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A Theory of Mandated Academic Change

During the past decade, colleges and universities have been subject to a rapid expansion and intensification of external pressures for major policy changes. Among the most influential of the forces for academic reform are mandates emanating from the federal legislative and judicial branches of government. 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. The probability that such governmental involvement will decrease in the future appears remote.

Federal mandates often require sweeping changes that can be expensive for institutions to implement and difficult to administer and enforce. Unfortunately, the literature on mandated academic change is woefully inadequate in providing both government and college officials with useful guidelines for providing successful leadership in implementing mandates in institutions of higher education. Grounded in empirical evidence, the theory presented in this article identifies the processes and procedures that can help lead to effective educational change precipitated by governmental directives.

There are four major frameworks that have guided research on academic change: the complex organization [2, 7, 18], the diffusion of innovations [5, 11, 14, 15], the planned change [8, 10, 12], and the political [1, 3, 9]. Each model has focused on a particular aspect of change (formal organization, communication, planning, power), but none of these research frameworks has led to a general theory of aca-

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demic change [3, p. 102; 4, p. 432]. Moreover, the existing research has focused almost exclusively on purposive change and innovation rather than change prescribed by organizations or agencies external to colleges and universities. There is a paucity of research on the implementation of governmental directives.

The purpose of this article is to present a grounded theory that identifies the conditions that facilitate the effective implementation of federal mandates. One major research question guided the investigation: What are the key variables that influence an institution's ability to successfully adapt programs, policies, and practices in compliance with a federal mandate? The study focused on institutional implementation of Title IX of the Higher Education Amendments of 1972 and the accompanying regulations and guidelines for elimination of sex discrimination in athletics.

To provide some background, this article begins with a review of Title IX and then turns to a brief description of the methodology used in the study. Following the presentation of the theory in a discussion format, several major implications of the study are examined.

Title IX

In 1972 Congress passed Title IX of the Education Amendments prohibiting sex discrimination in educational programs and organizations that receive federal money. The law's opening statement 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" [16, p. 1]. 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.

Although Title IX was adopted into law in June 1972, the official compliance regulations were not finalized until 1975. On July 21, 1975, the Department of Health, Education, and Welfare (HEW) issued "Final Title IX Regulation Implementing" documents to colleges and universities. During the three-year interim that followed, institutions were instructed to complete self-evaluations and to begin taking steps toward program revisions through voluntary compliance. Institutions

were to have reached the status of full compliance with the mandate and accompanying regulations by July 1978. However, following much controversy over the potential effects of the mandate on intercollegiate athletics, HEW issued a new policy interpretation in December 1979.

The revised policy was an attempt to clarify the application of the athletic provisions of Title IX and consisted of three major sections: (1) compliance in financial assistance or scholarships based on athletic ability; (2) compliance in other program areas; and (3) compliance in meeting the interests and abilities of male and female students. A governing principle for each area was set forth as follows. First, financial assistance should be available on a substantially proportional basis to the number of male and female participants in an institution's athletic program. Second, male and female athletes should receive equivalent treatment, benefits, and opportunities. And third, the athletic interests and abilities of male and female students must be accommodated by equally effective means [17, p. 71414]. The responsibility and jurisdiction for interpretation and enforcement of the law rest with the Office for Civil Rights (OCR).

Historically, most colleges and universities have emphasized intercollegiate athletic competition for men, and female participation in sports has been limited. In recent years, the lack of opportunities for female participation in organized competitive athletics has been attacked as one of the sharpest examples of inequality between the sexes. During the 1970s, however, the number of women participating in intercollegiate athletics more than doubled [13, p. 1]. This expansion, as reflected through increased financial expenditures and program development, provides a rich data source as well as a focal point for research concerning the process of organizational change brought about through federal mandates.

