AFFIRMATIVE ACTION FOR WOMEN: AN ASSESSMENT OF PROGRESS AT DOCTORATE-GRANTING UNIVERSITIES AND AN ANALYSIS OF SUCCESSFUL APPROACHES

by

Patricia B. Hyer

Dissertation submitted to the Faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY in Educational Research and Evaluation

APPROVED:

James C. Impara, Chairman

Margaret A. Eisenhart

Lee M. Wolfe

Gary D. Fenstermacher

Allyn R. Brosz

May, 1983
Blacksburg, Virginia
AFFIRMATIVE ACTION FOR WOMEN: AN ASSESSMENT OF PROGRESS
AT DOCTORATE-GRANTING UNIVERSITIES AND AN ANALYSIS
OF SUCCESSFUL APPROACHES

by
Patricia Brown Hyer

(ABSTRACT)

Implementation of affirmative action policies at doctorate-granting universities was examined using quantitative and qualitative research methods. The first phase included a quantitative assessment of the collective and individual progress made in hiring and promoting women faculty during the 1970s. Institutional data reported in the annual Higher Education General Information Survey were used to construct an index reflecting the degree of change experienced by the institution in five areas. After institutions were rank-ordered on the basis of their composite change score, three of the most successful were selected for site visits.

Major findings from the first phase of the research include:

1. The percentage of women on the faculties of doctorate-granting universities has increased from 14.7% in 1971 to 18.8% in 1980. However, the variation in current female
representation is great, from 0% to 68%. Women are least well represented at universities characterized by a low percentage of women students, a technical curriculum, and a strong research orientation.

2. There is also wide variation in the amount of change that has occurred on these campuses. At some institutions, the percentage of women has increased considerably more than the average (4%); at others, the percentage has decreased. Greater change occurred at universities which had a very low percentage of women in the base year, expanded their faculty, and were located in New England.

The second phase of the study included on-site interviewing of faculty and administrators, and document review to discover what strategies, policies, programs and other factors were associated with positive change for women at the three successful institutions selected in phase one.

Commitment of top administrators was a crucial factor in successful affirmative action implementation. A vital aspect of leader commitment was the creation and support of effective affirmative action staff roles. Women's groups also played an important role in pressuring for change. Federal intervention mobilized leaders at the point of policy adoption, but had little effect on implementation. All three campuses monitored faculty appointments closely and gave affirmative action issues high administrative priority.
ACKNOWLEDGMENTS

This study could not have been accomplished without the significant help given to me by several individuals and organizations. My thanks go first to my committee members who encouraged me to go my own way and were unfailingly supportive when I did.

A fellowship from the American Association of University Women made the three campus visits possible and thereby greatly increased the strength and usefulness of this research. The visits also put me in touch with some truly extraordinary people, to whom I am much indebted for their valuable and candid insights into the complicated process of creating change. Their courage and persistence in pursuing a vision of greater equity for women are quite remarkable.

Special thanks go to my husband whose boundless love, support and good humor kept me going when things got tough.
# TABLE OF CONTENTS

ABSTRACT ........................................ ii
ACKNOWLEDGMENTS ................................ iv

<table>
<thead>
<tr>
<th>Chapter</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td></td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Introduction to the Study</td>
<td>1</td>
</tr>
<tr>
<td>Persistent Inequties in the Higher Education Workforce</td>
<td>3</td>
</tr>
<tr>
<td>Background on the Executive Order</td>
<td>5</td>
</tr>
<tr>
<td>Purpose and Significance</td>
<td>9</td>
</tr>
<tr>
<td>Overview</td>
<td>10</td>
</tr>
<tr>
<td>II.</td>
<td>12</td>
</tr>
<tr>
<td>REVIEW OF THE LITERATURE</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>12</td>
</tr>
<tr>
<td>Nature of Change Required by Affirmative Action Policies</td>
<td>16</td>
</tr>
<tr>
<td>Barriers to Change</td>
<td>18</td>
</tr>
<tr>
<td>Implementation at the Organizational Level</td>
<td>25</td>
</tr>
<tr>
<td>Research on Mandated Change</td>
<td>36</td>
</tr>
<tr>
<td>Impetus and Enabling Factors in AA Implementation</td>
<td>43</td>
</tr>
<tr>
<td>Summary of Findings from the Literature</td>
<td>45</td>
</tr>
<tr>
<td>Implications for the Study</td>
<td>46</td>
</tr>
<tr>
<td>III.</td>
<td>49</td>
</tr>
<tr>
<td>METHODOLOGY</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>49</td>
</tr>
<tr>
<td>Phase I: Assessment of Change</td>
<td>50</td>
</tr>
<tr>
<td>Phase II: Case Study Issues and Methods</td>
<td>56</td>
</tr>
<tr>
<td>IV.</td>
<td>66</td>
</tr>
<tr>
<td>STATUS OF WOMEN FACULTY</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>66</td>
</tr>
<tr>
<td>The Changing Status of Women Faculty</td>
<td>67</td>
</tr>
<tr>
<td>Institutional Differences in the Status of Women Faculty</td>
<td>73</td>
</tr>
<tr>
<td>Institutional Change over the Decade</td>
<td>81</td>
</tr>
<tr>
<td>V.</td>
<td>87</td>
</tr>
<tr>
<td>CKSU</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>87</td>
</tr>
</tbody>
</table>

v
# List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Proportion of Women Faculty at Doctorate-Granting Universities, 1971-72 - 1980-81</td>
<td>68</td>
</tr>
<tr>
<td>2. Mean Number Men and Women Faculty by Rank at the Average Doctorate-Granting University, Selected Years</td>
<td>70</td>
</tr>
<tr>
<td>3. 20 Institutions with the Highest Percentage of Women Faculty, 1980-81</td>
<td>75</td>
</tr>
<tr>
<td>4. 20 Institutions with the Lowest Percentage of Women Faculty, 1980-81</td>
<td>76</td>
</tr>
<tr>
<td>5. Women as Percentage of Full-Time Faculty in Universities, by Carnegie Classification, 1980-81</td>
<td>80</td>
</tr>
<tr>
<td>6. Percent Women on Faculty at 20 Institutions with Highest Change Scores</td>
<td>83</td>
</tr>
<tr>
<td>7. Number and Percent Women on the Faculty, CKSU, 1972-1980</td>
<td>93</td>
</tr>
<tr>
<td>8. Number and Percent Women by School, CKSU, Selected Years</td>
<td>95</td>
</tr>
<tr>
<td>9. Title and Affiliation of CKSU Interviewees</td>
<td>97</td>
</tr>
<tr>
<td>10. Factors Cited by Interviewees at CKSU</td>
<td>98</td>
</tr>
<tr>
<td>11. Denby College, Faculty Composition, Appointments, and Tenure, 1971-72 - 1981-82</td>
<td>140</td>
</tr>
<tr>
<td>12. Title and Affiliation of Denby College Interviewees</td>
<td>143</td>
</tr>
<tr>
<td>13. Factors Cited by Denby College Interviewees</td>
<td>146</td>
</tr>
<tr>
<td>14. Number and Percent Women by Rank at Newton University for Selected Year</td>
<td>195</td>
</tr>
<tr>
<td>15. Number and Percent Women on Faculty by School, Newton University, 1970 and 1980</td>
<td>196</td>
</tr>
</tbody>
</table>
16. Title and Affiliation of Newton University Interviewees ........................................ 198
17. Factors Cited by Newton University Interviewees .............................................. 201
## LIST OF EXHIBITS

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Percent Men and Women Within Rank on Doctorate-Granting University Faculties, 1980-81</td>
<td>72</td>
</tr>
<tr>
<td>2. Chronology of Desegregation Negotiations</td>
<td>105</td>
</tr>
<tr>
<td>3. Interim Report, CKSU</td>
<td>128</td>
</tr>
<tr>
<td>4. Appointment Approval Form, CKSU</td>
<td>129</td>
</tr>
<tr>
<td>5. Faculty Recruitment and Appointment Form, Denby College</td>
<td>176</td>
</tr>
<tr>
<td>6. Guidelines for Special Contacts, Denby College</td>
<td>179</td>
</tr>
<tr>
<td>7. Serious Search Policy, Newton University</td>
<td>220</td>
</tr>
</tbody>
</table>
Chapter I
INTRODUCTION

INTRODUCTION TO THE STUDY

Federal affirmative action (AA) policies have sparked much controversy in higher education—a controversy heightened by the inclusion of women among protected groups in 1968; the requirement of written plans, goals, and timetables in 1972; and slow growth in much of the sector throughout the 1970s. Despite federal pressure, progress in increasing the representation of women and minorities in higher education has been disappointingly slow. Study after study confirms the existence of continuing inequities in access to employment, promotion, tenure, and salary for women faculty. Affirmative action policies have not yet achieved their intended effect of opening up and equalizing opportunities for underrepresented groups. In fact, affirmative action policies have produced relatively minor changes in most universities.

Why has the policy had so little impact? The critical issue appears to be the extent to which affirmative action policies have actually been implemented at colleges and universities. If token compliance has been the norm, then a better understanding of the complex interaction of factors
that produced positive change in relatively successful institutions is much needed information.

This study, focused on affirmative action implementation at doctorate-granting universities, fits into a tradition of research on organizational change and policy implementation. The study is intended to answer two broad questions:

1. Which doctorate-granting universities have been most successful in hiring and promoting women faculty over the last decade? What institutional characteristics are associated with greater and lesser change?

2. What strategies, policies, programs, and other factors are associated with positive change for women in successful institutions?

The remainder of Chapter I contains a brief review of the status of women in higher education, historical background on Executive Order 11246 (as amended), which requires government contractors to take affirmative action, and the purpose and significance of the study. An overview of the entire document is provided in the final section of this chapter.
PERSISTENT INEQUITIES IN THE HIGHER EDUCATION WORKFORCE

Higher education is one employment sector in which resistance to change has been particularly strong. While some progress has been made in hiring women into the lower ranks, the professoriate remains overwhelmingly white and male. The problem is most acute in the nation's most influential institutions--doctorate-granting universities. In 1979-80, university faculties were only 19% women as compared to 35% at two-year colleges (Fact-file, 1980, p. 8). The more prestigious and research-oriented the institution, the fewer women faculty it has.

Dramatic changes in the composition of the postsecondary student body over the last decade sharply contrast with this pattern of faculty composition. The percentage of doctorates awarded to women has increased every year since 1969 and was more than 30% in 1981 (National Research Council, 1982). Since 1979, the number of women attending colleges and universities has exceeded the number of men. This represents a dramatic shift in student enrollment and has made inequities on the faculty and administrative staffs more obvious and more difficult to rationalize.

As evidence accumulated showing the slow progress in increasing women's share of faculty employment during the 1970s, it became clear that the federal edict may have been
a necessary but not sufficient motivation for institutional reform. Documenting the nature and extent of discrimination and the complex attitudinal and institutional barriers that effectively block women's opportunities has been an important preoccupation of research over the last decade.

Recent evidence on the employment of new Ph.D.s indicates that discrimination in first job placement has not disappeared as once suggested by Cartter and Ruhter (1975). In a sample of 1,316 pairs of men and women matched on the basis of field of doctorate, quality of Ph.D. institution, race, and year of Ph.D., men were favored in all employment and salary measures (Ahern & Scott, 1981, p. 29). For the cohort of matched doctorates who received their Ph.D.s between 1970 and 1974, the distribution by rank was significantly less favorable for women than men; men were more likely to have achieved tenure by 1979 than women; and the median salary for women was $5,000, lower than men's. Among the most recent Ph.D.s (1975-1978), involuntary unemployment was still 2 1/2 times greater for women than their matched male counterparts and all other trends were repeated (Ahern & Scott, 1981, p. 43). These findings refute Cartter and Ruhter's tentative conclusions that employment equity has been achieved for recent graduates and reinforce the conclusions of numerous other studies documenting the
unequal opportunities and status of women on higher education faculties.

Although documentation of discrimination has been an important step in drawing attention to continuing inequities, there is a need to move beyond a delineation of barriers and focus on workable solutions. It is important to identify strategies associated with positive results and to learn how affirmative action programs can be implemented effectively.

BACKGROUND ON THE EXECUTIVE ORDER

Current regulations requiring federal contractors to refrain from discriminatory actions and to take affirmative action have a lengthy history (Abramson, 1979). The first executive orders were a response to black demands during World War II for a share of defense industry jobs. President Roosevelt organized the first committee on fair employment practices in 1941 and created a second, temporary committee in 1942 to focus on the prevention of discrimination in war industries. After a six-year hiatus following the war, President Truman created a Committee on Government Contract Compliance. Eisenhower made other changes in the committee structure in 1953. However, the executive orders issued by Kennedy and Johnson are those which eventually led
to present-day enforcement practices, since committees established by predecessors had no enforcement authority. In 1965, President Johnson gave the Secretary of Labor the right to create a compliance office and to promulgate rules and regulations for enforcement. This last executive order, 11246, was later amended in 1968 to cover sex discrimination (Executive Order 11375).

The order has two major clauses. The first requires nondiscrimination on the part of federal contractors and the second requires contractors to take affirmative action to overcome the effects of past discrimination. Executive order enforcement activity can be triggered in three ways: (a) based on complaints of discrimination made by individuals or groups; (b) through required preaward compliance reviews to see if potential contractors have the capability of fulfilling executive order obligations; and (c) through periodic, selected reviews to see if federal contractors are in compliance (U.S. Dept. of Labor, 1977). Agency officials attempt to remedy violations of requirements through conciliation, and where conciliation fails, through contract cancellation, termination, or suspension in whole or part.

Revised Order 4 requires institutions with contracts of more than $50,000 and more than 50 employees to prepare a written affirmative action plan, conduct a workforce analysis, establish goals and timetables for hiring workers from underrepresented groups, and develop result-oriented policies and procedures (41 CFR Part 60-2).

The U.S. Commission on Civil Rights (1981a) describes the basic elements of an affirmative action plan as:

The organization's written commitment to providing equal opportunity;

Dissemination of this policy statement within the organization and to the surrounding community;

Assignment to senior officials of adequate authority and resources to implement the affirmative action plan;

Identification of areas of underutilization of minorities and women and analysis of discriminatory barriers embedded in organizational decisionmaking;

Specific measures designed to overcome the causes of underutilization and remove discriminatory barriers;

Monitoring systems to evaluate progress and to hold officials accountable for progress or the lack thereof; and

Promotion of organizational and community support for the objectives of the plan by consolidating advances as they are achieved (p. 42).

Selection of the Executive Order as the focal point for a study of federal policy and its impact on employment opportunities for faculty women is important for several reasons. First, unlike Title VII of the Civil Rights Act of
1964 which also provides guarantees of nondiscrimination in employment, the Executive Order focuses on systemic discrimination, a distinct advantage when addressing pervasive patterns within an employment sector. Second, the Executive Order was the only legal remedy available to faculty women until 1972 when Title VII was amended to cover public employees and employees of educational institutions. In 1969, advocates discovered and pressed for application of the Executive Order on behalf of professional women, a novel and uncertain use of federal machinery more accustomed to black constituents and blue-collar issues. Charges were filed against 250 colleges and universities between 1970 and 1972 by faculty women through the Women's Equity Action League (Sandler, 1973). At that time, the Order was viewed as a major vehicle for reform of higher education. Third, the Order does not require a finding of discrimination before remedies can be put in place. All contractors are expected to study the characteristics of their potential and actual labor force and to take affirmative action to correct underrepresentation of protected groups. This eliminates the need to prove discrimination, a time-consuming, difficult, and often unproductive process in the case of systemic problems. The year 1971-72 makes a useful starting point for examining affirmative action implementation because of
the new and far more specific requirements imposed by Revised Order 4.

PURPOSE AND SIGNIFICANCE

Although a great deal has been written about affirmative action in higher education, there is little research on how it has been implemented successfully. Literature on this topic typically falls into three areas: philosophical issues (arguments and rationales for particular viewpoints); legal issues (elucidation of AA regulations and judicial decisions and their effect on employment practices); and status reports (data-based studies documenting the extent of discrimination, or the status of women and minorities). Few studies have been comparative, or theoretical.

This study draws on the considerable body of research and case material on organizational change and policy implementation to put the issue into a new, more productive perspective. It examines the extent of positive change for women faculty at doctorate-granting universities which are subject to the Executive Order, and highlights institutional characteristics associated with greater and lesser change. Case studies of three successful institutions provide descriptions of the factors and processes thought to account for the amount of change that has occurred at those institu-
tions. Particular attention is paid to the specific policies, programs, and strategies used to implement affirmative action on each campus, since these represent factors under the control of university officials.

The study is directed at filling a need for longitudinal and institutional comparisons of affirmative action performance, and for description and analysis of actual practices in higher education. To the extent that the study fulfills these needs, it will make a practical contribution to decision makers in higher education and in government who continue to search for workable strategies to implement affirmative action mandates.

Affirmative action advocates may also benefit from the research. Insight into the process of organizational change and detailed descriptions of affirmative action efforts will provide change agents with valuable background to use in working with institutions committed to long-term change, but uncertain how to proceed.

OVERVIEW

Chapter II is a review of the literature on policy implementation and organizational change. Characteristics of affirmative action policies and the nature of higher education institutions anticipate the low level of implementa-
tion and high level of resistance. Models of planned change efforts in complex organizations provide an important conceptual base for this study, especially when augmented by recent research and case material on Title IX and affirmative action implementation in higher education. Implications from this literature are drawn for the study.

The quantitative and qualitative research methods used in the study are described in Chapter III. In Chapter IV, findings are presented from the first phase of the research, which was a quantitative assessment of progress for women at all doctorate-granting universities during the 1970s and an identification of institutional characteristics associated with greater and lesser change. Chapters V, VI, and VII are case studies of three successful institutions examined in the second phase of the research. Similarities and differences in the major factors found at the three institutions are discussed in Chapter VIII. Conclusions and implications of the study are drawn in the final chapter.
Chapter II
REVIEW OF THE LITERATURE

INTRODUCTION

Research interest in implementation processes arose from the all-too-frequent realization that large-scale social programs did not achieve their intended effects. Somehow, well-intentioned policies lost their capacity to produce measurable change in the conditions of individuals they were targeted to improve. Movement from one level to the next, through an array of "loosely coupled" organizations, each with its own structure, culture, problems, and perspective, transmutes the policy and dissipates its impact (Weick, 1976). Implementation is the missing link between the policy decision and policy impact.

Berman's (1978) definition of implementation analysis reflects this failure orientation:

Implementation analysis is, in short, the study of why authoritative decisions (policies, plans, laws, and the like) do not lead to expected results. To speak in more positive terms, it is the study of the conditions under which authoritative decisions do lead to desired outcomes. (p. 160)

Indeed, it is the urgent need to improve policy performance that led researchers and practitioners to a closer examination of the interaction of policy and the institutional setting.
Many useful concepts can be drawn from this emerging area of research. It is helpful to start by distinguishing between federal macro-implementation problems and local micro-implementation problems (Berman, 1978). The problem at the federal macro-level is developing and executing policy so as to influence local organizations to behave in desired ways. For education and other human services policies, elements within the policy sector (such as local, state, and federal government agencies; clients; interest groups; and local delivery systems) operate more or less autonomously, and are only loosely connected with one another. Thus, there are many individuals and organizations interacting to determine who gets what, when, and how. At each level, the policy is transmuted. Ultimately, the power to determine the policy's outcome rests with local administrators, not with federal officials.

Implementation of affirmative action policies has been hindered by numerous problems at the federal macro-level. Particularly serious problems have been overlapping and conflicting federal agency authority for civil rights policies, inconsistent enforcement efforts, lack of positive incentives for compliance, a hostile political environment, and slowed economic growth (Abramson, 1977; Abramson, 1979; Stewart, 1980; & U.S. Dept. of Labor, 1977). These problems
cause genuine confusion and substantial frustration among the institutions that must comply with the mandate and among the intended beneficiaries of the policy, women and minorities, who expected the policy to result in greater opportunities for them. Thus, one part of the explanation for the limited impact of affirmative action policies stems from these macro-level variables, which undermine the commitment needed for vigorous efforts at the institutional level.

At the local level, effective implementation is usually a mutual adaptation between the project and the organizational setting. Micro-implementation has three phases: mobilization, during which managers decide to adopt the project and lay plans for its execution; deliverer implementation, which is characterized by individual choices to adopt the plan to standard work routines and behavior or to change those routines and behavior in line with the new plan; and finally, institutionalization of the program (Berman, 1978).

This research is focused on the micro-implementation process. Its purpose is to gain better understanding of the dynamics at the institutional level that produced greater opportunities for women. Given the mixed messages emanating from the federal level, have all major research universities responded similarly, or have some universities managed to make more measurable progress than others? If some did bet-
ter, what were the conditions that led to their more favorable outcomes? How did the more successful institutions go about implementing affirmative action policies on the campus? What sorts of organizational change did these policies entail?

This chapter draws on an extensive body of literature on organizational change to provide a framework for examining affirmative action implementation at doctorate-granting universities.

First, the nature of the change required by affirmative action policies and the major barriers to change at the organizational level are examined. Next, the most important organizational models identified in the literature are described briefly along with their implications for understanding the change process. More extensive treatment is given to efforts by Lindquist (1978) and Schreirer (1981), who try to integrate these widely varying perspectives, and then to Newcombe's (1980, 1981) grounded theory of prescribed academic change. Finally, implications for this study are suggested and explored.
NATURE OF CHANGE REQUIRED BY AFFIRMATIVE ACTION POLICIES

Van Meter and Van Horn (1975) provide a typology of public policies based on a combination of two features: the amount of change required (major to minor) and the degree of goal consensus (low to high). They suggest the preponderance of policies are found in the "major change/low consensus" and "minor change/high consensus" categories (p. 460). It is easiest to achieve goal consensus on minor changes that do not disrupt the existing distribution of power and resources. Major changes, by their very nature, often lead to conflict among affected constituencies because they represent a threat to established relationships and procedures.

Affirmative action falls into the category of major change and low goal consensus. The intent of the policy is to dismantle interlocking discriminatory processes which routinely bestow advantages on white males and penalties on minorities and women (Commission on Civil Rights, 1981a, p. 13). Ultimately, a state of "equity" will mean a much greater share of opportunity, rewards, and status will go to women and minorities and less to white men as a group. This kind of change is a threat to the existing social system and it generates a predictable response from power elites, who benefit from existing practices. The anticipated response pattern has been described as follows:
First, power elites will tend to prevent or oppose innovations that threaten to restructure the social system. They will attempt to do this initially by preventing the basic idea of an innovation or change from entering the social system... Second, leaders will attempt to alter in a way favorable to them the nature of the advocated change and the nature and distribution of the consequences of the change. These attempts to alter the change and its consequences may not be consistent with the change planner's intentions and hence represent a form of resistance. Third, change initiated at the grass-roots level (bottom-up change) is likely to encounter resistance by power elites. 'The power structure of a system is a force toward the success of top-down change, whereas it works against bottom-up change.' (Zaltman, Florio, & Sikorski, 1977, p. 39)

Looking more closely at higher education, it is clear that mandates for equal pay and treatment and affirmative action threaten to disrupt the favorable distribution of rewards, status, and power for white males. Faculty women who have sought legal redress for inequitable individual or group treatment have found the courts less than sympathetic -- virtually all the Title VII cases against universities in the period 1972 to 1977 ended in defeat for female plaintiffs (Vladeck, 1981, p.2). The fact that the last decade did not provide any striking improvements for women faculty and that they still lag behind their matched male colleagues in salary, rank, and access to employment is further evidence of this powerful resistance to change in the status quo (Ahern & Scott, 1980, p. 80).
For some organizations, full implementation of affirmative action requires radical changes in existing personnel practices, in behavior of certain managers, and in the amount of resources and personnel devoted to implementing the program. Affirmative action policies are controversial because they require major changes in the way many organizations function and because they are designed to lead toward a more equitable allocation of rewards, power, and status in society. The "major change/low goal consensus" nature of these policies suggests that there will be many barriers to their full implementation at the local level.

BARRIERS TO CHANGE

It is particularly important to understand first the nature of higher education and its resistance to change of any sort, as well as the specific norms, values, and practices of universities that make affirmative action difficult to implement. Although they will not be discussed here, attitudes and behaviors of individuals interact with these organizational practices and further reduce the likelihood of achieving significant change.

Higher education has particular problems adapting to new conditions because of its distinctive characteristics. Hefferlin (1969) suggests seven conditions that make change
even more difficult to initiate and sustain in colleges and universities than in other types of organizations:

1. Their purposes and support are basically conservative. They are essentially devices for perpetuation of culture and their support and governance stems from the most successful and wealthy groups in the society that are naturally devoted to assuring the continuity of the present system.

2. The educational system is vertically fragmented. Each stage of a student's education is treated as an independent process with little or no coordination among the parts.

3. Within higher education, institutional reputation is not based on innovation. Unconventionality is not the usual road to academic prestige and advancement.

4. Faculty members have observed their vocation for years as students before joining it. Those who reject existing values and orientations of faculty usually seek other careers.

5. The ideology of the academic profession treats professors as independent professionals. Tenure and teaching in isolated classrooms make the power of passive resistance great.

6. Academics are skeptical about the idea of efficiency in academic life. Measurement of educational outcomes are resisted as is evaluation of teaching and research.

7. Academic institutions are deliberately structured to resist precipitant change. Institution-wide reform is impeded by fragmented and diffused power and a multiplicity of review and approval mechanisms (pp. 13-16).

