly the principal change agents.

At Eastern Virginia, there were two primary gatekeepers between HEW and the personnel involved in the management of women's athletics during the early stages of implementation: the President and the Director of Intercolligate Sports. Due largely to the rapid turnover of presidents at the college and the low status accorded to athletics in general as well as to the Director, very little information was passed down to athletic personnel from central administrators. Further, because of the lack of cohesion and of continuity of personnel within the sub-system, very little communication flowed upward. It was not until late in 1976 when a vice-president became involved in the governance of athletics that any definable communication system began to operate. For a short time the vice-president appeared to by-pass the Director of Athletics and the flow of information between the Coordinator of Women's Sports and the vice-president increased. This change in organizational procedures appeared to influence progress toward implementation, particularly with regard to reorganizing administrative workloads and clarifying responsibilities. In August, 1979, a new Director of Athletics was hired. At the time of this research, the relationships, roles and status of administrative personnel acting as change agents were, once again, undergoing alterations.
There were apparently no change agents acting as gatekeepers at Southern University. Consequently, the gates to open communication, as well as progress toward reform, remained closed. 152

Sub-category 2, Organizational Affiliations, addresses the effects of associations with external agencies and interest groups on the attitudes, opinions, behavior and status of change agents and potential change agents.

Principle 2: The effectiveness of change agents (and potential change agents) was determined, in part, by the type and degree of their primary affiliations with external organizations.

In general, the agencies or organizations which supported implementation of Title IX included HEW, educational and professional (physical education) associations, women's athletic associations, and other women's organizations. Opposing major reform, in athletics in particular, were organizations such as men's athletic associations (specifically the NCAA), certain associations for college administrators, and regional leagues or competitive organizations established originally for men's athletics. Evidence indicated that the nature, number and strength of ties between change agents and various external organizations influenced the course of the change process in each of the four sample institutions.

The direct or indirect organizational affiliations of institutional leaders appeared to influence their assumptions, their implementation strategy and their relationships with other key participants in change. There was some evidence of relevant direct association with external agencies but, in most instances, institutional leaders became aware of the viewpoints and status of external organizations through communication with other participants of change within or closely associated with the university.
The external organizations with which the President at Northern was most closely affiliated appeared to include educational associations and women's groups. His personal background reflected a history of affiliations with professional groups, and his awareness of organizations affiliated with promoting women's rights could be traced, in large part, to the active involvement of his wife in related political affairs. Consequently, he was in favor of change based upon principles which were educationally sound and which enhanced the status and opportunities of women. 154

The procreator of change at NVU (the Divisional Director) held strong ties with state, regional and national professional organizations for health and physical education. These affiliations not only influenced his own attitudes toward and strategy for implementing Title IX, but also increased his status from the perspective of an educationally-oriented central administrator. 155

Due to consensus on the part of the two primary change agents at Northern with regard to the level of priority assigned to providing educational experiences for students of both sexes, the information disseminated through communication channels was grounded in educational values and had a tendency toward emphasizing the benefits of progressive reform as implied by Title IX. Additional personnel, functioning in the system as potential gatekeepers, either supported this viewpoint or were simply circumvented in the communication process. 156

The institutional leader at Central found himself amidst a number of college personnel closely affiliated with diverse, and often opposing, external organizations. Representatives from various interest
groups made conscientious efforts to keep him informed of organizational viewpoints. Representatives of campus interest groups associated with men's athletics kept him abreast of the political leanings and rationale of national governing bodies for men's sports. These organizations perceived Title IX as threatening to intercollegiate athletic programs across the Nation. Women's rights representatives informed him of the progress, implications and intents of recent legislative and judicial action, as well as the political stance and underlying rationale of the National Organization for Women and local women's organizations. The Women's Athletic Director kept him aware of the viewpoints and activities of AIAW and professional physical education associations. With the assistance of the Affirmative Action Officer, she also kept the President up to date on interpretations and correspondence from HEW and the Office for Civil Rights. Faculty and student interest groups (many associated with external organizations to some degree) voiced their concerns and viewpoints through meetings, memoranda and informal conversations when related issues surfaced on campus. As a change agent, the institutional leader was placed in a position where critical decisions had to be made with respect to his strategy for implementing Title IX. As a gatekeeper, the President functioned to allow open conflict to develop and for related communications to flow freely. His position on Title IX was, in turn, based on a wide variety of data reflecting a diversity of collected opinions and suggestions for dealing with the mandate. What emerged, as one source described it, was "a middle of the road stance." Not wishing to alienate any particular interest group or coalition of interest groups, his strategy involved delegating much decision-making responsibility to other key personnel and administrative sub-structures.
The procreator of change (the Woman's Athletic Director), as well as several staff members in her department, had records of long term involvement and active participation as officers and leaders in state, regional and national women's athletic organizations. These affiliations contributed to the gradual development of more progressive viewpoints among women's athletic personnel at Central. Because the President was aware of gains in state and national prominence of these organizations, and because his personnel had previously been key figures in promoting the advancement of equal opportunities for women athletes, he acknowledged the achievements, abilities and status related to their organizational affiliations. One source stated that: "Due to the state and national recognition and visibility of our women's faculty as they participate as leaders in AIAW and related organizations, it would look very bad if this institution failed to respond favorably to Title IX." In brief, affiliations with external organizations affected the political manner in which the institution responded to the mandate, influenced the implementation strategy of the institutional leader, and improved the status of the change agent within the sub-system. It appeared that gatekeepers functioned to keep wide-spread communications flowing in order to allow the political "battles" to run their course until the momentum subsided and change could be implemented in a more peaceful climate.

Because of numerous personnel changes at Eastern, the affiliations of change agents with outside organizations had little influence on progress toward compliance until late in 1979, following administrative reorganization. At the time this research was being conducted, the active involvement of the Coordinator of Women's Athletics with various
external women's athletic associations had become clear to many key participants of change. Whether or not her achievements and related political visibility would be recognized and become a factor influencing the change process could not be determined. 162

The most influential external organization at Southern appeared to be the regional league in which male athletic teams had competed for a number of years. League policies and regulations generally served to preserve the status quo of athletics until Spring, 1979, when the league officials began to assume limited organizational responsibility for women's athletics. The league established a rule stating that participating institutions should offer a minimum of four sports teams for women, and appeared to be considering expanding schedules and tournament provisions to include selected women's teams. 163 Because league status was critically important to administrators and key personnel, and because the league officials' failure to recognize women's sports in providing competitive opportunities had influenced policies and practices throughout most of the Title IX implementation period, external organizational affiliations served to retard progress toward compliance with the mandate at Southern. 164

In summary, active involvement in external organizations which supported the intent and implementation of Title IX appeared to facilitate progress toward reform within the institutions themselves. Even when the affiliations of change agents were counteracted by the association of other constituents with organizations which generally opposed change, the mandate was implemented with relative success.

Sub-category 3, Major Assumptions, emerged as it became clear to the researcher that change agents, in particular, at the four compari-
son groups defined "equity" and "effective compliance" in terms of certain underlying assumptions. The nature and content of these assumptions varied considerably among various interviewees, and appeared to influence priorities and decisions related to Title IX implementation in certain instances.

Principle 3: The effectiveness of change agents is determined, in part, by the existence and nature of certain underlying assumptions related to interpreting and implementing the mandate.

Assumptions related to Title IX implementation ranged from general perceptions regarding sex-role stereotypes (for example, winning is more important to male athletes than it is to female athletes) to specific suppositions concerning the future course of change-related events within a particular institution (for example, women's sports do not have revenue producing potential). In most cases, interviewees were not aware of their own assumptions nor those of other key participants of change at their institutions until late in the interview process. As the researcher became more aware of the importance and diversity of existing assumptions, follow-up interviews were often conducted for the purpose of gaining a clearer understanding of the nature and influence of assumptions related to implementing Title IX. During the second round of interviewing, as certain respondents attempted to explain opinions and former statements in terms of the actual course of events which accompanied the change process, they became more aware of the origins of their beliefs and attitudes (and those of others), and underlying assumptions were often acknowledged and articulated. In other cases respondents remained unaware or were evasive or defensive when asked to reflect upon issues and beliefs related to assumptions. In most instances, however, the researcher emerged from interviews with
evidence that the attitudes and activities of change agents were likely to be grounded in certain assumptions, several of which were recognizable and appeared to influence the development of institutional policies and implementation strategies.

The assumptions of institutional leaders were derived from their own backgrounds, experiences and beliefs, and were often altered (or in other instances, reinforced) by affiliations with other participants of change and external organizations. Certain assumptions in particular influenced the strategy employed in implementing the mandate, notably with respect to hiring and utilizing personnel to facilitate change and in generating financial resources.

The institutional leader at Northern appeared to hold three critical assumptions which accounted, in part, for the effectiveness of implementation efforts throughout the institution: 1) that women were capable of administering, coaching, and competing successfully in a high caliber athletic program; 2) that a diversity of resources was available for generating additional revenue; and 3) that women's sports had revenue-producing potential similar to that of comparable men's teams. These major assumptions were reflected in the change strategy employed by the President. He hired dynamic, ambitious, and self-reliant female personnel in key positions as coaches and administrative assistants, and he helped to lay the necessary groundwork in institutional development and community relations which eventually led to revenue generated from a diversity of resources, including significant returns through gate receipts from women's basketball.165

The institutional leader at Central appeared to have made the following major assumptions: 1) women were capable of coaching,
conducting and administering women's athletics; 2) resources for the
generation of additional finances were limited primarily to student
fees; and 3) that women's athletics at Central (or in general) lacked
revenue-producing potential. His leadership strategy involved allowing
women athletic personnel freedom in most decision-making processes
with respect to conducting the female sports program (including hiring
and firing practices, utilization of staff and resources, and general
policy formation). Decisions and policies were subject to his approval,
but were rarely reversed or revised. 166

Institutional leaders at Eastern and Southern appeared to share
the following assumptions: 1) that men's athletics were more important
to the future and status of the universities than were women's athletics;
2) that implementation of Title IX involved increasing the funds
allocated to women's sports without regard for the manner in which those
funds were invested (except in areas where requirements were explicitly
stated, such as scholarships). When funding was increased, little money
was invested in qualified female leaders and staff members who might
provide the direction and guidance necessary for implementing the mandate. 167

One source addressed the links between administrative assumptions
and implementation strategy as follows:

Many administrators try to use existing conservative staff
members, part-time or voluntary leadership, or coaching re-
jects from men's sports to conduct women's sports. They assume
that any experienced "male jock" can handle a women's sports
program with no difficulty. Most colleges also feel that re-
sponding to Title IX just means adding dollars to the women's
budget. Both assumptions and practices are detrimental to
the spirit and future of the mandate in general, especially
when the personnel who use the money are not qualified, in-
formed or committed to improving the status of women's
sports. 168

This appeared to be the case at Southern and, until 1979, was also
characteristic of conditions at Eastern.
Due to the nature of administrative assumptions at these two institutions and the virtual lack of communication among change agents in general, the assumptions of procreators and gatekeepers had little effect on the course of progress toward reform.

The assumptions of the procreators at Northern and Central paralleled those of the institutional leaders. Neither situation was one of a procreator following the lead of the college president. Rather, consensus in major assumptions was due to institutional circumstances and similarity in values and beliefs among the change agents. In both instances, procreators hired qualified, ambitious female personnel as coaching positions became available, and worked cooperatively with the president in implementing his strategy for increasing and allocating resources.

The assumptions of institutional leaders, procreators and other personnel included in the gatekeeping process affected the nature, extent and direction of communication among various participants of change. At Northern, gatekeepers functioned to interpret and articulate administrative plans for expanding women's athletics as a part of a comprehensive and cohesive organizational effort toward eliminating discriminatory attitudes and practices. There was little conflict or confusion during the change process, since the information which filtered through various officials and sub-structures to the personnel within each sub-system was characterized by consensus among gatekeepers. Administrative intentions to comply with Title IX gradually became clear to all participants. The major assumption of gatekeepers at Northern appeared to be that they were expected to facilitate implementation of the mandate according to the assumptions, intentions and strategy
articulated by the institutional leader. At Central, once administrative assumptions and strategies became known, the same process occurred among primary gatekeepers. The latter functioned to facilitate reform based on the assumptions and related strategy of principal change agents.\footnote{171}

It is interesting to note that the variance in the extent to which the mandate was implemented in the two universities may have been grounded, in part, in the difference between Northern and Central with respect to change agents' assumptions that women's athletics had (or did not have) revenue-producing potential. As one source stated: "The utilization of diversified funding sources, including the promotion of women's sports to the point that they increase revenue through gate receipts, has to be a 'heavy' change variable."\footnote{172}

Sub-category 4, Priority Decisions, addresses the level of priority attributed to implementing the mandate within its various sub-systems, the priorities associated with progressive implementation of various components of the mandate within a particular sub-system, and the ability or willingness of change agents to make priority decisions.

**Principle 4:** The extent and effectiveness of implementation efforts are dependent, in part, on the priorities of principal change agents.

The priorities of change agents were largely determined by their personal assumptions and preferences and, often relatedly, their perceptions of situations constraints, opportunities and resources. As priorities were established and clarified, change-related decisions were made accordingly. In turn, these decisions (or "priority decisions") influenced the development of implementation strategies and the course and extent of institutional progress toward change. Because the priority
decisions of principal change agents in the primary comparison groups were acceptable to other key personnel on campus and were in agreement with the intent and regulations of the mandate, effective progress toward implementation occurred in both institutions. In contrast, the priority decisions of administrators in the other two sample institutions appeared to delay or impede progress toward compliance with the mandate.

The priorities of institutional leaders influenced administrative policies and strategies related to implementing Title IX, as well as the degree of organizational commitment to reform. The importance and impact of priority decisions made by institutional leaders became evident as change processes at Northern and Eastern were examined and compared. Both institutions were clearly experiencing rapid growth and expansion, and were located in large metropolitan areas where change and progress were accepted by community members as well as college constituents in general. The President at Northern chose to make an impact on the future course of events at the University, and two areas to which he attributed major importance were the improvement of athletics and the promotion of equal opportunity for students and personnel. In contrast, institutional leaders at Eastern appeared to be somewhat overwhelmed by the routine problems which accompanied enrollment expansion, and focused on management-oriented activities related to increasing staff, facilities, and curricular options. As one source commented, "The administrators [at Eastern] were just too busy with other affairs to worry about Title IX or give much thought to women's athletics." Clearly the priorities of institutional leaders in the two colleges reflected a difference of opinion with respect to the importance of implementing Title IX in general, and in expanding athletic opportunities for women in particular.
As evidence previously presented has shown, the President at Northern followed through on his commitment toward equal opportunity by planning, guiding and facilitating progress toward implementing Title IX. Relatedly, the lack of progress toward effective reform at Eastern could be traced largely to a lack of commitment on the part of institutional leaders to implement with the mandate.