Methodology

Due to the absence of an existing framework from which hypotheses could be drawn and tested, the research design for this study was based on the discovery of a grounded theory of mandated (prescribed) change. For our purposes, grounded theory is defined as theory generated and analyzed through the constant comparative method. The constant comparative method provided specific procedures for sample selection as well as systematic guidelines for collecting, verifying, or-

ganizing, and analyzing the data collected during the open-ended, inductive investigation.¹

Thirteen four-year public colleges and universities in Virginia were included in the initial population. Following a pilot study conducted at one institution, investigation proceeded in three phases. Phase I was organized around gathering background information on each institution and gaining entry and support for the research. Telephone interviews with key personnel at each college included requests for pertinent demographic data on the background and characteristics of the institution and its athletic program. During Phase II, additional information including extensive quantitative data describing each athletic program was gathered, and the data collected during the first two phases were analyzed for the purpose of delimiting the population. The final population included eight four-year public colleges and universities that were similar with respect to (1) proportions of male and female enrollments and (2) the existence of intercollegiate athletic programs for men and women during the 1974-75 academic year (the period that directly preceded government distribution of Title IX compliance regulations).

Preliminary findings (Phases I and II) provided (1) a statistical portrait of the degree of compliance with Title IX as reflected by participation and expenditures in athletic programs in public colleges and universities in Virginia and as compared with national averages; (2) a comparison of the degree of progress toward Title IX compliance over a five-year period (1974-79) among the eight institutions in the population; and (3) a quantitative data base that served as a point of departure for identifying primitive hypotheses of a theory of mandated change.

At the close of Phase II, a sample of four institutions was selected through application of a mathematical formula that defined each institution in terms of a numerical change index. The change index measured the degree of progress toward Title IX compliance in athletics at each institution over the five-year period from 1974 to 1979. For purposes of comparability, the final sample included the two institutions characterized by the greatest degree of change and the two institutions characterized by the least amount of progress toward compliance.

Phase III was directed toward answering the major research question and developing a theory of mandated or prescribed change. This process involved conducting an in-depth investigation at each of the

¹Owing to space limitations, a full discussion of the research procedure is not possible. The interested reader may contact the authors for a detailed statement of the methodology. For further elaboration of the constant comparative method see Glaser and Strauss [6].

four comparison groups in the final sample. A minimum of eleven personal interviews were conducted at each institution with various administrators and personnel directly and indirectly affiliated with athletics or with the implementation of Title IX. An open-ended interview form was used throughout the interview process and was designed to allow for systematic data collection without forcing specific responses. Analytic summary sheets were used to record the data and construct the emerging theory. As concepts and relationships emerged through the interview process, 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 additional variables emerged, their properties and 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, the formal propositions were integrated into a theoretical whole. The theory, which was gradually developed and refined throughout the entire process, is presented below.

A Theory of the Conditions Facilitating the Implementation of Federal Mandates

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 four major factors (categories of variables), including administrative leadership, the use of facilitative substructures, conditions in institutional subsystems, and governmental intervention (see Fig. 1). While a complex and multidirectional set of relationships exists between these categories and the stages of implementation, there are several primary relationships that explain, in large part, the variance in progress toward compliance among colleges and universities. Following a brief discussion of the stages of implementation, the four major categories of variables, and the relationship between the stages and categories, the integrated theory is presented.

Stages of Implementation

Progress toward the implementation of a federal mandate occurs in four stages. Each stage begins with an initial activity calling for some type of administrative response. The administrative response, in turn, generates the potential for conflict, reaction, and response on the part of constituents within and outside of the university community. This