Hefflerlin's search was for "vital educational institutions," those characterized by the capacity to grow and to adapt to new social demands. Among the 110 institutions surveyed, few could be described as dynamic. For those reporting significant changes, the source of the reform was usually an external stimulus or demand:
In short, we conclude that while the responsiveness of an innovation can be significantly affected by internal factors, the institution will seldom alter its function without external influence. Outsiders initiate; institutions react. (p. 146)

The fundamental importance of external factors in causing major innovation or reform is a consistent finding of research on educational institutions. This reflects in part the difficulty of overcoming internal resistance generated by academic norms and values.

Lindquist (1978) suggests that one of the great difficulties facing academic innovators is deciding the proper way to go about their change attempts. Where many complex organizations are dominated by bureaucratic rules and hierarchical decision making, postsecondary institutions have strong currents of collegiality and democracy as well. All three of these norms may be present regarding any issue; but the weight given each norm will vary by issue, by institutional type, and by amount of pressure to change (pp. 20-21). Governance structures are often very complex. Faculty and administrative committees have multiple, overlapping jurisdiction; departmental interests are jealously guarded; the decision making apparatus is usually cumbersome and time-consuming. The study of Oakland's community development program by Pressman and Wildavsky (1973) illustrates the fatal effect on program implementation when a large num-
ber of decision points must be cleared before the program can begin.

Lindquist sums up these and other findings on resistance to change in higher education as follows:

The American college or university is vital to our intelligent and ethical future but is largely unable to reform itself in response to the needs of that future without considerable external pressure. Studies of post-secondary institutions suggest several reasons for this consistently documented inflexibility.

Colleges and universities combine deeply-rooted norms, values, structures, sub-groups and power relations with great complexity, low formalization and de-centralization of control. Many ideas penetrate such organizations, but very few can budge the status quo. ...there simply is too little positive energy and skill focused on planned change to offset contrary tendencies. Small innovations, usually the result of external pressure, dot the periphery of these institutions; rarely does reform or innovation of much magnitude get implemented. (1978, pp. 30-31)

In addition to generalized resistance to change in higher education, there are special problems encountered in implementing affirmative action mandates in universities. Four examples of such barriers are described here--belief in the university as a meritocratic institution; faculty hiring practices; cumulative effects of past discrimination and bias; and current trends in higher education.

The notion that universities have developed their considerable strength by hiring and rewarding individuals on the basis of merit alone is widely accepted by the general
public, faculty members, and the legal system. Indeed, the courts consider themselves unable to evaluate faculty expertise and they are generally unwilling to review subjective judgments about the quality and value of a colleague's research and teaching, regardless of the individual rights which may have been violated during the decision making process (Vladeck, 1981, p. 1).

Affirmative action has been viewed as a direct threat to this highly cherished view of the university as a meritocracy and to the freedom of faculty to decide for themselves who should teach, and who and what should be taught (Lester, 1974; A Program for Renewed Partnership, 1980; Seabury, 1972). Unfortunately, senior faculty have recognized merit more consistently in promising white male scholars than among those with attributes different from their own. If merit were as potent a principle as it is alleged to be, then race, sex, and social class would have little or no correlation with faculty achievement, rewards, and status. The evidence is overwhelming that such ascribed characteristics significantly influence academic careers and that truly unbiased judgments of merit are extremely difficult to make (Lewis, 1975).

Faculty hiring practices have perpetuated a system in which women and minorities are at a clear disadvantage.
Recruiting practices depend heavily on recommendations from colleagues and often miss women who are seldom fully incorporated in the informal networks of sponsors and proteges. Hiring, promotion, and tenure decisions are made at closed meetings by senior faculty on the basis of criteria that fluctuate with each decision and are seldom articulated to those being judged. Numerous case histories of women denied tenure and/or promotion document the degree to which these practices are used, often quite blatantly, to exclude talented women from the tenured and senior ranks (Abramson, 1979).

The cumulative effects of discriminatory policies and practices have also hindered progress for women. Enrollment restrictions are one example of such policies. A number of prestigious institutions were all-male; many coed institutions set enrollment quotas for women students and required higher admissions standards for women in order to keep the male-female ratio at a preferred balance favoring males; and most professional schools and graduate programs routinely restricted the number of women students admitted on the grounds that women would probably marry and not use their training. Changes in these policies have only occurred in recent years.
Enrollment restrictions have obviously reduced the number of highly trained women who might have been available for faculty employment. In addition, since women were virtually excluded from graduate programs of the most prestigious institutions by official policy or accepted practice, the pool of new faculty for major universities had few, if any, "qualified" women in it.

A fourth problem is the current condition of higher education which seems to prohibit any major change in the structure of university faculty during the next few decades. Particularly important trends are: stable and/or declining enrollments; low turnover and high tenure rates among existing faculty, which result in few opportunities to hire or retain women; and declining fiscal resources (Levine, 1979, pp. 43-46).

Resistance to change in higher education poses a formidable barrier to any major innovation. External forces are nearly always necessary to initiate and sustain a major institutional reform. In addition to institutional inflexibility, affirmative action programs conflict with deeply-rooted norms and values and face economic conditions which further hinder progress.
IMPLEMENTATION AT THE ORGANIZATIONAL LEVEL

The literature on organizational change is vast. Researchers from a variety of disciplines have contributed to its development. There is no single, coherent theory of change but rather a multiplicity of perspectives and partial explanations of how organizations function and how change occurs within them. This section summarizes these differing perspectives on the nature of planned change in complex organizations and describes recent efforts to integrate these insights into a comprehensive framework.

Planned change efforts have been described and classified by many authors (Chin & Benne, 1976; Elmore, 1978; Lindquist, 1978; & Schreirer, 1981). Different models make very different assumptions about how organizations function and these assumptions necessarily lead to conflicting views on how change efforts might best be effected. Six of the major schools of thought will be briefly described here.

Rational/Empirical Model

The rational model of planned change dominates much of the literature. The model assumes organizations and the behavior of people within them are goal-directed. Organizations are structured hierarchically and responsibility for policy making and overall performance rests with top manage-
ment. Responsibilities are allocated to subunits in a way that maximizes the organization's overall performance on its objectives. Policy is translated into action by a deliberate stepwise process in which goals are elaborated into specific tasks. Implementation failure is viewed as a management failure—lapses of planning, specification, and control (Elmore, 1978).

Assumptions of rationality are fundamental to research and development strategies. If human beings (and organizations) are assumed to change on the basis of reason and evidence, then the best way to alter behaviors and attitudes is to invest in systematic research and development of new knowledge, new practices, new products. If the research is correct, the proposed change will sell itself (Lindquist, 1978, p. 2). Educational R & D centers are based on this model. Creation of a unit to conduct institutional research and planning analysis is a common manifestation of the rational management approach in colleges and universities.

**Bureaucratic Process**

The literature on bureaucratic processes is particularly useful in describing how policy is actually implemented by the "street-level bureaucrat." Elmore (1978) suggests that problems of implementing policies in bureaucratic
settings can be traced to two basic elements: discretion and routine. Specialization of subunits increases with the size and complexity of the bureaucracy, resulting in fractionated power. With specialization comes discretion, which individuals manage by creating operating routines to simplify their work, but also to demonstrate their specialized skill in controlling and managing their assigned tasks. The dominant characteristic of such organizations is resistance to change. Discretion and operating routines are relatively impervious to the kind of management controls exercised in the rational or systems management approach. The bureaucratic model offers few, if any, prescriptions for improving the implementation process. However, it does capture a common pattern of implementation failure in which hierarchical controls simply fail to affect the important street-level transactions that determine success of policy (p. 208).

**Political Model**

Conflict-bargaining and power-coercive are alternative names for political strategies. Unlike the systems management approach, the political model does not assume that power is contiguous with formal authority, or that individuals and subunits in the organization are working toward common goals. On the contrary, organizations are viewed as
arenas of conflict in which coalitions of groups and individuals with specific interests compete for relative advantage in the exercise of power and the allocation of scarce resources (Elmore, 1978, p. 217).

Baldrige (1971) was one of the first to discover the usefulness of the political model for understanding the dynamics of decision making in higher education. In his examination of events at New York University, he found decisions were negotiated, temporary settlements; the struggle for control was constant. Coalition groups, power struggles, and shifting authority contrast sharply with previous views of universities as collegial, democratic, or bureaucratic organizations.

The political model has important implications for understanding the implementation process. Constant conflict over the purpose and results of policy means some can characterize programs as "failures" and others as "successes" based on where they stand in the bargaining process. Policy implementation does not proceed from a single declaration of intent to a result, but is negotiated at every stage.
Organizational Development

Organizational Development, Human Problem-Solving, Normative-Reeducative, and similar strategies for planned change emerge from the human relations perspective and the work of the National Training Laboratories. T-groups and sensitivity groups are a well-known outgrowth of this approach. This model treats the needs of individuals for autonomy and control over their own work and for participation in decisions affecting them as paramount. Decision making consists primarily of building consensus and strong interpersonal relations among group members.

Implementation, according to this model, rests at the bottom of the organization, not the top, and success depends on critical variables such as motivation, commitment, and interaction and support from others in the workgroup, which are outside the direct control of managers and policy makers. Presumably, the only way for an innovation to become established in an organization is for implementors to learn it, shape it, and claim it for their own (Elmore, 1978, p. 214). This is a psychological dimension to change which most other models ignore. Effective planned change strategies will take these hidden sources of resistance into account (Lindquist, 1978, pp. 6-7). If implementation problems in the rational/systems approach are viewed as a fail-
ure of planning and management, the Human Relations approach sees them as a failure to achieve consensus and commitment to the program among workers.

Social Interaction/Diffusion Models

Research on social interaction and diffusion has a long history, building on early work of Extension agents who were interested in the factors that cause an individual to accept or reject a technical innovation. Lindquist (1978) summarizes some of the pertinent findings from this research. Adoption of an innovation follows a predictable pattern. A handful of "Innovators" in an organization or community who are uncomfortable with the status quo are the first ones to adopt. They are followed successively by "Early Adopters," "Early Majority," "Late Majority," and finally, "Laggards." The time lapse from adoption by "Innovators" to adoption by "Laggards" can be short, but several years is far more common for adoption of an educational innovation. Each subsequent group requires more personal communication and contact in order to be willing to change. The best route into an organization or community is through its "opinion leaders," a person whose expertise, experience, or social role establishes him as a credible source of the information presented.
Overemphasis on the individual as adopter and on factors which are nonmanipulable (such as age and social class), limit the usefulness of these findings for understanding the introduction of a major change in a complex organization (Baldridge & Deal, 1975, p. 3).

Structural Analysis/Complex Organization

This research perspective is in some ways an extension of the diffusion model using complex organizations as the unit of analysis rather than individuals. Typically, researchers attempt to correlate innovativeness in social systems with variables which characterize the system as a whole, such as complexity, formalization, age, size, affluence, and centralization. The focus has been how these characteristics relate to the rate at which new programs or features are added to the organization (Dill & Friedman, 1979, p. 415). While many of these organizational characteristics are also nonmanipulable by change strategists, some useful insights have been developed about the nature of innovative organizations.
Combining Models

Each of these models highlights an important aspect of the change process. Yet none, by itself, adequately accounts for the complex interaction of events that has typified implementation of federal policies in educational organizations.

The rational/systems management approach suggests a change strategy built on principles such as research, trial, and evaluation of the innovation; change planning and leadership provided by top managers; clear communication of policy and assignment of tasks; and accountability for progress toward organizational goals. The bureaucratic approach suggests that new policies are unlikely to be carried out unless individual discretion can be controlled and standard work routines altered to accommodate the change. The human relations approach suggests several ways this can be done: worker participation in decision making, attention to building consensus in work groups, and intervention of outside consultants to help diagnose and remedy problems. The social interaction and political models force attention to the issue of who should initiate and endorse the change in order to maximize its acceptance (opinion leaders) and the importance of assessing whose interests will be advanced and whose abrogated by the change.
Several authors have worked to meld these approaches into a single, comprehensive framework. Based on his careful multi-year case studies of planned change efforts at seven colleges, Lindquist proposes a model of adaptive development which links together these varying perspectives. His agenda for planned change includes:

...developing innovative models for adaptation rather than adoption, strengthening diffusion channels and linking local leaders personally to them, concentrating on thorough diagnosis of local goals and needs, opening political gates to demands for change, involving organization members not only in earlier parts of the process but in thinking and formulation of proposals, supporting the orientation and training of innovation implementation and leaders, providing solid time, material and facilities, conducting both formative and summative evaluation, rewarding those who involve themselves in innovation and intentionally disseminating the innovation internally and externally. (1978, p. 239)

Five factors were identified as critical to success of this approach: "1) interpersonal and informational Linkage 2) active Openness 3) initiating, guiding, involving and influential Leadership 4) Ownership and 5) material and psychic Rewards" (p. 240).

Similarly, Schreirer (1981) draws on the considerable body of research findings from the separate approaches and develops a framework for the study of social program implementation. Implementation is assumed to be a function of processes and interrelationships at three levels: the mac-
ro-level of the organization as a whole, including inter-
change between the organization and its environment; the
intermediate level of organizational subunits and the pro-
cesses which regulate their daily work activities; and the
micro-level of individual members and behaviors, motiva-
tions, and cognitions (p. 31).

Based on the results of previous studies, hypotheses
were generated about the effects of the major variables
within each level. The four macro-level variables are:
decision processes, control processes, obtaining resources,
and relations with the environment. Examples of hypotheses
generated about variables at the macro-organization level
are:

Implementation will be facilitated if:

1. those influential in the decision to adopt are in
   high enforcement positions;
2. those responsible for implementing an innovation are
   able to participate in the decision regarding adoption;
3. central administrators strongly and actively support
   the program;
4. adequate financial and staff resources are provided
   to carry out the program. (Schreier, 1981, pp. 69-70)

Five variables were identified at the intermediate
level: supervisory expectations, standard operating rou-
tines, technical requirements of the innovation, communi-
cation flow, and work group norms. Examples of hypotheses
generated about variables at the intermediate level are:

Implementation will be facilitated if:
1. division supervisor's backgrounds and beliefs are congruent with the innovation; 
2. there is a higher level of communication of all types within the organization; 
3. subdivision work group norms foster acceptance of the program among individual employees. (p. 70)

Three variables were identified at the individual level: behavioral skills, incentives, and cognitive supports. Examples of hypotheses generated concerning these individual level variables are:

1. Program implementation is positively related to longer and/or more intensive training in the use of the innovation. 
2. Individual implementation is positively related to overall job satisfaction. 
3. Individual implementation is positively related to cognitive clarity and/or to favorability about the program. (p. 71)

Implementation is viewed as a five-stage process, though straightforward progression is not assumed. The first stage is the decision to adopt, where macro-level components are most influential. The three middle stages--assembling resources, role change, and problem-solving--are interdependent. Intermediate level components are especially influential during these three stages where new roles and behaviors must be learned and made part of the work routine of implementors or no significant change will occur. Many innovations will never reach the fifth stage of institutionalization where they are embedded in the organization and special resources and problem-solving mechanisms can be removed.
Schreirer uses case studies of implementation of therapeutic innovations at two mental health centers to test the applicability of her conceptual model. The multi-level perspective was found to be very useful in analyzing implementation in these two cases. As expected, no single component or few components were found to be primary explanations for the extent of implementation (p. 202).

**RESEARCH ON MANDATED CHANGE**

Most studies on educational change focus on the introduction of innovations, new technologies, or methods. These change efforts were largely financed by federal or foundation funds which provided an incentive to schools and colleges to develop new programs. Quite a different set of circumstances might be expected in the case of federally mandated reforms which carry sanctions for noncompliance, but provide little or no financial support to carry out the directives. Thus, research on implementation of this class of policies is particularly important for a study of affirmative action.

Newcombe (1980) developed a grounded theory of mandated academic change in her recent dissertation and further clarified the theory in Newcombe and Conrad (1981). The specific federal mandate under investigation was Title IX of
the Education Amendments of 1972. Title IX prohibits sex discrimination in educational programs and organizations that receive federal money. The study focused on implementation of the controversial regulations requiring institutions to provide equal opportunity for both sexes to participate in intramural, intercollegiate, and interscholastic athletics.

A numerical change index reflecting the degree of progress toward Title IX compliance over the five-year period 1974-1978 was formulated in the first phase of her research. The index was calculated for each of eight four-year colleges in Virginia that met the initial criteria for entry into the sample. Using this index, the two institutions experiencing the greatest change and the two experiencing the least change were selected for further investigation. Through on-campus visits, intensive interviewing, document review, and observation, Newcombe sought an answer to the question: "What are the key variables that influence an institution's ability to successfully adapt programs, policies, and practices in compliance with a federal mandate?" (1981, p. 559).

Four consecutive stages were identified for the process of implementing federal mandates in institutions of higher education: (a) infusion; (b) preparation and policy forma-
tion; (c) trial and transition; and (d) policy execution. The rate and degree of institutional progress through the four stages were found to be dependent upon four major factors: (a) administrative leadership; (b) the use of facilitative substructures; (c) conditions in institutional subsystems; and, (d) government intervention. Complex and multidirectional relationships exist between these categories and stages of implementation, though there are several primary relationships that explain, in large part, the variance in progress toward compliance among colleges and universities (1981, p. 559). The four separate stages and four major categories of variables, as well as the integrated theory, are described below.

**Stages of Implementation**

Infusion begins with introduction of the mandate and is characterized by a number of activities related to receiving, discussing and interpreting the mandate, and projecting its potential impact on the institution. The second stage, preparation and policy formation, includes initial attempts, usually by administrators, to formulate plans for change. Conducting the required self-study, interpreting results, assessing the climate and potential for change, and formulating tentative priorities for the involved subsystems are examples of activities in stage two.
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. Trial implementation may take the form of personnel, budgetary, and policy changes. This stage often involves growing awareness of change and its impact in various departments and units, accelerating the conflict-response patterns. As formal institutional policy is stated and clarified, and the university pursues a reasonably clear course of action, implementation moves into the fourth stage of policy execution. In this final stage, the action-conflict-response is less pronounced and change is more likely to appear planned and systematic rather than sporadic and tentative in nature (1981, p. 561).

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.

Administrative leadership plays a vital role in facilitating change. Progress toward implementation is largely contingent upon leadership of a central administrator who
makes a decision and commitment to change. Facilitative substructures are also an important element in successful implementation. Substructures, such as advisory committees, affirmative action offices, or additional central administrators, carry out tasks, disseminate information, and provide support for the change. Institutional subsystems are the divisions, departments, units, and organized groups of constituents which make up the university as a whole. Because federal mandates are broad, they often require change in many subsystems. The potential for conflict as well as interest grows accordingly. Two conditions within these subsystems seem particularly important in facilitating effective implementation: (a) a change agent exists within the subsystem; and, (b) the activities and contributions of the group/unit are perceived as important by influential institutional leaders. The fourth factor facilitating implementation is governmental intervention which creates a climate in which change is perceived as important by influential institutional leaders.

The Integrated Theory

Top administrators (most frequently the college president because of the scope of federal mandates) are a pivotal link between government intentions and institutional compli-
ance. Their commitment to the change effort is influenced by their own values and priorities and other factors, such as government intervention and/or the presence of other change agents on campus, which may make them more aware of the need for reform. Administrative leadership seems most important during the first two stages of implementation. Once administrators have made a commitment to change, the rate and degree of progress is contingent on effective development and use of substructures. Substructures must be carefully selected, designed, and utilized to provide the necessary political and mechanistic support for change.

The scope (as opposed to the rate) of implementation appears to be determined by conditions within subsystems. In the case of Title IX athletic policies, change was found to be greatest where athletics were viewed as an important part of the educational process and where the status of change advocates was sufficient to influence policy and activities.

In general, the weaker the institutional leader's commitment, the greater the need for government intervention to generate change within the subsystems. For example, agency investigations of athletes' complaints helped shift the balance of power in favor of change advocates once it was clear that institutional efforts were under government scrutiny.
In the third and final stages, implementation becomes increasingly dependent on attributes and activities of others, especially the skills and attitudes of change agents located in the subsystems. If one or more of the facilitating conditions are not present, progress into the fourth stage is highly unlikely. However, some institutions may actually move into the fourth stage without effectively complying with the mandate. In these instances, an administrative decision of virtual noncompliance was not effectively resisted or altered by federal intervention or by change advocates on campus (Newcombe & Conrad, 1981, pp. 571-572).

In drawing implications of the theory, Newcombe emphasizes the role of administrative leadership in implementing policy. Committed leadership is critical to setting priorities, resolving conflicts and developing administrative structures to carry out the policy. The presence of skillful change agents in the affected subsystems is also important to widespread implementation of the mandate. Government intervention generally results in moving implementation to a higher priority at the institution, though changes in federal regulations can have a negative effect on implementation by reducing the need to comply.
IMPETUS AND ENABLING FACTORS IN AA IMPLEMENTATION

In addition to Newcombe's grounded theory of mandated change, there is a second study of particular relevance to this investigation. Taylor (1979, 1981) examined affirmative action programs in five organizations—a telephone company, an insurance company, and three universities—and identified factors that helped and hindered implementation at each site. Her findings led her to categorize factors as "impetus" or "enabling."

Essentially IFs (Impetus Factors) are those kinds of factors which impel the organization in some direction; EFS (Enabling Factors), on the other hand, allow the organization to make changes...even though they do not determine the specific direction. (1981, p. 45)

Both impetus and enabling factors can operate in a negative or positive mode. Location, for instance, was found to be a positive factor for the Insurance Company but a negative factor for one of the universities.

Six impetus factors were identified at the five case sites. These were social milieu, government action, the identity of the organization, coalitions, competitors' actions, and attitudes and behavior of leaders. Enabling factors were: financial resources, turnover or net additions, stability of the top executive system, and availability of minorities and women. Organizations were more likely
to be proactive in implementing affirmative action programs and to have increased the number and proportion of women and minority employees if these factors were present (e.g. sufficient financial resources were available and coalition groups were present and actively pressing for change).

Taylor's work is helpful, especially since it looks at affirmative action programs specifically. It has limited usefulness as a conceptual framework however. She does not make clear, for instance, how these factors relate to each other. It is also not clear what change strategies one could undertake to assure successful implementation. One factor is manipulable to some extent (attitudes and behaviors of leaders); the others are not really under the direct control of institutional leaders or those in the trenches. Thus, the factors themselves do not readily lead to potential change strategies.

The case studies provide a great deal of insight into the role of the affirmative action officer however. Taylor found that affirmative action progress was made "inch-by-inch," dramatic gains simply did not occur. Each position to be filled was a new battle. The more effective officers also had an "early warning system," which allowed them to head off impending crises, or to make a positive intervention early in organizational decision making. The level of
detail obtained at two of the five sites provides a valuable perspective on day-to-day implementation processes.

SUMMARY OF FINDINGS FROM THE LITERATURE

Recent research on implementation of social programs provides useful concepts for this study of affirmative action implementation. Particularly important is an awareness of the "adoption fallacy." A decision to adopt a policy or program does not mean it will be implemented as it was intended, or that it will have the effect policy makers hoped for. In the case of affirmative action, adoption of an affirmative action plan and stated compliance does not guarantee programs will be fully implemented, nor that the policy will ever achieve its intended effect of increasing opportunities and status of women and minorities on that campus.

Micro-implementation, where adopted policies are incorporated into local practices, is a critical step between policy formation and policy impact. Models of planned organizational change are especially helpful in examining implementation at this level. However, these multiple and conflicting schools of thought do not readily lend themselves to a single analytical framework. Lindquist and Schreirer have made important connections between the sepa-
rate perspectives and tested their integrated models against case studies of major change efforts in complex organizations. The case studies document the importance of a multi-level perspective (organization, unit, and individual level) and the influence of many variables on the implementation process.

Implementation of affirmative action policies in universities has met many barriers. Resistance to change in the allocation of rewards and status, the conservative nature of higher education in general, the meritocracy myth, fractionated power and authority, cumulative effects of past discrimination, and current conditions all make significant change extremely difficult.

IMPLICATIONS FOR THE STUDY

It is apparent that institutions of higher education have not been radically restructured by affirmative action mandates over the last decade. The emphasis on barriers that pervades the literature merely underscores this point. The fact that some institutions have been more successful at hiring and promoting women than others immediately raises interesting and unanswered questions. Are there certain characteristics shared by institutions that have changed the most, or the least? For those universities where signifi-
cant change has occurred, to what extent were those gains a function of nonmanipulable factors such as expansion, rather than deliberate efforts to implement affirmative action policies? What role did government intervention play in promoting change in the more successful cases? What were the leadership roles and styles used by university officials to gain support for change? How is commitment translated into effective policies and practices?

Some clues can be found in the combined findings of Newcombe (1981) and Taylor (1981). Based on their research and case studies, implementation of affirmative action policies would be facilitated where:

1. a central administrator acts as the principal change agent and the top executive system is sufficiently stable to maintain steady progress;

2. institutional conditions, such as financial resources and net additions or staff turnover, and environmental influences, such as availability of target group members and social milieu, favor the change;

3. an effective administrative structure, with strong support from top leadership, is developed to carry out tasks related to the mandate and to provide essential support for the change effort;

4. coalition groups representing the interests of women and minorities are active and pressing their issues;

5. individual change agents are present in the many units on campus and working toward change;

6. government action is visible.
While there are several similar findings in these two studies, the total picture of AA implementation is still unclear. Newcombe's theory, for instance, tends to ignore environmental and structural influences on the change process, except for governmental intervention. It is also not clear that the process of implementing Title IX policies for women's athletics is the same as implementing affirmative action policies. Taylor's listing of impetus and enabling factors overshadows her findings about actual implementation processes at the two primary sites and the importance of manipulable factors, such as top leadership support and selection of effective affirmative action officers. The list gives no hint of the relative weight of the factors—is social milieu as important as strong leadership? In addition, the evidence from the case material is not equally strong for all the factors.