The circumstances which influenced administrative priorities related to implementing Title IX at Central were unique in comparison with the other sample institutions. Initially, the President did not assume a leadership role in establishing priorities related to Title IX, or athletics in general. As forces for change gained momentum through the activities of several key personnel (and from events related to Category C which will be discussed in a subsequent presentation), priority decisions became imminent. When it became apparent to the President that implementation of Title IX was in the best interest of the institution, he allowed the proponents of change (including representatives of women's athletics) to initiate and carry on change-related activities. He indirectly accepted the role as change agent, unobtrusively established priorities, and facilitated implementation efforts accordingly. His priorities appeared to reflect commitments to complying with the "letter of the law" and to keeping peace among University constituents. Although indirect in nature, the President's priorities and commitments enabled the organization to progress satisfactorily toward compliance with the mandate.

The priorities of the institutional leader at Southern simply did not include implementing Title IX in athletics. Relatedly, progress toward change was minimal.
In summary, institutional leaders at two of the four sample institutions chose to comply with the mandate and attributed importance to its implementation in athletics. Consequently, it appeared that this condition facilitated successful reform in the primary comparison groups.

The priority decisions of procreators influenced the effectiveness of their interactions with superiors and other various university constituents and determined, in part, the effectiveness of the strategy employed within sub-systems to induce and sustain change. The priorities of the procreator at Northern were compatible with the values and priorities of the institutional leader and with the resource capabilities of the college. Consequently, he received support and cooperation from central administrators and other key participants of change as he worked toward reform within the sub-system.

Similarly, the priorities of the procreator at Central were situationally appropriate and politically acceptable, she received the necessary support and cooperation to initiate and implement change. Two additional factors increased the effectiveness of her change strategy within the sub-system itself: 1) the underlying principle which guided much of the change process included maintaining the competitive status of women's teams with regard to traditional opponents; and 2) the decision-making process through which priorities were established included the active involvement of the total women's athletic staff. This consideration for the pride, self-respect and capabilities of women coaches generated enthusiastic support for and active involvement in implementation activities within the sub-system.

Due to the nature of their positions and status, and the lack of an identifiable nucleus of personnel within the sub-system, potential
procreators at Eastern were apparently not able to make the necessary priority decisions to initiate reform. Several interviewees expressed the opinion that the organizational structure at lower levels (within the sub-system) added to the general state of confusion which characterized the development of the athletic program and precluded the establishment of meaningful priorities. Research indicated that coaches were often volunteers or were hired as part-time employees and the turnover rate among coaching personnel had been high. One interviewee contended that the lack of an established coaching staff prevented cooperative and sustained planning efforts, inhibited the flow of communication between athletes and athletic administrators, and had a negative effect on implementation efforts in general and attempts to establish priorities in particular. The interviewee stated:

"It is even useless to print season schedules. By the time a game contract gets signed and returned, the coach has re-scheduled the [event to accommodate] some request by her regular employer .... It's no wonder that the men here still think women are unable to make up their minds. The part-time, voluntary nature of the coaching staff not only adds to the confusion, it perpetuates the inability of the program to establish a sense of direction and gain status and recognition on campus."

A similar situation existed at Southern, where one source commented:

"There is no continuity or cohesion on the women's coaching staff, and therefore no way for a leader to emerge from within the ranks to make priority decisions. Without priorities, you can't work out policies, plans and recommendations for implementing Title IX."

In summary, when priority decisions could be made by procreators within the sub-system, policies and change strategies could be established to initiate efforts toward reform. Further, when the priorities were agreeable to upper level administrators and acceptable to participants
within the sub-system, change agents were able to move effectively toward implementing the mandate.

Sub-category 5, Strategy and Action addresses the abilities, activity patterns and behaviors of change agents. After values and attitudes had been clarified, opinions and viewpoints had surfaced and priority decisions had been made, institutional progress toward reform was greatly influenced by the effectiveness of the strategy and related activities of change agents.

Principle 5: The effectiveness of each change agent is determined, in part, by the nature of the implementation strategy employed and by the ability of the change agent to perform related tasks.

The effectiveness of institutional leaders attempting to facilitate the change process appeared to be related to three major attributes: 1) the ability to act; 2) resourcefulness; and 3) the strategy employed in dealing with conflict, risk and resistance. The specific behaviors associated with the three attributes included delegating responsibility in a manner which complemented the particular strategy employed, the appropriate utilization of personnel for enhancing the potential success of plans and key objectives (including hiring and firing practices), and the effective manipulation and utilization of material resources.

The President of Northern Virginia appeared to be a dynamic individual with a strong commitment to equal opportunity. Both attributes were reflected in his administrative style. He functioned openly and efficiently as a leader in the change process, delegating specific and well-defined responsibilities only after his viewpoints and priorities had been clearly articulated. He was willing to support his commitment to change with action and influence, and was aware of and assumed the related risks. He hired dynamic and ambitious personnel in positions where they, in turn, would be able to influence the implementation
process. He then accorded them the appropriate authority and freedom to act and innovate as they carried out assigned responsibilities.

Potential opponents of reform at Northern were simply circumvented or removed. In one case, a coach (who had been instrumental in initiating change in the early stages) became a source of conflict due to her discontent with the pace at which implementation was occurring. When it became apparent to the President (and Divisional Director) that differences could not be resolved quickly and effectively, she was encouraged to seek employment elsewhere and left the University.

Finally, the President at Northern was notably resourceful in generating the additional revenue required to implement the mandate. He utilized a variety of influential people and funding sources in order to increase athletic budgets. His strategy appeared to include establishing credibility and rapport with key individuals throughout the University and surrounding community, subsequently gaining their active support in promoting athletics and generating income. In summary, the strategy and behavior of the President at Northern was based on a strong commitment to change, was characterized by effective investments in terms of finances and personnel, and was supplemented by a willingness to assume risk and to foresee and deal directly with conflict and resistance.

Relatedly, evidence indicated that Northern proceeded more rapidly through the four Stages of Implementation than did other colleges in the State.

Because the strategy and leadership style of the President at Central was largely a matter of utilizing administrative sub-structures and other change agents to facilitate implementation of Title IX, much of the evidence related to this Principle has been presented in other sections of this Chapter (see "Evidence" in Category A). In brief, he
delegated much decision-making responsibility, as well as many specific tasks, to other participants of change, thereby assuming as little personal risk as possible. His strategy for dealing with conflict and resistance appeared to be that of indirect manipulation of forces for and against change, accompanied by mediation when necessary. He relied heavily on the judgment and integrity of an administrator within the sub-system and a second central administrator who dealt with financial affairs and personnel matters. The President's intent to comply with the mandate was clear to other change agents. He was far from performing as a dynamic leader in the change process; however, his resourcefulness in utilizing key personnel to carry out his intentions was effective in facilitating reform. Implementation of Title IX at Central proceeded at a more gradual pace than that at Northern. This variance may have been due, in part, to differences in the strategy and behavior of institutional leaders.

There was no evidence that institutional leaders at Eastern or Southern had developed change strategies or had behaved as key facilitators of reform. Consequently, they appear to have been notably ineffective as change agents in implementing Title IX in athletics.

The effectiveness of procreators in sustaining momentum toward reform was determined, in part, by the strategy employed in relating to superiors, colleagues and subordinates, and by the manner in which they interacted with other participants of change. The procreators of change at both Northern and Central demonstrated an awareness of political circumstances at their respective institutions, and interacted with colleagues and administrative officials accordingly. Further, they were sensitive to the needs and capabilities of participants within the
sub-system, and worked cooperatively with subordinates, thereby creating a climate conducive to sustained change.

The procreator at Northern saw an opportunity to increase the status and visibility of his sub-system and seized it. Working within the broad objectives of the University, and capitalizing on the available resources and supportive influence of the President, he helped to pave the way to a major national championship in women's sports. The related events had a meaningful impact on campus and within the surrounding community. Women's athletics at Northern were finally taken seriously and received the support of fans, as well as a number of influential college constituents. Further, during the course of reform, a number of key personnel who supported Title IX and favored related changes had been hired. Consequently, the momentum gathered during the first few years of Title IX implementation appeared to be an effective influence in sustaining change. As Zaltman aptly stated it in his recent work on educational change, "In the building of a value system that rewards innovation, nothing succeeds like success." Such was the case at Northern, where the President opened the doors for reform and the procreator moved women's sports to the forefront of the University and helped bring a measure of national prominence to the institution.

The procreator at Central employed a change strategy which differed significantly from that of the Divisional Director at Northern, but which was effective, considering the nature and number of institutional constraints. Her strategy was to progress gradually toward compliance with the mandate, gathering as much support from colleagues and officials as possible along the way. She was well organized, informed and persistent in her efforts to induce change. She was professional,
business-like and assertive in interactions with superiors, but never acted impulsively nor seriously threatened the value system established within the academic framework of the University. She hired young progressive women coaches when staff openings occurred, which helped to shift the balance of power within the sub-system toward proponents of change. The opinions and achievements of subordinates were recognized and valued, and all staff members had ample opportunity to participate in departmental decision-making processes. The increased support for women's athletics among influential college constituents, along with the cohesiveness and status of personnel within the sub-system, appeared to be factors conducive to sustaining change. Both factors were due largely to effective strategy and action on the part of the procreator (the Women's Athletic Director).

As change strategies developed and the two primary comparison groups progressed toward implementation of Title IX, the number of gatekeepers decreased and included only the procreator, institutional leader, and a second central administrator. The gatekeeping activities of procreators and institutional leaders paralleled the strategies and behaviors discussed above. In general, communication was simply a matter of keeping people informed of events, progress, future plans, and correspondence from external organizations and agencies as the federal regulations accompanying Title IX were revised and updated. By the time institutional priorities had been articulated and change strategies had emerged, information networks and communication patterns had been established accordingly. Those gatekeepers who acted to facilitate reform in a manner consistent with the intentions and strategy of other key change agents, continued to be included in the communication process.
Others had been removed, circumvented or replaced. In brief, gatekeepers functioned to disseminate information pertinent to the continuation of implementation activities in colleges where leaders and officials favored compliance. In the two colleges where implementation of Title IX was a low priority item, gatekeepers functioned with minimal direction and had little (if any) influence on the institutional response to the mandate. In both cases, priorities of institutional leaders were more closely related to the behavioral patterns of gatekeepers than were the priorities of government agencies (specifically, HEW).

In summary, Sub-proposition 1 was further developed and substantiated by five major principles derived from evidence related to the sub-categories of variables included in the proposition. The sub-proposition addressed the influence of specific attributes of change agents (including institutional leaders, procreators and gatekeepers) on the effectiveness of implementation efforts within institutions and sub-systems. The principles which support and clarify the sub-proposition are summarized in the paragraph below.

The effectiveness of change agents was determined, in part, by:

1) their ability to influence other participants of change; 2) the type and degree of their primary affiliations with external organizations; 3) the existence and nature of certain assumptions related to implementing the mandate; 4) their priorities and priority decisions related to implementing the mandate, and 5) the nature of the implementation strategy employed and the ability to perform related tasks. Findings related to the various components of the category of variables associated with each principle are included in the summary presented at the end of this major section (Category B).
Sub-proposition 2: The number, distribution and attributes of proponents and opponents of change influence the rate of institutional progress toward reform.

Evidence gathered throughout Phase III research indicated that the rate at which implementation of Title IX occurred in a particular institution was determined, in part, by individuals functioning in certain roles as key participants of change. These roles were identified as traditionalists, progressives, opportunists, and catalysts. The individuals identified as performing in one or more of the roles were change agents or potential change agents, but were more likely to be indirectly involved with the change process.

The same attributes which were found to account, in part, for the effectiveness of change agents, generally applied to other key participants of change. The five sub-categories of attributes include: 1) ability to influence; 2) organizational affiliations; 3) major assumptions; 4) priority decisions; and 5) strategy and action. Since the preceding discussion included a thorough examination of the relationships between the specified attributes and the effectiveness of personnel functioning in defined roles within institutions of higher education, the evidence presented hereafter will build upon the principles which have already been established (see evidence related to Sub-proposition 1). Consequently, no attempt will be made to relate each sub-category of variables to each participant in change.

Further, Sub-proposition 2 addresses the number, distribution and influence of college personnel surrounding the change agents. Individually, the role performances of key participants as described in this section may or may not be critical to the institutional rate of progress toward change. Collectively, however, the interactions and
influence of these individuals create a political climate which can be either favorable or detrimental to the implementation of mandated change.

Rationale. There are probably as many reasons why individuals assume particular political positions related to a specific issue as there are individuals involved. For example, some may find potential change threatening to their status or performance in the academic hierarchy. Others may view anticipated changes as incompatible with institutional norms or personal values. In the case of federal mandates, college constituents who reject outside interference with academic policies and practices may resist change partially because of its source. Proponents of mandated change may support efforts to reform due to past or present experiences in which they (or their significant others) have been victimized by discriminatory practices. Others may place a high value on progress and, in turn, support change which appears to be educationally sound or socially beneficial to greater numbers of college clientele. Regardless of the underlying sources of attitudes and opinions, individuals often perceive the values and implications of mandated change quite differently. Some simply state their opinions and let fate take its course. However, when anticipated personal or professional risks, compared with potential gains, appear to be maximized (or are unclear), viewpoints are likely to be expressed through attempts to accelerate or impede change. Consequently, individuals enact roles as traditionalists, progressives, catalysts, and opportunists and as such may become key participants in the change process. When the influence and behavior of these participants are sufficient to place pressure on administrators or change agents, progress toward implementation is likely to be affected accordingly.
Evidence. In order to adequately describe the climate created by the unique combination of participants of change at each sample institution, the composite of evidence for each college will be presented as a separate section. This presentation will be followed by a brief comparative summary of related conditions among the four institutions.

It is important to note that Sub-proposition 2 addresses the environment created by the existence and interactions of key proponents and opponents of change rather than the influence of each type of participant in each college. For example, although a catalyst facilitated implementation at Northern, there was no evidence of a catalyst as such at Central -- yet change occurred. In turn, the catalyst (or lack of a catalyst) is but one component in the development of an environment characterized by acceptance of efforts to implement a mandate.

Key participants of change at Northern Virginia surfaced in roles as progressives, opportunists, and a catalyst. Since both principal change agents were characterized by "progressive" educational philosophies, they tended to hire progressive personnel and reward innovative behavior among existing personnel. The climate at NVU was such that it became professionally and politically beneficial to be involved in progressive reform. This was particularly the case in reform efforts associated with the priorities of the institutional leader. One of these priorities was the elimination of sex discrimination, the intent of Title IX. Consequently, many individuals within the University emerged as progressives and supported implementation of the mandate.