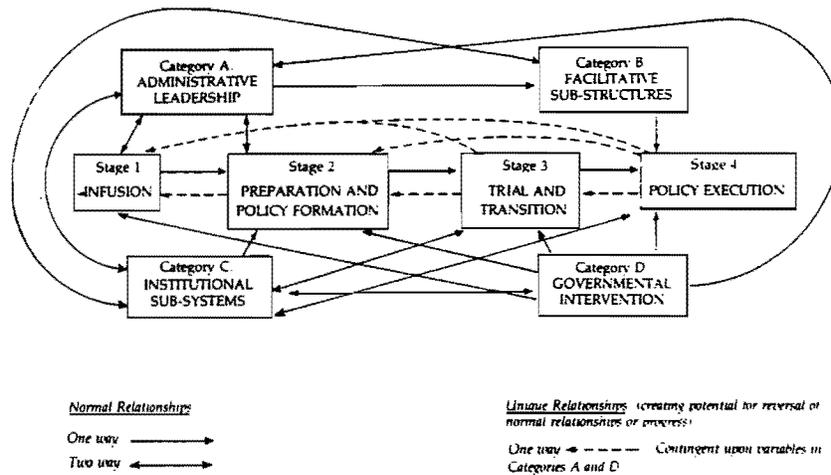


Fig. 1. Stages of Implementation and Categories of Variables Affecting Progress toward Implementation of Federal Mandates

cycle of feedback generally represents the culmination of one stage and the beginning of another.

The first stage, infusion, begins with the introduction of the mandate at the institutional level. The process of infusion is characterized by a number of activities occurring simultaneously or intermittently. These activities, or subprocesses of infusion, include: (1) introduction of the mandate to appropriate personnel in a formal or informal manner; (2) inquiry into the reaction to the mandate by external organizations with which the university and its constituents are affiliated; (3) examination of the social values of the mandate from the perspective of concerned individuals' personal value systems and priorities; (4) formal or informal discussion among various university personnel; (5) projection by groups and individuals with regard to the potential effects of the mandate on the institution; (6) interpretation of the mandate by institutional leaders, particularly key administrators; (7) articulation and communication of the institutional interpretation of the requirements of the mandate; and (8) feedback from university constituents.

The second stage, preparation and policy formation, reflects the attempts of institutions, and particularly college administrators, to formulate plans for change. The process begins with an investigation, generally in the form of an institutional self-study prescribed by the 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 conflicts, risks, and options; (3) an interpretation of the results of the self-study coupled with a decision regarding how this information will be utilized; and (4) a declara-

tion of intent to comply with the federal mandate. The decision-making process, critical in the second stage of implementation, involves both the selection (or creation) of substructures to facilitate initial compliance efforts and the formulation of tentative priorities related to implementing change in various subsystems within an institution. The declaration of intent takes the form of a real or implied institutional policy, which may also be tentative in nature and may or may not reflect administrative priorities. In any event, the activities that occur throughout this stage result in the gradual emergence of a preliminary institutional policy related to forthcoming implementation procedures and expectations. The reaction and response of various constituencies to emerging interpretations, policies, and procedural directives marks the end of the second stage.

The third stage, trial and transition, begins with the onset of observable changes and is characterized by cycles of decision making, conflict, action, reaction, and adjustment. This occurs throughout an extended period of testing one or more alternative courses of action for dealing with the mandate as the institution takes steps toward implementation. The effects of implementation efforts may take the form of personnel changes, budgetary alterations, policy revisions, and new definitions of roles, responsibilities, and expectations among participants (particularly those within the subsystems). Because the impact of the mandate is felt to some degree by a greater number of college constituents, the activity-conflict-response patterns in the third stage are heightened and often accelerated. Eventually, the organization begins to settle into a recognizable course of action, and the formal institutional policy on implementing the mandate is established, clarified, and articulated. When this occurs, the institution moves into the fourth and final stage.

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 that reaches stage four in the implementation process is nevertheless subject to the influence of several key factors (see below). As a consequence, the potential exists for an institution to regress back to the third, or even an earlier, stage.

Categories of Variables

The rate and degree of institutional progress through the various stages of implementation, and the scope of implementation efforts

throughout the university as a whole, are dependent upon the influence of and interaction among four 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. Each category is briefly described below.

Administrative leadership. In order to implement major change in a complex organization, the mechanisms and procedures of governance and administration, as well as the key individuals in top level administrative positions, must facilitate effective communication and control of the change process. Institutional progress toward implementation of a mandate is largely contingent upon the leadership of a central administrator who assumes a role as change agent. Functioning effectively as a principal change agent requires (1) making both a decision and a commitment to change and (2) the ability to act in a manner that promotes progress and acceptance to change within the institutional environment.