While this study does not fill all these gaps, it is intended to provide insights into the conditions, policies, and practices which have produced more positive change for women faculty and to draw implications from the findings for those responsible for affirmative action implementation.
Chapter III

METHODOLOGY

INTRODUCTION

The study had two major phases and used both quantitative and qualitative research methods. The first phase included a quantitative assessment of the collective and individual progress made by doctorate-granting universities in hiring women faculty during the 1970s. A comparative change index was developed and calculated for each institution. Three institutions were selected for in-depth study in Phase II based on their high positive change scores. Factors accounting for the success of the selected institutions were explored during week-long campus visits in Fall 1982.

The data base, change index, and statistical methods used in Phase I are described in the following section. Methods and materials used to develop the case studies in Phase II are described in a subsequent section.
PHASE I: ASSESSMENT OF CHANGE

Research Population and Data Base

Universities included in this study were those classified by the Carnegie Council (1976) as doctorate-granting universities. This group of 183 public and private institutions was selected for two reasons. First, underrepresentation of women is a much greater problem at universities than at other types of institutions. Second, doctorate-granting institutions are frequent recipients of federal contracts and grants for research and thus have a vested interest in retaining their eligibility as federal contractors by complying with affirmative action guidelines.

The data base used for the first phase was the Higher Education General Information Survey (HEGIS) administered by the National Center for Education Statistics. The salaries, tenure, and fringe benefits of full-time instructional faculty section of the survey was first conducted in 1971-72 and, except for the year 1973-74, has been subsequently conducted annually. The latest available responses were for 1980-81. Survey items changed somewhat during the nine administrations. The first two surveys provide information on the number and mean salary of nine and twelve month full-time instructional faculty by rank and sex. In addition, since 1974-75, data were collected on the number of
tenured faculty by rank and sex. All other differences were slight and comparable statistics were calculated where they were not directly provided.

The HEGIS data base has two major advantages: it is national and comprehensive in scope, providing information on all institutions in the population (though not for all years) and it includes institutional identification so that progress at any one university can be tracked over the decade. Given the focus of the study, the data base also has limitations, particularly the lack of discipline identification and racial background of faculty members.

The longest possible view of affirmative action progress was deemed desirable. One hundred fifty-nine of the 183 institutions had sufficient longitudinal information to compare a base year of 1971 or 1972 with the most recent year, 1980. This subset was used in all calculations related to the change index and to assessments of progress made by individual institutions. Descriptive statistics for doctorate-granting universities as a whole were calculated using data from all institutions reporting in that particular year. The response rate has been at or near 100% since 1974-75.

Though doctorate-granting universities share certain general characteristics related to the presence of doctoral
programs and faculty research endeavors, they vary widely on many dimensions. Of the 183 institutions, 64 are private and 119 are public. Only one, Texas Woman's University is a woman's college. Howard University is the only historically black institution. Enrollment size varies greatly. Rockefeller University has less than 100 students and the University of Minnesota of Minneapolis-St. Paul has more than 63,700 students. The mean enrollment for these institutions is 17,000 students.

Calculation of the Change Index

Development of a change index reflecting institutional progress in hiring and promoting women faculty was a difficult task. Since much of the focus for affirmative action is on recruitment and hiring processes, a study such as this would benefit from data on newly hired faculty by discipline and a comparison of these hiring results with the goals set by the institution. Hiring data are not readily accessible however. What information is collected on a nationwide basis by the Equal Employment Opportunity Commission is not publicly available. Thus, this study and others have necessarily used the change in faculty composition as a bottom-line measure of affirmative action.
This single measure - an increase in the proportion of women on the faculty - proved less than satisfactory in initial tests. Particularly troubling were the cases where institutions had actually lost women faculty, but because they had also lost men, the percentage of women increased. It was difficult to accept the notion that a decrease in the number of women employed could in any way be called progress; thus, this single measure was viewed as inadequate.

Through a process of step-by-step conceptualization and testing, a five-variable change index was eventually developed. All variables were created from reported data on the number of full-time instructional faculty by rank and sex. The five change "scores" were calculated as follows:

Percent change in the proportion of women:
1980 proportion - Base year proportion

Percent change in the ratio of male to female faculty:
(Base year ratio - 1980 ratio)/Base year ratio

Percent change in the number of women on the faculty (all ranks):
(1980 number - Base year number)/Base year number

Percent change in the number of female full professors:
(1980 number - Base year number)/ Base year number

Percent change in the number of tenured women:
(1980 number - 1974 number)/1974 number

Progress on the first four of these variables was assessed by comparing 1980-81 data to base year data. One hundred sixty-six institutions reported for the first time
in 1971 or 1972 (154 of these were in 1971). Data from seven institutions were eliminated -- four had very erratic changes in reported faculty size, indicating a possible change in the method of counting faculty; one had a very small faculty size which resulted in artifactual change scores; and two had missing data for one of the comparison years. Tenure information was collected for the first time in 1974, thus the comparison years for the tenure variable are 1974 and 1980. These values were then divided by the base year value to get a percent increase over the base year.

A composite change index was created by converting the "scores" on each variable to standard scores (mean = 0, standard deviation = 1). The purpose of this step was to transform the score so it could be easily recognized as representing a value greater or lesser than the average score and so that the five variables, similarly transformed, could be summed to make a composite change index.

This composite index was used in two ways. First, the index was used as a dependent variable in testing the relationship between certain institutional characteristics (e.g. public/private support or geographic region) and the amount of change experienced by the institution. Second, and more importantly, the change index was used to select case study sites for the second phase of the investigation.
Caveats Concerning the Change Index

The change index is constructed from outcome measures (e.g. What has been the percentage change in the number of women faculty? the number of tenured women?). There was no assumption that a high change score was necessarily a result of vigorous affirmative action efforts since a similar outcome could be achieved by adding a nursing school, for instance, and leaving other areas unchanged. Outcome measures also ignore institutional constraints. Careful reflection produced no satisfactory means to weigh the relative efforts made by institutions with quite different faculty mixes. Discipline specification, turnover data, and a more limited study would be necessary to examine this issue in greater detail. This researcher is unaware of an existing national data base that allows such questions to be asked from an institutional perspective.

Interpretation of the change index itself requires some caution. Given the method of calculating the index, the addition of even a few women to a small faculty with a very low starting point could result in a high change score. Whether or not the change measured in a case like this is more artifactual than real is a matter of judgment. In most cases, evaluation of the institution's reports for the ten-year period supports the positive outcome reached through
the change index method. The one case where the outcome was clearly an artifact of exceptionally small faculty size (less than 50 faculty members) was eliminated. In all cases, the index reflects the degree of change, not a state of equity for women faculty. The calculations generally favor those schools which began with a low percentage of women faculty and experienced substantial change.

The fact that a certain number of universities continually appeared in the top 20 or so institutions in successive examinations of change indices considerably reinforced the researcher's confidence in the final choice of campuses for on-site study.

PHASE II: CASE STUDY ISSUES AND METHODS

Use of the Case Study Method to Study Change Processes

The case study format is particularly well-suited to a study of local implementation of federal mandates. Multiple and conflicting program goals and disagreements over appropriate, quantifiable outcome measures have undermined the usefulness and interpretability of many quantitative evaluation studies. Evaluation researchers have found that qualitative data and detailed description complement quantitative assessments of program effectiveness (Cook & Reichardt, 1979). They appear to be indispensable if policy makers are
to understand how a program works, what really happened and why, and what explains the problems (Murphy, 1980).

Case studies have been particularly useful in the development of change theory (Lindquist, 1978; Newcombe, 1980) and in the identification and description of institutional and educational processes which appear to affect the success of innovative projects in schools (Greenwood, Mann, & McLaughlin, 1975). Lindquist studied reform efforts at seven institutions over a period of several years. His detailed case studies provided a rich source of data against which he could test the usefulness of four change models. Finding these models to be individually inadequate, he again drew upon the case material to create his adaptive development model. Schreirer (1981) worked in the opposite direction by developing a comprehensive conceptual framework for social program implementation, then testing it against case studies in two settings. Newcombe's approach compares the case records of successful and unsuccessful institutions to develop a theoretical understanding of the implementation of federally mandated change. The Rand (Greenwood, et al, 1975) investigators selected 29 case study sites, oversampling those reporting project successes, to investigate the change process promoted by five federal programs.
The major contribution of these and similar studies is their attention to institutional context. By focusing only on the innovation and the effect of new practices on student outcomes, many evaluations have provided no empirical information on the interaction of the project with the institutional setting or on the process of implementation, and consequently produce little understanding of the components of success and failure (Greenwood et al., 1975, p. 8).

The situation is similar in studies of affirmative action. That is, legal requirements are typically outlined on the one hand and measures of the status of women and minorities on the other. Seldom are there data on how and to what extent affirmative action mandates were implemented in individual institutions, or how differences in institutional and political contexts affected the implementation process. The case study approach fills this urgent need.

Site Selection

The three institutions selected were the top three in the rank order of universities according to their composite change index. In addition to the change index score, several other factors were considered in making the final selection. Telephone calls were made to the affirmative action officers at six of the top 15 schools. They were
asked whether the reported figures were approximately correct and what their general impressions were on important factors at the institution. The nature and purpose of the study were then discussed along with an assessment of whether the researcher could gain access to documents and key officials. Preference was given to those sites where: (a) the contact person was willing and able to assist by naming potential interviewees and sharing documents; (b) permission to investigate and interview appeared more likely to be granted; (c) the institution's record revealed a reasonably steady growth in the number of women over the decade rather than wide fluctuations which were not captured in the change index; and (d) the absolute number of women employed was sufficiently large to indicate substantive change (at least 40 women).

These calls were made in late summer 1982 and letters requesting permission to visit were sent to three college presidents immediately afterward (see Appendix A, B, and C). However, between two and three months elapsed before permission was granted by two of the campuses. Different reasons were given by each campus for the delay. One campus was in the midst of a ten-year renewal of their AA plan. The concern was that any statement to the effect that the institution had already accomplished more than other universities
would feed the arguments of those who wanted to reduce the institution's future AA commitments on the grounds that they had done enough already. The second campus later reported that during the fall they were facing their first potential lawsuit on a sex discrimination charge and the situation on campus seemed unsettled as a result. The case was resolved through internal hearings and negotiations. Permission was eventually secured from both campuses as the danger to ongoing negotiations subsided.

Access Issues and Research Methods

The three universities in the case studies have been given pseudonyms and all names of individuals have been changed or eliminated.

The mode of access varied at the three sites. At CKSU, the Affirmative Action Office selected the interviewees based on general guidelines provided by the researcher, and set up the appointments. At Denby College and Newton University, names of potential interviewees were provided by university contacts and the researcher wrote, then called, each of the suggested individuals (see Appendix D for a sample letter). In no case was an interview request denied, although two interviews were later cancelled because of scheduling conflicts and illness. Because the total number
of individuals to be interviewed was necessarily limited, certain perspectives were specifically requested. Current and past affirmative action officers, the president and/or other key administrators, faculty and/or administrators who had been involved in the development and implementation of the plan, and representative(s) of the women's organization were expected to be useful informants based on findings of Newcombe (1980, 1981) and Taylor (1979, 1981). Names of other individuals were solicited during the process of setting up appointments and carrying out the interviews.

In general, all three sites provided very good access to the researcher once initial permission was granted. The open-ended interviews lasted a minimum of one-half hour; some lasted several hours. The average was one hour. Discussions were audio-taped. Notes were taken during the interviews, but substantially expanded after listening to the tapes. Nearly all interviewees were asked to respond to the major question of what factors accounted for the extent of positive change that had occurred for women faculty. The exceptions were those who had been on campus for only a few years and whose firsthand knowledge of such factors was minimal. In addition, interviewees were asked to comment on those aspects of the implementation effort they knew best. For example, AA Officers were asked to provide detail on
specific policies and procedures, while faculty members generally described their personal role on committees or in actual recruitment efforts. With only one or two exceptions, interviewees seemed very candid about past and present efforts and their views on persistent problems.

Prior to visiting the campuses, certain basic documents were requested—a copy of the AA Plan, college catalog, and any readily accessible statistics. Once on site, numerous documents and special reports were collected to gain insights into the implementation process, historical developments at the college, and examples of specific policies and procedures. Denby College and Newton University had much more information available than did CKSU. Examples of these documents include: past AA plans, policy memoranda, copies of speeches and college annual reports, histories of women faculty and students, recruitment guides, newspaper clippings, special reports on the status of women, minutes of meetings, position papers, and AA annual reports.

Data for the case studies consisted of the expanded field notes, quotations on salient issues, written reports and documents, and some observations made by the researcher during the week-long visits. The field notes and quotations were cut up, pasted on separate cards, and categorized by topic.
Five major issues were viewed as crucial to the study and, since questions were specifically asked about these areas, much of the data falls into categories related to the major issues. Four of the issues for investigation were drawn from the work of Newcombe and Taylor described in detail in Chapter II. These correspond closely to the list of factors likely to facilitate AA implementation. The fifth is a response to the need for descriptions of actual affirmative action practices. The issues were:

1. Source and nature of leadership for affirmative action;
2. Nature and extent of government intervention;
3. Nature and extent of coalition group activity on behalf of women faculty;
4. Structural &/or environmental influences on AA implementation; and,
5. Implementation strategies (AA structures, policies, practices, and programs).

Because of time constraints, data were not systematically collected on departmental variations at each college, although this is an important aspect of Newcombe's theory. However, anecdotal evidence is reported in the cases where it was provided. Other factors emerging from the data are reported in the individual case studies. The
case studies were written using the five major research issues as the framework for presentation of the findings. They were then sent to at least two persons on each campus for verification of facts and an opportunity to correct any misinterpretations. (See Appendix F for a copy of the letter to case study readers.) This step was taken to increase the internal validity of the case findings.

Limitations to the Case Study Method

The methods used in this investigation have been described in detail so that the reader can make an independent judgment of the sources and extent of threats to the validity of the findings. A study of this nature has numerous threats to validity, some of which can be reduced, but perhaps not eliminated, by attention to the problem as well as specific procedural safeguards.

The change index, though not a perfect device, was an attempt to control sampling bias in two ways: by making sure the largest possible number of institutions were considered and by selecting on the basis of performance outcomes rather than reputation, the dimensions of which would be difficult to specify or control.

Potential bias is also introduced in any study where impressions and recollections of interviewees are a major
source of data. Human perspectives are limited and memories faulty. The wealth of documentation, especially at two sites, was essential in the process of triangulation. Roles of key actors, dates, and events described by interviewees were checked whenever possible against historical records and comments by other interviewees.

Researcher bias is also a very real threat which can take many forms—from difficulties in establishing rapport with interviewees and biased questioning to preconceived notions about the existence and relative importance of certain factors. Specific steps taken to reduce this source of bias were: audio taping conversations so that responses could be recorded as completely as possible and questions later reviewed for bias; recording and analyzing daily impressions of interview situations and responses to guide subsequent questioning and to help in later interpretation; minimally interfering with interviewee's recollections; and, soliciting alternative viewpoints. As already mentioned, drafts of the case studies were reviewed by at least two people on each campus as a further validity check.
Chapter IV
STATUS OF WOMEN FACULTY

INTRODUCTION

The chapter is organized into three major sections. The first is an overview of the status of women faculty at doctorate-granting institutions. Through tables and graphs, it provides a picture of consistent, though limited, progress in increasing the percentage of women faculty over the decade and highlights those areas of continued inequity. The second section focuses on differences among the institutions. It answers questions such as: To what extent do large institutions differ from small? public from private? more research-oriented universities from less research-oriented universities? The final section examines the relationship between institutional progress, as measured by the composite change index, and institutional characteristics such as size, location, and research-orientation.
THE CHANGING STATUS OF WOMEN FACULTY

Doctorate-granting universities have made steady progress in increasing the proportion of women on their teaching faculties. Table 1 shows the annual increases in the proportion of women by rank. From a base of 14.7% in 1971-72, the overall percentage of faculty women has increased to 18.8%.

Growth in the representation of women has not been uniform across ranks however. While the percentage of women assistant professors increased 13%, the percentage of women at the associate professor rank grew 5.2% and almost no change occurred among full professors (+.6%).

A lack of association between the growth rate in female representation within a rank and the growth rate for the rank itself was noted by Waldenberg (1982, p. 70). She reported that, while the overall increase in faculty slots was 8.5% between 1972 and 1979 for all of higher education, dramatic changes occurred at the full and associate ranks (40+% growth at each rank). Yet, female representation has increased most significantly in the lower ranks where very little growth has occurred. The same pattern exists in an even more extreme way among doctorate-granting universities.

This trend and its impact on the composition of an university faculty are illustrated in Table 2 where the mean
TABLE 1
Proportion of Women Faculty at Doctorate-Granting Universities, 1971-72 - 1980-81

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Faculty</th>
<th>Full</th>
<th>Assoc</th>
<th>Asst</th>
<th>Inst</th>
<th>Lect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971-72</td>
<td>14.7%</td>
<td>5.6%</td>
<td>11.3%</td>
<td>17.3%</td>
<td>38.9%</td>
<td>27.5%</td>
</tr>
<tr>
<td>1972-73</td>
<td>15.6</td>
<td>5.8</td>
<td>11.5</td>
<td>19.0</td>
<td>42.3</td>
<td>30.6</td>
</tr>
<tr>
<td>1973-74</td>
<td>No survey conducted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1974-75</td>
<td>16.6</td>
<td>6.0</td>
<td>12.3</td>
<td>22.9</td>
<td>47.1</td>
<td>34.3</td>
</tr>
<tr>
<td>1975-76</td>
<td>16.9</td>
<td>5.7</td>
<td>12.7</td>
<td>24.7</td>
<td>47.4</td>
<td>37.3</td>
</tr>
<tr>
<td>1976-77</td>
<td>17.5</td>
<td>5.8</td>
<td>13.2</td>
<td>26.3</td>
<td>49.6</td>
<td>38.9</td>
</tr>
<tr>
<td>1977-78</td>
<td>17.8</td>
<td>5.8</td>
<td>13.8</td>
<td>27.8</td>
<td>50.7</td>
<td>40.8</td>
</tr>
<tr>
<td>1978-79</td>
<td>18.1</td>
<td>5.9</td>
<td>14.6</td>
<td>28.7</td>
<td>51.9</td>
<td>40.7</td>
</tr>
<tr>
<td>1979-80</td>
<td>18.4</td>
<td>6.0</td>
<td>15.5</td>
<td>29.5</td>
<td>53.1</td>
<td>42.3</td>
</tr>
<tr>
<td>1980-81</td>
<td>18.8</td>
<td>6.2</td>
<td>16.5</td>
<td>30.3</td>
<td>52.6</td>
<td>44.2</td>
</tr>
</tbody>
</table>

Source: HEGIS Employee Surveys, 1971-72 - 1980-81, National Center for Education Statistics
number of men and women faculty by rank and year are provided for the hypothetical average doctorate-granting university with 17,000 students for selected years.

While the average university had a 37.3% growth in the number of full professors on its faculty between 1971 and 1980, 71 of the new slots went to men and 6 to women; the proportion of women at that rank increased only .6%. During the same period, there was a 9% reduction in the number of assistant professors. Yet, the percentage of women increased from 17% to 30% in that rank and the absolute number of women assistant professors on a typical faculty increased from 37 to 58. Although growth in overall faculty size has played some part in expanding employment opportunities for junior women faculty, it is apparent that growth alone does not ensure increased opportunities for women, despite the close link made throughout the literature between expansion and affirmative action gains. The relationship between institutional growth and positive change for women faculty will be examined in more detail below.

The shift of male faculty upward in the ranks and the entry of women into lower and/or untenured positions has done little to alleviate the effects of past underrepresentation. Exhibit 1 presents data from Table 1 for the most recent year, 1980-81, to illustrate the nature and extent of
TABLE 2
Mean Number Men and Women Faculty by Rank at the Average Doctorate-Granting University, Selected Years

<table>
<thead>
<tr>
<th></th>
<th>1971-72</th>
<th></th>
<th></th>
<th>1976-77</th>
<th></th>
<th></th>
<th>1980-81</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
<td>Total</td>
<td>Men</td>
<td>Women</td>
<td>Total</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Full</td>
<td>196</td>
<td>12</td>
<td>208</td>
<td>239</td>
<td>15</td>
<td>254</td>
<td>267</td>
<td>18</td>
</tr>
<tr>
<td>Associate</td>
<td>150</td>
<td>19</td>
<td>169</td>
<td>173</td>
<td>26</td>
<td>199</td>
<td>175</td>
<td>35</td>
</tr>
<tr>
<td>Assistant</td>
<td>174</td>
<td>37</td>
<td>211</td>
<td>150</td>
<td>53</td>
<td>203</td>
<td>134</td>
<td>58</td>
</tr>
<tr>
<td>Instr</td>
<td>45</td>
<td>29</td>
<td>74</td>
<td>25</td>
<td>25</td>
<td>50</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>Total*</td>
<td>574</td>
<td>100</td>
<td>674</td>
<td>600</td>
<td>127</td>
<td>727</td>
<td>606</td>
<td>140</td>
</tr>
</tbody>
</table>

*Total includes lecturers & unranked faculty. However, most D-G have few or no full-time faculty in these ranks, thus they were excluded from the table.

Source: 1980-81 Employee Survey, HEGIS, National Center for Education Statistics
inequities still remaining in the distribution of men and women by rank.

Men continue to be tenured at a higher rate than women: 70.2% of the men and 41.2% of the women have tenure. Given the distribution of men and women by rank, the gap is not unexpected.

The gap in mean salaries for men and women apparent early in the decade remains at every rank in 1980-81. The gap in mean salaries for assistant professors on 9-month contracts was $1300, or 7% higher for men, in 1980-81. This dollar gap is wider than it was in any previous year. Female full professors averaged $4667 less than their male counterparts in 1980.

While salary is a function to some degree of field of specialization, which is not identified in the HEGIS surveys, a recent study by Ahern and Scott (1981) seems to suggest that the gap reported above is very likely a reflection of continued inequities and not simply a difference in distribution of men and women across fields. Their study matched male and female faculty with Ph.D.s on a number of significant characteristics in order to investigate salary and status differences. They found persistent and significant gaps in salary and in rates of tenure and promotion after controlling for field of specialization, prestige of doctorate-granting institution, race, and year of degree.
Exhibit 1. Percent Men and Women Within Rank on Doctorate-Granting University Faculties, 1980-81
In sum, the make-up of university faculties has changed over the decade. Large cohorts of men hired during earlier periods have moved upward in the ranks, considerably expanding the number of senior faculty. While the number and proportion of women have increased on most campuses, they are concentrated in lower and untenured positions. The small number (18 at the average university) and proportion (6.7%) of women at the full professor rank suggest that decision making traditionally reserved for senior faculty—including decisions about who will be tenured and promoted among junior faculty—is done with little or no female participation.

The findings reported here for all doctorate-granting institutions hide substantial variation however. The following sections of the chapter provide some insight into this variation by identifying institutional characteristics associated with greater representation of women on the faculty and with greater change over the decade.

INSTITUTIONAL DIFFERENCES IN THE STATUS OF WOMEN FACULTY

This section explores the relationship between certain characteristics of an institution and the representation of women on its faculty. Size, location, research-orientation, curriculum emphasis, and type of control are all considered important dimensions of institutional variation. These
characteristics are examined as potential clues for identifying institutional environments associated with greater equity for women. Before examining these characteristics in detail, it may be helpful to list the twenty doctorate-granting institutions which have the highest and lowest percentages of women on their full-time instructional faculty. These institutions are listed in Tables 3 and 4.

Texas Woman's University is the only women's college in this population and the very large proportion of women on its faculty (68%) and among its full professors (41%) reaffirms the importance of women's colleges in providing opportunities for achievement of women faculty.

California Institute of Technology is the only institution in the group which has no women on its full-time faculty, though it is joined by Claremont Graduate School, University of Missouri-Rolla, and Rockefeller University in having no women at the full professor rank.