The progressive climate at Northern served to unleash a number of opportunists within the various sub-systems. Two notable examples in athletics were the Divisional Director (see Principle 5 in the preceding
section) and the women's basketball coach. In the latter case, the coach was a fervent proponent of equal rights and demanded immediate equality for women in athletics from the moment Title IX was in print. She invested initial budgetary supplements in top caliber recruits, produced a winning women's team (one of the first at NVU), and generated enthusiasm and support for women's athletics. However, the rapid progress inspired by the coach created financial and publicity problems for administrators at Northern. For example, the coach demanded equal treatment for female athletes with respect to the scheduling of competitive events, transportation to events, and general availability of operational funds. Most additional resources had, however, been exhausted through accelerated recruiting activities and generous scholarships. The dilemma escalated when the news media intervened, and the coach eventually left the University. Prior to her departure, however, she had gained national recognition which enhanced her professional career, and had formed the nucleus of a team of female athletes destined to become national champions.197

Another significant participant in the change process at Northern was the President's wife. She functioned to facilitate implementation of Title IX in women's athletics as a catalyst. She regularly attended a variety of University athletic events and was thus closely in touch with the participants in the sub-system as well as the institutional leader. She provided a direct link between female athletes and the college President, and clearly articulated her position on equal rights, both verbally and behaviorally. Numerous sources contended that she was a visible and significant facilitator of change, although her involvement was external to the structural organization and was indirect.198
In summary, the combination of progressives and opportunists, supplemented by the activities of a catalyst, created an environment among NVU constituents which accelerated progress toward implementation of Title IX.

The political composition of University constituents at Central Virginia has been examined at length in preceding discussions. Two opposing forces, formed by various interest groups for and against major reform in college athletics, gradually emerged as major coalitions. The two coalitions can be described as progressives and traditionalists. As open conflict ensued, the traditionalists gained influence primarily through legitimate power resources. Several held positions on the Board of Visitors or controlled the financial purse strings of revenue generated through outside resources, including alumni donations. The progressives gained power and influence from sheer numbers, as many faculty and students voiced opinions in support of change, and from the high academic status of several "progressive" leaders in the educational system. In essence, the opposing forces appeared to balance each other, creating a climate in which the activities of the change agents themselves took on added importance in determining the future course of events. It is important to note that due to the balance of power between proponents and opponents of change, neither the traditionalists nor the progressives had a significant or long-lasting effect with regard to accelerating or impeding progress toward reform. Other variables, including the administrative organization, the effectiveness of change agents and the implications of intervention (see Category C), had greater impact on the rate and degree of Title IX implementation at Central.

The athletic department at Eastern functioned under the direction of a single individual who worked independently and autonomously in
administering the program throughout most of the 1970s. The Athletic Director was basically a traditionalist, and influenced the course of the development of women's sports through his activities as a gatekeeper. The women's athletic program grew in breadth as the number of interested participants increased. However, the development of equal opportunities for women in athletics (in terms of leadership, depth and financial backing) was not among his priorities. Women's sports appear to have expanded only to the extent that they did not threaten men's athletics. The lack of a definable and influential group of progressives, and the absence of opportunists, catalysts and dedicated change agents in upper administrative levels, created a climate in which the traditional beliefs and practices of the Athletic Director were generally unopposed. Recent personnel changes have increased the potential for shifting the balance of power and influence toward producing an environment in which change may be encouraged or supported. However, throughout the investigative phases of this study, the lack of proponents of change contributed to the static nature of college sports in terms of Title IX implementation, even though the Athletic Director was not particularly powerful nor overtly antagonistic toward related change.

Two vivid and powerful traditionalists governed athletics at Southern Virginia. Progressives appear to have been scattered among University constituents at lower levels of the academic hierarchy. However, no coalitions or major interest groups formed in support of implementing Title IX. Individuals who attempted to apply pressure on administrators to comply with the mandate were quickly silenced by removing them from responsible positions within the sub-system or through verbal and written reprimands. Administrators, functioning
as gatekeepers, were apparently able to convince numerous constituents (and attempted to convince the researcher) that the institution was aware of and in compliance with Title IX. Data gathered through the course of research consistently showed that this was not the case. A segment of an interview with one University official appears below and reflects the general attitude of administrative interviewees toward implementation of the mandate.

Question: Do you believe your institution is in full compliance with Title IX?
Answer: Yes, absolutely and unequivocally.

Question: Can you elaborate on some specific evidence related to administrative policy for implementing Title IX?
Answer: The most important evidence is that we [the central administration] see all individuals as being equally important. Female students here pay more than half of the tuition and fees, and deserve their share of opportunities to participate in campus activities. Honey, when we go to a football game, we are there just as much to see the cheerleaders and the boys and girls in the band as we are to see the football players. Everyone receives equal treatment and recognition.

Clearly, the traditional orientation and utilization of power resources by administrators created a climate in which change of major proportions was unlikely to occur. Further, there was no identifiable catalyst, and the environment was not conducive to the emergence of progressives or opportunists who might participate in key roles in the change process.

In summary, evidence at the four sample institutions supported Sub-proposition 2 by pointing out the importance of the internal climate created by the interaction among key participants functioning in various roles in support of (or in resistance to) change related to the imple-
mentation of Title IX. Numerous progressives surfaced as individual proponents of change or as members of coalitions of interest groups in the two primary comparison institutions. The progressives encountered no significant resistance at Northern, and implementation efforts accelerated amidst the added influence of opportunists and a catalyst. The progressives at Central neutralized the traditionalists, making it possible for change agents to move toward significant reform. Traditionalists held the balance of power at Eastern and Southern. Both college constituencies were characterized by a notable lack of progressives, opportunists and catalysts. In brief, the political environments at both Northern and Central were conducive to change, while those at Eastern and Southern appeared to perpetuate the status quo.

Summary

The core proposition for Category B, Attributes of Key Personnel, addressed educational change as a process and product of the people involved as they interact and function in various roles as change agents and key participants of change. Evidence indicated that the effectiveness of change agents (performing in roles as institutional leaders, pro-creators and gatekeepers) was influenced by certain personal and professional attributes. These attributes (characteristics, attitudes, values and behaviors) of change agents were identified as: 1) ability to influence; 2) organizational affiliations; 3) major assumptions; 4) priority decisions; and 5) strategy and action. A sixth major variable in Category B included the number, distribution and attributes of other key personnel within an institution as they functioned individually in specific roles as proponents or opponents of change and collectively to produce a political climate favorable or detrimental to the implementation of Title IX.
Category C: Intervention

The two major categories of variables previously discussed have focused primarily on activities, processes, and interactions among groups and individuals within the institution as they influence the internal environment and, relatedly, affect progress toward Title IX implementation. Intervention focuses on the existence and operation of external stimuli which have significant impact on the institutional environment to alter the direction and pace of reform. This category of variables relates directly to the rate and course of institutional progress through any or all of the four Stages of Implementation.

Core Proposition: Effective implementation of a federal mandate is contingent upon intervention which creates a situation or climate in which change is perceived by influential leaders as being important.

Intervention may occur in the form of a single major event, a series of related or isolated events, or as a relatively continuous influence. Intervention is unplanned, and may occur in any stage of the implementation process or may never occur.

Although intervention is not planned and although it occurs in some institutions and not in others, the potential relevance of this category of variables is critically important. Further, evidence indicated that the stronger the internal constraints (or restraints) existing to impede reform, the greater the need for intervention to induce and sustain change.

Often it is through intervention that a performance gap is recognized, acknowledged, and considered from an objective, problem-solving perspective. The ensuing transition enables personnel to focus on developing a change strategy, and is often accompanied by a decrease in rhetorical debate centered around values and assumptions and an in-
crease or acceleration in activities related to practical change. When a performance gap is brought to the attention of and acknowledged by influential administrators or leaders within an institution, decisions can and will be made to reduce the degree of difference between what is expected or desired in terms of reform and what is currently occurring.

In the case of federal mandates, the unique potential exists for government activities to function as a special type of intervention variable. When the regulations or enforcement procedures which accompany a mandate are altered through legislation, executive orders, or judicial action, it is possible that such events may create an acceleration or even a reversal of established relationships and normal progress through the Stages of Implementation. The effects, if any, of changes in the status and interpretation of the mandate are, in turn, dependent upon other key variables in all three major categories included in this chapter. Because the impact of recent government activities related to the re-interpretation of Title IX athletic regulations had not been clearly established during the research phases of this study, evidence was not available to substantiate the validity or theoretical relevance of this type of government intervention as a significant variable influencing the change process. Consequently, further discussion concerning the nature and function of this particular variable will be limited to exploring the implications of this study (see Chapter VI).

Definition of Terms. The pivotal concept linking the occurrence of an intervention with measurable, practical change is the creation or intensification of a performance gap. Zaltman describes performance gaps as "discrepancies between what an individual or group is doing and what decision makers believe an individual or group ought to be doing."\textsuperscript{207}
The perception of a performance gap by influential leaders within an institution stimulates a search for alternative actions which would better satisfy the needs of participants or the requirements of the mandate. When the search leads to an acceptable course of action, that action is implemented, and the performance level is brought up to the level of expectation or demand, change is said to have occurred.

Rationale. A federal mandate is, in itself, a form of intervention with the policies, procedures and practices of institutions of higher education: an external agency demands and requires colleges to meet certain standards and societal obligations. Further, a mandate is generally precipitated by perceptions of national political leaders and decision-makers that a performance gap exists between current and desired educational purposes and practices. Because the need for change and the remedial action designed for closing the performance gap are perceived and articulated by outside sources, internal leaders and constituents may or may not agree that change is important or that remedial recommendations are appropriate in a particular institution. Relatedly, the nature and degree of response to a mandate will vary considerably among colleges and universities. Zaltman supports this concept and states:

The locus of a perceived performance gap is very important. Performance gaps may be perceived by either outsiders or insiders, or by both. If the gap is perceived by outsiders, then the outside change planner must establish this perception within the target group. Personnel may disagree strenuously about whether or not a gap exists. Even with consensus, considerable disagreement may exist as to what appropriate remedial action is necessary for closing the gap.

A second problem associated with prescribing educational change through federal mandates is the nature of accompanying enforcement policies and procedures (the withdrawal of federal funds). For example,
research cited in Chapter 2 of this study indicated that although hundreds of complaints related to alleged non-compliance with Title IX had been filed by female athletes and personnel, few institutions had been investigated and not one college or university had been penalized by the withdrawal of federal financial assistance in any form. Two assumptions are commonly associated with the enforcement of federal mandates: 1) there are no clearly discernible rewards for institutions which move rapidly toward full compliance; and 2) the threat of actually being penalized for non-compliance is minimal in most instances. With regard to a previously enacted federal mandate, Baltman states:

Many schools comply with integration guidelines not because of a general commitment to integrated schooling, but because of a commitment to continued federal support and to peaceful conduct of daily activities. . . . When the issue is sufficiently important to the persons involved, those who find themselves complying may feel guilt, anger, and frustration. They have been placed in a dilemma. . . . Where change occurs because the environment has been made more conducive to change, such goal conflict is less likely. . . . Change is adopted because it is something to which a commitment is attached. . . . The basis for commitment has implications for the success of a change strategy. Where the individual is seeking other rewards, his change-related behavior will last only as long as those rewards remain important and unattained. If he is avoiding punishment, his change behavior depends on vigilance on the part of the influencing agent. Thus, the change-related behavior will be unstable. 210

In view of the preceding discussion, it became increasingly clear that the initial intervention, a federal mandate prescribing educational change, often falls short of creating an institutional climate in which major reform is perceived as important and worthwhile. In order to generate momentum for initiating and sustaining related institutional change, a performance gap must be perceived by leaders and constituents within the college community. There are three primary forces capable of creating the internal climate necessary for educational
participants to respond effectively in implementing a mandate: 1) institutional leaders with the power, authority and ability to act and influence hold values and priorities similar to those implied in the mandate, and are committed to making the related changes which bring about full compliance; 2) a predominance of influential college constituents who collectively favor reform are strong enough to overcome resistance, and are led by capable and effective change agents in key positions; and 3) a second intervention occurs and influences the institutional environment in a manner which causes key participants or administrative leaders to acknowledge a performance gap and to view change as being necessary or beneficial. When all three conditions exist, major reform is likely to occur. When institutional leaders are not initially committed to compliance with the mandate or when they have not been persuaded by participants to make a strong commitment to change, intervention becomes critical in precipitating efforts to reform.

Intervention may occur as a single major event or in the form of continuous (related or unrelated) forces which function to increase the awareness of a need for change among constituents and administrators. Participants may experience feelings of dissonance or dissatisfaction with respect to traditional practices and procedures, or may perceive some reward (such as increased visibility, academic status or recognition) to be associated with efforts to facilitate change. In some instances, it may appear that the risks involved in maintaining the status quo are greater than those associated with change. In all cases, intervention serves to induce or intensify recognition that a performance gap exists between the educational practices as intended and prescribed by the
mandate and the policies and procedures characteristic of the in-
stitution, thereby creating a climate conducive to change.

In summary, intervention causes key personnel to experience in-
creased awareness of the need for or benefits of change toward compliance
with the mandate. In turn, performance expectations change, creating
an institutional climate conducive to implementation. In effect, the
primary impetus for change has thereby been transferred from external
forces to internal forces. Implementation appears to be important and
worthwhile to those directly involved in the change process, and related
reform is likely to occur.

Evidence. In this study, intervention occurred at both primary
comparison groups and was characterized by series of related events
which created a climate vulnerable to the impact of one or two major
events. Intervention, in the form of relatively continuous forces,
influenced the environment surrounding participants involved in efforts
to implement Title IX, and served to increase the levels of awareness,
visibility, and expectations of college constituents associated directly
and indirectly with women's athletic programs and practices. In each
case, when major intervention occurred, its impact fell on fertile
territory, and its force was critical in shaping the future course of
reform. The locus and nature of perceived performance gaps throughout
the various Stages of Implementation were crucial in influencing change
at both institutions.

At Northern Virginia, the critical source of intervention was
the public news media. The series of events associated with efforts
to provide greater opportunities for women in athletics not only created
a climate in which intervention would have significant impact on reform,
it also precipitated the occurrence of major intervention.
Three primary factors influenced the nature and existence of the perceived performance gap at Northern: 1) a catalyst intervened to gradually increase administrative awareness of the needs and capabilities of women involved in the athletic program; 2) changes in personnel resulted in changes in expectations among key participants of reform; and 3) the success of women's sports during early stages of reform increased the visibility of the institution, as well as the visibility of attitudes and behaviors of decision-makers. The activities and influence of the catalyst were discussed in the evidence section of Category B and need no further elaboration. Key personnel changes included: 1) hiring practices which placed dynamic women coaches in leadership roles in the athletic program; and 2) recruiting practices which brought a number of talented and enthusiastic female athletes to the campus. The third factor, a notable increase in the competitive success of women's teams at NWW, served to focus significant campus-wide and public attention on the University's athletic program. Consequently, the climate preceding and precipitating major intervention was one in which female coaches and players were impatient and anxious for opportunities conducive to greater achievements, key people were aware of existing (or remaining) inequities between the men's and women's athletic programs, and success had opened paths for communication between key participants in women's athletics and the public.

The critical intervention factor at Northern, however, appears to have been a series of reports by public news media. During an interview with local reporters, a woman coach expressed her dissatisfaction with the failure of the University to provide equality in funding and other accommodations for male and female athletes. Impatient with the
rate at which progress toward equal opportunity was occurring, she openly attacked administrators for failing to provide comparable programs and for failing to meet demands for compliance with Title IX. Her statements received the attention of public newspapers and other media across the state and, to a lesser extent, throughout the region. The initial outcry was followed by a series of interviews with players, administrators and additional statements by the coach. The situation ended in a "public truce" between the coach (and her principal supporters) and the central administration. Reports that the issue had been settled among University constituents were less widely publicized than were the statements made during the heat of controversy.