Facilitative substructures. Successful implementation of a federal mandate is dependent, in part, on the effective development and use of administrative substructures. Substructures must be designed and utilized to perform mechanistic support services (such as providing reliable and efficient networks for communication of 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). Substructures may also serve as the primary means for generating or increasing support for anticipated reforms. In implementing Title IX in college athletic programs, the substructures most frequently involved in the change process included: (1) an athletic advisory committee; (2) the affirmative action office; and (3) a second central administrator or administrative office, generally a vice-president.

Institutional subsystems. The subsystems of a university include a wide range of departments, divisions, schools, offices, and other recognized groups of constituents that comprise the organization as a whole. Due to the broad scope of most federal mandates, compliance generally requires some degree of change in most or all of an institution's subsystems. Personnel within the subsystems (students, faculty, and administrators) are those who are most likely to anticipate and, eventually, experience the impact of change. Because of the potential for interest and conflict on the part of participants within the various subsystems, and because of the varying degrees of change required to implement the mandate among the subsystems, conditions within key

subsystems can be critical in enhancing or impeding progress toward full (institution-wide) compliance. Two conditions, in particular, facilitate effective implementation of mandated change in institutional subsystems: (1) a change agent or potential change agent exists within the subsystem and (2) the activities and contributions of the subsystem are perceived to be important by influential leaders in the central administration. The subsystems that served as the primary focal point for in-depth investigation in this study were university athletic departments.

Governmental intervention. Effective implementation of a federal mandate is frequently contingent upon an intervention that 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 a directive for change is imposed upon colleges and universities by an external source, internal members and leaders may or may not agree that related changes (particularly those of major proportion) should be made. Consequently, the initial intervention (the mandate) often falls short of creating the institutional climate necessary for educators to respond effectively in implementing the mandate. In many instances, a second intervention (such as a campus visitation by a representative from the government agency responsible for enforcement) is necessary to produce major change. Often it is through the second (or subsequent) intervention that a performance gap (a discrepancy between current and desirable practices) is recognized, acknowledged, and eliminated.

Relationships among Stages and Categories

Figure 1 is a graphic representation of the principal components of the theory and their primary relationships. In the discussion that follows, the illustration is examined in terms of relationships among the stages of implementation, among the categories of variables as they interact to facilitate change, and between the stages and categories as the latter influence the rate and degree of progress toward implementation of the mandate.

During the course of change, an institution generally proceeds from one stage to the next. In effect, institutional involvement in the activities and processes that characterize each stage generates momentum for progress toward the succeeding stage. Progress, however, is also dependent upon the influence and interaction of the four major categories. Although one or more of the categories may influence progress at any stage of the implementation process, most tend to have greater

impact during some stages than others. For example, while governmental intervention may occur during any of the four stages, administrative leadership tends to be most critical in influencing progress during the two earlier stages. In contrast, the remaining categories (facilitative substructures and institutional subsystems) become crucial for continued progress during later stages of implementation.

In some instances, a two-way relationship exists between stages and categories. Under these circumstances, the events occurring in a particular stage are likely to precipitate change in the conditions describing the variables in one or more categories. For example, the political climate that surfaces as personnel participate in and respond to events that characterize the first two stages of implementation may influence the perceptions and decisions of the administrative leadership. Similarly, it is often during the second or third stage when facilitative substructures are created or adapted to meet institutional needs for initiating and sustaining change. Further, the function and structure of institutional subsystems are likely to be altered during the latter stages as observable changes occur.

The relationships among the categories (which are described in greater detail as the integrated theory is presented) are generally more complex. In brief, the administrative leadership is ultimately responsible for (1) the characteristics, functions, and influences of the facilitative substructures and (2) the activities and progress within subsystems. However, certain characteristics within each subsystem hold the potential for influencing priorities and implementation strategies of the leadership. Therefore, a one-way relationship exists between the former pair of categories (administrative leadership and facilitative substructures), while the interaction between the leadership and the subsystems is best described as a two-way relationship.