To determine if the current proportion of women faculty was related to certain institutional characteristics, a series of simple regressions and one-way anovas were performed. The proportion of women students, curriculum emphasis, Carnegie classification, size of the student body, control, landgrant status, region of the country, and size of the city in which the university is located were used as
TABLE 3

20 Institutions with the Highest Percentage of Women Faculty, 1980-81

<table>
<thead>
<tr>
<th>University</th>
<th>% Women on F-T Faculty</th>
<th>% Degrees Awarded in Sci/Tech Fields*</th>
<th>% Degrees Awarded in Non-Sci Fields**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas Woman's Univ</td>
<td>68.1</td>
<td>1.8</td>
<td>89.4</td>
</tr>
<tr>
<td>Adelphi University</td>
<td>39.4</td>
<td>5.6</td>
<td>42.3</td>
</tr>
<tr>
<td>Loma Linda Univ</td>
<td>38.0</td>
<td>9.7</td>
<td>74.0</td>
</tr>
<tr>
<td>Univ of NC, Greensboro</td>
<td>35.8</td>
<td>5.6</td>
<td>47.4</td>
</tr>
<tr>
<td>St. Louis Univ, Main</td>
<td>33.9</td>
<td>11.3</td>
<td>38.6</td>
</tr>
<tr>
<td>Catholic University</td>
<td>33.1</td>
<td>9.9</td>
<td>31.4</td>
</tr>
<tr>
<td>Howard University</td>
<td>32.4</td>
<td>18.1</td>
<td>43.0</td>
</tr>
<tr>
<td>U of So. Mississippi</td>
<td>30.8</td>
<td>11.1</td>
<td>49.2</td>
</tr>
<tr>
<td>U S International Univ</td>
<td>30.0</td>
<td>.4</td>
<td>26.0</td>
</tr>
<tr>
<td>U of No. Colorado</td>
<td>29.7</td>
<td>3.4</td>
<td>54.9</td>
</tr>
<tr>
<td>Ball State University</td>
<td>29.3</td>
<td>7.8</td>
<td>45.0</td>
</tr>
<tr>
<td>Baylor University</td>
<td>28.9</td>
<td>10.5</td>
<td>30.7</td>
</tr>
<tr>
<td>Loyola U of Chicago</td>
<td>28.4</td>
<td>13.8</td>
<td>22.4</td>
</tr>
<tr>
<td>Virginia Commonwealth U</td>
<td>28.2</td>
<td>9.0</td>
<td>37.3</td>
</tr>
<tr>
<td>Wayne State University</td>
<td>27.6</td>
<td>13.8</td>
<td>42.8</td>
</tr>
<tr>
<td>New Sch for Soc Res</td>
<td>27.6</td>
<td>0</td>
<td>9.8</td>
</tr>
<tr>
<td>Cornell U Statutory C</td>
<td>26.0</td>
<td>48.8</td>
<td>20.3</td>
</tr>
<tr>
<td>Ill State University</td>
<td>25.8</td>
<td>13.8</td>
<td>37.8</td>
</tr>
</tbody>
</table>

*(Sum of all degrees awarded in 1980-81 in Mathematics, Agriculture, Biological & Physical Sciences, Computer Sciences, & Engineering)/Total degrees awarded

**(Sum of all degrees awarded in 1980-81 in Education, Foreign Languages, Health Professions, Home Economics, and Library Science)/Total degrees awarded

Source: 1980-81 Employee Survey and Degrees Earned Survey, HEGIS, National Center for Education Statistics
<table>
<thead>
<tr>
<th>University</th>
<th>% Women on F-T Faculty</th>
<th>% Degrees Awarded in Sci/Tech Fields*</th>
<th>% Degrees Awarded in Non-Sci Fields**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calif Inst of Tech</td>
<td>0.0</td>
<td>98.9</td>
<td>0</td>
</tr>
<tr>
<td>Claremont Graduate Sch</td>
<td>1.7</td>
<td>5.8</td>
<td>22.9</td>
</tr>
<tr>
<td>Rensselaer Poly Inst</td>
<td>4.4</td>
<td>75.8</td>
<td>.1</td>
</tr>
<tr>
<td>U of Missouri, Rolla</td>
<td>4.7</td>
<td>96.5</td>
<td>0</td>
</tr>
<tr>
<td>Georgia Inst of Tech</td>
<td>5.7</td>
<td>72.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Polytechnic Inst of NY</td>
<td>7.1</td>
<td>99.4</td>
<td>0</td>
</tr>
<tr>
<td>Univ of Notre Dame</td>
<td>7.5</td>
<td>23.6</td>
<td>.8</td>
</tr>
<tr>
<td>Lehigh University</td>
<td>7.7</td>
<td>45.0</td>
<td>10.7</td>
</tr>
<tr>
<td>Texas A &amp; M, Main Campus</td>
<td>9.0</td>
<td>51.1</td>
<td>16.1</td>
</tr>
<tr>
<td>Ill. Inst of Technology</td>
<td>9.2</td>
<td>61.0</td>
<td>0</td>
</tr>
<tr>
<td>Mass Inst of Technology</td>
<td>9.8</td>
<td>78.2</td>
<td>0</td>
</tr>
<tr>
<td>Harvard Univerity</td>
<td>10.7</td>
<td>15.7</td>
<td>19.1</td>
</tr>
<tr>
<td>U of Illinois, Urbana</td>
<td>11.0</td>
<td>38.7</td>
<td>18.1</td>
</tr>
<tr>
<td>Univ of Chicago</td>
<td>11.4</td>
<td>17.3</td>
<td>5.7</td>
</tr>
<tr>
<td>Stanford University</td>
<td>11.6</td>
<td>46.4</td>
<td>9.2</td>
</tr>
<tr>
<td>Princeton University</td>
<td>11.6</td>
<td>36.2</td>
<td>2.4</td>
</tr>
<tr>
<td>Colorado State Univ</td>
<td>11.8</td>
<td>40.4</td>
<td>22.1</td>
</tr>
<tr>
<td>U of Colorado, Boulder</td>
<td>11.9</td>
<td>25.8</td>
<td>15.4</td>
</tr>
<tr>
<td>Rockefeller University</td>
<td>12.1</td>
<td>95.0</td>
<td>0</td>
</tr>
</tbody>
</table>

*(Sum of all degrees awarded in 1980-81 in Mathematics, Agriculture, Biological & Physical Sciences, Computer Sciences, & Engineering)/Total degrees awarded

**(Sum of all degrees awarded in 1980-81 in Education, Foreign Languages, Health Professions, Home Economics, and Library Science)/Total degrees awarded

Source: 1980-81 Employee Survey and Degrees Earned Survey, HEGIS, National Center for Education Statistics
independent variables. Variable names and definitions are included in Appendix G and an inter-correlation matrix can be found in Appendix H. Of the eight variables tested, only three were significantly related to the percentage of women on the faculty. These were the proportion of women students, curriculum emphasis, and Carnegie classification.

The proportion of women on the faculty is highly correlated with the proportion of women in the student body. Although female enrollment patterns changed dramatically during the last decade, these changes have not reduced the strong link between the representation of women in the student body and on the faculty. For doctorate-granting universities, more women students meant more women on the faculty as a whole and at the rank of full professor. One explanation offered by Gordon and Kerr (1978) is that women are more likely to be recommended for appointment when there are substantial numbers of women students in classes.

A second, complementary explanation involves the curriculum emphasis of universities with high and low proportions of women among their students and on their teaching faculties. The higher the percentage of degrees awarded in scientific and technical fields, the lower the percentage of women faculty and students. The relationship between curriculum emphasis and representation of women on the faculty
is visible in Tables 3 and 4 where the percentage of degrees awarded in Agriculture, Engineering, Biological and Physical Sciences, Computer Science, and Mathematics is reported for the top and bottom 20 institutions. Ten of the 20 institutions with the lowest percentages of women faculty awarded 50% or more of their degrees in these scientific and technical fields. Correspondingly, institutions with a high percentage of women faculty are characterized by large programs in education, home economics, library science, foreign languages, and health professions.

A significant difference was also found among institutions grouped by Carnegie classification. The variable "Carnegie classification" represents the four subcategories of "Doctorate-Granting Institutions" identified by the Council (1976). These subcategories reflect differing levels of research orientation and have also been used as an indicator of prestige (Gordon & Kerr, 1978).

Research Universities I: The 50 leading universities in terms of federal financial support of academic science provided they awarded at least 50 Ph.D.s

Research Universities II: Universities from the top 100 recipients of federal financial support which awarded at least 50 Ph.D.s

Doctorate-Granting Universities I: Institutions awarding 40 or more Ph.D.s in at least five fields or which received at least $3 million in total federal support

Doctorate-Granting Universities II: Institutions awarding at least 20 Ph.D.s without regard to field (Carnegie, 1976, p. xv)
An analysis of variance procedure was performed to test for significant differences among the mean proportions of women at the four types of institutions for 1980. Doctorate-Granting II universities had a significantly higher proportion of women on the faculty than universities in the other three subclassifications. This was also true for the individual ranks of assistant and full professor. Table 5 gives the mean percentage of women by Carnegie classification for 1980.

Size of student body, control, region of the country, landgrant status, and size of the city where the university is located were not significantly related to the proportion of women on the faculty.

Thus, fewer women in the student body, a scientific and technical curriculum emphasis, and a strong research orientation continue to be associated with low percentages of women on the faculty. The last section of this chapter moves beyond this review of the status quo and reports on the extent to which institutional characteristics are associated with greater or lesser change over the decade.
TABLE 5
Women as Percentage of Full-Time Faculty in Universities, by Carnegie Classification, 1980-81

<table>
<thead>
<tr>
<th>Carnegie Classification</th>
<th>1980-81</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Doctorate-Granting Universities</td>
<td>18.8</td>
</tr>
<tr>
<td>1.1 Research Universities I</td>
<td>16.6</td>
</tr>
<tr>
<td>1.2 Research Universities II</td>
<td>18.7</td>
</tr>
<tr>
<td>1.3 Doctorate-Granting Univ I</td>
<td>19.4</td>
</tr>
<tr>
<td>1.4 Doctorate-Granting Univ II</td>
<td>24.6</td>
</tr>
</tbody>
</table>

INSTITUTIONAL CHANGE OVER THE DECADE

The major focus of this investigation is institutional change. The general patterns of female representation reported in the first two sections of the chapter provide the overall context for examining the change experienced by individual doctorate-granting universities during the decade.

As recipients of large sums of federal research dollars, all doctorate-granting institutions have had a vested interest in complying with federal affirmative action guidelines required of government contractors. Yet the degree to which institutions have succeeded in measurably improving the representation and treatment of women on its faculty varies greatly. This section explores the relationship between certain institutional characteristics and the extent of change experienced by 159 of the 183 doctorate-granting institutions.

The composite change index is a comparative rather than absolute measure of institutional change. Institutions experiencing larger than average percentage increases on several variables would tend to have high positive values for the composite change index. The range of raw scores as well as values for the composite measure is wide, indicating substantial variation among institutions and prompting ques-
tions such as: What patterns are observable in the data? What types of institutions have changed the most? To answer these questions, institutional characteristics described in the previous section were re-examined for possible relationships to the degree of change experienced by an institution.

Many, though not all, institutions with very low percentages of women early in the decade appear to have made substantial efforts to recruit junior women faculty. One indication of this is higher change scores for institutions with lower percentages in the base year. Table 6 lists the 20 institutions with the highest composite change index scores, along with their base year percentage and 1980-81 percentage of women on the faculty. Appendix I lists the actual change score values for the top and bottom 20 institutions.

Fifteen of the top 20 institutions had less than 10% women on their faculties early in the decade. A move toward a coeducational student body was apparently influential in promoting change on the faculty for a number of universities. At least 9 of the 20 were predominantly male institutions which recently shifted to coeducation or dropped restrictive admissions policies for women (Dartmouth, MIT, Notre Dame, Lehigh, Brown, Princeton, Harvard, NCSU, and VPI&SU).
TABLE 6
Percent Women on Faculty at 20 Institutions with Highest Change Scores

<table>
<thead>
<tr>
<th>Institutions by Rank Order on Composite Change Index</th>
<th>Base Yr % Women</th>
<th>1980-81 % Women</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denby College*</td>
<td>4.8</td>
<td>20.3</td>
<td>+15.5</td>
</tr>
<tr>
<td>CKSU*</td>
<td>7.1</td>
<td>17.5</td>
<td>+10.4</td>
</tr>
<tr>
<td>Newton University*</td>
<td>3.0</td>
<td>9.8</td>
<td>+ 6.8</td>
</tr>
<tr>
<td>Univ of Notre Dame</td>
<td>2.6</td>
<td>7.5</td>
<td>+ 4.9</td>
</tr>
<tr>
<td>U of South Carolina,Columbia</td>
<td>10.9</td>
<td>20.3</td>
<td>+ 9.4</td>
</tr>
<tr>
<td>U of South Florida</td>
<td>16.0</td>
<td>16.8</td>
<td>+ 0.8</td>
</tr>
<tr>
<td>Rice University</td>
<td>5.6</td>
<td>13.7</td>
<td>+ 8.1</td>
</tr>
<tr>
<td>Virginia Polytechnic Inst &amp; State University</td>
<td>6.5</td>
<td>14.0</td>
<td>+ 7.5</td>
</tr>
<tr>
<td>Rensselaer Polytechnic Inst</td>
<td>1.6</td>
<td>4.4</td>
<td>+ 2.7</td>
</tr>
<tr>
<td>Lehigh University</td>
<td>3.9</td>
<td>7.7</td>
<td>+ 3.8</td>
</tr>
<tr>
<td>Brown University</td>
<td>6.6</td>
<td>13.5</td>
<td>+ 6.9</td>
</tr>
<tr>
<td>Princeton University</td>
<td>5.2</td>
<td>11.6</td>
<td>+ 6.4</td>
</tr>
<tr>
<td>Univ of Florida</td>
<td>7.0</td>
<td>15.2</td>
<td>+ 8.2</td>
</tr>
<tr>
<td>Univ of Kentucky</td>
<td>9.5</td>
<td>16.5</td>
<td>+ 7.0</td>
</tr>
<tr>
<td>Vanderbilt University</td>
<td>13.0</td>
<td>22.3</td>
<td>+ 9.3</td>
</tr>
<tr>
<td>Northeastern University</td>
<td>21.3</td>
<td>25.6</td>
<td>+ 4.3</td>
</tr>
<tr>
<td>Harvard University</td>
<td>4.0</td>
<td>10.7</td>
<td>+ 6.7</td>
</tr>
<tr>
<td>St. Louis University</td>
<td>23.2</td>
<td>33.9</td>
<td>+10.7</td>
</tr>
<tr>
<td>Stanford University</td>
<td>5.5</td>
<td>11.6</td>
<td>+ 6.1</td>
</tr>
<tr>
<td>Clark University</td>
<td>9.3</td>
<td>17.7</td>
<td>+ 8.4</td>
</tr>
</tbody>
</table>

*Pseudonym to protect anonymity of case study site.

Another indication of stepped-up hiring efforts at some institutions is a very small percentage of women at the full professor rank and a much increased percentage at the assistant professor rank. North Carolina State University is an example. Only 2.4% of full professors in 1980-81 were women, a legacy of days when most of the student body and faculty were men. Now, 26.5% of the assistant professors are women—a sizeable increase over the 9% figure for that rank in 1972-73. Many of these 'much changed' institutions still have a low percentage of women on their faculty.

Given the relationship between the starting point for an institution and its change score, an exploration of the influence of other institutional characteristics was conducted using a stepwise regression with the base year percentage of women (starting point) as a covariate. In this way, the unique contribution of other variables could be assessed after the influence of starting point was partialled out. Only two other variables were found to contribute independently to the variance of the change score: change in faculty size and curriculum emphasis. The R-squares and associated F's for each step are shown in Appendix J. Of the two measures representing institutional growth, only change in faculty size entered the equation. An increase in faculty size was associated with greater
change scores. Also, scientifically-oriented universities were somewhat more likely to have higher change scores.

Several variables, in addition to enrollment growth failed to add significantly to the model. The proportion of women students and Carnegie classification were both associated with the current proportion of women on the faculty, but were not significantly related to the change index. Neither size of the city or current enrollment met the p ≤ 0.05 level for entry into the equation.

Some differences were noted among regions of the country. Institutions located in the New England area had the highest average change index and those in the Far West had the lowest. The move toward coeducation by some previously all-male Ivy League institutions resulted in an increase in opportunities for women faculty in New England universities where these schools are concentrated. But this shift took place in an environment of low growth: average faculty growth for the region was 4.8%, well below the growth rate for all institutions (8%). The 15 schools in the New England region reported a net gain of 570 jobs for women and a net loss of 154 jobs for men over the decade. All but one institution in the New England region reported an increase in the absolute number of women faculty.
This analysis provides some clues concerning institutional change. Universities whose early records indicated only a token presence of women have made measurable efforts to increase the number and status of women on their faculties. Institutions reporting an increase in the size of their faculty over the decade tended to show more change; expansion apparently provided opportunities to add women. A scientific and technical curriculum orientation was predictive of greater change. Size of the city in which the university is located was not a relevant characteristic, although institutions in the New England region appear to have experienced more change than those in other regions.

Still, the quantitative analysis leaves much unexplained. Why, for instance, did MIT make such progress in recruiting women while a reasonably similar institution, California Institute of Technology, reported a loss of the few women faculty it had? Intriguing contrasts and important exceptions are readily evident from the rank order listing of institutions by their composite change index. These observations were important factors in validating the choice of case study sites.
Chapter V

CKSU

INTRODUCTION

The case study is organized into several sections. The institutional setting and major themes of the case are described in the overview. The second section uses statistical data provided by the institution to try to answer the question: "Just how much change has occurred for women faculty over the decade?" Interviewee responses to the question: "What factors account for the relative success of CKSU in hiring and promoting women faculty?" are summarized in the third section. These factors are described and illustrated in greater detail in the subsequent sections which present findings for the five major research issues drawn from the work of Newcombe (1981) and Taylor (1981). These are: nature and extent of institutional leadership, coalition group activity, and federal intervention; structural and/or environmental influences on affirmative action implementation; and specific strategies used for implementation.
OVERVIEW

Background on CKSU

CKSU is a large public university located in a southern state. Its programs reflect its long heritage as a land-grant institution with considerable strength in engineering, agriculture, forestry, and textiles. While these programs continue to be strong and attract a large percentage of the student enrollments, the creation of the degree-granting School of Liberal Arts in 1963 brought greater balance to the curriculum and attracted many new students to the University, especially women.

Male predominance at CKSU evolved in part because of its curriculum orientation, but also as a result of policies which specifically excluded women students. In 1931, TH University (THU), the Women's College at Dexter, and C K College were consolidated into the State University System. The agreement called for transfer of some curricula and women would no longer be admitted as freshmen or sophomores at THU or CK State. This exclusionary policy meant that only a handful of graduate women were enrolled at CKSU until the early 60s. Since that time, the number of women students has increased from 308 in 1963 to approximately 8,000 in 1982. The student body is now about 37% female with many women enrolled in engineering and other technical programs.
The racial composition of the student body has also changed. According to the current college catalog there are approximately 1,700 black and 300 other minority students among the 22,000 students enrolled.

Thus, expansion in size and in program offerings has been characteristic of CKSU's recent history, transforming it from a locally-oriented agricultural and mechanical college to a broad-based research university with regional and national influence and a more diversified student body.

Major Themes in the Case

External pressure from the federal government looms large in this case. Indeed, there is little evidence of self-examination, policy planning, or administrative action before the regional Office for Civil Rights began its compliance review. In that sense, CKSU took a reactive or resistant posture toward affirmative action during the late 60s and early 70s. The lawsuit filed by the N.A.A.C.P. Legal Defense Fund in 1970 named this southern state as one of ten states with continued vestiges of racial segregation. This suit spurred on federal investigations and protracted negotiations between the State University System and HEW over an acceptable desegregation plan. Though the suit was not resolved until 1981, the institution made deliberate and
consistent efforts to implement affirmative action during the intervening years and worked to create a climate more conducive to change. Leadership from the Provost's Office was crucial to this effort. Issues related to race and sex discrimination have been handled in tandem, but the need to eliminate racial duality in the state has been the driving force for affirmative action policy development and implementation on campus. Despite the focus on race, white women appear to have been the major beneficiaries of these efforts, in large part because of their greater availability in the pool of recent doctorates.

Growth of the student body and structural changes created new opportunities for women faculty. In particular, expansion of the School of Humanities and Social Sciences resulted in new faculty slots in disciplines where qualified women were readily available. Expansion of the School was part of a gradual but dramatic transformation of the entire institution. An increase in population in the region and in educational level of the area workforce created a demand for new and better programs at CKSU.

By 1982, affirmative action issues and procedures had settled into a routine of sorts, at least compared to the intense activity of the mid-70s when policies and systems were being developed and numerous reports had to be prepared
in response to the lawsuit or federal requirements. The recent consent decree, which requires additional efforts to recruit black faculty and students, appears to have widespread acceptance as the "morally right and necessary thing to do," indicating that perhaps active resistance to affirmative action has been reduced over the years. While the institution has undergone substantial changes over the last decade and has made progress in diversifying its faculty, all parties agree that there are serious equity issues remaining.

**AA RESULTS: FACULTY COMPOSITION AT CKSU**

Just how much change has occurred for women faculty at CKSU? As discussed in the methodology section, the extent of change found depends to some degree on the measure used. Multiple and conflicting definitions of "faculty" are particularly troublesome in developing valid comparative measures. The case of CKSU illustrates this problem. Federal and state agencies are concerned with slightly different issues and thus request reports that cut the faculty pie in different ways. In addition, each campus uses faculty ranks somewhat differently; this is particularly true for the instructor and lecturer ranks. Given these caveats, two tables are presented here to give a more complete picture of
progress for faculty women at CKSU. These data were not
crossed by sex and race, thus, there is no specific informa-
tion on the status of black women faculty. Figures reported
annually on the Higher Education General Information Survey
are provided in Table 7. This table includes all full-time
instructional faculty members at all ranks who have at least
50% of their salary charged to the teaching budget.
Although changes in distribution by rank are evident in the
table, no information is provided on distribution by school.
Extension and research faculty are not included in these
figures.

Except for the years 1975-77 when the number of women
remained about the same, there was a steady progression in
both the absolute number of women (from 51 in 1972 to 159 in
1980) and the percentage of women on the faculty (7.1% to
17.5%). The total number of female full professors inched
upward from 1 to 7 and the number tenured almost tripled (12
to 35).

Data for full-time tenured/tenure-track faculty by
school are presented in Table 8. By including research and
extension positions, the number of male faculty jumped dra-
matically, resulting in a much smaller growth in the per-
centage of women over the decade. For instance, the number
of men in 1977 was 30% larger using this definition rather


<table>
<thead>
<tr>
<th>Rank</th>
<th>1972-73</th>
<th>1974-75</th>
<th>1975-76</th>
<th>1976-77</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Total</td>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Faculty</td>
<td>Women</td>
<td>Faculty</td>
<td>Women</td>
</tr>
<tr>
<td>Full</td>
<td>201</td>
<td>1 (.5%)</td>
<td>229</td>
<td>1 (.4%)</td>
</tr>
<tr>
<td>Assoc</td>
<td>185</td>
<td>3 (1.6%)</td>
<td>209</td>
<td>5 (2.4%)</td>
</tr>
<tr>
<td>Asst</td>
<td>209</td>
<td>17 (8.1%)</td>
<td>199</td>
<td>31 (15.6%)</td>
</tr>
<tr>
<td>Inst</td>
<td>120</td>
<td>29 (24.2%)</td>
<td>98</td>
<td>32 (32.7%)</td>
</tr>
<tr>
<td>Lect</td>
<td>1</td>
<td>1 (100%)</td>
<td>4</td>
<td>1 (25%)</td>
</tr>
<tr>
<td>Total</td>
<td>716</td>
<td>51 (7.1%)</td>
<td>739</td>
<td>70 (9.5%)</td>
</tr>
<tr>
<td></td>
<td>n/a</td>
<td></td>
<td>457</td>
<td>12 (2.6%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Total</td>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Faculty</td>
<td>Women</td>
<td>Faculty</td>
<td>Women</td>
</tr>
<tr>
<td>Full</td>
<td>274</td>
<td>3 (1.1%)</td>
<td>281</td>
<td>3 (1.1%)</td>
</tr>
<tr>
<td>Assoc</td>
<td>214</td>
<td>12 (5.6%)</td>
<td>205</td>
<td>12 (5.9%)</td>
</tr>
<tr>
<td>Asst</td>
<td>245</td>
<td>45 (18.4%)</td>
<td>255</td>
<td>56 (22.0%)</td>
</tr>
<tr>
<td>Inst</td>
<td>86</td>
<td>23 (26.7%)</td>
<td>63</td>
<td>18 (28.6%)</td>
</tr>
<tr>
<td>Lect</td>
<td>34</td>
<td>3 (8.8%)</td>
<td>54</td>
<td>22 (40.7%)</td>
</tr>
<tr>
<td>Total</td>
<td>853</td>
<td>86 (10.1%)</td>
<td>858</td>
<td>111 (12.9%)</td>
</tr>
<tr>
<td></td>
<td>494</td>
<td>18 (3.6%)</td>
<td>485</td>
<td>18 (3.7%)</td>
</tr>
</tbody>
</table>

Source: Higher Education General Information Surveys, Salaries, Benefits, and Tenure of F-I Instructional Faculty, 1972-80; National Center for Education Statistics, Dept. of Education.
than the teaching faculty definition required for HEGIS reported in Table 7. Yet there was little change in the numbers of women.

While this second table provides a different perspective, it too suggests substantial progress has been made over a very low starting point. The number of women on the tenure-track faculty doubled, the percentage of women increased 4.4%, and the number of tenured women more than tripled since 1973 (16 to 51). Progress also was made in disciplines where the availability of women doctorates is very low—Engineering, Forest Resources, and Textiles. The upward trend in the number of tenured women is particularly positive, though underrepresentation of the rank of full professor continues to be a serious problem.