Because of the University environment at the time of the intervention, and because administrators had consistently expressed a willingness to comply with the mandate prior to the intervention, there was great pressure on key officials to continue with (and even accelerate) progress toward implementation of Title IX. During the controversy, administrative press statements reflected a desire to serve all students on a non-discriminatory basis. Officials assured constituents, as well as the public, that progress toward reform would continue as rapidly as University resources would allow. Consequently, the administrators had publicly declared a position in which the University recognized a commitment to implement Title IX. Further, the future course of events was apt to be closely scrutinized by college constituents, local citizens and media representatives, as well as the participants involved.

The effects of public intervention were minimized by some top level administrative interviewees. Most respondents disagreed with that
interpretation, stating opinions which reflected the critical nature of the intervention as it related to the change process. One source expressed the latter point of view:

Prior to the public conflict, the advancement of women's sports had received a good deal of lip service and limited boosts in finances for hiring personnel and recruiting athletes. Some administrators had never worked with non-traditional women before, and they didn't anticipate the rapid move to success. Once we began to win, our team's enthusiasm spread, the college was in the public eye. The press releases spotlighted the whole situation and placed the reputation of the college and certain administrators on the line. They couldn't back down from promises to upgrade women's sports. Besides looking bad to the public, they would have lost the best athletes [NVU] ever had when the coach left campus. The fans and the press reports gave us the ammunition to fight for equal treatment, if we needed to use it. But most of the administrators seemed to sense this, and took command in solving the problems so the program continued to get better. The publicity caused a lot of hard feelings at the time, but I don't think we'd be where we are today if it hadn't been for [the coach's] interaction with the reporters.  

Intervention occurred early and repeatedly throughout the Title IX implementation process at Central Virginia. Due to the existence of significant institutional constraints influencing the rate and progress of change, intervention appeared to be more crucial in shaping reform at Central than was the case at Northern. The factor precipitating intervention at Central appeared to be a high level of sophistication among college constituents with respect to the applicability of specific legal statutes and processes, as well as the general nature and implications of discriminatory practices.

Almost simultaneously with the arrival of Title IX on campus, a female student filed a complaint with HEW which focused on the inequities between men's and women's athletic programs at Central. A federal official visited the campus and recommended that the University take steps to remedy the existing inequities as outlined in the regulations.
accompanying the mandate. No punitive action was taken. Nevertheless, the initial intervention served to raise the "level of consciousness" among central administrators and women's athletic personnel. It became clear that change was needed in order to comply with the mandate. It was also apparent that the Title IX implementation process at the University would be scrutinized, to some degree, by government officials. In turn, planning activities and efforts to comply accelerated, and related change occurred.

Two years later, a second formal complaint was filed by a student. She addressed the lack of available scholarship opportunities for female athletes. Again, an HEW investigator appeared on campus and the University was strongly encouraged to remedy the situation. Priorities in the initial implementation strategy were altered and the college made progress toward equalizing the number of athletic scholarships for men and women. In 1973, a third complaint was filed and another federal investigation followed. Although the latter case involved age discrimination, and was a personnel problem rather than one involving athletic participants, the complaint placed the women's sports program (as well as the University as a whole) under government scrutiny for the third time within five and one-half years.

Due in part to the nature and scope of interactions between college constituents and federal officials, institutional administrators gradually acknowledged the existence and importance of a performance gap and began to accept responsibility for making the necessary decisions and changes to remove the sources of conflict. Further, the succession of events related to federal intervention had helped to raise the consciousness level, and likewise the level of expectations, among key
personnel in the women's athletic program. In turn, pressures for change increased from sources within the institution itself. Progress toward implementation appeared to accelerate accordingly.\textsuperscript{221}

Another condition related to the institutional climate at Central during the period under investigation contributed to maximizing the impact of federal intervention as a change variable. The Commonwealth of Virginia was under government scrutiny for failing to racially integrate public colleges and universities. Central, a highly selective institution of higher education, had made only limited progress in increasing undergraduate minority percentages throughout the decade.\textsuperscript{222}

The racial issue, combined with a strong desire among campus leaders to maintain traditionally high academic standards, appeared to create an institutional climate in which the increasing involvement of government officials in college affairs was not welcomed.\textsuperscript{223} Eventually, relatively high risks came to be associated with non-compliance with Title IX. In contrast, it appeared that perhaps compliance was not without reward. As a result, Title IX implementation was perceived by many to be worthwhile and important to the future of the college.\textsuperscript{224} One source summarized the existing climate and the critical nature of intervention as a change variable as follows:

Many faculty members and administrators are concerned about the probing presence of government officials on campus. They resent interference, resist change, and don't want the reputation of being suspects or violators with HEW. Also, our racial minority quotas aren't what they could be but, so far, HEW hasn't bothered us much on that issue. However, a compliant about one type of violation flags other government agencies to potential problem areas in a college. The administrators here want to prevent this from happening. If they have to generate funds for women's sports in order to keep federal officials off campus, they'll find the money to do it. Supporting women's sports now is easier than trying to find a solution for the long term effects of what might happen if the federal investigations continue. Because of our traditional nature, I would attribute ninety percent of
the progress in women's athletics here to Title IX and the fact that we were one of the few institutions that HEW actually investigated.

**Summary**

In summary, intervention (precipitated and intensified through increased levels of awareness, expectations and visibility of key participants) occurred at both primary comparison groups. The forces of intervention operated to sustain change at one institution and to induce and sustain change at the other. Through intervention, a performance gap was acknowledged and dealt with by administrators, and efforts to implement Title IX accelerated. Further, intervention created changes in institutional climates whereby internal participants of change (rather than external sources) provided an increasing proportion of the major impetus for reform. The forces accompanying intervention created or intensified perceptions of key personnel that implementation of the mandate was worthwhile and important to the majority of constituents in the institution. The complete lack of evidence that any type of intervention (other than receipt of the mandate itself) occurred at Eastern or Southern is critical to the "Theory of Prescribed Academic Change."

In conclusion, Chapter V described institutional progress through four related Stages of Implementation and addressed the nature, scope and function of three major Categories of Variables which influenced the effectiveness of reform as colleges attempted to comply with or respond to Title IX. Chapter VI focuses on: 1) summarizing the major components of the theory; 2) integrating the Categories of Variables with the four Stages of Implementation; 3) evaluating the theory in terms of related theories of academic change; and 4) briefly discussing several implications of this research.
Footnotes for Chapter V

1. Interviews, Northern Virginia University, September, 1979.

2. Interviews and samples of inter-departmental correspondence, Northern Virginia University.

3. Minutes of the Board of Visitors, Northern Virginia University, September, 1974.

4. Interviews, Northern Virginia University, September, 1979.


6. Interviews and campus publications, Northern Virginia University, September, 1979.

7. Interviews, Central Virginia University, August and September, 1979.

8. Interviews, Central Virginia University, August and September, 1979.

9. Interviews and written correspondence from personal files of interviewees, Central Virginia University, September, 1979.

10. Interviews, Central Virginia University, September, 1979.


12. Interviews, Central Virginia University, September, 1979.

13. Interviews, Central Virginia University, September, 1979.


15. Interviews, Central Virginia University, September, 1979.

16. Interview and correspondence from personal files of interviewees, Central Virginia University, September, 1979.

17. The Women's Caucus at Central Virginia University originated in 1975 as an ad hoc Affirmative Action Committee which was instrumental in convincing central administration to hire an Affirmative Action Director. The Committee evolved into a Faculty Women's Caucus in January, 1979.

18. Interviews, Central Virginia University, September, 1979. Memorandum from the President to an interviewee, Central Virginia University, May 2, 1979.
Interviews, Eastern Virginia University, August and September, 1979.


Interviews, Eastern Virginia University, September, 1979.

Interview, Eastern Virginia University, September, 1979.

Interviews, Southern Virginia University, August and September, 1979. Campus correspondence from the personal files of interviewees, Southern Virginia University, fall, 1976 through spring, 1979.

Comparisons are based on a composite review and synthesis of all interviews conducted and materials gathered throughout Phase III research.


Telephone interviews, Phase II research, May through August, 1979.

Telephone interviews with respondents from twelve public colleges and universities in Virginia, May, 1979 through August, 1979.

Interview, Eastern Virginia University, August, 1979.


Personal interviews, Northern Virginia University, August, 1979.

Personal interviews, Central Virginia University, August and September, 1979.

Personal interviews at the four sample institutions, August and September, 1979.
36 Personal interviews, Northern Virginia University, August and September, 1979.

37 Personal Interviews, Central Virginia University, August and September, 1979.

38 Personal Interviews, Eastern Virginia University and Southern Virginia University, May through September, 1979.

39 Composite of interview data, Phase III research, July through September, 1979.

40 See Chapter IV.

41 This figure was calculated from data obtained in Phase II research.

42 Data gathered through telephone interviews, Phase II research, May through August, 1979.

43 Interviews, Phase III research, August and September, 1979.

44 Composite of interview data, Phase III research, August and September, 1979.

45 Composite of interview data, Phase III research, August and September, 1979.

46 Composite of interview data, Phase III research, August and September, 1979.

47 See comparative data on men's and women's athletic programs in Chapter IV.

48 The 1975-76 academic year was the period in which institutions were initially required to respond to Title IX.

49 Interviews, Northern Virginia University, September, 1979.

50 Interviews, Northern Virginia University, September, 1979.

51 Interview, Northern Virginia University, September, 1979.

52 Interviews, Central Virginia University, September, 1979.

53 Interviews, Central Virginia University, August and September, 1979.

54 Interviews, Central Virginia University, August and September, 1979.

55 Interviews, Eastern Virginia University, August and September, 1979.
Interviews, Eastern Virginia University, August and September, 1979.

Interviews, Eastern Virginia University, September, 1979.

Interview, Eastern Virginia University, September, 1979.

Interviews, Southern Virginia University, September, 1979.

Interviews, Southern Virginia University, September, 1979.

Interview, Southern Virginia University, September, 1979.

See Tables 7 and 8, Chapter IV.

Composite of interview data from the four sample institutions, August and September, 1979.

Composite of interview data from the four sample institutions, August and September, 1979.

Composite of interview data from the four sample institutions, August and September, 1979.

Interviews, Northern Virginia University, September, 1979.

Interviews, Northern Virginia University, September, 1979.

Interviews, Northern Virginia University, September, 1979.

Interview, Northern Virginia University, September, 1979.

Interviews, Central Virginia University, September, 1979.

Interview, Central Virginia University, September, 1979.

Interview, Central Virginia University, September, 1979.

Interviews, Eastern Virginia University, August and September, 1979.

Interviews, Eastern Virginia University, August and September, 1979.

Interview, Eastern Virginia University, September, 1979.

Interview, Eastern Virginia University, September, 1979.

Interviews, Southern Virginia University, September, 1979.

Interview, Southern Virginia University, September, 1979.

Interview, Northern Virginia University, September, 1979.

Composite of evidence gathered during Phase III research.

Interviews, Northern Virginia University and Southern Virginia University, September, 1979.

Interviews, Northern Virginia University, September, 1979.

Interviews, Northern Virginia University, September, 1979.

Interviews, Northern Virginia University, September, 1979.

Interviews, Northern Virginia University, September, 1979.

Interview, Northern Virginia University, September, 1979.

Interview, Southern Virginia University, September, 1979.

Interview, Southern Virginia University, September, 1979.

Interview, Southern Virginia University, September, 1979.

Interviews, Northern Virginia University and Central Virginia University, September, 1979.

Interviews, Eastern Virginia University and Southern Virginia University, August and September, 1979.

Interviews, Northern Virginia University and Central Virginia University, August and September, 1979.

Interviews, Eastern Virginia University and Southern Virginia University, September, 1979.

Interviews, Northern Virginia University, September, 1979.

Interviews, Central Virginia University, August and September, 1979.

Interview, Eastern Virginia University, September, 1979.

Interviews, Eastern Virginia University, August and September, 1979.

Interviews, Southern Virginia University, September, 1979.

Interview, Southern Virginia University, September, 1979.
Interviews, Central Virginia University, August and September, 1979.

Interviews, Central Virginia University, August and September, 1979.

Interviews, Central Virginia University, August and September, 1979.

Interview, Central Virginia University, September, 1979.

Interview, Central Virginia University, September, 1979.

Interviews, Central Virginia University, September, 1979.

Interviews, Central Virginia University, September, 1979.

Interviews, Central Virginia University, September, 1979.

Interviews, Central Virginia University, September, 1979.

Interviews, Central Virginia University, September, 1979.

Interview, Central Virginia University, September, 1979.

Interviews, September, 1979; minutes of the Athletic Policy Committee, 1974-1978; and minutes of the Board of Visitors, 1975-1978; Central Virginia University.

Interviews, Central Virginia University, September, 1979.

Composite of interview data, Central Virginia University, August and September, 1979.

Interviews, Central Virginia University, August and September, 1979.

Interview, Central Virginia University, September, 1979.

Interviews and printed brochures, Central Virginia University, September, 1979.

Interviews, Central Virginia University, September, 1979.

Interviews, Central Virginia University, September and December, 1979.

Interview, Central Virginia University, September, 1979.

Composite of interview data, Central Virginia University, August and September, 1979.
123 Interview, Central Virginia University, September, 1979.

124 Composite of interview data, Northern Virginia University, September, 1979.

125 Composite of interview data, Eastern Virginia University, September, 1979.

126 Composite of interview data, Eastern Virginia University and Southern Virginia University, August and September, 1979.


128 Ibid., p. 3.


130 Ibid., pp. 77-80.


132 Ibid., p. 303.

133 Composite of interview data from the four sample institutions, August and September, 1979.

134 Composite of interview data from the four sample institutions, August and September, 1979.

135 Interview, Northern Virginia University, September, 1979.

136 Interviews, Central Virginia University, September, 1979.

137 Interviews, Central Virginia University, August and September, 1979.

138 Interviews, Eastern Virginia University, August and September, 1979.

139 Interview, Southern Virginia University, September, 1979.

140 Interview, Southern Virginia University, September, 1979.

141 Interview, Northern Virginia University, August, 1979.


143 See evidence presented in Sub-proposition 2, Category A in this Chapter.
Interviews, Northern Virginia University, September, 1979.

Interviews, Central Virginia University, September, 1979.

Interviews, Northern and Central Virginia Universities, September, 1979.

Interviews, Eastern Virginia University, August and September, 1979.

Interviews, Southern Virginia University, September, 1979.

Interviews, Northern Virginia University, September, 1979.

Interviews, Central Virginia University, September, 1979.

Interviews, Eastern Virginia University, August and September, 1979.

Interviews, Southern Virginia University, September, 1979.

Composite of interview data and correspondence from personal files of interviewees, Phase III research, August and September, 1979.

Interviews, Northern Virginia University, September, 1979.