The category, institutional subsystems, is shown to have a bidirectional relationship with the two remaining categories as well. First, substructures (by definition) have the potential to produce change in subsystems, and, in turn, the needs and characteristics of the subsystems are often critical in shaping and operationalizing the substructures. Second, the category of variables identified as institutional subsystems represents the only instance in which governmental intervention interacts with (rather than directly influences) any other category or any stage of implementation. This latter bidirectional relationship exists because of the potential for participants within a subsystem to generate government intervention through the use of prescribed le-

gal mechanisms (such as filing formal complaints or taking steps toward court action).

Finally, Figure 1 illustrates a unique set of relationships that may result in a reversal of the change process and cause an institution to return to an earlier stage of implementation. Two events, in particular, hold the potential to generate such regression: (1) personnel changes among influential administrative leaders and (2) further governmental intervention, such as reinterpretation of policy or change in implementing regulations.

The Integrated Theory

The major 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 subsystems are usually involved) of mandated change, the principal administrative leader is most likely to be the college president.

The development and use of facilitative substructures 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 a top-level administrator must make a decision and a commitment to implement the mandate, the development and use of administrative substructures must be appropriate to the situation, and administrators must provide essential support services to facilitate change within the formal organization and political environment of the institution.

Four conditions may precipitate an administrative decision to implement a mandate and influence the institutional leader's commitment to change: (1) the values and priorities of the institutional leader may be such that he or she favors implementation of the mandate; (2) the organizational affiliations of the institutional leader and those of key administrative personnel may influence attitudes toward prescribed reform, creating a climate in which change is viewed as politically desirable and educationally sound; (3) the presence of both change advocates and change agents within and outside the institution may create an environment in which resistance is minimized; and (4) governmental intervention may lead to an 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 to 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 appropriate personnel, administrative leaders become increasingly 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 other institutions as they anticipate changes that 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, the administrator may assume a role as a change agent early in the implementation process and be instrumental in providing direction and impetus as the institution advances to the second (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, and there may be related delays in institutional progress toward compliance. However, since an institutional self-study is generally required by a mandate, colleges eventually begin the second stage of implementation with or without major involvement by a primary institutional leader.

By the close of stage two, considerable 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 juncture, if one or more of the four precipitating conditions exist, an administrative leader will decide to implement the mandate. Conversely, when the precipitant variables are not operating, institutional leaders are not likely to make a commitment to change. In any case, when the institution begins the transition into the third stage of implementation, the primary administrative 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 it will be delayed until precipitating conditions change (e.g., governmental intervention occurs or the internal political climate is altered).

Once an institutional leader has assumed a role as a change agent, the rate and degree of progress toward implementation are contingent, in large part, upon the effective development and use of administrative

substructures to facilitate reform. In all instances, substructures are necessary to perform mechanistic support services and task-oriented functions in order to provide for efficient and sustained progress toward implementation. Under those conditions when an administrative change agent has limited power resources, substructures must also be utilized to gain political support for the proposed changes.

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 or may provide political support for the activities of change agents, while others may work toward preserving the status quo. The political climate created by the interaction and influence of key participants in the change process must be interpreted by the administrative change agent in terms of the potential constraints placed on his or her power resources. The administrative change strategy, which is always subject to modification, must be based on the power resources available, the risks associated with openly advocating the proposed reforms, and the personal attributes of the administrative change agent.

When the potential for conflict and resistance is perceived by the administrative leadership 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 substructures. The purpose of the substructures, to facilitate implementation of the mandate according to the intentions and priorities of the institutional leadership, must be made clear to those involved. Responsibilities must be delegated, and related tasks must be assigned to personnel within the substructures. 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. Under such circumstances, the administrator may use indirect influence in guiding the organization toward implementation of the mandate. Substructures must be carefully selected, designed (or adapted), and utilized in order to provide 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 substructures, will reflect the degree of direct administrative control desired by the institutional leader.