FACTORS CITED

Twenty-three faculty members and administrators were interviewed during the week-long site visit to CKSU. Table 9 gives an indication of the range of perspectives provided in the interviews. Nearly all interviewees responded to a question concerning their perception of the factors which account for the amount of positive change that occurred for women faculty. Though some emphasized certain factors over others, the picture that emerges from their responses to
### TABLE 8
Number & Percent Women by School on the F-T Tenured/Tenure Track Faculty at CKSU, Selected Years

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Total</td>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Faculty Women</td>
<td>Faculty Women</td>
<td>Faculty Women</td>
<td>Faculty Women</td>
</tr>
<tr>
<td>Agriculture</td>
<td>354</td>
<td>6 (1.7%)</td>
<td>435</td>
<td>14 (3.2%)</td>
</tr>
<tr>
<td></td>
<td>404</td>
<td>12 (3.0%)</td>
<td>452</td>
<td>33 (7.3%)</td>
</tr>
<tr>
<td>Design</td>
<td>27</td>
<td>1 (3.7%)</td>
<td>28</td>
<td>1 (3.6%)</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>2 (7.4%)</td>
<td>35</td>
<td>6 (17.1%)</td>
</tr>
<tr>
<td>Education</td>
<td>38</td>
<td>4 (10.5%)</td>
<td>58</td>
<td>6 (10.3%)</td>
</tr>
<tr>
<td></td>
<td>54</td>
<td>9 (16.7%)</td>
<td>61</td>
<td>13 (21.3%)</td>
</tr>
<tr>
<td>Engineering</td>
<td>134</td>
<td>0 (0%)</td>
<td>147</td>
<td>1 (0.7%)</td>
</tr>
<tr>
<td></td>
<td>132</td>
<td>2 (1.5%)</td>
<td>149</td>
<td>5 (3.4%)</td>
</tr>
<tr>
<td>Forest Resources</td>
<td>40</td>
<td>0 (0%)</td>
<td>50</td>
<td>0 (0%)</td>
</tr>
<tr>
<td></td>
<td>46</td>
<td>2 (4.3%)</td>
<td>54</td>
<td>4 (7.4%)</td>
</tr>
<tr>
<td>Humanities &amp; Social Sciences</td>
<td>192</td>
<td>37 (19.3%)</td>
<td>224</td>
<td>34 (15.2%)</td>
</tr>
<tr>
<td></td>
<td>237</td>
<td>52 (21.9%)</td>
<td>231</td>
<td>52 (22.5%)</td>
</tr>
<tr>
<td>Physical &amp; Mathematical Sci</td>
<td>165</td>
<td>8 (4.8%)</td>
<td>176</td>
<td>9 (5.1%)</td>
</tr>
<tr>
<td></td>
<td>181</td>
<td>7 (3.9%)</td>
<td>198</td>
<td>9 (4.5%)</td>
</tr>
<tr>
<td>Textiles</td>
<td>35</td>
<td>1 (2.9%)</td>
<td>37</td>
<td>1 (2.7%)</td>
</tr>
<tr>
<td></td>
<td>35</td>
<td>2 (5.7%)</td>
<td>42</td>
<td>3 (7.1%)</td>
</tr>
<tr>
<td>Vet Med</td>
<td></td>
<td></td>
<td>32</td>
<td>3 (9.4%)</td>
</tr>
<tr>
<td>Intercol &amp; Special Frog</td>
<td>38</td>
<td>2 (5.3%)</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>1023</td>
<td>59 (5.8%)</td>
<td>1155</td>
<td>66 (5.7%)</td>
</tr>
<tr>
<td></td>
<td>1116</td>
<td>88 (7.9%)</td>
<td>1278</td>
<td>130 (10.2%)</td>
</tr>
</tbody>
</table>

About 16 women tenured

About 51 women tenured

Source: Provost's Office, CKSU
this and other interview questions is quite consistent. Respondents were urged to cite as many factors as they thought important to understanding the phenomena.

The most frequently cited factor was commitment and leadership by the Provost (12 direct citations). Federal pressures on the race issue and women speaking out on their own behalf were each cited by eight respondents. Creation and expansion of the School of Humanities and Social Sciences and other concerned people on campus were the next two most frequently mentioned factors, each cited by five respondents. Ten other factors, often subcategories of those already listed, were cited by one to three respondents each.

Responses to this direct question and to additional probing were used to develop a taxonomy of factors listed in Table 10. The taxonomy summarizes aspects of the conditions interviewees thought were influential in promoting positive change for women at CKSU.

**SOURCE AND NATURE OF INSTITUTIONAL LEADERSHIP FOR AA**

Interviewees at CKSU cited the Provost's commitment and leadership more often than any other factor. At this site, the previous chancellors were mentioned only infrequently and with equivocal comments. A new chancellor assumed his
<table>
<thead>
<tr>
<th>University Administrators</th>
<th>School of Forest Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provost</td>
<td>Assoc Dean (Unit AA Officer)</td>
</tr>
<tr>
<td>Associate Provost &amp;</td>
<td>Head, Wood &amp; Paper Science</td>
</tr>
<tr>
<td>Affirmative Action Officer</td>
<td></td>
</tr>
<tr>
<td>Associate Provost</td>
<td></td>
</tr>
<tr>
<td>Administrative Assistant,</td>
<td></td>
</tr>
<tr>
<td>Affirmative Action</td>
<td>School of Humanities &amp;</td>
</tr>
<tr>
<td>Acting Associate Dean,</td>
<td>Social Sciences</td>
</tr>
<tr>
<td>Graduate School</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>School of Agriculture &amp; Life Sciences</td>
<td></td>
</tr>
<tr>
<td>Head, Dept of Bio &amp; Agric Engr</td>
<td>School of Physical &amp;</td>
</tr>
<tr>
<td>Assoc Prof, Horticulture Sci</td>
<td>Mathematical Sciences</td>
</tr>
<tr>
<td>Full Prof, Zoology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assoc Dean (Unit AA Officer)</td>
</tr>
<tr>
<td>School of Design</td>
<td>Head, Physics</td>
</tr>
<tr>
<td>Assoc Prof, Landscape Arch</td>
<td>Asst Prof, Math</td>
</tr>
<tr>
<td>(Unit AA Officer)</td>
<td></td>
</tr>
<tr>
<td>School of Education</td>
<td>School of Textiles</td>
</tr>
<tr>
<td>Head, Curriculum &amp; Instruction</td>
<td>Head, Textile Mats &amp; Management</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>School of Engineering</td>
<td></td>
</tr>
<tr>
<td>Dean (Unit AA Officer)</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 10
Factors Cited by Interviewees at CKSU

I. Leadership and commitment of central administration, particularly the Provost's Office
   A. Personal commitment of the Provost as evidenced in his behavior
   B. Enunciation of clear policies; effective, consistent monitoring of results
   C. Leadership provided by the Associate Provost/Affirmative Action Officer
      1. His status (as an Assoc. Provost) and visible support from Provost
      2. His personal style (low-key, nonconfrontive), race (black), and personal commitment to AA
   D. Efforts made by AA Office to change attitudes, especially the race seminar designed for senior administrators

II. Federal Government Pressure
   A. Long-term, direct pressure as a result of the Adams suit concerning racial duality in the state
   B. Existence of the laws and regulations

III. Faculty Women Speaking Out
   A. Women's organization has credible, competent leaders who press their issues
   B. Existence of the women's organization has helped individual women question treatment they receive

IV. Changes in the nature of the institution, its structure, and student body
   A. Creation and expansion of the School of Humanities & Social Sciences
   B. Dramatic increase in the number of female students
   C. National recruitment for faculty, dept. heads, and deans brought in more cosmopolitan and liberal attitudes

V. Changing ecology of the region
   A. Region has had heavy influx of well-educated non-Southerners, forcing the institution to become more cosmopolitan
   B. Location makes recruiting easier, better possibilities for spouse employment in the area
duties in Fall, 1982. The perception of the Provost, James Whitmore (pseudonym), as committed to affirmative action is remarkably consistent across the campus. One reason is the consistency of his behavior in regard to these issues:

He (the Provost) has just been positive about it and unrelenting over a long period of years in talking about it and he's had a good influence on the campus. When you make a hiring choice or decide not to make a hiring choice that would go against affirmative action then he wants to know why. And I've been in this situation where I've decided not to hire a person, and I had to go over and explain why I think that's right.

Time and again at our faculty meetings in the beginning and end of the year, especially the beginning of the year, (the Provost) makes a little speech about affirmative action. Now he doesn't have to do that. There are many other things he could talk about. Over and over again he talks about affirmative action.

I really think the leadership of the administration is sending out clear signals to the schools - clear, consistent . . . I know, for example, some instances when department heads and deans were left way out on a limb when some things were brought to his attention that were clearly wrong. I knew the department head was going to get into trouble when the woman told me about it. So they (department heads) learned the hard way, but they learned. (The Provost) was very firm, what was expected, what our obligations are.

I know how sensitive our Provost is to these things. If he sees something that he is even suspicious of, you have to present one hell of a case to him as to why this did or didn't happen. Why wasn't this person considered. That's the kind of environment we're working in.

Two aspects of the Provost's behavior are clear from these comments. He spoke out constantly and publicly on the
need for affirmative action and he questioned decisions which did not help the institution achieve its goals. Along with the AA Officer, he met with numerous groups to communicate the fact that the administration was serious about affirmative action and when necessary he worked with specific units where there was "some slowness." Thus, affirmative action was treated as a priority issue for which campus decision makers were held, at least verbally, accountable.

The Provost's leadership style is one of low-key persuasion, constant reminders, and "an encouraging attitude" (Provost's self-description).

The thing they have going is effective communication, constant reminders personally.

On the other hand, both (the Provost) and (the AA Officer) have really been helpful. I have never had a case where I felt strongly that we had to move with the white candidate because I just didn't think the black candidates we had were qualified. I've never had a case where they said "no." Now they may have held them up for awhile and (the Provost) says "Let's come over and chit-chat about it," and I know exactly what he means: "Get ready, here comes the onslaught."

While interviewees provided a consistent picture of the Provost's behavior, they were much less certain about the motivation behind his support of affirmative action. His own exposure to achieving women and blacks seems limited. He is a product of CKSU, graduating at a time when women were almost nonexistent on campus. He returned to teach in
the sciences and has spent much of his career at CKSU. His responses throughout the interview focused on women's increasing interest in pursuing careers in math, science, and technical areas and how increased availability of women in nontraditional fields has made a difference at CKSU.

When asked what was the source of the Provost's commitment, interviewees speculated that, while he was a morally fair person, he probably saw the handwriting on the wall when federal investigators questioned racial practices.

His behavior is good. But you have to ask yourself what creates this kind of behavior on the part of any administrator. And I can't believe the legal environment hasn't made a difference.

First of all I think he's a high caliber of person who has a commitment for doing what's right. I think sometimes a person has to be jogged into realizing something has to be done. He's certainly bound to have been influenced by the problems of the University with HEW and so forth. So there's been pressure from the outside that we've really got to do something. But I don't think that's his sole motivation. He's not just doing it to satisfy some law. That may have been what got it started.

The Provost's effectiveness as a change agent has been greatly enhanced by hiring Nathan Jones as Affirmative Action Officer in 1974 during his first year as Provost. Dr. Jones is perceived as wholly committed to affirmative action and as having the full support of the Provost in carrying out his work.

His (the AA Officer) being here has been tremendously influential. Of course, he has exactly as
much clout as the Provost and Chancellor give him, no more. But they do try to give him some clout....The combination of (the Provost) and (the AA Officer) has been tremendously influential.

Dr. Jones' style of low-key persuasion has also served him well. One administrator described his approach as "jawboning." From others, we know it was jawboning with a purpose:

Nathan has had to raise some cane in departments where he detected the person was certainly qualified...yet this person had been passed over....It's been nudging, pushing, shoving in particular instances where we get enough evidence that there may indeed be a problem.

Dr. Jones is black. His race appears to interact with his status and personal style to enhance his effectiveness:

Having Nathan is one thing (factor) and a person in his position who is committed to affirmative action and who is a minority. There is no way a white male can fill that position in the same way as a black or female can...

I can tell you this, that when Nathan came here as the senior administrator on campus and was black, it changed the attitudes of many administrators on campus. You could see the change. We've never had to work for, or debate with, or to be a colleague with blacks in an administrative position and it changed the whole character, in my opinion, of at least how I perceived the initiative to recruit blacks.

Implementation of affirmative action appears to date to the HEW compliance review and to the promotion of James Whitmore to Provost in 1974:

The predecessor Provost was totally uninterested in women's advancement so far as I know. And it was only pressure from HEW that caused the Univer-
sity to take any steps. After Jim got the job, there was an entire difference.

The team of Whitmore as Provost and Jones as Affirmative Action Officer/Associate Provost has been in place since that time. Stability in that office provided time for the low-key approach to have some effect and for campus decision makers to realize the issue was not going away.

Informants provided strong support for the view that the current Provost, in tandem with the Affirmative Action Officer/Associate Provost, has given the leadership for affirmative action implementation on the campus. Effective and repetitive communication of policy, as well as the administration's serious intent to enforce it, is viewed as setting the pattern for others on the campus. Questioning decisions is the major method of enforcing policy. The fact that some decisions were questioned is well known by everyone on campus and seems to push people into making more rational, defensible employment decisions.

**NATURE AND EXTENT OF FEDERAL INTERVENTION**

**Negotiating the Desegregation Plan**

Government intervention was omnipresent at CKSU during the seventies. While much of the direct contact and negotiations were focused on the officials of the State University System rather than administrators of the 16 constituent cam-
puses, all participated to some degree in planning responses to charges of continued racial segregation, meeting demands for information, and planning programs to correct deficiencies. CKSU also had direct contact with investigators over the establishment of a School of Veterinary Medicine on the campus. The complete story is too complex to do it justice in a brief case study. Thus, this overview seeks only to sketch out the extent and nature of government oversight that pervaded the administrative environment for campus officials and to try to assess the impact of federal intervention on behalf of blacks on opportunities for women.

Exhibit 2 is a helpful summary of the on-going saga of negotiations between HEW and the State University System to reach an acceptable plan for eliminating vestiges of racial segregation in public higher education in the state. There are 16 institutions in the system of colleges and universities. Five are predominantly black. In 1973, the representation of black students at the white institutions was about 3.7%. The representation of white students on black campuses was about 5.9% (Middleton, 1978, p. 6).

In the late 1960s, HEW enforcement of Title VI of the Civil Rights Act in higher education was viewed as laggard at best. A series of visits to southern colleges had convinced the staff of the Office for Civil Rights that a num-
THE ROAD TO THE ___ DESEGREGATION PLAN

Washington
Following are the events leading up to this month's college-desegregation agreement between ___ and the U.S. Department of Education:


October, 1970: The N.A.A.C.P. Legal Defense & Education Fund files a lawsuit, Adams v. Richardson, asking a federal district court to compel H.E.W. to enforce Title VI of the Civil Rights Act by cutting off funds to 10 states, including (this one), if they fail to desegregate their systems of higher education.

February, 1973: U.S. District Judge John H. Pratt orders H.E.W. to initiate enforcement proceedings within 60 days against 10 state systems, including (this one). On appeal, the U.S. Court of Appeals for the District of Columbia Circuit grants H.E.W. additional time to obtain desegregation plans.

July, 1974: H.E.W. accepts plans for desegregating higher education systems from 8 of the 10 states, including (this one).

August, 1975: The Legal Defense Fund seeks further relief from Judge Pratt, alleging that the H.E.W.-accepted plans from (this state) and 5 other states are inadequate.

April, 1977: Judge Pratt agrees that the plans are inadequate and orders H.E.W. to issue more specific criteria and to renegotiate the plans in (this state) & the five other states.

July, 1977: H.E.W. issues its criteria calling for more black enrollment in predominantly white institutions & "enhancement" of predominantly black institutions.

September 2, 1977: (This state) submits the university segment of its plans to H.E.W.

December 30, 1977: The university submits a "Supplemental Statement" discussing employment and enrollment goals & new programs.

February 2, 1978: Secretary of H.E.W. Joseph A. Califano, Jr., rejects the university's plan.

March 22, 1978: H.E.W. issues a notice of intent to hold an administrative hearing to determine whether federal higher education aid should be withheld from the state.

May 12, 1978: Based on the university's submission of a second supplemental statement, a promise to study duplication of programs on different campuses, and a commitment to submit more information, H.E.W. provisionally accepts (the university's) plan.


March 29, 1979: A new notice of intent to hold an administrative hearing against the state is issued.

April 24, 1979: The university sues H.E.W., seeking an injunction to prevent the federal government from withholding funds from the institution and to stop the administrative hearing.

June 8, 1979: Judge Frank T. Dupree, of the U.S. District Court in (the capital), enjoins the government from withholding funds but refuses to stop the hearing.

July 2, 1980: The administrative hearing begins.

January, 1981: Secretary of Education Terrel H. Bell appoints Douglas P. Bennett, a Washington lawyer in private practice, as "consultant and counselor" to negotiate a resolution.

June 20, 1981: In an "emergency" session, the (university) board of governors unanimously approves an agreement, and Secretary Bell announces that a settlement has been reached.


Exhibit 2. Chronology of desegregation negotiations.
ber of states were still operating racially segregated systems of higher education. During 1969, HEW sent letters to ten states ordering them to prepare statewide desegregation plans within 120 days. Lacking both a clear idea of what the states needed to do to comply and Presidential support for vigorous enforcement, OCR never managed to obtain or approve a single desegregation plan during the period 1968 and 1973.

Six years of bureaucratic inaction convinced the Legal Defense Fund of the N.A.A.C.P. that stronger measures were needed if the 1964 Civil Rights Act were to have any effect on higher education. They filed suit against HEW (Adams v. Richardson) and asked the court to compel the agency to enforce the law and cut off funds to the ten states if they failed to desegregate their systems of higher education (Hyer, Note 1). CKSU is located in one of the ten states named in the suit.

This suit touched off activity in the regional Office for Civil Rights and began more than a decade of negotiations with officials in the state. The first compliance review was held sometime before September 1972. Federal investigators visited the CKSU campus in these early years. The current Affirmative Action Officer reports the purpose of that visit was to investigate plans to establish a School
of Veterinary Medicine at CKSU, a move that was opposed by the historically black colleges. Alumni of the five black colleges sued on this issue, charging placement of the Vet School at CKSU rather than the historically black landgrant college would hinder the process of desegregation. The Vet School issue remained in the courts for several years and was finally resolved in May 1979, when a federal appeals court upheld the lower court ruling and approved construction of the school on the CKSU campus ("Another Extension," Chronicle of HE, 1979, p. 2).

A flavor of the activity required of campus officials as a result of the Adams suit and federal agency enforcement is conveyed in the straightforward recitation of precedents listed in the 1978 AA Plan and from comments by the current AA Officer:

We were constantly writing plans or reporting data to three or four government agencies because of the Adams case—HEW had a component of it, the Department of Labor had reports, and the general administration was constantly needing reports from us since we were in court. We had to be knowledgeable of and able to generate these things pretty fast and accurately.

Though the controversy between HEW and the State University System dragged on throughout the decade and is not yet entirely resolved, commitment and leadership from the Provost's office seems to have emerged early on:

Certainly there has been perhaps more emphasis placed on trying to deal with affirmative action needs. This is something that we should be involved in, we needed to be involved in. And I've seen a commitment made at the beginning by our administration that I thought was proper, wholesome, and they have continued to stand by it.

A few charges of sex discrimination were filed against the University and resulted in legal investigations but not necessarily judgments in favor of women plaintiffs. Complaints on the basis of race are more common. This appears to be an avenue of recourse used infrequently by women, particularly in recent years, and the cases seem to have had no obvious impact on the overall status of women faculty.

**Impact of Federal Action on Opportunities for Women**

The thrust of government interventions has been elimination of remnants of racial segregation and improving opportunities and status of black students and staff. Just
how much impact all this has had on opportunities for women is more difficult to assess. A few interviewees felt that federal pressure on the race issue had had little or no positive spinoff for women. They felt that other factors, such as women speaking out on their own behalf, were what kept women in the picture at all. The evidence seems to point the other direction, however.

First, the Provost made an early commitment to affirmative action, based in part on the recognition of a performance gap. The gap in representation versus availability was every bit as clear for women on the faculty as it was for blacks. The issues were treated together in the development of the Plans, in setting goals, and in discussing the need for affirmative steps.

Federal pressure resulted in attention to equity in the hiring process, in more active, open recruiting, and in elimination of the most blatant forms of discrimination.

When you are under the gun as the State University System has been for years, since the early 70s, there's a real incentive to be more careful about what you do, to be more aware of active discrimination.

I think it's easier (now) for women to be hired here but that's because the University is under the gun on this affirmative action business and if they were not, I think the record would be considerably poorer.
Interviewees expressed concern that their efforts have produced relatively few black appointments and slower than desired increases in black student enrollments. While direct pressure and special efforts have been aimed at meeting stated goals for black participation, the institution has been more successful in meeting its goals for hiring women. Several commented on this phenomena:

There seems to be an overall concerned effort to try to respond to affirmative action on some level and since females, especially white females, are a larger number in terms of the pool, there is a response that is favorable.

If I'd look for a single explanation I think it's because there has been pressure to be aware of including opportunity for people of all types in hiring situations. The pressure has come primarily from the need to integrate the University racially, not sexually, (but) the prime beneficiaries may have been women....When we think about affirmative action here we think of minorities and women. We don't at the policy level make a clear distinction. There isn't a special effort to hire minorities or a special effort to hire women.

In sum, federal pressure appears to have been important in generating an early, sustained commitment to affirmative action by the Provost. Subsequent attention to equity in hiring and promotion procedures reduced active discrimination and resulted in serious consideration of female candidates. The high public visibility of the on-going negotiations between HEW and the State University System may have increased the awareness of many faculty over time and legitimized administrative demands for affirmative action.
NATURE AND EXTENT OF COALITION GROUP ACTIVITY ON BEHALF OF WOMEN FACULTY

Eight respondents cited the activities of women faculty as influential in the change process. Yet, it is difficult to measure their direct impact at CKSU. The major advocacy group for women faculty began activity in 1973 as a standing committee of the campus AAUP chapter. The first year the committee heard complaints from "grievettes," but since that time it has operated as a loosely structured pressure and support group, focusing primarily on salary inequities and meeting annually with the Provost to press their issues. The agenda of current concerns is still salaries, the lack of representation of women in administration, the appointment of a senior woman to handle women's issues, and related concerns. Two well-respected, tenured women are recognized as the long-time leaders and spokeswomen for the organization, a role they accept in order to protect untenured junior women.

Assessments of the organization's impact on the change process vary. One of the leaders felt they had had no influence on hiring progress since they had been so focused on salary issues for existing women faculty. The other felt that in general, "women complaining" was the only thing that kept women's issues on the minds of administrators, since federal efforts were nearly exclusively focused on blacks.
While women faculty may debate the extent of their influence, the Provost and his two associates speak as if they are a force to be reckoned with:

We've had a number of women who were rather outspoken on issues and concerns and I think that if you tried to go to sleep, they wouldn't have let you. The nice thing is that when you have women who are very, very competent as part of the leadership of the group of females . . . When you have good people who push you, you pay more attention to them . . . We've been blessed by having some very good female faculty as demonstrated by what they can do so even if you wanted to be a chauvinist you couldn't . . . The best evidence is the clear evidence.

So that (AAUP-Committee W) has been a source of leadership, prodding, over the years . . . It's got people in it who are important to us.

The Committee has certainly had some impact on individual women as well, providing them information and support to challenge inequitable treatment. For example, an early committee meeting on salaries revealed to one female faculty member that she was paid $3,000 less than a male colleague hired at the same time with similar qualifications. She protested and the inequity was corrected. While there are few documented examples of direct impact on policy made by this coalition group, their activities have helped raise the awareness level of many on campus, particularly by identifying and publicizing specific concerns, and proposing measures to improve the status of faculty women. The administrative target of much of their activity is the Provost who in turn "has listened carefully."
The protests of women were not always welcomed, however. Women faculty alluded to the risks of speaking out with great regularity. These could be subtle, such as comments from colleagues about "getting up on her soapbox again" to delayed and traumatic promotion and tenure decisions. In addition, there is a direct cost in time expended that then does not exist for pursuing one's own research and publishing. As a result, there is a tendency for individual women faculty to emerge as change agents in their unit or in the larger context of the university when they feel less vulnerable--either because they have tenure or they have a supportive department head. A few act without such protections, but several women reported that getting tenure increased their willingness to speak out. Given the power structure of this institution which has only one female department head, no female deans, and only a handful of female full professors, women faculty are dependent on their ability to influence and on the commitment of white males with legitimate power in order to change the status quo. (It should be noted that after the study was completed, three women were selected to fill important administrative posts--Associate Dean of the Graduate School, Associate Dean of the School of Humanities, and Department Head, Education.)
SUBSYSTEM VARIATION

The focus of interview questions at all three sites was change at the organizational level. However, a number of respondents provided illustrations and comments related to conditions and practices in their own department or school. This anecdotal evidence is a useful though nonsystematic way of assessing the extent and causes of variation in affirmative action progress across campus. A recurrent theme in these anecdotes is the impact individuals can have on hiring outcomes. Two examples illustrate the point.

In answer to the question of overall factors responsible for change at the institution, one female faculty member indicated that while the central administration had a commitment to affirmative action, her experience suggested that advances were a result of attitudes of individual department heads. Her department had had three different heads in recent years. The first had recruited her and three other women in a three-year period (in a discipline where female availability is low) and had emphasized the importance of hiring women in the department. The second hired one woman, and the third has hired no women. In addition, several of the women hired earlier have left. In the view of this faculty member, what had changed was the loss of a supportive department head who had forced recruitment and fair treat-
ment of women. Without the presence of this change agent, old patterns quickly reasserted themselves.

A second anecdote illustrates the role of a change agent who is not the department head, but a junior female faculty member functioning with the tacit approval of her dean. She protested the selection of a white male for a position when a well qualified female had not been interviewed. Her complaint resulted in the selection of an affirmative action committee in the school to assess the interviewing process. The committee set a hiring goal of 50% women and/or minorities for the next wave of new positions. The junior woman had been appointed to that committee and then headed up the search for two of the positions. Attention to the fairness of the process and deliberate recruiting, including numerous calls to women colleagues met at national meetings, resulted in the selection of four women out of the eight faculty hired during a two-year period.

This case illustrates the multiple sources and multiple targets of internal pressure for change. At CKSU, coalition groups focus and direct pressure on the central administration and try to heighten the awareness of women's issues on the campus. At the same time, individual men and women
worked to effect change within their particular units through their influence on search committees and in other ways. While this study was not a systematic exploration of causes of variation in progress across departments, anecdotal evidence suggests the presence of a change agent is indeed a positive factor as suggested by Newcombe. At this institution, many of these were white males. This is no surprise, given the current power structure and the perceived costs to women for speaking out.

INFLUENCES FROM INSTITUTIONAL CLIMATE, STRUCTURE, OR ENVIRONMENT

Two evolutionary but dramatic changes in the institution seem to have had a particularly favorable effect on affirmative action progress for women: institutional growth, especially the expansion of the School of Humanities and Social Sciences, and a rapidly increasing female student body.