Interviews, Northern Virginia University, September, 1979.

Interviews, Northern Virginia University, September, 1979.

Interviews, Northern Virginia University, September, 1979.

Interviews, minutes, articles from local news media and correspondence from personal files of interviewees, Central Virginia University, August and September, 1979.

Interview, Central Virginia University, September, 1979.

Interviews, Central Virginia University, September, 1979.

Interview, Central Virginia University, September, 1979.

Interviews, Central Virginia University, September, 1979.

Interviews, Eastern Virginia University, September, 1979.

Interviews and correspondence from personal files of interviewees, Southern Virginia University, September, 1979.

Interviews, Southern Virginia University, August and September, 1979.

Interviews, Northern Virginia University, September, 1979.

Interviews, Central Virginia University, September, 1979.
167 Interviews, Eastern Virginia University and Southern Virginia University, August and September, 1979.

168 Interview, Northern Virginia University, September, 1979.

169 Interviews, Eastern Virginia University and Southern Virginia University, August and September, 1979.

170 Interviews, Central Virginia University and Northern Virginia University, August and September, 1979.

171 Interviews, Northern Virginia University and Central Virginia University, August and September, 1979.

172 Interview, Northern Virginia University, September, 1979.

173 Interview, Eastern Virginia University, August, 1979.

174 Composite of interview data, Northern Virginia University and Eastern Virginia University, August and September, 1979.

175 Interviews, Central Virginia University, September, 1979.

176 Composite of interview data, Southern Virginia University, September, 1979.

177 Interviews, Northern Virginia University, September, 1979.

178 Interviews, Central Virginia University, August and September, 1979.

179 Interviews, Central Virginia University, August and September, 1979.

180 Interviews, Eastern Virginia University, August and September, 1979.

181 Interview, Eastern Virginia University, September, 1979.

182 Interview, Southern Virginia University, September, 1979.

183 Composite of interview data, Northern Virginia University, September, 1979.

184 Interviews, Northern Virginia University, September, 1979.

185 Interviews, Northern Virginia University, September, 1979.

186 Composite of data gathered during Phase II and Phase II re-search, May through September, 1979.

187 Interviews, Central Virginia University, August and September, 1979.
188. Interviews, Eastern Virginia University and Southern Virginia University, August and September, 1979.

189. Interviews, correspondence and printed materials from the personal files of interviewees, Northern Virginia University, September, 1970; printed public relations brochures, Athletic Office, Northern Virginia University, 1978-79.


191. Interviews, Central Virginia University, August and September, 1979.

192. Interviews, Central Virginia University, August and September, 1979.

193. There was no evidence at Eastern Virginia University or Southern Virginia University which showed that procreators had established change strategies for implementing Title IX. Further, since progress toward compliance was minimal, there was no evidence that programs had moved toward a stage of reform where the potential for sustained change could be evaluated.

194. Composite of interview data, Phase III research, August and September, 1979.


196. Interviews, Northern Virginia University, September, 1979.

197. Interviews, Northern Virginia University, September, 1979.

198. Interviews, Northern Virginia University, September, 1979.

199. Interviews, Central Virginia University, August and September, 1979.

200. Interviews, Central Virginia University, August and September, 1979.

201. Composite of interview data, Central Virginia University, August and September, 1979.


203. Interviews and correspondence from the personal files of interviewees, Southern Virginia University, September, 1979.

204. Composite of interview data gathered during Phase II and Phase III research, May through September, 1979.
205 Interview, Southern Virginia University, September, 1979.

206 Composite of interview data, Southern Virginia University, September, 1979.


208 Ibid., p. 22.

209 Ibid., p. 22.

210 Ibid., pp. 83-84.

211 Composite of interview data, Northern Virginia University, September, 1979.

212 Interviews, Northern Virginia University, September, 1979.

213 Interviews, Northern Virginia University, September, 1979; articles published in local and regional newspapers available in libraries at Northern Virginia University and Virginia Commonwealth University, Richmond, Virginia (November, 1976 through May, 1977).

214 Ibid.

215 Ibid.

216 Interview, Northern Virginia University, September, 1979.

217 Interviews and correspondence from personal files of interviewees, Central Virginia University, September, 1979.

218 Interviews, Central Virginia University, September, 1979.

219 Interviews, Central Virginia University, September, 1979.

220 Interviews, Central Virginia University, September, 1979.

221 Interviews, Central Virginia University, September, 1979.

222 Correspondence and reports from personal files of interviewees, Central Virginia University, September, 1979.

223 A number of interviewees expressed or supported this viewpoint, and many did not. No one, however, refuted it, denied it, or produced any data which would preclude use of the information as admissible evidence.

224 Interviews, Central Virginia University, September, 1979.

225 Interview, Central Virginia University, September, 1979.

226 Composite of data gathered during Phase II and Phase II research, Eastern Virginia University and Southern Virginia University, May through September, 1979.
The implementation of federal mandates in institutions of higher education occurs in four consecutive stages: 1) Infusion; 2) Preparation and Policy Formation; 3) Trial and Transition; and 4) Policy Execution. The rate and degree of institutional progress through the four stages are dependent upon three major categories of variables including: 1) Administrative Organization; 2) Attributes of Key Personnel; and 3) Intervention. When the combination and influence of these major variables within an institution facilitate progress through the four stages of implementation, a mandate will be implemented effectively. Conversely, in institutions in which variables in one or more of the three categories function to impede or fail to facilitate progress through the four stages of implementation, compliance with the mandate will be minimal, at best.

**Major Theoretical Components**

The following is a brief description of the three major components comprising the Theory of Prescribed Change:

1. **Stages of Implementation.** Progress toward implementation of a federal mandate occurs in four overlapping and consecutive stages. Several phases of institutional "readiness," or receptivity to change, accompany progress through the various sub-processes associated with each stage and account for the linkages between the four stages. An
institution must go through several alternating phases of activity and response in each stage in order to reach the phase of readiness necessary to advance to the next stage (see Chapter V).

2. **Categories of Variables.** The rate and degree of institutional progress through the various stages of implementation, and the scope of implementation efforts throughout the various sub-systems of a university, are dependent upon the influence and interaction of three major categories of variables. Variables within each category function independently and in combination to enhance or impede organizational change related to compliance with a federal mandate. Three categories, and the key variables which comprise each category, are briefly reviewed below.

   A. **Administrative Organization.** In order to implement major change in a complex organization, the mechanisms and procedures of governance and administration must facilitate effective communication and control of the change process. Once the decision to change has been made by central administrative leaders, they must act to facilitate institutional adaptation, structurally and procedurally, to accommodate progress toward reform. Successful implementation of a mandate is dependent, in part, on the effective development and use of administrative sub-structures as well as on the discovery (or placement) and use of effective change agents within each sub-system.

   B. **Attributes of Key Personnel.** Specific attributes (characteristics, attitudes, values and behaviors) of key participants of change influence the rate and degree of institutional progress toward implementation of a federal mandate. Key participants can be identified as change agents (designated institutional leaders, gatekeepers, and procreators); proponents of change (designated progressives, opportunists and catalysts);
and opponents of change (traditionalists). Five sub-categories of attributes can be identified as determinants of the effectiveness of change agents and other key participants: 1) ability to influence; 2) organizational affiliations; 3) major assumptions; 4) priority decisions; and 5) strategy and action. Depending upon the attributes and distribution of key participants of change, and the interactions between participants as they function in various roles to induce or impede change, progress toward implementation of a mandate may be either enhanced or inhibited. The attributes of persons functioning in roles as change agents influence the effectiveness of their efforts to initiate and sustain change. With respect to other key participants in the change process, the collective interaction and influence of these individuals as they function (according to related attributes) in roles as proponents and opponents of change, produces a political climate favorable or detrimental to the implementation of mandated change. The political climate generated by proponents and opponents of change emerges as a sixth variable influencing the effectiveness of change agents as they attempt to implement a mandate.

C. Intervention. Effective implementation of a federal mandate is contingent upon intervention which creates a climate in which change is perceived by influential leaders as being important. A federal mandate is a form of intervention with the policies and practices of institutions of higher education. Because the directive for change is imposed upon colleges and universities by external sources, internal members and leaders may or may not agree that related changes (particularly those of major proportion) are important. Consequently, the initial intervention, a federal mandate prescribing educational change, generally
falls short of creating the institutional climate necessary for educators to respond effectively in implementing the mandate. In many instances, a second intervention is necessary to produce major change. Often it is through the second (or subsequent) intervention that a performance gap (a discrepancy between what the members of an organization are doing and what decision-makers believe they ought to be doing) is recognized, acknowledged and eliminated. Depending upon the nature and effect of conditions related to the two other major categories of variables, intervention may be the most critical factor in determining the rate, degree and scope of implementation of mandated change in a particular institution.

3. Integration of Categories and Stages. A complex and multidirectional set of relationships exists among categories of variables and between the categories and the stages of implementation (see Figure 1, Chapter III). No direct patterns of cause and effect pertain to all situations, nor are specific variables linked exclusively with any particular stage of implementation. Rather, the combined effects of interactions and relationships determine the rate and course of the change process within a specific institution. For example, intervention may occur during any stage of the implementation process to influence the rate and direction of progress toward compliance. Further, direct administrative control and the development of sub-structures may accompany reform efforts early in the implementation process, serving to minimize the influence of other variables such as the attributes of other participants of change. In other instances, administrators may delay taking direct action and the combined effects of the attributes and activities of other key participants of change will be far more
critical in precipitating or influencing administrative decision-making and subsequent change. However, a number of direct or primary relationships linking specific events and processes to distinguishable conditions and outcomes of change can be identified; they are elucidated in the integration of theoretical components which follows.

The Integrated Theory

The principal vehicle for implementing a federal mandate in a college or university is the central administration. Administrative leaders provide the pivotal link between government intentions and institutional change. Owing to the source (a directive is issued by an external government agency) and the scope (numerous institutional sub-systems are usually involved) of mandated change, the principal administrative leader is most likely to be the college president. The development and use of facilitative sub-structures by administrative leaders who favor change is critical in influencing the rate and degree of institutional progress toward compliance, particularly in the early stages of implementation. In order for reform to occur: 1) a top level administrator must make a decision and commitment to implement the mandate; 2) the development and use of administrative sub-structures must be appropriate to the situation; and 3) administrators must provide essential support services to facilitate change within the formal organization and political environment of the institution.

Four conditions, in particular, precipitate an administrative decision to implement a mandate, and similarly influence the institutional leader's commitment to change: 1) the values and priorities of the institutional leader may be such that he favors implementation
of the mandate; 2) the organizational affiliations of the institutional leader and those of key personnel may influence attitudes toward prescribed reform, creating a climate in which change is viewed as politically desirable and educationally sound; 3) the attributes of key personnel and the distribution of change advocates and change agents within and surrounding the institution may create an environment in which risk and resistance, often stifling or reform attempts, are minimized; and 4) intervention may lead to awareness of a performance gap between existing and preferred policies or practices. Any one of these four conditions may precipitate an administrative decision to comply with a mandate. In most instances, the precipitating variables combine and interact to influence the decision-making process and the degree of administrative commitment associated with implementing mandated change.

Top level administrative decision-making processes begin during the initial stage of implementation (Infusion). As the mandate is introduced, analyzed, interpreted and discussed among key personnel, administrative leaders gradually become aware of its nature, scope and intent. At the same time, administrative leaders have an opportunity to examine the perceptions and reactions of university personnel and colleagues from peer institutions as they respond to anticipated changes which are prescribed or implied by the mandate. Depending upon the development and influence of the four precipitants discussed above, the administrative leader may decide that it is in the best interest of the institution to comply with the mandate. In turn, he may assume a role as change agent early in the implementation process and will be instrumental in providing direction and impetus as the institution
advances to the second stage (Preparation and Policy Formation) and subsequent stages of implementation. In other instances, the precipitating conditions may be such that the administrative leader delays making a commitment to change. Similar delays in institutional progress toward and throughout Stage Two may result. Because an institutional self-study is generally required by a mandate, and because activities related to the self-study mark the beginning of Stage Two, colleges eventually began the second stage of implementation with or without major involvement by a principal institutional leader.

By the close of Stage Two, more information on the internal and external forces favoring and opposing reform, as well as self-study data on institutional needs and resources, are available for analysis and response by administrative leaders. At this point, if one or more of the precipitating conditions exist, an administrative leader will decide to implement the mandate. Conversely, when the precipitant variables are not operating, some institutional leaders may not make a commitment to change. In any case, as the organization begins the transition into the third stage of implementation, the primary institutional leader has either emerged as a change agent or does not intend to do so. In the latter instance, institutional progress toward implementation will be intermittent, minimal and ineffective, or will be delayed until precipitating conditions change (for example, intervention occurs or the internal political climate is altered through turnover in personnel).

Once an institutional leader has assumed a role as change agent, the rate and degree of progress toward implementation are contingent, in large part, upon the effective development and use of administrative sub-structures to facilitate reform. When the administrative change
agent can exert considerable power, sub-structures must be designed and utilized to perform mechanistic support services (such as providing reliable and efficient networks for communication and information) and task-oriented functions (such as compiling and reporting data requested by government agencies and assisting with budgetary and personnel changes related to implementing the mandate). However, when an administrative change agent perceives his power resources as being limited, sub-structures must be utilized to gain political support in addition to providing mechanistic services and task-oriented functions.

The variables which most directly influence the power resources of the institutional leader are the attributes of key personnel, including the institutional leader. Individuals who are or may become participants in prescribed change, and those who are concerned with the potential outcomes of reform, often become involved in the change process through attempts to accelerate or impede change. Proponents of change may become change agents (procreators or gatekeepers) or may assume roles as progressives, opportunists or catalysts. Others may oppose change and assume roles as traditionalists, working toward preserving the status quo. The political climate created by the interaction and influence of key participants of change must be interpreted by the administrative change agent in terms of the potential constraints placed on his power resources. The change strategy which emerges then will be based on direct or indirect administrative leadership and control depending upon: 1) the perception of power resources available; 2) the risks associated with openly advocating the necessary reforms; and 3) the personal attributes and preferences of the administrative change agent (leadership style).
When the potential for conflict and resistance is perceived to be minimally threatening to the effective implementation of the mandate, the institutional leader who favors change must assume an active role in establishing new institutional policies as necessary and in directing the change process through the use of selected administrative sub-structures. In such instances, the purpose of the sub-structures (to facilitate implementation of the mandate according to the intentions and priorities of the institutional leader) must be clear to those involved. Specific responsibilities must be delegated, and related tasks must be assigned to personnel within the sub-structures. In cases where the political climate is such that conflict and resistance to reform are likely to limit the power resources available to the administrative change agent, direct control over the change process may not be feasible. In such circumstances, the administrator may use indirect influence in guiding the organization toward implementation of the mandate. In such instances, sub-structures must be carefully selected, designed (or adapted) and utilized for the purpose of providing additional power resources by supplying the necessary political, as well as mechanistic, support for change. The extent of responsibility for policy formation and decision-making which is delegated to personnel within the sub-structures will reflect the direct administrative control from the institutional leader.