Both direct and indirect administrative control were used effectively

by college presidents in implementing Title IX. For example, there were distinct differences in administrative change strategies with respect to the use of direct control even between the two primary comparison groups (those institutions identified as having made the most progress toward equalizing athletic opportunities for men and women) in this study. In one instance, the president assumed major responsibility for initiating and directing change throughout the implementation process. He made decisions, articulated administrative intentions and priorities, and took steps to promote efficient and effective implementation. Substructures were developed to facilitate the change process and related tasks were assigned accordingly. Personnel who were likely to support his position were hired or selected and utilized as change agents, and responsibilities were clarified and then delegated. In the second case, the traditional influences of prominent interest groups and individuals within and surrounding the university community created a climate in which overt administrative leadership in promoting change was not feasible. Rather than relying on legitimate power to direct the change process, the president chose to approach implementation of Title IX unobtrusively and utilized two primary methods of indirect control. First, substructures (composed of members appointed by the president) were developed early in the implementation process for decision-making purposes. Open conflict ensued as participants expressed concerns and opinions. However, the balance of power within and among the decision-making bodies was such that progress toward implementation could and did occur. In effect, the group decisions increasingly paralleled the intentions of the president. Second, as change advocates emerged as active or potential change agents, the president worked cooperatively with these individuals and quietly supported their efforts to initiate and promote reform. Eventually, conflict and resistance subsided and opportunities for men and women athletes at the institution began to equalize.

The processes that accompany the administrative change agent's assessment of his or her power resources and the development of substructures 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 of change are likely to surface. Influential individuals who favor reform may be identified as potential change agents. Based largely on her or his perception of the political climate that first emerges during the infusion stage, the institutional leader begins to develop and implement an initial change strategy. The change agent

selects (or creates) and activates the administrative substructures that will conduct the self-study and assists with other change-related activities that characterize stage two (preparation and policy formation). When administrative control is combined with the appropriate use of substructures, 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 subsystems. Two factors, in particular, precipitate the broad-based change usually required to comply with federal mandates: (1) the existence of a change agent or potential change agent within each subsystem in which change is to take place and (2) a favorable status of each subsystem with respect to the institutional priorities of top-level administrators. Frequently, change is subverted when certain subsystems are ignored due to the difficulty and expense associated with implementing the mandate in these subsystems. For example, due to vast differences in traditional practices in men's and women's sports for more than 200 years, the implementation of Title IX in most college athletic departments was expensive and required substantial change. Consequently, institutional efforts toward compliance with the mandate often focused on subsystems in which change was likely to be least expensive or disruptive. In turn, overall compliance efforts often failed to achieve the overriding goal of the mandate (elimination of sex discrimination in all educational programs and practices). Because implementation of Title IX in college athletic departments often involved extensive changes in priorities, attitudes, and practices, conditions within these subsystems were particularly important in determining institutional response to the mandate (see below).

Among the four comparison groups in this study, distinct differences existed in terms of the level of priority attributed to men's and women's athletics by institutional leaders. This diversity became apparent through analysis of quantitative data (information on budgets, participants, personnel, and the competitive status of various teams) and through the interview process. In the two institutions that had progressed most satisfactorily in implementing Title IX in athletic programs athletics were viewed as an important and integral part of the educational process by the administrative leadership, and influential change agents emerged from within the subsystems and were acknowledged, supported, and given the resources and authority to act by administrative leaders. In contrast, administrators in the other comparison groups accorded relatively little importance to athletics in general

and women's athletics in particular. Moreover, change advocates (potential change agents) within the subsystems held positions of low status (part-time employees, volunteers, and so on) and were not able to effectively influence administrative policies or change strategies.