The upward trend in enrollment growth did not begin in the 70s but is rather a continuation of a pattern begun earlier as increased state and federal investment in higher education resulted in rapid development of new programs and buildings. Enrollments doubled during the sixties. In Fall 1972, the institution reported 14,532 students on campus and by Fall 1980, that number had further increased to 21,109.
In general, expansion has had favorable consequences for the employment of women faculty. Not only did new jobs open up for which women were considered (particularly in the 70s), but turnover of some deans and department heads brought in men whose attitudes were more favorable.

A number of respondents identified the expansion of the School of Liberal Arts, created in 1963, and later renamed the School of Humanities and Social Sciences, as a particularly important aspect of this growth. From Table 8, it can be seen that the School has 40% of the tenure track women at CKSU. Approximately 50% of the total number of faculty women (including nontenure track appointments) are in this School.

Growth alone does not account for the change, since despite rapid growth in the sixties, the institution entered the seventies with only one female at the full professor rank (in a hard science area) and a tiny proportion of women among its ladder-rank faculty. Women had been hired, but not as part of the permanent faculty. A change to more open search procedures meant a pool of highly qualified women emerged with little or no special effort in the disciplines where women were well represented:

In virtually every field, in a matter of a few years, we would be advertising, screen it down to the top three candidates in the country, and we'd get one of the top three. I would like to say that we got so many women, and we got awfully good
ones, because you know it was some great impact that I had, that I had a vision that I wanted 50% of all the females on campus. That's not true. What's really true is that I was lucky. At the time, good women were available and you throw it open and you take the top three in a lot of fields and two are going to be women at the time, particularly in foreign languages, English literature, and increasingly in history... You throw the search open and good women surface. Particularly now, right now, women candidates are very impressive.

Earlier search procedures often consisted of a telephone call to a sister institution 30 miles away, which would in turn send its second and third rate graduates over. (The best candidates expected a better fate than teaching English literature at an engineering/agriculture college.) The coming of age of these disciplines at the institution has been accomplished in part by drawing talent from around the country. Searches are now typically national in scope and conducted by committees. There were no 'special efforts' reported to recruit women in traditional disciplines. A female faculty member succinctly summarized her view of the situation in liberal arts: "There are a lot of very good women out there. If you simply remove active discrimination, you get growth."

The growth of the female student body appears to have had the greatest impact on the attitudes of decision makers in the hard sciences, engineering, textiles, and agriculture where women were very scarce. The presence of achieving
women students in large numbers in these disciplines has caused some to reassess their notions about acceptable roles for women and their capacity to pursue studies in nontraditional disciplines:

I really believe that this process has been one of those things that has gradually changed. I think the best thing that helped change the attitude on this campus was... large numbers of women moving into fields which women didn't go into. If...male students only saw one female in class as I did, I think that the whole campus would really have problems wondering if women could handle the types of areas in which CSU State predominantly awards degrees. But I think that the whole scene where women just decided that they could become an engineer, an agriculturist, they could become somebody in textiles manufacturing or textiles management, and so on, I think that was the thing that was the most important.

Similarly, administrators in the sciences, engineering, forestry, and textiles reported dramatic gains in female student enrollments (now approximately 25% in engineering, 20% in forestry, 30% in textiles) and mentioned the impact these enrollments had on their thinking concerning the need to recruit women faculty, especially to handle problems of female students.

The impact of changes occurring in the region were substantial. Paralleling, perhaps even causing, the growth and expansion of the institution was the increase in population in the state and urbanization of the University's immediate environment. CSU was built up to serve the demands of more
students for more programs. The influx of a highly educated local workforce had a real impact on the university:

I don't think we could live here in the Research Valley and be old C K State College of Agriculture and Mechanics, because the pressures are out there to do something different ... The demand was out there pulling us. And that's because we happen to be located in a growing urban center in the Research Valley where there is a demand for broader gauge things on the campus than agriculture and engineering... It's just the whole ecology of this place has changed so rapidly during this period of time.

These changes in the ecology of the region had a favorable impact on opportunities for women, first, by forcing expansion in program areas where qualified women were available and second, by providing viable job opportunities for spouses, making the institution a more attractive option for married women.

These factors--growth accompanied by a change in orientation from local/parochial to national and increased enrollments of female students particularly in nontraditional fields--appear to be the most important facilitating conditions but other aspects of the institution's climate were mentioned by a few people. Two felt that the fact that the institution was non-elitist ("unlike the one down the road") meant that the power structure in traditional disciplines was less entrenched and more accepting of women.

Three others mentioned that the campus was characterized by
an unusual degree of cooperation between faculty and admin-
istrators and this had facilitated affirmative action policy
development and implementation.

**STRATEGIES USED TO IMPLEMENT AFFIRMATIVE ACTION AT CKSU**

At CKSU, the development of policies, procedures, and
programs used to implement affirmative action were evolu-
tionary. Modifications by trial and error and by their
judgments of what was necessary to meet the spirit as well
as the letter of the law.

The First Plan

The first plan, as already described, was a response to
a contract compliance review by the Regional Office for
Civil Rights. In November, 1972, a decision was made to use
existing patterns of organization in the development and
implementation of the Plan. Thirteen units were identified.
Each was asked to set up a committee to develop a plan for
that unit. The anticipated advantages of this decentralized
approach were enumerated in the February 1974 document:

First, it followed normal organizational patterns
of the University rather than imposing a new
structure for administration of the plan on the
existing pattern. Second, this method of organi-
zation compelled each unit to conduct its own
analysis of utilization and availability and to
develop a plan that would work in that unit's con-
text. Third, this approach meant that more indi-
viduals would be involved in developing affirma-
ative action plans than would have been the case if a single central committee had been assigned the task. Wide participation is an important factor in the success of any endeavor in a collegial institution like the university. (CKSU, Affirmative Action Plan, Feb. 1974, p. 4)

The decentralized approach continues to be a major feature of the affirmative action structure. A modification was the designation of the Dean or Associate Dean as the Unit Affirmative Action Officer, rather than a faculty member or department head. This move was necessary to increase the clout of the Unit AA Officer as well as to provide a school-wide perspective.

The amount of time spent on affirmative action-related efforts differs among these Unit AA Officers. Some are very active; others report minimal energy expended, especially in recent years when procedures and reporting have been routinized. A principal function in earlier years was the determination of availability of women and minorities in the disciplines and setting goals based on these figures. Unit AAs have ongoing responsibility for sensitizing faculty and department heads to the need to recruit students and faculty affirmatively and for monitoring the outcomes of their decisions. Specifically, Unit AAs sign off on the Interim Report generated by a faculty search committee only after they are satisfied that a representative pool of applicants was obtained and that interview candidates include qualified women and minorities.
The report card on the decentralized approach of developing and monitoring the Plan is mixed. On the one hand, it can and does produce uneven results depending on the commitment, priorities, and clout of the Unit AA Officers. On the other, it did result in widespread participation in the process and a sense of shared responsibility for the outcomes. The decentralized approach retained the pattern of relatively autonomous decision making enjoyed by the schools and as such, was thought to achieve greater acceptance. A consequence has been maintenance of only a small AA staff in the central administration to coordinate and supplement these separate efforts.

The Affirmative Action Office

Nathan Jones was not the first institutional Affirmative Action Officer at the institution, but his appointment, promotion of James Whitmore to Provost, and the publication of the first major plan all occurred in 1974. Thus, this was a period of intense activity and setting of direction.

Dr. Jones inherited the first plan and the decentralized structure for implementation. Unit AAs continued to provide data on faculty composition and availability and assisted in preparing numerous reports. Two committees were set up. The first, composed of Unit AAs, addressed official
policy and monitoring issues. In recent years, this particular committee has not been very active. A second committee, the EEO Committee, is a reconstituted version of a preexisting committee called the Good Neighbor Council, formed during the 60s and charged with improving race relations. The reorganized EEO Committee has three subgroups working on issues related to race, sex, and handicap. Its members are selected based on their concern and support for affirmative action and its major thrust is sensitizing the community to problems of discrimination. Interviewees who had been members of this committee reported involvement in numerous activities designed to raise general awareness and change attitudes, e.g., teams volunteered to present programs on race and prejudice across the campus; an annual women's symposium was developed; and so on. Their contribution has been more programmatic than policy related.

The work of this committee is an example of the stated function of the Affirmative Action Office. Dr. Jones and a full-time administrative assistant believe their purpose is to deal with the "spirit of the law." Though some complaints and grievances come to the office, many of these are referred back to the Unit AAs for resolution. A university lawyer handles whatever formal charges emerge. Affirmative action issues for the staff are handled by Personnel.
Changing attitudes, reducing resistance to affirmative action, and adding to the list of those on campus who are willing to work to improve the status of women and minorities has been a challenging assignment.

A major program sponsored over several years by this office deserves special note. Interviewees who were "graduates" of this controversial seminar described the experience at great length and most felt it had had a tremendous personal impact. The seminar topic is race discrimination, and the technique is confrontation. The program does not address sex discrimination directly, though apparently a brief discussion of parallels between racism and sexism does occur. The first day consists of trying to create in participants the feeling of oppression experienced by most blacks as a daily experience. He challenges their opinions, dismisses their views, and presents them with discomforting evidence about their own racial stereotypes. The leader is generally confrontive, argumentative, and provoking. The response is usually anger, hostility, fear, frustration, and withdrawal. At the end of the first day, he describes his deliberate methods. The second day is focused on constructive approaches, providing new information for building more positive attitudes toward minority group members. The experience has been psychologically traumatic for a few and thus remains controversial as an institution-sponsored program.
There are several important points to be made about this seminar. The target group is top-level administrators who are invited to attend—75% of the administrators from department head upward have attended, including the new Chancellor; 325 people have participated in the program over several years; 270 are still on campus. In addition, several deans provided funds from their budgets for special sessions for their personnel after attending the program. Among its graduates are a loyal group who provide testimony and leadership for special AA efforts.

Some funds for this and other programs sponsored by the EEO Committee have been provided the Provost's office and from other University sources. Raising the level of awareness then is considered a major priority for the office; it is done primarily through sponsorship of programs and personal contact. It is also done through forms and procedures.

**Monitoring Faculty Recruitment**

The Affirmative Action Plan calls for a two-stage review process before a new faculty appointment can be made. The Interim Report, Exhibit 3, requires search committees to restate their present race/sex distribution, their projected race/sex distribution from their five-year goal statement,
and the race/sex distribution of the application pool. This form must be approved by the Unit AA Officer and Dr. Jones before formal campus interviews take place. This checkpoint allows the AA officers to compare the representativeness of the applicant pool against the pool of doctorates available and to urge further efforts if qualified women and minorities have not yet been located for serious consideration. A second check takes place after interviewing but before the offer is extended (see Exhibit 4). The forms are designed to act as a reminder of where the department is and where they should be in five years.

The two-stage process is reasonably well accepted at this point and is generally adhered to. Again, some variation in the frequency and vigor of questions raised by the Unit AAs is apparent but several described themselves as refusing to accept superficial efforts. Comments quoted earlier indicate that questions have been raised by the University AA Officer and Provost concerning the adequacy of the search and hiring outcomes. These questions are often triggered as a result of processing the forms.

The heart of the affirmative action program at CKSU appears to be these two thrusts: monitoring of the hiring process and programmatic and personal efforts to raise awareness on campus. These both tend to be carried out in
INTERIM AFFIRMATIVE ACTION REPORT

(Submit to Affirmative Action Office for each EPA position prior to formal campus interview)

I. Department of: ____________________________________________________________

EPA Position to be filled (Rank and area of specialization if appropriate)

Full-time _____; Part-time _____ Proposed Employment Date ______________________

Central Faculty Position Listing Service Form Number ____________________________

II. Department/Unit Affirmative Action Projections

<table>
<thead>
<tr>
<th>EPA Faculty Complement</th>
<th>Other EPA Complement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Present Complement

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

Projected 5 Yr. Complement

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

Number of Written Applications Received

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

List the Candidates being seriously considered (A revised list may be subsequently submitted)

<table>
<thead>
<tr>
<th>Name</th>
<th>Sex</th>
<th>Race</th>
<th>Present Employer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Signed:

Search Committee Chairman __________________ Date __________

Department Head __________________ Date __________

Unit Affirmative Action Officer __________________ Date __________

University Affirmative Action Officer __________________ Date __________

Exhibit 3. Interim report, CKSU.
AFFIRMATIVE ACTION RECRUITMENT REPORT

I.
Department of: _____________________________________________________________

EPA position filled: ______________________________________________________
(Rank and area of specialization)

Full-time ___; Part-time _____; Effective date of employment __________

Central Faculty Position Listing Service Number ____________________________

I.
Number of written applications received: Number of candidates invited to
Male Female campus or interviewed elsewhere:

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Offer to be made to:

<table>
<thead>
<tr>
<th>Name</th>
<th>Sex</th>
<th>Race</th>
<th>Present Employer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Persons seriously considered but not recommended for the appointment:

<table>
<thead>
<tr>
<th>Name</th>
<th>Sex</th>
<th>Race</th>
<th>Campus Interview</th>
<th>Present Employer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes No</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Exhibit 4. Appointment approval form, CKSU.
II.
Do you have files documenting your efforts to take affirmative action to locate female and minority candidates for this position?

☐ Yes  ☐ No

Can you provide an explanation for the offers made by explicitly comparing the qualifications of those offered the position with those not offered the position?

☐ Yes  ☐ No

IV.
List below specific efforts to locate females and minorities (number of groups, institutions and individuals notified about vacancy.)

Signed:  

Department Head  

Dean  

E.E.O. Officer

Date  

Date  

Date
an informal, personalistic fashion. The AA bureaucracy and formal policy statements are bare bones. There are few administration-sponsored formal reports identifying problems faced by women faculty along with recommendations for policy changes. Only the Dean of Engineering reported using any kind of incentives to encourage hiring of women and minorities by departments. Though salaries have been informally monitored on an annual basis and adjustments made in earlier years, an official salary study has just been agreed to by the new Chancellor in Fall 1982, after years of pushing by the AAUP Committee W. Related policies and programs of specific interest to women, such as part-time or shared tenure-track appointments, child care, and administrative internships, have not been seriously addressed yet.

Recruitment of Faculty in Nontraditional Disciplines

Faculty and administrators in Education and in Humanities and Social Sciences reported no special efforts to recruit women faculty. All were satisfied that simply announcing the position in national publications or recruiting at annual association meetings provided an adequate pool of qualified female candidates.

Recruiting women in nontraditional disciplines requires more effort, creativity, and investment of resources.
Administrators in Forestry, Textiles, Physics, and Engineering recounted the recruiting experiences for their female faculty members. Personal contact was critical in most of these cases. Contacts were generated through shared graduate school experiences, acquaintance at professional meetings, and solicitation of suggestions from male colleagues. 'Growing your own' was also used. Women with masters degrees were hired to teach (reduced schedules whenever possible) and nurtured through a doctoral program over a period of years. Others had degrees in related fields and through collaborative research or joint teaching, their skills became more closely aligned with departmental needs. A broad job description was considered essential, since narrow specialization demands nearly guaranteed that qualified women and minorities would not be considered. While several interviewees thought additional slots could be arranged by the Provost, particularly for good black candidates, this was not an announced university policy. The Dean of Engineering reported hiring three of the six women on the Engineering faculty in just this way however ("forgiveness positions").
SUMMARY

Affirmative action mandates received serious attention and crucial leadership from the Provost at CKSU, who in turn hired an effective associate to assist in implementation efforts. Hiring procedures were scrutinized and active discrimination against women was halted. The number and percentage of women has increased over the decade in large part because of more equitable procedures.

Women have also benefitted indirectly from changes occurring at CKSU. Expansion of the nonscience disciplines, the gradual upgrading of faculty quality, the increase in female student enrollments, and government pressure to racially integrate the University have had a positive impact on female hiring. Thus, a constellation of factors was responsible for the institution's progress in hiring and promoting women.
Chapter VI
DENBY COLLEGE

INTRODUCTION

This second case study is organized along the same lines as the first. A brief overview describes the institutional setting and introduces the major themes of the case. The second section provides a statistical assessment of progress made for women faculty over the decade, while the third summarizes those factors identified by interviewees as influential in achieving that level of success.

Findings concerning the five major research issues provide a more detailed picture of the critical factors and how they relate to one another, and of the specific policies and practices used to implement affirmative action.

OVERVIEW

Background on Denby College

Denby College is private liberal arts college in rural New England with a student body of 4,000. The College (with a capital C) is dominated by the college (with a small c) of Arts & Sciences, its undergraduate liberal arts component. This reflects the institution's commitment to providing a strong liberal arts background for the nation's future lead-
ers. Two small schools in business and engineering and a school of medicine offer graduate programs in selected fields. Graduate enrollment is approximately 10% of the total. While these graduate programs and the research dollars generated by the faculty are the reasons Denby College is classified as a "doctorate-granting university," the associated schools are in many ways outside the Denby mainstream. Not only are the programs small, but they report through a different hierarchy and face quite a different set of problems. In the view of many, the College is largely synonymous with its undergraduate college of Arts & Sciences.

Diversification of the student body was and continues to be viewed as an important educational goal. Over time, the definition has expanded from geographic, to economic and racial diversity. Although Denby was ahead of its peer institutions in the admission of nonwhite students, the impact of those admissions policies was very limited until recent years. The first black graduated in 1828, but by the late 1960s, the total number of blacks among the living alumni was only 130 (Denby College, Note 2). More intense recruitment efforts date from 1968. A Trustee committee report charted future directions for the College in the admission of black students, development of new programs,
and recruitment of black faculty and officers. Commitment to the education of Native Americans stated in the 200-year old College charter went largely unrealized until the 1970 decision to seek out 15 Native Americans for the next freshman class.

None of these efforts to diversify the student body has had quite the impact that the admission of women has had during the last ten years. Coeducation was a highly controversial topic with resistance strongest among Denby's extremely active and loyal alumni. While many on the faculty held the opinion that coeducation was essential to the institution's continued vitality and to retaining its share of bright new students, some worried that the admission of women might mean the end of the special nature of a Denby education. The faculty and trustees voted for a program of limited admission of women in 1971 and the first mixed class entered in 1972. In 1979, after several years of gradual increases, the trustees approved equal access admissions. The merged pool of male and female applicants produced a freshman class with approximately 43% women in 1982.

The "Denby experience" is one that has been highly valued by its graduates. The college has attracted and retained many exceptional faculty members who are expected to be successful scholars and researchers. They are also
expected to excel at teaching, for undergraduate education is considered the heart and strength of the College.

**Major Themes in the Case**

The decade of the 1970s was a period of great change for Denby College. Under the leadership of a strong president, the College set out to diversify its student body, faculty, and administration and restructure its calendar. Aspects of these three reforms—coeducation, affirmative action, and year-round operation—were closely related and mutually supportive.

Unlike CKSU, federal government pressure had little or no impact on the decision to adopt and implement affirmative action policies. The College had already drafted an affirmative action plan before one was requested by HEW and had set ambitious hiring goals for itself.

Leadership provided by the past-President was viewed as the critical factor in the College's success. He described the importance of leadership in this way:

And the commitment by the President in this particular case is crucial. It is an area where some people will cooperate, some people believe in it, some people will cooperate because they are told to, and some people will do everything possible to avoid doing anything on the subject. Unless you both set policy, and you monitor things very closely, and crack down on those who are doing nothing or making only token gestures, nothing will happen.
Highly competent Affirmative Action Officers worked with the President's full support to develop policies and procedures and to monitor searches. The move to coeducation and a slight expansion of faculty resulting from a change to year-round operation, provided impetus and opportunity to increase the number of women faculty. The number and proportion of women continued to increase after the the period of expansion.

Though the number of women on the faculty before the move to coeducation was very small (only one woman had tenure at the time), women organized early on and effectively presented their concerns. Administrators have been responsive to some, though not all, of the articulated problems, generally preferring collaboration or negotiation to confrontation.

Denby now appears to be facing a new stage in affirmative action implementation. Key actors have been replaced and new priorities may be adopted to meet conditions facing the College during the 80s. The impact of these changes in personnel and priorities on affirmative action is as yet unknown.
AA RESULTS: FACULTY COMPOSITION AT DENBY COLLEGE

Assessing the amount of progress for women faculty is an easier task at Denby than at CKSU, thanks to cumulative statistics included in their annual reports on affirmative action. Reports prepared since 1971-72 give not only changes in the faculty composition by sex, but also results of appointment, tenure, and promotion decisions; the number and sex of faculty terminated during the year; the number and general nature of grievances; the number of salaries adjusted; and similar information for administrators and staff of the College.

Data presented in Table 11 are drawn from the appendices of the 1981-82 Affirmative Action Report. The number of women on the combined faculties of Arts and Sciences, Business, and Engineering has increased from 12 in 1971-72 to 72 in 1981-82. The percentage of women increased from 3.7% to 20.8%. While most of the increase is due to appointments to the Faculty of Arts and Sciences, the Business School added its first woman in 1976 and is now reporting a total of four women. The Engineering School appointed its first and only female faculty member in 1981-82.

The percentage of female appointments to the Faculty of Arts and Sciences has exceeded the 25% goal set by the Trustees of the College in 1972 nearly every year since it was
### Table 11

Denby College  
Faculty Composition, Appointments, and Tenure  
1971-72 - 1981-82

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Full- &amp; Part-Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composition, Total</td>
<td>325</td>
<td>344</td>
<td>335</td>
<td>341</td>
<td>343</td>
<td>348</td>
</tr>
<tr>
<td>Women</td>
<td>12 (3.7%)</td>
<td>26 (8.3%)</td>
<td>34 (10.1%)</td>
<td>39 (11.4%)</td>
<td>44 (12.8%)</td>
<td>56 (16.1%)</td>
</tr>
<tr>
<td>Appointments, Total</td>
<td>23</td>
<td>48</td>
<td>36</td>
<td>39</td>
<td>33</td>
<td>38</td>
</tr>
<tr>
<td>Women</td>
<td>4 (17.4%)</td>
<td>20 (41.7%)</td>
<td>10 (27.8%)</td>
<td>10 (25.6%)</td>
<td>11 (33.3%)</td>
<td>17 (44.7%)</td>
</tr>
<tr>
<td>Tenured Fac, Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>174</td>
<td>173</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 (2.3%)</td>
<td>5 (2.9%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition, Total</td>
<td>343</td>
<td>344</td>
<td>341</td>
<td>350</td>
<td>346</td>
</tr>
<tr>
<td>Women</td>
<td>61 (17.8%)</td>
<td>57 (16.6%)</td>
<td>57 (16.7%)</td>
<td>67 (19.1%)</td>
<td>72 (20.8%)</td>
</tr>
<tr>
<td>Appointments, Total</td>
<td>27</td>
<td>22</td>
<td>23</td>
<td>29</td>
<td>26</td>
</tr>
<tr>
<td>Women</td>
<td>11 (45.8%)</td>
<td>5 (22.7%)</td>
<td>7 (30.4%)</td>
<td>11 (37.9%)</td>
<td>7 (26.9%)</td>
</tr>
<tr>
<td>Tenured Fac, Total</td>
<td>171</td>
<td>176</td>
<td>183</td>
<td>192</td>
<td>204</td>
</tr>
<tr>
<td>Women</td>
<td>5 (2.9%)</td>
<td>5 (2.8%)</td>
<td>5 (3.3%)</td>
<td>9 (4.7%)</td>
<td>13 (6.4%)</td>
</tr>
</tbody>
</table>

*"Regular Faculty" includes full, associate, assistant professors, and instructors.  
("Nonregular Faculty" includes lecturers, adjuncts, research associates, & visitors.)  

Table includes Faculties of Arts & Sciences, Business, and Engineering.  Excludes Medical School faculty.  

established. Given the recent appointment of junior women, the number of tenured women rose very slowly through most of the 1970s, from one in 1971-72 to 13 in 1981-82. In other documents, the College reports a total of 19 tenured women which includes two in the medical school and a few others who may have just been awarded tenure or who may be serving in an administrative capacity.

The medical school appears to be quite a different story. The figures included in the Affirmative Action Report do not show a steady increase in numbers or percentage of women. Because the medical school has a very different faculty structure and orientation, implementation of affirmative action policies has been particularly difficult. Given the complexity of these problems and limited time and access to explore them, this case will focus on the more traditional faculty positions in Arts & Sciences, Business, and Engineering.

In sum, the substantial increases in the number and percentage of women faculty at Denby College is still visible, even under close scrutiny. Unlike CKSU where the addition of research and extension positions diluted the apparent gain for women on the teaching faculty, Denby College has few, if any, faculty holding nonteaching appointments. Thus, gains made on the teaching faculty have a considerable
impact on the institution as a whole. This is not to say that progress has been uniform across the disciplines. Lower availability of women in business, engineering, and the hard sciences clearly affected the College's capacity to attract and hire women in these fields.

FACTORS CITED

Twenty faculty and administrators were interviewed during the week long campus visit in Fall 1982. The titles and affiliations of those people interviewed are listed in Table 12.