The processes which accompany the administrative change agent's assessment of potential power resources and the related development of sub-structures to facilitate change occur primarily throughout the first two stages of implementation. In the Infusion Stage, the attitudes and opinions of various individuals are articulated and clarified. Groups
or coalitions of proponents and opponents of change may surface. Capable personnel who favor reform may be identified as potential change agents. Based on past experiences and on the perceived political climate which emerges during the Infusion Stage, the institutional leader begins to develop and implement his initial change strategy. He selects (or creates) and activates the administrative sub-structures which will conduct the self-study and assist with other change-related activities which characterize Stage Two (Preparation and Policy Formation). When direct or indirect administrative control is combined with the appropriate use of sub-structures, effective progress toward the third stage of implementation (Trial and Transition) occurs.

The scope (as differentiated from the rate) of implementation of a government mandate is determined, in large part, by conditions within various institutional sub-systems. Two factors, in particular, precipitate the broad-scale change required to comply with federal mandates: 1) the existence of a change agent or potential change agent within each sub-system in which reform is required; and 2) a favorable status of the sub-system with respect to the institutional priorities of top level administrators. Even when an institutional leader generally favors compliance with a mandate, and administrative sub-structures are available to facilitate the change process, implementation may not occur on a college-wide basis. In planning for change, certain sub-systems may be ignored or omitted due to the difficulty and expense associated with implementing the mandate in these sub-systems. For example, due to vast differences in traditional practices in men's and women's sports for more than two hundred years, the implementation of Title IX in most college athletic departments was expensive and required substantial change.
In such instances, institutional efforts toward compliance with a mandate tend to focus on sub-systems in which change is likely to be less costly or disruptive. However, when impetus toward reform comes from a change agent within the sub-system itself, and when the activities or services of the sub-system are perceived to be essential in terms of university goals and priorities, institutional leaders will include the sub-system in implementation plans and procedures. As a result, the attributes of key personnel, and particularly the change agent, within each sub-system are critical factors in determining the scope of implementation.

An additional variable influencing the rate and degree, as well as the scope, of implementation among sub-systems is intervention. When intervention occurs and is accompanied by recognition that a performance gap exists with respect to current and desirable practices within the institution as a whole or within a particular sub-system, progress toward implementation will be accelerated. In general, the weaker the administrative leader's commitment to full (institution-wide) compliance with the mandate, the greater the need for intervention to generate change within each sub-system.

When change begins to occur within various sub-systems throughout the institution, the organization has progressed to the third stage of implementation (Trial and Transition). Although the groundwork has been laid and the tempo has been set by central administrators, effective implementation is henceforth largely dependent upon the attributes and activities of others. In Stage Three, the attitudes, influence and capabilities of change agents other than the institutional leader are particularly critical in facilitating change. As individuals assume or
accept roles as procreators and gatekeepers in the change process, they begin to affect the rate and success of reform. These change agents provide the link between top level administration and the numerous participants (faculty and students) in change. When gatekeepers and procreators function effectively in developing and maintaining appropriate channels of communication, and in providing innovative leadership suitable to institutional needs and resources, their efforts are likely to be met with support from superiors and cooperation among subordinates. In such instances, if resistance to change occurs, it will come from sources external to the central administration and the sub-system involved and will have limited impact on actual progress toward implementation.

During the third stage of implementation, the nature and effects of variables and precipitants of change can be readily identified. Change has occurred and its impact has been felt by participants. When progress has been generated or accompanied by the aforementioned conditions which facilitate implementation of a mandate, Trial and Transition will generally occur in the form of testing the plausible options and the components of a preliminary institutional plan for compliance. As change is implemented and the participants react and respond, plans and strategies are evaluated and altered accordingly. Structural or personnel changes may be made in order to facilitate progress. For example, new administrative positions at lower levels of administration may be created and filled by personnel who favor the type of change preferred by institutional leaders. In other instances, administrators may exert power and effectively influence the political climate by the strategic hiring and firing of key personnel. Eventually the necessary adjustments (on the part of participants and change agents)
have been made, and the organization has entered the final stage of implementation (Policy Execution).

In institutions in which one or more of the facilitating conditions does not exist, or where the necessary adjustments have not been made, progress into Stage Four may or may not occur. Among the possible explanations for inability to reach the Policy Execution Stage are: 1) pressure for change by key personnel who favor compliance with the mandate is resisted or countered by an institutional leader who lacks the commitment or ability necessary to bring about change; 2) ineffective use of supportive sub-structures and change agents by institutional leaders who favor change and encounter resistance; 3) opposition to change among participants or outsiders which is not effectively countered by change agents within various sub-systems; 4) intervention fails to occur and there is no compelling reason to make more than sporadic attempts toward minimal compliance; and 5) the government agency responsible for enforcing the mandate re-interprets the accompanying regulations, causing major alterations in an institution's implementation plans and related policies and practices. Some institutions do move into the final stage of implementation without effectively complying with the mandate. In these instances, a decision is made by the institutional leader to promote or allow only minimal efforts toward compliance. This decision is not effectively resisted or altered by intervention or by institutional personnel, and the administrative policy of virtual non-compliance is accepted and implemented.

The variables which interact to facilitate progress through the four stages of implementation are both dynamic and situational. The scope, rate and degree of institutional progress toward implementation
of a mandate are not based on static cause and effect relationships, but are constantly subject to change. For example, intervention can occur during any stage of the change process, significantly influencing the rate and direction of implementation. Further, changes in personnel, particularly in top administrative positions, may cause a reversal or alteration in the course of events which has previously characterized the institutional change process. Consequently, an organization in any stage of change is still subject to the influence of key variables which may function to accelerate, impede, retard or even reverse progress in implementing a federal mandate. This caveat notwithstanding, effective implementation of federal mandates can and does occur in institutions of higher education under specific and identifiable conditions which facilitate progress toward compliance.

A Comparison with Existing Theories of Change

The theory of prescribed academic change has several major similarities with three different models of unplanned change: 1) the complex organization model as described by Hefferlin; 2) Baldridge's political model; and 3) Conrad's grounded theory of academic change. Further, two critical components of the theory of prescribed change resemble elements of Zaltman's model for change acceptance, particularly with regard to his analysis of factors which influence effective implementation of planned change.

The theory of prescribed academic change views implementation of federal mandates as occurring through both planned and unplanned processes. Change is planned to the extent that effective compliance is largely a result of strategic decisions and power utilization by central administrators. Change is unplanned to the extent that the conditions
which precipitate and sustain this type of administrative activity are coincidental or are atypical of institutions of higher education in general. Even in colleges in which institutional leaders favor change, effective implementation is partly dependent upon various internal and external forces which combine to create the appropriate climate, resources and impetus for change. In essence, although failure to plan for the implementation of a mandate may ultimately be a deterrent to progress, the scope, extent and effectiveness of planning efforts are largely contingent upon unplanned events, responses, and pressures. Thus, the theory of prescribed change primarily resembles existing models of unplanned (rather than planned) change.

Hefferlin's elaboration on the complex organization perspective is especially useful in explaining the complexity of internal and external factors which account for differences among institutions in their ability to make change. Hefferlin contends that due to the unusual number of internal constraints and structural characteristics within colleges and universities which predispose them toward stability, the sources of academic change are predominantly outside the education system. He further noted the importance of available resources, as well as the distribution and orientation of influential organization members, in determining institutional ability to reform.¹

Since change in response to a mandate is precipitated initially by external agencies, and because Hefferlin's model focused on change initiated by external sources, his study sensitized the researcher to: 1) structural differences in the administrative organization among colleges; 2) the importance of available resources in facilitating change; and 3) the distribution and contributing attributes of influential per-
sonnel. All three factors are important in explaining institutional reform in response to federal mandates. However, the complex organization model in general, and Hefferlin's interpretation in particular, fails to explain the effects of internal dynamics on the processes and outcomes of externally prescribed reform. Hefferlin tends to view reform in higher education as a process of change being imposed upon an established structural system. Individuals within the system must adapt to reform or be replaced. The theory of prescribed change explains how and why the administrative organization must adapt structurally as well as philosophically in order to accommodate and implement change. In terms of available resources for financing implementation, Hefferlin fails to account for differences in institutional priorities attributed to, and administrative strategies and assumptions related to, providing the necessary support for effective reform. These variables (attributes of key personnel) are important in influencing successful implementation of a mandate. For example, when attempting to implement nonincentive-based federal legislation in times of economic stress, virtually no institution will have readily available financial resources to support extensive reform. In turn, other variables are far more critical to effective implementation than merely the availability or lack of availability of funds — as Hefferlin's analysis implies. In brief, the complex organization model contributes to understanding the initial institutional response to a federal mandate, but is of little value in explaining the dynamic processes involved in implementing a mandate in colleges and universities.

The political model of unplanned change, as best described by Baldridge, focuses on the formation, action, power and influence of
interest groups in shaping major policy related to academic reform. According to Baldridge, a complex social structure within an institution generates pressure for change, thus many forms of power and pressure for and against change impinge on decision-makers. Eventually a legislative stage translates the pressures into policy and, finally a policy execution phase generates feedback in the form of new conflicts. The key element describing the change process becomes the political maneuvering among vested interest groups attempting to influence policy decisions. During the constant struggle for control, a new series of problems is generated and the process is characterized by dynamic self-perpetuation. In contrast to the complex organization model, the political model focuses explicitly on the internal institutional dynamics of decision-making and policy change. The political model suggests that the inability to predict the force and direction of political conflict and power generated by interest groups result in policy decisions which are unplanned.

In the theory of prescribed change, political conflict is one element among many influencing the change process. The potential for political conflict is a critical variable in the institutional leader's assessment of available power resources, and influences his strategy in developing and utilizing administrative sub-structures to facilitate change. However, the theory of prescribed change suggests that, in many instances, the course of political activities among various interest groups can be predicted and minimized or manipulated by institutional leaders who favor the implementation of change in response to a mandate.

The political model is particularly useful in providing a framework for understanding the relationships between certain categories of
variables and the rate of institutional progress through the first three stages of implementation in the theory of prescribed change. For example, the distribution and influence of key personnel assuming roles as proponents or opponents of change, influences the extent of power resources available to and, relatedly, the effectiveness of change agents in their attempts to implement the mandate within institutional sub-systems. Of greater importance, Baldrige's model supports the critical nature of the administrative use of sub-structures in gaining political support for anticipated reform. In the cycle of political activity described by Baldrige, one means by which resistance from interest groups which oppose change can be counteracted is through the formation of interest or pressure groups which favor change.

The theory of prescribed change goes beyond the political model in identifying and describing additional factors which account for effective implementation of desired change. In particular, Baldrige's political model fails to address two major conditions: 1) the impact of intervention on the rate and degree of reform; and 2) the effect of direct administrative control on the political climate of the university. In addition to its limitations in describing the full scope of variables which interact to bring about academic reform, the political model falls short in describing the course of events which follows a decision for new policy execution. Baldrige's implication is that new interest groups will emerge and further conflict will occur. The theory of prescribed change suggests that once an institution has progressed through the first three stages of implementation, and the new institutional policy has been tested and clarified, the organization will adjust to related change and will reach a phase of political equilibrium rather
than regenerated conflict. In order for the political climate to return to a state of overt conflict and attempts at power manipulation, a new decision or policy must be made or some other major change (intervention, for example) must occur. In summary, the political model has limited applicability unless used in conjunction with more comprehensive theory, and is especially inadequate in explaining the latter stages of implementation of mandated change.

Conrad's grounded theory of academic change is, by far, the most comprehensive among the existing models of unplanned change in terms of administrative processes. The grounded theory follows five overlapping stages and is similar, in some respects, to the political model. The major point of departure occurs in the role definition, and the recognition of the potential influence, of the administrative change agent in the decision-making process. Conrad contends that the administrative role goes beyond that of mediator as the leader acts (often by exerting a substantial amount of power) to facilitate or resist change. The administrative leader is capable of directly influencing the change process through the selection of the policy-recommending body. It is this understanding of who has academic power and, more specifically, how it is used, that distinguishes Conrad's approach from the political model.

The theory of prescribed change parallels Conrad's grounded theory in several respects. In both instances, change is viewed as occurring in stages, most of which are characterized by patterns of activity and response. Further, both models focus on the significance of institutional politics as well as the effective utilization of administrative power resources in facilitating change. The theory of
prescribed change expands Conrad's power analysis by describing, in
greater detail, the options available to administrative change agents
who favor reform. The prescribed change theory identifies three
additional means by which administrators exert power to influence reform.
First, not only does the leader select the appropriate vehicles (sub­
structures) for implementing desired change, he also exerts power in
utilizing the vehicles for the type of support (mechanistic or mechanistic
and political) which will most likely lead to effective implementation
in a particular situation. Second, the administrative leader is capable
of influencing reform through the selection or placement and utilization
of key personnel in roles as change agents at middle and lower levels of
administration. In the latter instance, the institutional leader has
some degree of control over the direction and extent of implementation
within the various organizational sub-systems. Third, administrative
change agents may exercise power directly through the hiring and firing
of key personnel.

In summary, Conrad's theory offers an insightful approach to
studies of academic change which focus on initiation and formation of
policy. It falls short, however, of addressing the implementation phase
of change, especially the processes involved in implementing mandated
change.

The extensive work of Zaltman and associates in the study of
planned change was particularly useful in sensitizing the researcher to
potential conditions which enhance change acceptance, and in providing
meaningful labels and definitions for variables once they had been
discovered and verified. Zaltman et al. presents a model for the change
acceptance process which involves two basic stages: initiation and
Implementation. The authors hypothesize that effective implementation of change requires greater control by administrators through a mechanistic or formal mode of organizational operation. The model emphasizes the importance of a high level of centralization in reducing the role conflicts and ambiguity often associated with impeding implementation. In turn, the authority structure of an organization is viewed as a critical factor in gaining the commitment, attitudinal changes and behavioral acceptance required for successful reform. Unlike most theories of planned change, Zaltman's approach incorporates components of models of unplanned change including the complex organization perspective and the political model. He advocates planning for change, but does not ignore the potential variables which may function or interact at either stage (initiation or implementation), to impair the success of planning and reform.

In comparing Zaltman's model of change acceptance with the theory of prescribed change, the principal similarities include: 1) a recognition of the importance of administrative control through the use of formal (mechanistic) support services; and 2) the potential of administrative leaders who favor change to generate a similar commitment to reform among other key personnel through direct control or through the effective use of sub-structures and change agents at lower levels of administration. Beyond these similarities, several major differences should be noted. Theory of prescribed change is far more specific than the more broader approach to organizational change presented by Zaltman. Further, much of his work focuses on the initiation phase of the change process. In essence, Zaltman's work serves as a useful frame-of-reference for the generation and development of more specific theoretical models of academic change.
A second study by Zaltman et al. included an insightful chapter on "Forces for and Against Change in Education." The authors provided useful information for identifying and analyzing expectations, resources, constraints, attitudes, values and relationships as these factors combine to influence the rate and direction of organizational change.