An additional factor influencing the rate and degree, as well as the scope, of implementation among subsystems is governmental intervention. When intervention occurs and is accompanied by the recognition on the part of institutional leaders that a performance gap exists within the institution as a whole or within a particular subsystem, 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 subsystem. For example, government intervention was critical in providing the impetus for change in only one of the two primary comparison groups. In this instance, the efforts of change advocates were neutralized by influential forces that favored the preservation of traditional athletic practices and sought to maintain the status quo. However, two formal complaints regarding sex discrimination in athletics were filed with HEW and, in each case, federal officials conducted an on-campus investigation. Once it became clear that institutional efforts to comply with the mandate were under direct scrutiny of the federal agency responsible for enforcement, the balance of power shifted toward Title IX proponents and change occurred. In the other institution selected as a primary comparison group, the administrative leadership favored implementation of the mandate and encountered little resistance from internal forces. As a result, further government intervention (beyond the initial mandate) was not necessary to stimulate progress toward reform. Government intervention did not occur in either of the two other institutions in the final sample, nor was Title IX effectively implemented in either athletic program.

When change begins to occur within various subsystems throughout the organization, the institution 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 becomes increasingly dependent upon the attributes and activities of others. In stage three, the attitudes, influences, and capabilities of change agents other than the institutional leader are particularly critical in facilitating change. As individuals assume active roles in the change process, they begin to affect the rate and success of reform. These change agents provide the link between top level admin-

istration and the numerous participants (faculty and students) in change. When change agents function effectively in developing and maintaining formal and informal channels of communication to promote the proposed changes, 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 subsystem involved and will have limited impact on actual progress toward implementation.

During the third stage of implementation, change has occurred and its impact is felt by participants. Trial and transition will generally occur in the form of testing various compliance options and the components of a preliminary institutional plan for implementation. 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) are made, and the organization enters the final stage of implementation (policy execution).

In institutions in which one or more of the aforementioned facilitating conditions does not exist, or where the necessary adjustments have not been made, progress into stage four is highly unlikely. Among the possible explanations of why institutions fail to reach the policy execution stage are: (1) pressure for change by those who favor compliance with the mandate is resisted or countered by an institutional leader(s) who has neither the commitment nor ability necessary to bring about change; (2) ineffective use of supportive substructures and change agents by institutional leaders who favor change; (3) opposition to change among participants or outsiders that is not effectively countered by change agents within various subsystems; (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 reinterprets 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 noncompliance is accepted and implemented.

Both primary comparison groups in this study entered the fourth stage of implementation following eventful periods of experimentation and adjustment in the trial and transition stage. In each instance, this chain of events (although different in each institution) gradually resulted in consensus on implementation policies and procedures among administrative leaders and change agents (lower level administrators) within the athletic departments. Once momentum toward change began to generate from both upper and lower levels of administration, and progress was characterized by unity in purpose and direction among those most directly responsible for implementing change, resistance was minimal or ineffective. Personnel who were unlikely to be supportive of emerging plans and alterations were circumvented, fired, or ignored. Institutional policies on Title IX compliance were gradually clarified, implemented, and accepted. Of the two remaining comparison groups, one institution was still experiencing activity-conflict-response cycles characteristic of the third stage of implementation, while the other had entered the policy execution stage without effectively implementing the mandate.

The factors that influence progress through the four stages of implementation—administrative leadership, the use of facilitative substructures, the conditions in institutional subsystems, and governmental intervention—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 that has previously characterized the institutional change process. Consequently, an organization in any stage of change is still subject to the influence of factors that 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 that facilitate progress toward compliance.

Implications

There are several major implications of this study for both administrative leaders in higher education and government officials responsible for interpretation and enforcement as they attempt to promote effective implementation of federal mandates in colleges and universities.