The consistency of responses by interviewees to the question, "What accounts for Denby's success?" was striking. Though respondents would very likely assign different weights to certain factors, the constellation of major factors are widely accepted as fact, with little disagreement over their existence or their impact. Affirmative action implementation was obviously a topic to which many faculty and administrators had given careful thought over the years. It may be the small size of the College, or exceptional efforts at communication, but almost all respondents were surprisingly well informed not only about the broad issues but about details of the affirmative action program, to the point of reciting the most recent figure for tenured women,
TABLE 12

Title and Affiliation of Denby College Interviewees

<table>
<thead>
<tr>
<th>College Administrators</th>
<th>Faculty of Arts &amp; Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Former President</td>
<td>Dean of the Faculty</td>
</tr>
<tr>
<td>Exec Asst to the President</td>
<td>Assoc Dean of the Faculty &amp; Dean of Graduate Studies</td>
</tr>
<tr>
<td>Affirmative Action Officer</td>
<td>Assoc Dean of the Faculty &amp; Assoc Provost for Res Dev</td>
</tr>
<tr>
<td>Asst Affirmative Action Officer</td>
<td>Chair, Sociology</td>
</tr>
<tr>
<td>Dean of Freshmen (former AA Officer)</td>
<td>Full Professor, Drama</td>
</tr>
<tr>
<td>Assoc Dean of the College Counselor</td>
<td>Assoc Professor, French &amp; Italian</td>
</tr>
<tr>
<td>Assoc Dir for Intercolleg Athletics</td>
<td>Assoc Professor, English</td>
</tr>
<tr>
<td>Childcare Coordinator</td>
<td>Assoc Professor, Russian</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business School</th>
<th>Medical School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean</td>
<td>Assoc Professor, Physiology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Engineering School</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean</td>
<td></td>
</tr>
</tbody>
</table>
the last year a black was hired, and the latest issue under discussion. The exceptions were the two interviewees in Business and Engineering who were well aware of policies and goals and their own efforts at faculty recruitment, but who were much less in tune with events, people, and issues which dominated the college of Arts & Sciences.

Of those responding to the question concerning major factors accounting for the College's success, thirteen specifically cited leadership provided by the President and the remaining two cited "leadership from the top down" and "the quality of faculty and administrators and the sincerity of their commitment." Thus, the past President has been widely perceived as providing strong, effective leadership for affirmative action issues throughout his eleven-year term.

Leadership and energy also emanated from the women faculty according to ten respondents. Despite the tiny number of women present early in the decade, respondents cited the importance of early efforts to organize and influence decision making, the effective role played by a few senior women, and the level of effort expended by nearly all women to identify problems and to seek improvements in their status, and to support other women.

The move to coeducation in 1972 and the simultaneous change to year-round operation, which created some new fac-
ulty positions, were closely tied to affirmative action progress. Seven respondents cited coeducation as a major impetus to female faculty hiring and five cited the expansion accompanying the change to year-round operation as an important facilitating factor.

Six respondents felt many on the faculty deserved credit for their good faith efforts to hire women. Competence of the Affirmative Action Officers was specially cited by two and procedures used to implement AA were cited by one. Availability of women, the growing cosmopolitanism of the school and community, an "expanding economy that made everything seem possible," and the close fit between the college's educational philosophy and affirmative action were each cited by one person.

The most frequently cited factors are more fully described in the following sections of the case. The most important aspects of the cited factors are summarized in Table 13.

SOURCE AND NATURE OF INSTITUTIONAL LEADERSHIP FOR AA

While the principal change agent at CKSU was the Provost, leadership for affirmative action at Denby College was provided by its exceptionally capable president, John Heller. Heller was appointed President in 1970; he was the
TABLE 13
Factors Cited by Denby College Interviewees

I. Leadership and commitment of the President
   A. Sincerity of personal commitment
   B. Persuasive and effective leadership
   C. Creation of an effective AA Office, which report to him and received his full support; recruitment of competent AA Officers

II. Faculty Women Speaking Out
   A. Leadership of senior women lent credibility
   B. Group identified problems & pressed for change
   C. Group acted as support for women faculty

III. Changes in the nature of the institution
   A. Move to coeducation in 1972
   B. Move to year-round operation resulted in some expansion of faculty

IV. Good faith efforts by many people on campus
first Denby president to come from the College faculty. Despite the dramatic and controversial changes which took place during his presidency, Heller still inspires a measure of loyalty and respect (at least among interviewees) that is accorded few college presidents. He was described as "not only a brilliant scientist, but a fine and compassionate human being," as a "skilled advocate" with an "awesome mind," and as having not only an extraordinary mind but the "right kinds of values and principles."

Heller's presidency began in a period of intense national debate over issues of social justice. His own commitment to equal opportunity for women and minorities predates his role as President. His background as an immigrant from Eastern Europe may have been an influence on his personal values, though he did not specifically refer to this as a source of his commitment. As a member of the faculty he chaired the Equal Opportunity Committee established in 1968 and his own report, reaffirming the College's commitment to blacks, native Americans, and the economically depressed local region, was on top of the desk as he took office as President. He also served on a committee to examine structural options for coeducation, a change he strongly favored (Taylor, 1979).
The importance and effectiveness of his leadership in bringing about change in the make-up of the student body and on the faculty is clearly reflected in a sample of comments from interviewees:

I think there was no question about it. I think President Heller, and the Dean of the Faculty, were both people of extraordinarily liberal—not just liberal views—they were persons of vision. They saw this school could be a different kind of school than it was when it was an all-male school. They really saw that.

So I think that John really pushed to make it happen and in the absence of the commitment he made it probably would not have happened at the same speed ... I would also think there was a proportion of the faculty that shared that same commitment, but I doubt to the same extent John did. You could always react as "Who needed it—we've gotten along all these years before. After 200 years, who needs to change?"

I give the credit to John Heller. I think we had a President who was firmly committed to equal opportunity for women and minorities and he had that commitment long before he became President. And coeducation, I think, just became a framework for it. John was vitally interested in and continually pushing and supporting affirmative action ... I know John, all the length of his presidency, kept watching that all the time and kept reinforcing it in faculty addresses and policies ... I think it was the difference. I really think you have to have someone at the very top who doesn't just say it. With John, there was deep commitment.

How did Heller exercise leadership for affirmative action throughout his tenure? At CKSU, the Provost used a low-key, personalistic approach to implementation, along with constant public and private reminders and support from
an effective affirmative action staff. Though Heller's personal style is quite different, some of the strategies were similar. In addition to retaining a personal interest in implementation efforts, the President made effective use of three closely related strategies: two-way communication, creation and support of affirmative action substructures, and trustee involvement.

Two-way Communication

There is considerable evidence in both interview data and College documents that effective communication occurred in both directions, from the top down and the bottom up and that this, in turn, favorably affected affirmative action implementation.

Several aspects of top-down communication were identified. The first is that the President set firm expectations and standards for performance. Affirmative action was to be treated as an important institutional priority. Seriousness of intent was clearly communicated:

If you have a president, dean of the faculty, associate deans all saying: "We mean business on this thing," this is not just some slogan we're proclaiming. We mean it. It is important to the institution that we meet these goals, to get this diversity in the faculty, to get this diversity in the undergraduates." Once that is in place and the faculty realize that it is to be taken seriously, there's a big difference. They can all sense slogans. "Sure, affirmative action is great, but no one is really going to look at us.
All right, we'll do what we can." Over and over again nothing happens. And finally when the pressure comes down and says, "You have to stop recruiting because we just don't think you're doing it deeply enough in terms of really looking at what's happening out there and to that extent you are not contributing to what we want as a department." Once they find that out then they go to work.

In meetings with faculty groups held during early stages of development of the AA Plan, the President was described as accepting "no nonsense, no excuses, and no rationalizations." Speeches given by the President to a wide variety of College constituencies provide evidence of frequent reinforcement of expectations and continual evaluation of progress in meeting the College's stated affirmative action goals. Commitment to change had high public visibility.

A second aspect of communication evident at Denby College was openness to upward feedback. There are numerous instances (examples are given later in this case), where the opinions of College constituencies were deliberately sought and seriously considered. This led to a general sense that working through the system could be productive in resolving problems as they were identified.
Effective Substructures

The existence of "effective substructures" was an important differentiating factor between the most and least effective institutions Newcombe (1980) examined in her study of Title IX implementation. While the phrase seems cumbersome, it accurately reflects a second strategy used by the Denby College President to implement affirmative action mandates.

When asked how he had monitored policy, Heller responded that he did so in two ways: through delegation to senior colleagues, who "fortunately on this subject...all agreed with me," and through selection of competent Affirmative Action Officers who were then given authority to act with his full support. Heller gives much credit to Denby's exceptionally competent AA Officers:

But the Affirmative Action Officers played a crucial role. After the temporary one who was also very good, I managed to persuade our single most distinguished black faculty member, the one black full professor we had at the time, to take over as Affirmative Action Officer, which he agreed to do for two years. He did it for a year and a half and he did a wonderful job. Most importantly he recruited his successor who happened to be a white female and superb.

The President highlighted three conditions he felt increased the effectiveness of the Affirmative Action Officers: (a) the AA Officer reported to him and no one else; (b) the AA officer had access to him on a regular basis and
whenever an emergency arose; and (c) the AA officer was given the power to stop a search if she was not satisfied with the procedures followed. He viewed the AA Officers as his "secret weapon" and they had major responsibility for monitoring implementation of the plan. In return, the AA Officer was given the power that came with having the full support of the President:

Someone high in administration has to be willing to push and back up the affirmative action officer. If the word gets around that she is going to file a report and nobody is going to pay any attention to it, which I suspect happens at a great many institutions, then she has no power at all.

Trustee Involvement

The third strategy may be a reflection of the unique character and smaller size of Denby College. Interviewees frequently referred to the College's affirmative action goals as the "Trustees' goals." This frequent reference raised questions about the level and type of involvement the College trustees had in deciding to adopt and carry out affirmative action policies. While there is considerable evidence in the records that the trustees were informed about AA and approved the initial plan as well as subsequent revisions, it does not appear that either the initiative or leadership for affirmative action actually emanated from the
Board. This is not at all surprising given the fact that
the Trustees meet only quarterly and no women or minorities
served on the Board at the time. However, the level and
frequency of trustee involvement in AA discussions appears
to be substantially greater at Denby College than was visi-
ble at the other two sites. Trustee involvement and author-
ity may well have been a way to add support and legitimacy
to affirmative action reform efforts ("trustee goals" may be
more palatable than the "President's goals").

Trustee participation reinforces the impression of
"ownership" Denby evidenced toward its AA policies and the
high priority assigned to their implementation. One example
of this sense of ownership is the historical and current
references to Denby's motive for pursuing affirmative
action: its goals were not imposed by the federal govern-
ment but determined by the College in order to reflect its
"own educational requirements." Compliance to the Executive
Order is a byproduct rather than a motive for achieving "a
diverse, multi-racial faculty of both sexes" (AA Plan, Note
3). In addition, Denby takes considerable pride in being
ahead of most institutions in terms of its early commitment
to AA and the progress it has achieved. Leadership in AA
was important to the President in building a new image for
the College.
While the strategies outlined above are an incomplete description of a complex process that evolved over time, they are meant to provide the reader with examples of how leadership was exercised in the implementation of affirmative action policies at Denby College. In this case, the strategies also describe how the President's commitment was translated into action.

**NATURE AND EXTENT OF FEDERAL INTERVENTION**

Denby College takes great pride in the fact that they had a draft affirmative action plan already completed before the federal government requested one and that theirs was among the very first to be approved by HEW. HEW officials regarded their hiring goals as overly ambitious, but used the plan as a model in discussions with other colleges and universities.

While the existence of the Executive Order was clearly an impetus for development of the Plan, there is no evidence that the federal enforcement process had a particular influence on implementation at the College. Records show that the College has had three extensive on-site visits from government teams in 1974, 1977, and 1982. A "clean bill of health" has been issued after each, along with praise for
their record-keeping. Specific complaints of sex discrimination have been handled internally, except in two cases. One of these, a reverse discrimination charge, was dismissed; the second, a tenure case, was settled out of court.

In probing for positive external influences on Denby's affirmative action commitment and policies, interviewees could think of none. The alumni, a very powerful constituency at the College, was mentioned but as a resisting, negative force on implementation. Government involvement was specifically rejected.

One interviewee, reflecting on the development of the first plan, provided some insight into the rationale used to support the document and affirmative action efforts that would flow from it:

The big philosophical fight at that point was whether we should do it for moral and educational reasons—and that's where we came down in the end—or strictly legal. That's what everybody felt was the major debate. Whether we were going to say we were doing just the bare minimum and we're going to do it because it's being forced down our throats. A lot of people said that, that we would be less vulnerable down the pike, etc. Heller said "no way." There are inherent moral educational imperatives.

Thus, the development of the first Plan preceded any significant government intervention and implementation proceeded largely by force of internally-generated initiative.
NATURE AND EXTENT OF COALITION GROUP ACTIVITY ON BEHALF OF WOMEN FACULTY

Denby College was one of five sites studied by Taylor in 1976. Her summary chapter identifies "coalition group activity" as an impetus factor in affirmative action implementation. She notes the existence of a women's caucus, a black caucus, and an Afro-American Society at Denby, and suggests that each played a role in "heightening early awareness and making demands which accelerated the pace of implementation" (p. 209). Yet there is no description and only one reference to the women's caucus in the case itself, and little more on the role of the two black groups. From interview data and documents collected during the 1982 site visit to the same campus, Taylor's conclusion that coalition groups were an impetus factor at Denby seems entirely warranted, even if their role was not well documented.

This section spells out more clearly the nature of activism on behalf of women faculty and the role of the caucus in influencing affirmative action implementation. Tracing the history of the caucus, twelve years after its inception, was made considerably easier by the continued presence of some of its founders and good records (e.g., minutes of early meetings; copies of position papers, letters, resolutions; and references to caucus activities in other college documents).
The Women's Caucus was formed in 1970 by a core of women faculty, staff, and administrators, who were very much aware of the Women's Movement at the national level and concerned about women's issues at Denby which was at that time still an all-male college. Coeducation, the lack of women faculty on campus, and the status of those two dozen or so who were employed, were the pressing issues in first year or more. The records show that Caucus members met in late 1970 and early 1971 with the Provost to clarify policies related to faculty appointments as adjuncts, lecturers, visitors, and half-time tenure-track faculty. A large percentage of the existing women held marginal appointments at Denby and the need for "regular" appointments on less than a full-time basis was recognized and approved as a result of these early meetings.

The draft Affirmative Action Plan very quickly became the focus of Caucus activity. The document drafted by the administration in 1971 was viewed as "unacceptable" and Caucus members prepared an alternative Plan, submitted it to the administration, and met with various officials to press for their version. The Caucus asked for a hiring goal of 33% (one out of three new faculty hired would be a woman). The goal was eventually set at the more conservative figure of 25%, which was viewed by the President as more realistic and attainable.
As more women were hired by Denby, the Caucus evolved into an umbrella organization with three branches, for staff, faculty, and administrative women. A steering committee composed of representatives of each of the three groups meets regularly to consolidate progress, discuss shared issues, and to reinforce direction. The steering committee and/or the separate groups meet regularly with the President; the faculty group meets periodically with the Dean of the Faculty as well. Child care is the issue uniting the groups; it has been a major priority throughout the 70s and it continues to consume much of their collective energy.

Minutes from the 1973-74 period reflect lengthy discussions among members about the appropriate role for the Caucus. Members reaffirmed their role as an action/pressure group (a "feminist conscience on campus") and suggested that one of their most important functions was writing letters to appropriate officers in which they expressed their "concern, or chagrin about conditions at Denby which still relegate women to second-class status." This appears to be the role they played throughout the decade.

The Caucus has pressed for equal access admissions, a maternity leave policy, the appointment of senior women officers, child care, spouse employment policies, a women's
Attrition of Women Faculty

Phyllis Green, the AA Officer, officially raised the issue of high attrition rates for women faculty at a meeting of the Board of Trustees in January 1978. Women hired in the early years of coeducation (1972-1974) left the institution at a much higher rate than men. Dr. Green noted that high attrition would make it impossible for the College to attain its goal of 20-25 tenured women by 1982. The President indicated his willingness to investigate the issue further and was charged to do so by the Trustees.

During the months that followed, the AA Officer did a case-by-case analysis of attrition over the prior six years to determine why women (and men) had left the College. In addition, the AA officer conducted a survey of junior faculty perceptions. These data were examined for particular problems facing women faculty that contributed to their attrition and greater dissatisfaction.

Meanwhile, the Women's Faculty Caucus began meeting and discussing the attrition problem. None of the three women considered for tenure that year had succeeded, making the
attrition issue all the more urgent. The Caucus met with
one of the Trustee committees during the next quarterly
Board meeting in April. The meeting was attended by forty
or so women faculty (a large percentage of the total). The
Caucus presented a position paper outlining problems from
their vantage point and recommendations to improve the work-
ing environment of female faculty. They recommended:

1. A communications clearinghouse for women
2. Attitudinal surveys of faculty
3. Formal and informal educational programs focused on
women
4. A child care facility
5. Extending tenure probationary periods one year per
child
6. Expanding part-time and jointly-held positions
7. Compensatory release-time for committee overload
8. More women trustees, administrators, faculty and
students
9. A public, prioritized list of criteria for tenure
and promotion
10. Mandatory annual reviews of junior faculty
11. Presence of a nonvoting woman "advocate" on all
departmental tenure committees reviewing women can-
didates
12. Presence of at least one woman on the college-wide
tenure committee
13. Increased tenure slots for women, above and beyond
departmental quotas (Colfax College, Note 4)

The position paper, which reflected items of agreement
among conservative and radical women, and the presentation
of their concerns were well received by the Trustee commit-
tee. The President reported on the case-by-case analysis of
attrition and the survey of faculty attitudes to the full
Board on the following day. Preliminary recommendations
were made by the President and by the Dean of the Faculty. Faculty women were promised two things: that the Trustees would consider the issues again in some detail at their August retreat and that the President would devote a major portion of his State of the College address in the fall to affirmative action.

In September, the President announced new measures to address concerns raised by the Women's Caucus and the Black Caucus. Among the strategies proposed by the President were:

A new tenure allocation system. Tenure quotas could be exceeded in departments which had hired more female and/or minority junior faculty.

Senior lateral appointments for distinguished women and minorities. Tenure awarded to these new faculty upon arrival would not count against the department's tenure quota.

Authorization to the Dean of the Faculty to postpone approval of a list of candidates to be invited for interviews if it appeared that no serious recruitment of women and minorities had occurred.

Pre-tenure contract extensions were authorized for men and women who had primary responsibility for children. Such faculty could petition for an extension of their six-year probation period.

In addition, the President emphasized the importance of: treating the status of spouse as a positive rather than negative factor in hiring decisions, holding the line on the number of committee assignments for junior faculty, and
improving negative male attitudes toward women faculty (AA Newsletter, Note 5). Communication problems were addressed by the Dean of the Faculty who now holds annual meetings with junior faculty to discuss and clarify expectations for tenure.

Some measures proposed by the President in 1978 were more effective than others in reducing identified problems of stress, attrition, and sexist treatment of women faculty. But the process of identifying problems, involving numerous constituencies in their discussion, and proposing some solutions had the salutary effect of refocusing attention and energy on affirmative action implementation.

Teaching Evaluations

While inadequate publishing is the reason given for denying women tenure at many institutions, three Denby women were denied tenure on the basis of teaching in 1981 and 1982. In the view of many women faculty these "deficiencies in teaching" may be still another example of the extent to which male values predominate (Colfax College, Note 6).

Denby male students have long favored faculty who fit a masculine model of the forceful lecturer who tells jokes and entertains while teaching. Women faculty are concerned that this is a biased ideal against which women stand less chance
of being positively evaluated. In addition, some women have had painful first-hand experiences with male student intolerance of women faculty. The issue of student evaluations is crucial since it is standard procedure to solicit letters from randomly selected recent Denby graduates requesting a comparison of a tenure candidate (whom they have had for at least one class in which they received at least a C) to their favorite teacher. These confidential letters are included in the candidate's dossier and used in making an overall decision to grant or deny tenure.

The Women's Faculty Caucus raised this issue of sex bias in teaching evaluations last year. As a result of their pressure, a study committee has been formed to examine the issue and make recommendations as needed. A Caucus member serves on the committee.

Other Aspects of Feminist Activism

These examples illustrate the role of the Women's Faculty Caucus in identifying problems, persuading officials of their urgency and legitimacy and proposing alternatives. They also illustrate that Caucus efforts are not isolated activities. In fact, the AA Officer reported working hand-in-hand with the Caucus on some issues and doing some "quiet strategizing" about the roles the Caucus and the AA office
should play to maximize their effectiveness. The Caucus has also served a crucial role as a support system for women faculty who are often isolated in separate departments. Having a "vital women's community" was viewed by several interviewees as a positive factor in attracting new women to campus, and in encouraging them to stay.

Certain aspects of feminist activism are not apparent from the discussion above but were emphasized by interviewees. In particular, the role played from the beginning by a handful of truly first-rate senior women was important. Not only did these women fight all the "bloody battles," but their intellectual strength and reputations as faculty scholars meant their voices could not be dismissed. Their leadership and the energy devoted to women's concerns by women themselves was viewed by a number of respondents as important to Denby's success:

That's helped us a lot. I think that's made a big difference at Denby. The senior women have been very outspoken, have kept the pressure up, and it's made a big difference.

I'm really giving us women more credit than we deserve, but I really think that if it wasn't for this group of women giving a lot of their time, energy and effort and to always bring it up again. You know you always feel like a squeaky wheel and you think, "Oh God, let someone else do it." But I think that is a factor that is probably very important, or was one of the determinants for some of the success you have seen ... I think if you didn't have that kind of push the administration would not have moved as quickly.
In sum, a coalition group working on behalf of women faculty has been instrumental in identifying problems, pressing for more equitable treatment and working conditions, and providing support and encouragement to its own members. There is evidence that their concerns led to official studies, new policy proposals, and better communication and enforcement of existing policy.

**INFLUENCES FROM INSTITUTIONAL CLIMATE, STRUCTURE, OR ENVIRONMENT**

The move to coeducation was an important impetus to hiring more women faculty members. The importance of role models for all students and the educational advantage of diversity are ideas taken very seriously at Denby College. The faculty certainly recognized that the admission of women students would require related changes on the faculty if the institution were to be truly coeducational.

Although faculty and students generally favored the move to coeducation, many alumni were vocally opposed. It was feared that the admission of women would change the essential character of the institution, reduce the number of places available to men, decrease the number of applicants, and have a negative effect on contributions. How to accomplish the change was even more problematic than whether to admit women.
A package plan, marrying two separate proposals, coeducation and year-round operation, was approved in 1971 and implemented in 1972. The agreement called for an increase in the size of the student body from 3,200 to 4,000, with a target of 3,000 men and 1,000 women. The expansion was to be accommodated by an innovative plan treating all terms equally and increasing foreign and off-campus work and study opportunities so that 15% of the student body would be off-campus in any one term.

More students meant more faculty were needed, especially in the humanities area where the burden for freshman-level required courses was heaviest. The President's Ten Year Report (1980) reviewed the impact year-round operation had on faculty size. There was an 18% growth in full-time equivalent faculty between 1970 and 1979, while the student body increased 20%. The expansion of faculty took place over several years (1972-1976). The number of faculty in Arts and Sciences, where the growth occurred, has been the same since 1976. Expansion, plus turnover, at a time when the institution was moving to coeducation did have a positive effect on female hiring: 20 women were hired (of 45 in Arts & Sciences) in 1972/73, the first year of coeducation and year-round operation. (Attrition in this group was singularly high and led to the events and discussions in 1978.)
The number of faculty appointments in Arts & Sciences dropped to 32-35 annually for the next four years, and dropped again in 1977 as faculty size stabilized. However, women's share of faculty positions has continued to grow since 1976, even though faculty turnover now represents the only opportunity to hire.

One interviewee described affirmative action and the move to coeducation as parallel developments; others described coeducation as the "framework." While progress for women faculty and the admission of women students are clearly related, affirmative action implementation required deliberation, planning and commitment of resources separate from those dedicated to coeducation. Both efforts were major institutional reforms with complementary aims and mutually reinforcing outcomes.

**SPECIFIC STRATEGIES TO IMPLEMENT AFFIRMATIVE ACTION AT DENBY COLLEGE**

Affirmative action started much earlier at Denby than CKSU. Formal policies and programs are also more numerous and more sophisticated. These evolved over time as new concerns arose or as previous strategies were judged insufficient.
The First Plan

Development of the first Affirmative Action Plan came after the issuance of Revised Order 4 in September 1971, which gave institutions until the end of March 1972 to develop goals and timetables. Responsibility for drafting the Plan went to the Provost, who had to delegate it to his assistant, Carole Simpson, because of poor health. She described that period as an "exciting, innocent" time when no one really knew what affirmative action meant. The process of drafting the plan included extensive negotiations with many constituencies, including the Women's Caucus and Black Caucus which had both submitted alternative drafts. When the plan was completed in March, Simpson was disappointed that no one immediately rushed to see copies displayed at the Library or in the President's office. She interprets this lack of burning interest to the fact that the process had been very open, that everyone felt they were or could have been involved, and thus final issuance of the document was "no big deal."

This first draft was approved in principle by the Trustees at their April 1972 meeting. Though the Plan was to undergo multiple revisions to meet HEW specifications during the next two years, it contained from the start the commitment to specific 10-year hiring goals for women and minority faculty. The faculty goals approved by the Trustees were:
At least 25% of all faculty being recruited over the next ten years will be women and, during this period, 20 to 25 women will be appointed or promoted to the Associate and Full Professor ranks. The Board also adopted as its goals the appointment of minority group faculty in at least 10% of all faculty recruited over the next ten years.

A hiring goal of 50% women and 10% minorities was adopted for administrative positions and additional goals set for staff and service employees.

The Assistant Dean of the Faculty took on responsibility for the Plan's continued development, negotiations with HEW, and early stages of implementation, in addition to his other duties during 1972-73.