Performance gaps were identified as providing the major force for change in education. Further, the authors discussed the importance of the activities, attitudes and personal characteristics of gatekeepers as they function to facilitate or block communication networks which are essential to the implementation of change. Both factors (the recognition of performance gaps and the use and influence of gatekeepers) are theoretically relevant variables in the study of mandated change.

Of particular interest is the discovery that a mandate alone is rarely responsible for leading to the acknowledgement or recognition that a performance gap exists between government intentions and institutional practices. Rather, the occurrence of unplanned and unanticipated intervention is necessary in order to precipitate recognition of a performance gap and related initiation or acceleration of efforts to close it. In response to federal mandates, gatekeepers function as change agents and, in most instances, serve to facilitate implementation efforts according to the intentions of institutional leaders. In general, gatekeeping responsibilities are delegated to or remain with selected individuals who support the direction and degree of change desired by top level administrators. The latter individuals often assume roles as gatekeepers themselves, and directly influence the type and extent of communication which flows between government agencies and institutional personnel.
In contrast to Baldridge, who focuses on the distribution of and power relationships among organizational members, Zaltman emphasizes the importance of personal characteristics and behaviors of participants in change. In most instances, the theory of prescribed change more closely parallels Zaltman’s perspective. In implementing a mandate, the attributes (as opposed to the distribution) of change agents influence the change process more directly. For example, power and influence emerge only as specific attributes among others in determining the effectiveness of performance of key personnel.

Zaltman and associates present an eclectic model, the Proactive/Interactive Change Model, for diagnosing, planning and changing educational systems. The model is a strategy for change, designed to guide continuous development and renewal within organizations, and is based on existing theories of planned and unplanned change. Because it is strategic instead of explanatory, Zaltman’s model is not comparable with other models of change previously discussed, or with the theory of prescribed change.

In summary, the theory of prescribed change combines and expands key elements of three existing change models: the complex organization approach, the political model, and the grounded theory of academic change. The integration of stages with three distinct categories of variables, as well as the analysis of the means by which administrative leaders exert power to influence institutional response to a mandate, are unique to the theory of prescribed change. Further, the theory explains the change process in terms of institutional sub-systems as well as central administrative activities and organizational politics. This linkage between what occurs within and surrounding top level administra-
tion and the effects on and responses of participants in the sub-systems in which the greatest amount of change occurs, is critical in explaining why mandates are implemented effectively in some institutions and not in others. In other words, the theory of prescribed change addresses and accounts for the scope of reform as well as the rate and degree of implementation. No previously developed theory has adequately accomplished this task.

Implications

The theory of prescribed change, as well as the research findings of this investigation, has potential value in guiding both administrative leaders in higher education and government officials responsible for interpretation and enforcement toward greater success in promoting effective implementation of federal mandates in colleges and universities. Three major implications are suggested by the results of this study.

1. The importance of institutional leaders, specifically college presidents, in implementing a mandate cannot be ignored. Two factors related to top level administrators are particularly critical in determining the effectiveness of implementation efforts within an institution: a) the values and priorities of administrative leaders affect their ability or desire to make the necessary decision and related commitment to change; and b) the leadership style and capabilities of key administrators influence their ability to effectively develop and utilize supportive sub-structures which are critical to the implementation of broad-scale change required by most federal mandates. Relatedly, from the standpoint of government officials, it appears to be general practice to hold college presidents directly accountable
for non-compliance in institutions which have failed to implement a mandate effectively, and to adjust enforcement procedures and communication processes accordingly. On the other hand, the results of this study can serve as a guide for college presidents in developing and utilizing administrative sub-structures more effectively to facilitate the implementation of prescribed change.

2. One of the primary factors influencing the scope of implementation (and, relatedly, the degree of compliance) is the existence of effective change agents within sub-systems in which extensive change is projected. The implementation of a federal mandate will be effective at lower levels (where actual change occurs) only when leaders within the sub-system are committed to change, capable of administering change, and given the power and resources to implement change. Unfortunately, in many instances, federal guidelines and regulations (as well as administrative change strategies) focus exclusively on evaluating compliance in terms of increased dollars and cents in certain budget areas. The findings of this research imply that the manner in which increased funds are utilized is of greater importance to effective implementation and sustained change than indiscriminately adding dollars to previously underfinanced programs. For example, this study provided evidence suggesting that when institutions invest in qualified personnel to administer and conduct expanding women's athletic programs, change related to compliance with the mandate will be more effective in terms of satisfaction among participants and among top level administrators as well. Further, when institutions provide for athletic leadership by competent women, it is likely that efforts to implement Title IX will be accompanied by greater dedication and commitment to eliminate dis-
criminatory practices (the intent of the mandate). In contrast, in institutions where budgetary increases go directly to athletes and to buy equipment, departmental personnel are often part-time employees, volunteers, or temporary staff members (graduate assistants, for example) who lack the power or motivation to bring about satisfactory and sustained change. It appears that government officials responsible for the regulations which accompany federal mandates (and college administrators as well) must focus on providing for appropriate and effective leadership in order for successful implementation to occur.

3. Three implications can be drawn from the findings related to the intervention variable. Of major interest is the inability of a mandate to create the type of intervention necessary for the recognition and alleviation of performance gaps. The implications related to the importance and impact of intervention are:

a. When even minimal attempts at enforcement (such as campus visitations by government officials) are made, colleges assume that compliance efforts are noticed. Relatedly, a higher priority is awarded to implementation of the mandate. In turn, periodical direct communication between government agencies and top level college administrators may be helpful in producing more satisfactory efforts toward reform.

b. The impact of competitive leagues and national associations concerned with the governance of college athletics on university personnel responsible for administering athletic programs is significant. If government agencies do not intervene to change the patterns established by influential athletic associations over the past century, it is doubtful that discriminatory practices will be minimized or eliminated. Until government regulations are clarified and enforced, athletics will
continue to develop in the direction determined by more dominant forces, particularly the NCAA.

c. Of greater importance in the intervention process are the potential effects of changes in policy interpretations by government agencies after a mandate has been issued and is being implemented. Although intervention through a re-interpretation of regulations may cause some institutions to improve or accelerate compliance efforts, it may impede efforts toward implementation in others. A case in point is the most recent Title IX policy interpretation (issued in Fall, 1979), which emphasized providing proportionally equitable scholarship expenditures for male and female athletes. Colleges which have not already done so will be forced to provide equal scholarship funding for women athletes according to the proportion of athletic participants which is female. In institutions in which overall compliance efforts have been minimal, the effects of the recent policy interpretation will probably benefit women athletes and promote specific efforts to implement the mandate. In other instances, the new policy interpretation may be detrimental to women's athletics by forcing institutions to limit the scope of the program for the benefit of a few highly skilled athletes. For example, a college which has focused on broadening competitive opportunities for women may serve nearly as many women as men in athletic programs. In such cases, implementing the mandate according to the latest interpretation may be extremely difficult. In contrast, a college which has, in the past, done nothing to expand the breadth of opportunities for women in sports, and offers an athletic program in which only ten percent or so of the participants are women, will not be hard-pressed to meet the current government standards. The
ultimate effects of the new policy may serve to discourage institutions from expanding the breadth of competitive opportunities for women athletes in the future, and may encourage the continuation of patterns of investment in which additional money is channelled directly to the athletes without improving the quality of the program or of the staff members responsible for leadership in a changing environment. In brief, it appears that government officials responsible for policy interpretation need a stronger working knowledge of the internal processes which accompany implementation of federal mandates in colleges and universities. Further, in order to avoid creating the type of intervention which defeats the intent and purpose of the mandate, a more valid assessment of the effectiveness and extent of current implementation efforts is needed. With further testing and validation or adjustment, a Change Index formula (such as the one used in this study for sample selection purposes) may become a valuable tool for government officials and college administrators in evaluating and comparing progress toward Title IX compliance in athletic programs among institutions of higher education. The formula measures progress in terms of the scope (number of athletes served) as well as the depth (amount of money spent) of existing programs.

A Concluding Note

Much of the value of this research lies in the nature of its approach to the study of implementing mandated change. Rather than emphasizing factors which impede progress toward compliance (as is typical of much literature and research on the subject of government mandates), the study focused on the discovery and identification of conditions which facilitate implementation. Ideally, the theory of prescribed
change will be tested through further research by individuals involved in the study of academic reform and their findings, as well as the theory presented herein, will provide useful guidelines for those who are concerned with the effective implementation of mandated change in institutions of higher education.
Footnotes for Chapter VI


7. A valuable source recommended for use in conjunction with the "Theory of Prescribed Change" in planning for implementation of federal mandates is Zaltman's *Dynamic Educational Change* (see above).
APPENDIXES
APPENDIX A

SUMMARY OF TITLE IX, REGULATIONS FOR IMPLEMENTATION, AND PROPOSED POLICY INTERPRETATION
SUMMARY OF TITLE IX, REGULATIONS FOR IMPLEMENTATIONS, AND PROPOSED POLICY INTERPRETATION

Title IX of the Education Amendments of 1972 prohibits discrimination on the basis of sex in any educational program receiving federal aid. The law became effective on July 21, 1975. HEW issued specific regulations covering intercollegiate athletics in September, 1975. The compliance deadlines for the latter were July 21, 1976 for elementary schools and July 21, 1978 for secondary and postsecondary educational institutions. On December 11, 1978, HEW's Office for Civil Rights issued a proposed Policy Interpretation on Title IX intercollegiate athletic regulations. Summaries of the federal documents describing Title IX, the original athletic regulations, and the proposed Policy Interpretation are included below.

Title IX

Title IX "provides that 'No person in the United States shall on the basis of sex, be excluded from participation in, be denied the benefits, or be subjected to discrimination under any education program or activity receiving Federal financial assistance,' with certain exceptions." Title IX is similar to Title VI of the Civil Rights Act of 1964 except that Title IX applies to discrimination based on sex, is limited to education programs and activities, and includes employment. The law applies to numerous educational functions of Federally assisted schools and colleges; specifically "any service, facility, activity or
program which it operates or sponsors, including athletics and other extracurricular activities.\textsuperscript{1}

The enforcement procedure is complex and includes, among other things, compliance reviews, hearings, administrative and judicial reviews, and post-termination proceedings. When a violation occurs, HEW is obliged to seek voluntary compliance. If attempts to secure voluntary compliance fail, enforcement action may be taken: 1) to terminate federal financial assistance until the institution ceases discriminatory conduct; or 2) to refer the matter to the Department of Justice with a recommendation for initiation of court proceedings.\textsuperscript{2}

The final regulation covers three major areas including admission of students, treatment of students, and employment. The regulations describing equal treatment of students include specific guidelines for eliminating sex discrimination with respect to housing, physical education, organizational memberships, curricular materials, facilities, and athletics.\textsuperscript{3}

Elimination of Sex Discrimination in Athletic Programs

There are two substantive provisions in Title IX which define the basic responsibility of educational institutions to provide equal


opportunity to members of both sexes interested in participating in athletics. The first section prohibits discrimination in the operation of any interscholastic (or similar) athletic program. Accompanying regulations address the nature and extent of sports programs offered; the provision of equipment and supplies; the scheduling of games and practice time; the provision of travel and per diem allowances; the nature and extent of opportunity to receive coaching and academic tutoring; the assignment and compensation of coaches and tutors; the provision of locker rooms, practice and competitive facilities; and the provision of medical and training facilities.4

A second and separate section sets forth requirements for ensuring equal opportunity in the provision of athletic scholarships. The regulation provides that "reasonable opportunities" for athletic scholarships should be "in proportion to the number of students of each sex participating in interscholastic or intercollegiate athletics."5 The regulation also prohibits discrimination on the basis of sex in the recruitment of student athletes.

Neither quotas nor fixed percentages are required for compliance under the operational or scholarship regulations. Institutions are required to take "a reasonable approach" considering the participation and relative interests of student-athletes. A three year transition period, ending July 21, 1978, was established to allow institutions of higher education time to comply with athletic regulations.6

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5Ibid., p. 9.

6Ibid., p. 5-9.
Proposed Policy Interpretation

The proposed Policy Interpretation released by the Office for Civil Rights in December, 1978 was scheduled to be finalized by April, 1979. Controversy over the proposal has delayed adoption and implementation of the new policy. The impact of the controversy and delay on the substance of the Policy Interpretation is yet to be determined.

In brief, the proposal established a two stage approach to compliance and enforcement. Part I is designed to eliminate sex discrimination against men or women currently participating in the intercollegiate athletic programs. It requires the "immediate elimination of discrepancies in average per capita expenditures for financially measurable benefits and opportunities unless the institution can demonstrate that the discrepancies are based on differences in the costs of particular sports... or other nondiscriminatory factors." Part I also requires comparability with regard to those benefits and services that are not readily financially measurable such as practice time, scheduling, coaching, tutoring, facilities, training and medical services, and housing and dining services.7

Part II is designed to "eliminate, over a reasonable period of time, the discriminatory effects of the historic emphasis on men's intercollegiate sports, and to facilitate the continued growth of women's athletics." It also requires adoption of procedures for the expansion of women's athletic programs to provide the number of participation

opportunities needed to accommodate the interests and abilities of women. 8

Together, Parts I and II are designed to "ensure that women's intercollegiate athletic programs receive the resources and commitments to which they are entitled." This does not necessarily mean that compliance requires identical athletic programs for men and women. Finally, special allowances are made to take into account the size and cost of football programs as well as the "scope of competition" in certain sports. 9

The proposed Policy Interpretation "focuses on the provision of equal athletic opportunity for women because, in most cases, women's athletic opportunities have been limited." However, Title IX prohibits discrimination against both sexes and the Policy Interpretation is equally applicable "where men's athletic opportunities have been previously limited." 10

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8 Ibid., p. 58072.
9 Ibid., p. 58072.
10 Ibid., p. 58072.
APPENDIX B

PHASE I OPENING INTERVIEW AND INSTITUTIONAL PROFILE FORM
The following questions were asked during a telephone conversation with the coordinator or director of women's athletics prior to formal contact with the institution.

1. What was the approximate full-time undergraduate enrollment at your institution in 1974-75? What percentage was female? In 1978-79? Percentage female?

2. Please give a brief background of the athletic program at your institution:
   a. Year men's program began -
   b. Year women's program began -
   c. NCAA division -
   d. AIAW division -
   e. Other current league memberships: men -
      women -
   f. Number of sports offered (intercollegiate):
      men - 1974-75
      women - 1974-75
      men - 1978-79
      women - 1978-79

3. Explain briefly the chain of command in your athletic program.

4. Which central administrator can give permission to release quantitative data? (name, position, phone, campus address)

5. Name and give the position of the superior in the central administration to whom the athletic director is responsible. (address and phone)

6. Who is the current athletic director? (name, phone, address)

7. Does your institution have an Affirmative Action officer? (name, address, phone) What responsibilities does he/she have for the athletic program, if any?