1. The importance of institutional leaders, particularly college presidents, in implementing a mandate should not be underestimated. Two characteristics of top level administrators are particularly critical in determining the effectiveness of implementation efforts within an institution. First, the values and priorities of administrative leaders affect their willingness to make difficult decisions. Second, the leadership style and capabilities of key administrators influence their success in developing and utilizing supportive substructures that are critical to the implementation of broad-scale change required by most federal mandates. The findings of this study can serve as a guide for administrative leaders in developing and utilizing administrative substructures more effectively to facilitate the implementation of prescribed change. In addition, government officials may be able to gain greater cooperation from college presidents through the use of improved communications and orientation programs designed to provide incentive, direction, and support throughout the change process.
2. One of the primary factors influencing the scope and degree of compliance is the existence of effective change agents within subsystems 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 subsystem are committed to change, capable of administering change, and given the power and resources to implement change. In many instances, federal guidelines and regulations (as well as administrative change strategies) focus exclusively on evaluating compliance in terms of increased dollars in certain budget areas. The findings of this research suggest that the manner in which increased funds are utilized is of greater importance to effective implementation than indiscriminately adding dollars to previously underfinanced programs. For example, this study found 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 both among participants and top level administrators. 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 sex-discriminatory practices (the intent of the mandate). In contrast, in institutions where budgetary increases go directly to athletes (more scholarships, larger travel allowances, better equipment, and so forth), minimal compliance criteria may be met, but the outcomes of change may be unsatisfactory due to failure to invest in qualified leaders (coaches, administrators, and support staff). In these instances, departmental personnel are often part-time employees, volunteers, or temporary staff members (e.g., graduate assistants) who lack the commitment and influence to bring about change. Government officials responsible for the regulations that accompany federal mandates and college administrators must identify (or make provisions to hire), encourage, and support change agents within institutional subsystems in order for successful implementation to occur.

3. Three implications can be drawn from the findings related to governmental intervention:
 - a. When even minimal attempts at enforcement (such as campus visitations by government officials) are made, colleges assume that compliance efforts are noticed. In turn, a higher priority is awarded to implementation of the mandate. Thus periodical direct communication between government agencies and top level college administrators is likely to lead to more effective efforts toward reform.
 - b. Government intervention in enforcing mandates is necessary in those numerous cases where organizations external to the university are working at cross-purposes to the mandate. For example, the impact of competitive leagues and national associations concerned with the governance of college athletics on university personnel responsible for administering athletic programs is substantial. If government agencies do not intervene to change the patterns established by influential athletic associations over the past century, it is unlikely that discriminatory practices will be eliminated. Until government regulations are enforced, athletics will continue to develop in the direction determined by more dominant forces, such as the National Collegiate Athletic Association (NCAA).

- c. Often overlooked in the implementation 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 reinterpretation of regulations, may cause some institutions to improve or accelerate compliance efforts, it may impede efforts toward implementation in many 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 that have not already done so will be forced to provide equal scholarship funding for women athletes according to the proportion of athletic participants that are 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, however, 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 that 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 that has, in the past, done nothing to expand the breadth of opportunities for women in sports and offers an athletic program in which only 10 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 they may encourage the continuation of patterns of investment in which additional money is channeled directly to the athletes without improving the quality of the program or, more notably, the quality of the staff members responsible for leadership in a changing environment. In short, it appears that government officials responsible for policy interpretation need a stronger working knowledge of the internal processes that accompany implementation of federal mandates in colleges and universities. Moreover, in order to avoid creating the type of intervention that defeats the intent

and purpose of the mandate, more valid assessment of the effectiveness and extent of implementation efforts is needed.

A Concluding Note

Previous research on academic change has focused largely on purposive change at the initiation stage and has paid scant attention to the implementation of mandated change. This study suggests that three research frameworks—the complex organization, the planned change, and the political—provide powerful analytic lenses for studying different stages of the implementation process.

But while this theory has many common elements with these three change models, it goes beyond existing change research. By combining and expanding upon key elements of existing models, it offers an integrated, comprehensive theory of academic change. Ideally, of course, this theory will be tested through further research. At the very least, however, this grounded theory offers a tested approach to guide research on change, and it suggests guidelines for those who are concerned with the effective implementation of mandated change in higher education.

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