8. Please suggest other relevant information sources for this research. (names, addresses, phone numbers)
### Phase I: Institutional Profile

**College:**

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<th>Office Phone(_)</th>
<th>Men's A.D.</th>
<th>Office Phone(_)</th>
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<tbody>
<tr>
<td>Home Phone (_)</td>
<td>Address</td>
<td>Home Phone (_)</td>
<td>Address</td>
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- Central Administrator | Office Phone(_) |
- Address | Title |

**Estimated Undergraduate Enrollment 1974-75**

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**Estimated Undergraduate Enrollment 1978-79**

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<th>Women</th>
<th>Men</th>
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</table>

**Approximate Year Women's Program Began**

- Men's Program

**Number of Sports: 1976-77 Women**

|---------------|---------------|-------------|

**Number of Athletes - Women**

|---------------|---------------|-------------|

**NCAA Division 1974-75**

|---------------|---------------|-------------|

**ALAA Division 1975-76**

|---------------|---------------|-------------|

**League Membership**

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<th>Men</th>
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**Comments**

**Affirmative Action Officer**

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**A.D.'s Superior**

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**Chain of Command**

<table>
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<tr>
<th>Comments</th>
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</table>

**OTHER SOURCES:**

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<tr>
<th>Name</th>
<th>Position</th>
<th>Phone</th>
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</table>

| Comments on Back: Dates called, summer addresses, vacation schedules, etc. |
APPENDIX C

PHASE II INTRODUCTORY LETTER AND TELEPHONE INTERVIEW SURVEY
TO:

FROM: Judith Newcombe, Department of Physical Education

RE: A study of conditions facilitating implementation of federal mandates in higher education.

I am conducting research on conditions which facilitate effective implementation of federal mandates in institutions of higher education. The focal point for initial data collection is the effectiveness of Title IX implementation as reflected through athletic programs in public colleges and universities in Virginia. I would appreciate your assistance in gathering the necessary quantitative data, and I am also interested in your observations and opinions regarding this topic.

This phase of my investigation is directed toward identifying a small sample of state institutions for future in-depth study. Data will be collected by means of telephone interviews primarily for the purpose of sample selection.

Since your response and ideas are important to the progress of this study, I sincerely hope that you are willing to participate as an interviewee. Please be assured that anonymity is guaranteed with respect to the identity of respondents and institutions, and all information is confidential. I would like to emphasize that all my findings will be reported in such a manner that will eliminate any possibility of negative feedback to respondents and that will serve to protect all participating individuals, departments and institutions.

The telephone interview should take about forty-five minutes of your time. I am enclosing a summary of the information I wish to collect from you. Your advanced preparations in obtaining the factual data will be greatly appreciated. Please indicate on the enclosed post card a date and time you would like to be called and the phone number at which you may be reached. I would like to complete all interviews within the next two weeks. Unless you hear from me to the contrary, you may expect to be called at the time you request.

I believe this study will eventually be of practical value to college and university personnel. In turn, I appreciate your cooperation as an interviewee.
INTERVIEW GUIDELINES

Part I of this survey is designed to provide an institutional profile of the rate and degree of change in your athletic program during the past five years. This data forms the basis for a mathematical index to be used in the sample selection process. It will be most helpful if you can compile this information prior to the telephone interview. The items in Part II are an important supplement to the quantitative profile and are designed for open-ended response with respect to your own ideas and perceptions. You may wish to read them and collect your thoughts prior to our forthcoming conversation.

Once again, I wish to reassure you that confidentiality and anonymity are guaranteed. Your assistance will be most valuable in this research.

In case you wish to contact me for any reason, my phone numbers and address appear below. I shall be glad to share my findings at your request.

Home:  
Judith Newcombe  
1804 Grove Avenue  
Richmond, Virginia 23220  
(804) 353-4636

Office:  
Judith Newcombe  
Physical Education Department  
Virginia Commonwealth University  
Academic Campus  
Richmond, Virginia 23284  
(804) 257-1270
### PART I. QUANTITATIVE DATA

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<thead>
<tr>
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<tr>
<td>2. Total enrollment: full-time undergraduate women</td>
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<td></td>
</tr>
<tr>
<td>3. Number of intercollegiate teams - men</td>
<td></td>
<td></td>
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<tr>
<td>4. Number of intercollegiate teams - women</td>
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<td></td>
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<tr>
<td>5. Number of student-athletes - men</td>
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<td>6. Number of student-athletes - women</td>
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<tr>
<td>7. Number of athletes on scholarship - men</td>
<td></td>
<td></td>
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<tr>
<td>8. Number of athletes on scholarship - women</td>
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<td></td>
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<tr>
<td>9. Total scholarship budget - men</td>
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<td></td>
</tr>
<tr>
<td>10. Total scholarship budget - women</td>
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<td></td>
</tr>
<tr>
<td>11. Total athletic budget* - men</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Total athletic budget* - women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Per capita expenditures - male athletes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Per capita expenditures - females athletes</td>
<td></td>
<td></td>
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</tbody>
</table>

* Operating budget including scholarships, equipment, supplies, transportation, lodging, meals, tournament fees, recruiting expenses and all other operational expenses. Do not include coaching and administrative salaries or shared services such as training facilities, secretaries, sports information personnel, etc.

15. Comments:
PART II. SURVEY QUESTIONS

Background Data

1. What is your present position? How long have you held this position?

2. What position did you have prior to this? How long have you been at this institution?

Policy

1. How and by whom are athletic policies established at your institution?

2. What major policy changes have occurred with regard to eliminating sex discrimination in intercollegiate athletics? Would you cite Title IX as the major source of these changes?

3. What is the institutional interpretation of the word "equitable" as it applies to the distribution of goods and service to men's and women's athletic programs? Is this consistent with your personal interpretation of "equity"?

4. Are affirmative action procedures used in the hiring of coaching staff and administrators? Is the procedure effective in meeting institutional needs? Has the percentage of female personnel increased?

5. Are institutional memberships in athletic conferences and organizations similar for men's and women's programs? Explain.

6. Do you believe your institution is currently in full compliance with the Title IX athletic regulations? Explain.

Budget and Resources

1. Does your institution provide (or plan to provide) for equal per capita expenditures for participating athletes with regard to financially measurable items?

2. Are funds generated and utilized directly or indirectly for the support of athletics apportioned equitably to men's and women's programs? Explain.

3. Is the number and amount of scholarships awarded to female athletes equitable to the number and amount of scholarships awarded to male athletes?

4. Are equipment, facilities, scheduling opportunities, and support services equitably provided? (Consider prime practice time, office space, uniforms, transportation, training services, support staff, work load equivalency, number of contests and tournaments, etc.).
PART II. (Continued)

Implementation Process

1. How would you compare the quality of your current women's athletic program with that prior to fall, 1975? How much of this change, if any, do you attribute to Title IX? Compare changes in the quality of the men's athletic program within the same time frame.

2. What major compliance steps were initially taken at your institution, when, and by whom? Have any structural changes occurred as a result of compliance efforts?

3. Briefly describe the procedural changes and the change processes that took place at your institution in attempting to comply with Title IX athletic regulations. Which, if any, individuals or groups influenced the rate, direction, and degree of change?

4. From the standpoint of satisfaction of the participants of change, including male and female athletic personnel and student-athletes, how successful has Title IX implementation been at your institution? From the standpoint of the student body and faculty in general? (Give examples of attitudes, impressions, interpretations, conflicts, etc.)

5. What conditions at your institution, if any, appear to have facilitated effective implementation of Title IX? What conditions, if any, appear to have blocked or hindered effective implementation?

6. From the standpoint of providing equal opportunity for women in athletics, how effective has Title IX implementation been at your institution?

Other Sources

Please suggest other information sources at your institution who might be helpful with this research.
APPENDIX D

FORM FOR RECORDING AND COMPUTING NUMERICAL
DATA COMPLIED IN PHASE II
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<tr>
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<tr>
<td>2. Total enrollment: full-time undergraduate women</td>
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<td>3. Number of intercollegiate teams - men</td>
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<td>9. Total scholarship budget - men</td>
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<td>11. Total athletic budget** - men</td>
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<tr>
<td>12. Total athletic budget** - women</td>
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<tr>
<td>13. Per capita expenditures - male athletes</td>
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<tr>
<td>14. Per capita expenditures - female athletes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Enrollment is based on head-counts, not F.T.E.s.

**Operating budget includes scholarships, equipment, supplies, transportation, lodging, meals, tournament fees, recruiting expenses and all other operational expenses. Budget figures do not include coaching and administrative salaries or shared services such as training facilities, secretaries, sports information personnel, etc.

15. Computations: 

\[(100C/D - 100A/B) - [(F-E)-(H-G)]/F = X\]

A = 
B = 
C = 
D = 
E = 
F = 
G = 
H =
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APPENDIX P

PHASE III INTRODUCTORY LETTER AND INTERVIEW QUESTIONS
August 8, 1979

TO:

FROM: Judith Newcombe, Department of Physical Education

RE: A study of conditions facilitating implementation of federal mandates in higher education.

I have been conducting research on conditions which facilitate effective implementation of federal mandates in institutions of higher education. The focal point for initial data collection was the effectiveness of Title IX implementation as reflected through athletic programs in public colleges and universities in Virginia. I will be visiting your campus during the week of ____________, 1979 and am interested in your observations and opinions regarding this topic.

According to statewide data I have gathered during the past two months, your institution appears to be unique in the degree of change which has occurred in attempting to eliminate sex discrimination in athletics. I am now concerned with gaining a clearer understanding of the change process and with identifying variables which may have facilitated successful implementation of Title IX at ____________.

Since your response and ideas are important to the progress of this study, I sincerely hope that ____________.
The focus of the initial data collection was the effectiveness of Title IX implementation as reflected through athletic programs in public colleges and universities in Virginia. I will be visiting your campus during the week of __________, 1979 and am interested in your observations and opinions regarding this topic.

According to statewide data I have gathered during the past two months, your institution appears to be unique in the degree of change which has occurred in attempting to eliminate sex discrimination in athletics. I am now concerned with gaining a clearer understanding of the change process and with identifying variables which may have facilitated successful implementation of Title IX at _______________.

Since your response and ideas are important to the progress of this study, I sincerely hope that you are willing to participate as an interviewee. Please note that anonymity is assured with respect to the identity of respondents and institutions, and all findings will be reported in a manner that will serve to protect the participating individuals, departments, and institutions.

The interview should take thirty to forty-five minutes of your time. I am enclosing a summary of the interview format. As you will note, the questions are quite general and are designed for open-ended response. I would also be most grateful if you would let me know of any other informational sources at your institution who might be helpful with this research so that I can pre-arrange as many interviews as possible during my initial visit to your campus.

I believe this study will eventually be of practical value to college and university personnel. In turn, I appreciate your cooperation as an interviewee.
INTERVIEW QUESTIONS

1. It appears that since the passage of Title IX, your institution has undergone a significant amount of change in the direction of providing greater opportunities for women in athletics. Would you please tell me more about how this change occurred?

2. What are your perceptions regarding the change process and procedural events which occurred as a result of institutional attempts to interpret and implement Title IX?

3. Were there any groups or individuals who were instrumental and/or influential in affecting the rate, degree and direction of change? If yes, please explain.

4. How effective has Title IX implementation been on this campus in promoting equal opportunity for women?

5. What conditions at this institution, if any, appear to have facilitated effective implementation of Title IX?

6. From your own point of view, which key factors appear to significantly affect the rate and degree of implementation of a federal mandate at any institution of higher education?
APPENDIX G

CODING SYSTEM FOR DATA COLLECTION AND ANALYSIS
CODING SYSTEM FOR DATA COLLECTION AND ANALYSIS

ON = Observational Notes (data from a single event)

TN = Theoretical Notes (inference, interpretations)

MN = Methodological Notes (tactical decisions)

1 = Quantitative Data

2 = Perceptual Data

V = Data Needing Verification

Additional coding, ranking and classification systems were developed as interviews progressed and variables and categories emerged.
BIBLIOGRAPHY
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Title IX Status in Region X: An Evaluation of Models and Barriers to Implementation of Title IX of the Education Amendments of 1972, Government Region X of HEW as cited by the Project on the Status and Education of Women in On Campus with Women, Spring, 1979, p.3.


Name: Judith Patten Nevcombe  
Address: 1910 Hanover Avenue, Richmond, VA 23220  
Date of Birth: April 6, 1942  
Place of Birth: Minneapolis, Minnesota  

Education:  

The College of William and Mary  
Williamsburg, Virginia  
Doctor of Education Degree - Higher Education Administration  

Central Michigan University  
Mt. Pleasant, Michigan  
Master of Arts Degree - Physical Education  
Dates of Attendance: June, 1966 - August, 1967  

Western Michigan University  
Kalamazoo, Michigan  
Bachelor of Science Degree - Physical Education  
Dates of Attendance: September, 1960 - June, 1964
ABSTRACT

A THEORY OF PRESCRIBED ACADEMIC CHANGE

Newcombe, Judith Fattan, Ed. D.
The College of William and Mary
Advisor: Clifton F. Conrad

This study was directed toward the discovery of a grounded theory that identifies the conditions and processes which facilitate effective implementation of federal mandates in institutions of higher education. The constant comparative method, an inductive approach to generating theory, was used to study the implementation of Title IX of the Higher Education Amendments of 1972 and the accompanying regulations and policy interpretations for elimination of sex discrimination in athletics.

The research population included public colleges and universities in Virginia. From this population, a sample of four comparison groups (institutions) was selected through application of a mathematical formula which defined each institution in terms of a numerical Change Index. The Change Index formula measured the degree of progress toward Title IX compliance in athletics at each institution over a five year period, 1974 - 1979. In-depth investigations at each of the four colleges focused on the discovery, development and verification of theory.

The design of the study included three phases of research. Each phase employed different data gathering techniques, and each had its own purpose for obtaining various types of data. In Phase I, an informal telephone interview was used for defining the population. Phase II consisted of telephone interviews for collecting data necessary for delimiting the sample and for examining preliminary findings. Personal interviews at four sample institutions provided the primary source of data in Phase III. These open-ended interviews were used to guide data collection and analysis throughout the investigative process.

A theory of prescribed academic change was developed which expands on existing models of educational change. The theory specifically addresses federal mandates and identifies conditions which facilitate the implementation process. In brief, the implementation of mandated change occurs in four consecutive stages: 1) Infusion; 2) Preparation and Policy Formation; 3) Trial and Transition; and 4) Policy Execution. The rate and degree of institutional progress through the four stages are dependent upon three major categories of variables, including: 1) Administrative Organization; 2) Attributes of Key Personnel; and 3) Intervention. A complex and multi-directional set of relationships exists between stages and categories and among the variables within each category. When the combination and influence of the three major variables within an institution facilitate progress through the four stages of implementation, a mandate will be implemented effectively.

The theory of prescribed academic change views implementation of federal mandates as occurring through both planned and unplanned processes. The conclusions regarding the means by which administrative leaders exert power to influence institutional response to a mandate, the description and explanation of the change process in terms of institutional sub-systems, and the role of organizational politics are unique to the theory. Further, the identification of intervention as a precipitant to the effective implementation of prescribed change is critical in explaining why mandates are implemented effectively in some institutions and not in others.