In November, 1973, President Heller persuaded a distinguished Denby faculty member, who was a black male, to take on the role of first affirmative action officer on a half-time basis for not more than two years. The President was convinced that senior faculty would be more likely to cooperate if the AA Officer were someone with whom they could identify (an insider and a faculty member) and someone they respected. Selection of a female or minority and setting up the new office in the same building with the President were considered important symbolic aspects of the role for the first official AA Officer.

The Plan itself required more revisions and supporting data as a result of HEW instructions. It was finally given approval in October 1975.
Subsequent revisions have made modest changes, such as the inclusion of a grievance procedure, and sexual harassment and maternity leave policies which were developed in the interim. In 1982, the Plan underwent extensive reassessment since the initial 10-year period had ended. Proposed changes include increasing the goal to 33% women in all faculty appointments over the 10-year period 1982-1992. The essential AA structure remains the same.

The Affirmative Action Structure

The Affirmative Action Office consists of a full-time director, half-time assistant director, and half-time child care coordinator, plus an administrative assistant. The role of AA Officer at Denby was very much molded by the personality and skills of Phyllis Green, who was recruited by her predecessor and began work in 1975. She served in this office until 1981.

Dr. Green described her role as evolving over time, moving through several distinct, but overlapping stages. The first stage included wrapping up work on the Plan to meet HEW approval, getting to know people on campus, and defining for herself what the AA Officer role should be. The role, she felt, had four important aspects: educator, monitor, resource person, and consultant. The office
quickly became known as a place where concerns could be raised and responded to promptly and discreetly. Sometimes this simply required passing on information on policies; other cases required further involvement:

Usually all it took was being in touch with people who had some overview or leverage vis-a-vis those concerns, alerting them to those, talking about ways to address them, and getting them resolved. People on this campus tend to be very responsive if approached in the right kind of way.

The second stage involved getting systems into place and institutionalizing procedures. The grievance procedure needed an overhaul; a job posting system had to be set up; and check points for monitoring searches for faculty and administrative positions had to be carefully negotiated. The education aspect of the role was continuous. It entailed meeting with faculty and administrators as individuals and in groups, sharing resources, engaging in mutual problem-solving, and endlessly trying to persuade those who resisted.

The third stage she describes as one of monitoring and continuing education. Once the systems were in place, it was critical to monitor the College's progress, particularly during the search process. Adjustments were made as problems were identified and as new federal regulations required. Dr. Green carefully chose the battles she would fight, selecting only those where there were clear viola-
tions of procedures and a long history of hiring only white males. Day-to-day implementation activities are well described in Taylor (1979). In observing the affirmative action officer at work, Taylor found:

Implementation of affirmative action does not take place in one blaze of glory. The process is, rather, put into place piece by piece. The evolution of the role appears to parallel the implementation process. Likewise the changing of the composition of the faculty, administration, and staff occurs on a one-by-one basis. (p. 149)

This one-by-one process Taylor aptly calls "inching." She also found that the two most effective officers in her study had developed informal channels around the organization and among constituent groups that kept them informed and allowed them to intervene early on, preventing the escalation of problems into crises.

It is difficult to judge the effectiveness of the office apart from the individual skills of the AA Officer. Personality and structure were both essential to Dr. Green's apparent effectiveness:

You see that Dr. Green plays a very independent role; she's a gutsy person ... In many institutions, for someone playing the affirmative action role to get up and say, in a sense, that she thought the institution was headed in the right direction, people would raise their eyebrows. But, in the first place, Phyllis is that kind of person, but she knew that she had the full support of the President. So she was unafraid to say things like this, to be critical of parts of the institution. I think it was a product of both her personality and the system which had her directly under the President so she didn't have to be
afraid of saying things that might get her in trouble ... John Heller had a great deal of respect for her and conversely she had respect for him. She knew absolutely that he was completely supportive of the objectives of affirmative action.

The multi-dimensional role for the AA Officer was supported by an effective committee structure. An Affirmative Action Review Board composed of a chairperson appointed by the President; the chief officer or appointed representatives from the Faculty of Arts & Sciences, Medical School, Provost's Office, Student Affairs, and the Personnel Office; and chairpersons of three Review Committees. The Board recommends improvements in policy and procedures, reports progress made toward AA goals back to their respective constituencies, and reviews cases of discrimination brought to it by the AA Officer. Interviewees who had served on the Board described their role in generating consensus for difficult decisions. On occasion, the Board has blocked appointments, forced a reopening of searches or rescinding an offer, when procedures were clearly violated and good faith efforts were not apparent. The Board is also a place where the AA Officer can test new ideas and gather support for implementation efforts.

Three Review Committees feed into the Board. These are composed of at least 50% women and minority groups elected from the constituent groups they represent: faculty, admin-
istration, and staff and service employees. The Committees keep in close touch with their constituent groups and work on current issues and new policy proposals. Recommendations are then fed through the Committee Chairs to the Review Board.

Faculty Recruitment

The search process is key to affirmative action efforts for faculty. Steps in the hiring process are described first, followed by greater detail on recruitment guidelines, monitoring efforts, and related policies.

Faculty hiring in Arts and Sciences follows a well-established procedure:

1. Review of current staff, terminations, expansion, and departures in each department in the fall. Department heads make their case for replacements or new positions to Associate Dean.

2. If new or replacement faculty position is authorized, then Associate Dean formally notifies department they can proceed with a search. AA officer receives copy of notification.

3. Department prepares a job description, announces the position and consults with the AA Officer about strategies for recruiting women and minority candidates.

4. Short list of candidates is prepared. If there are no women and minorities on the short list, committee heads must consult with the Associate Dean and AA Officer before inviting candidates to campus.

5. Candidates are interviewed and a preferred list, designating race and sex and documenting reasons for choice, is submitted to Associate Dean for approval.
Associate Dean consults with AA officer to ensure conformity to procedures before offer extended.

The procedure includes several important check points where the Associate Dean and/or the AA officer can offer suggestions, or stop the procedure, if necessary. In practice, both administrators have found they are most effective when they periodically, informally, check with the search committee and discuss with them possible strategies to pursue, rather than wait to confront the committee at a checkpoint. The forms themselves (see Exhibit 5) act as a constant reminder of the intent.

A recruitment guide is given to each committee chair and reviewed by the Associate Dean. Though the Associate Dean has "checked all along" on the progress of the search, the checkpoint requiring his approval is a time to assess the results of the Committee's recruitment efforts:

At that point I look over the list and I am looking for a woman and a minority candidate. If I don't see one of each kind I will ask "What happened? You weren't successful." The short list should at least contain a woman and a minority candidate. We don't even require that the short list must contain a woman or minority candidate. But we do require that the department explain the absence of women and minority candidates in the interview list ... That is a formal discussion. It is based on the data on the form they have filled.

Denby has found that personal contact is the most effective way to recruit women and minorities. While they
OFFICE OF THE DEAN

AUTHORIZATION FOR APPOINTMENT
and
AFFIRMATIVE ACTION RECRUITMENT REPORT

Department _______________________________ Date ________________
Position _______________________________ Number ________________

1. Recruitment sources: (e.g. Advertising; Professional Rosters; Institutions contacted and visited; Personal contacts made.)

2. Was Affirmative Action Officer consulted during this search? Yes  No

3. Statistics to be updated and completed after appointment is made.

<table>
<thead>
<tr>
<th>Number of Candidates</th>
<th>Interviewed outside of</th>
<th>Interviewed in</th>
</tr>
</thead>
<tbody>
<tr>
<td>making formal application</td>
<td>men</td>
<td>women</td>
</tr>
<tr>
<td>Caucasian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native American</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncertain</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* * * * * * * * * * * * * * * * * * * * * *

Self-Identified as Handicapped
Self-Identified As Vietnam-Era Veteran

Exhibit 5. Faculty recruitment and appointment forms, Denby College.
4. Leading candidates (in alphabetical order) and action taken (complete "Results" column):

<table>
<thead>
<tr>
<th>Name</th>
<th>Present Position</th>
<th>Highest degree &amp; granting institution</th>
<th>Race &amp; Sex</th>
<th>Self-Identifies as Sexual Minority/Transgender?</th>
<th>Dates candidate added to list</th>
<th>Date candidate removed from list (Initial &amp; date)</th>
<th>Date of departmental vote to appoint</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. On reverse side, please indicate reasons for rejecting the candidacy of all female or minority candidates who were interviewed in (Compare qualifications with candidate appointed.)
continue to formally advertise open positions, their "special efforts" have been more fruitful. How to make these special personal contacts has been spelled out in detail in the Recruitment Handbook and is included in Exhibit 6.

These guidelines reveal more than acceptable procedure; they reflect Denby's long-term approach to affirmative action recruitment. The most effective strategy according to a second associate dean is to "get them here:"

The longer they are here, the better the recruitment. The best thing is to bring them as a visitor, if not a year then a term; if not a term, then a week; if not that, then a lecture... You must have enough confidence to believe if someone gets to know you they will like what they see.

This approach has been codified into policy and a modest fund set aside for the purpose of bringing women and minority scholars to campus, separate from any specific recruitment effort. The purpose is to make Denby better known to nonwhite and/or female scholars who will then consider employment for themselves or their students when an appropriate opening occurs. In addition to one-time lectures, the College makes deliberate use of its visiting appointments to bring in women and minorities.

These special efforts are crucial for recruiting blacks, since Denby is not in an urban location but competes with institutions which are, and has either an unknown or negative public image for many black academics. Since
GUIDELINES FOR SPECIAL PERSONAL CONTACTS

Denby College

It is important that each department develop a network of contacts and associations to build a long-term, continuous base for recruitment of women and minorities. Experience has shown that in recruiting women and minorities, the most effective method is through making personal contacts in an effort first, to identify, then, to attract these non-traditional candidates.

Candidates of the quality sought by the college for its faculty positions will usually be those in the highest demand; our competitors for attracting these candidates are most likely to be those institutions with whom we compare ourselves. Women and minorities, particularly in fields where availability is still somewhat low, are actively recruited and tend to have little need to respond to the normal advertisements or other standard announcements. Therefore, in addition to the usual procedures for identifying and recruiting candidates, the following steps should be taken to ensure that recruitment is sufficiently aggressive:

1. Develop a list of colleagues in the field who by virtue of status, institutional affiliation, or specialty area are likely to be of assistance in identifying candidates. (Minority and women faculty at large may be of help in constructing such a list and should be contacted accordingly.)

2. Divide the list among faculty in the department (or program) and make contact by telephone. (Telephone contact is much more expedient and far more likely to yield results than a letter.) The telephone conversation should include describing the available position and seeking the following information:
   a. Who would you recommend for this position and how might we reach them directly?
   b. Who are the minority and women candidates you would recommend for this position and how might we reach them directly?
   c. Do you know of candidates in the "pipeline", i.e., candidates for the Ph.D. who will be completing their work within the next two or three years, whom you would recommend we get to know?
   d. Who, among the candidates in the "pipeline" are women and minorities, and who, among these, would you recommend we get to know?

3. Using the information generated in 2.a. and b. above, write personal letters to those identified inviting them to apply for the position vacancy at Denby College. Include in these letters information about the institution, the department (or program), and whatever other attractive, pertinent information appropriate. If there is no response after three-four weeks have elapsed, call the prospective candidate directly, reiterating your interest in having him or her apply.

4. Using the information generated in 2.c. and d. above, make arrangements within the department (or program) to become acquainted with the prospect at annual, regional, or other meetings of the discipline. If you find the prospect attractive, discuss with the Associate Dean the possibility of bringing him or her to the campus for a special visit, colloquium, etc. - the underlying purpose being to acquaint the individual with Denby College and its community, and vice-versa. (While this may have no immediate "pay-off", say, for departments not anticipating recruitment for the next year or two, it has public relations value, and most importantly, academic value if, as it should be, the person is engaged in exciting work and is intellectually able.)
recruitment of blacks is so much more difficult, additional funds are available, if necessary, to bring in a larger percentage of black candidates. The recruitment of white women has been less difficult and ultimately more successful.

As noted previously, the College also adopted a policy permitting a bypass of certain procedures in order to hire "an outstanding person who fills a major institutional need." The policy was intended to act as an incentive to search out and hire truly distinguished candidates who could fill the College's need for senior-level nonmajority faculty. While several such appointments were actually made before the policy was adopted in 1978, none have been made since. The Women's Caucus opposed senior-level appointments since they felt it would give their departments an opportunity to select "acceptable" women, and to reject their own junior women when they came up for tenure. Competition and tension surrounding Denby's tenure quota system have undercut the potential positive effect of this strategy.

The formula for determining the number of tenure slots in a department at Denby was "2 per 10 per decade," that is, two tenure slots per ten faculty members per decade. While the claim was that no outstanding faculty member would be denied tenure because of the formula, the quotas increased the level of anxiety among junior faculty. The formula was
dropped in 1981 and replaced by a policy stating that the
tenure rate should not exceed 70%. The tenure quota system
had implications for affirmative action since newly hired
women would be coming up for tenure at the end of the decade
when the departmental quotas were likely to have been
filled. The quota system was one of the issues raised by
the Women's Caucus in 1978. The President had adamantly
refused adding slots specifically for women and minorities,
but he did agree to allocate an additional tenure slot to
those departments which had been more successful in recruit-
ing women and minorities. The slot then increased the
chances of all junior faculty, including white males, of
achieving tenure.

Women faculty also pressed for the presence of a ten-
ured woman as observer or advocate on tenure review commit-
tees, and for a female observer on the tenure appeals board
when the case involves a woman. The purpose of the observer
would be to help filter out bias, to help interpret sexist
comments in letters of recommendation, and to ensure the
same standards are used to evaluate male and female candi-
dates. This policy has not been adopted. However, the AA
Officer does have the authority to review the complete dos-
sier of a protected class faculty member after a departmen-
tal decision has been made and before the college-level com-
mittee deliberates, if the candidate so requests.
Other Affirmative Action Policies

In an effort to deal with the recurring problems of inadequate child care and limited opportunities for professional employment of faculty spouses in the community, the College has adopted additional policies. A part-time child care coordinator helps parents locate appropriate care for their children, and the college provides some support for a local infant center. While this helps, it has not met the need for child care repeatedly emphasized by women's groups and in surveys of faculty and staff. (In Spring 1983 after the study was completed, Denby administrators agreed to build or renovate a suitable facility for a childcare program to be ready in late fall or early spring 1984.)

The spouse employment problem has no totally satisfactory solution either. Denby's isolated location and small size mean many faculty spouses are un- or underemployed. The College has adopted a policy stating that professionally qualified spouses shall be considered on an equal basis with other candidates and that their relationship to a Denby employee shall in no way be a negative factor in his or her chances for selection. The Personnel Office is to extend its assistance in helping find nonacademic employment for spouses.
Denby also pioneered in the use of half-time tenure track positions for those whose family obligations preclude full-time employment. Though this possibility was created to meet the needs of women, it is available to and has been used by male faculty. The tenure probation period is extended from six to nine years. Though one risks being viewed as nonprofessional and less serious by full-time colleagues, the half-time appointment has been used by some women to add better balance to their work and family lives.

Evaluation of Efforts

Denby's annual reports, self-studies, position papers, and frequent references in public forums to affirmative action goals and how these are, or are not, being met constitute a continuous public evaluation of their policies and programs. Such on-going evaluations have brought particular problems, such as the attrition of women faculty, to the attention of administrators and concerned groups, so that new strategies could be devised. The structure has allowed for identification and resolution of problems both large and small, and negotiation has been consistently preferred over confrontation.
OTHER FACTORS

Full implementation of affirmative action requires more than strong leadership from the top and close monitoring by a competent AA Officer, according to several Denby interviewees. Making affirmative action produce results takes a lot of work by a lot of people:

The second most important thing is the commitment and energy devoted by members of this community. The President has a commitment, he takes the lead, he does some articulation. But he could be standing up there talking into the wind unless there were people out there in the community who were willing to devote time, energy, and their persuasive powers to making something happen. And (it was) a lot of people out there who made the difference. You know, the Affirmative Action Office is merely a catalyst. It takes those committed people in the community, and we are fortunate that we have a good number of those who are respected and who are seen as leaders of the faculty, whose colleagues admire, respect, and will listen to (them).

TRANSITION TO A NEW STAGE?

Though the investigation and questions asked of interviewees were focused on past efforts and conditions, some interviewees worried aloud that past commitments would not carry over into the future and that gains made could be easily lost. The source of concern is a change of President and a change of Affirmative Action Officer. President Heller's administration was one of dramatic change for the institution. At the time he stepped down, some felt the
College needed a period of consolidation and of careful fiscal management if the institution was to survive and thrive in the 80s. The new President is the past Chairman of Denby's Board of Trustees, a corporate manager, and a graduate of Denby.

During the same period, Phyllis Green was appointed to a different and important administrative post at the College and a search was conducted for her replacement, who has now been at the College one year. The styles and personalities of both the new President and new AA Officer are markedly different than their predecessors. The relationship between the President's Office and the Affirmative Action Office has also changed. The AA Officer has less frequent access to the President to discuss on-going problems and issues. As part of his overall concern for fiscal management of the College, the President has asked the Affirmative Action Office to cut its staff. These changes are viewed as a threat to affirmative action progress and add to the perception that the current President may not be as committed to AA as his predecessor.

A few interviewees felt affirmative action procedures were well institutionalized and that they no longer needed intense attention from the top. More, however, referred to the current stage as a "transition," and a "vulnerable
period," and pointed to their repeated failure to meet black hiring goals as evidence of backsliding. Old questions about the competence of women faculty have resurfaced and attracted more attention than they were permitted in earlier years. Debate over the ten-year renewal of the Plan during 1982 brought much of this anxiety to the forefront. It should be noted, however, that the final version approved by the Trustees in no way reduces Denby's paper commitment to AA and actually increases the goal for hiring women.

These perceptions raise questions about the degree of institutionalization of the reform and the extent to which it can be sustained under anything less than ideal conditions. Is affirmative action implementation so dependent on the deep commitment and exceptional skills of a few key actors that new leaders any less committed or skilled will have difficulty sustaining progress? Is there no point at which policies and structures can be judged adequate and affirmative action aims sufficiently internalized, that some of the consuming attention and resources devoted to implementation can be withdrawn without threatening gains already made? To what extent can internally generated commitment to affirmative action persist in face of a dwindling national priority for social justice reforms and in spite of other pressing institutional problems?
It is too early to make any judgments on these issues in the Denby case. But these questions are certainly on the minds of those who were involved in the reform effort over the last decade and those who are trying to determine its appropriate priority in the future of Denby College.
Chapter VII
NEWTON UNIVERSITY

INTRODUCTION

Similarities and contrasts with the previous two sites are evident in this third case study. The chapter overview describes the institutional setting and introduces the major themes in the case. As in the previous cases, a statistical assessment of progress for women faculty is provided, followed by a summary of factors identified by interviewees as influential in creating change for women.

The role and nature of institutional leadership, federal intervention, and interest group activity are described, along with structural and environmental influences on policy adoption and implementation. Finally, the specific strategies used to implement affirmative action at Newton University are delineated.

OVERVIEW

Background on Newton University

Newton University is one of the nation's premier private research universities. Just over half of its 9500 students are enrolled in graduate programs. The curriculum is heavily oriented toward science and technology: in 1981-82,
58% of the students were in engineering and another 23% were majoring in the sciences. The University's emphasis on excellence is reflected in the opening paragraph of their 1981 Affirmative Action Plan:

For more than a century, Newton University has been a focal point of excellence and progress in science and technology. It has been a place where people with exceptional talents and with rare gifts of intellect have gathered to work, to explore, to learn, and to teach. Through the accomplishments of its faculty, students, staff, and alumni, the University has made significant contributions to the advancement of knowledge and to the betterment of society. (p. 2)

Sponsored research, funded by the federal government and increasingly by industry, accounts for 60% of the University budget, on and off campus, and has a direct impact on nearly every aspect of life at the University. For instance, many faculty members see themselves as research "entrepreneurs" managing a small, medium, or even large-sized company within the context of the University. Management of large programs enhances the faculty member's autonomy and alters the balance of power between faculty members and administrators. Recent changes in direction of federal research priorities and changes in federal reimbursement patterns have had negative consequences for the institution, resulting in personnel cuts and the imposition of stronger fiscal controls.
Affirmative action for students and faculty at Newton University rests on the assumption that exceptional intellect is in short supply and that large segments of the population cannot be overlooked in the search for and development of scientific talent. Thus the moral commitment made to affirmative action principles was consistent with its educational mission.

Newton University has been coeducational for more than a century. Its first female graduate completed a degree in chemistry in 1873 and made extraordinary contributions in several fields during her career. Despite the stellar achievements of Newton's early women graduates, the University was often thought to be all-male. Indeed, for decades women were nearly invisible, dropping from 6% in 1895 to one or two percent of the student body between 1919 and 1960. One reason for the small number of women admitted was the maintenance of an annual admissions quota corresponding to the number of beds available to entering women in a nearby rooming house. Standards for admission were higher for women than men, and only those women living nearby or having male relatives at the institution seemed to know that women were even permitted to apply.

Events of the late 50s and the 1960s changed much of this. At that point, University officials were considering
two options: either to increase significantly the number of women students to improve their morale and retention rate, or to stop admitting women altogether. A wealthy female graduate from the class of 1904 was surprised to learn that the low numbers were more a reflection of available bedspace than female interest in the sciences. Her gift of a dormitory for women, announced in 1960, tipped the scales in favor of expanding the number of women and working to make the environment more conducive to female achievement. This is one of several instances where financial contributions from women have had a direct and positive impact on opportunities for other women to participate in the University.

The first section of the dormitory opened in 1963 and a second section opened several years later. Female enrollments increased along with bedspace. However, the greatest increase was to occur after 1971 when the institution finally began considering male and female applicants on an equal basis. In 1971-72, women comprised 10% of undergraduates and 8% of the graduate students. Vigorous recruiting efforts increased considerably the number and percentage of women students. In 1981-82, 21% of the undergraduates and 18% of the graduate students were women. The entering class in 1981 was 25% female. Although Newton has been at least nominally coeducational for most of its existence, this
recent increase in female enrollments has substantially transformed the student body.

**Major Themes in the Case**

A threat to withhold federal funds was the mobilizing force for development of the first "modern" affirmative action plan at Newton University. Given the University's dependence on federal funds, the national climate in the early 70s, and personal convictions, administrators made a decision to respond within the 30-day deadline. They produced an extensive document which included hiring goals for the multiplicity of departments and laboratories at the University. The commitment to affirmative action was sufficiently strong that additional government pressure was rarely needed to sustain implementation efforts.

In large part, Newton's committed leadership was responsible for implementation of the plan. The past President was very influential, but AA received strong support and additional leadership from the Chancellor, and several deans, department and laboratory heads. These senior officers were morally committed to AA and set clear expectations for progress. Staff roles were created to deal with AA concerns and strong support provided for their activities.
Women played a substantial role in increasing their own numbers and status by effectively articulating their concerns to male administrators and by supporting the entry and success of new women in the system. Leadership of a few outstanding senior women was crucial to the organizing effort and in lending credibility to women's demands. The "women's voice" at Newton has represented the interests and needs of women in all roles--as students, faculty, staff, administrators, researchers, and wives.

The nature and identity of this institution may have also favored affirmative action implementation. Rational decision making and systematic approaches to remediation may have met with greater acceptance due to the objective orientation of faculty and administrators. The University's reputation as a first-rate institution which seeks to "design the future" was a motivation to be as much a leader in affirmative action as in numerous other areas.

AA RESULTS: FACULTY COMPOSITION AT NEWTON UNIVERSITY

How much change has occurred for women faculty at Newton University? Newton considers its record in hiring and promoting women in nontraditional disciplines as 'one of the least bad' when compared to institutions of similar prestige and orientation. Given the historically low level of female
participation in the sciences and engineering, what does a relatively "good" record look like for one of these institutions?

Data on the representation of women on the faculty are presented in Tables 14 and 15. The aggregate change in the number and percentage of women in the three major faculty ranks during the decade is shown in Table 14. Table 15 is used to compare the 1980 proportion of women with the 1970 starting point for each school within the University.

There were only 17 women on the faculty in 1970, less than 2% of the total. By 1980, the number had grown to 85 and the percentage increased to 8.8%. The data in Table 15 suggest that the largest number of women are concentrated in the Humanities department, but in fact, more significant progress has been made in disciplines where the availability of women doctorates is very low. Engineering has retained the two women it had in 1970 and added 11 more. The Sciences report 15 additional women, including six in physics. Management went from zero to seven women. Five women had tenure in 1972 (Note 7); 42 women had tenure in Fall 1982 (Note 8). An internal analysis shows that faculty women and men have been, on the average, promoted in equal proportions.
TABLE 14

Number and Percent Women by Rank at Newton University for Selected Years

<table>
<thead>
<tr>
<th>Rank</th>
<th>Total No. Faculty</th>
<th>Total No. Faculty Women(%)</th>
<th>Total No. Faculty</th>
<th>Total No. Faculty Women(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full</td>
<td>458</td>
<td>4 (1%)</td>
<td>456</td>
<td>8 (2%)</td>
</tr>
<tr>
<td>Associate</td>
<td>256</td>
<td>5 (2%)</td>
<td>239</td>
<td>6 (3%)</td>
</tr>
<tr>
<td>Assistant</td>
<td>233</td>
<td>8 (3%)</td>
<td>209</td>
<td>9 (4%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School</th>
<th>Total Faculty</th>
<th>Number Women (%)</th>
<th>Total Faculty</th>
<th>Number Women (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture, All depts.</td>
<td>54</td>
<td>4 (7%)</td>
<td>75</td>
<td>10 (13%)</td>
</tr>
<tr>
<td>Humanities &amp; Social Sciences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All departments</td>
<td>131</td>
<td>8 (6%)</td>
<td>182</td>
<td>41 (23%)</td>
</tr>
<tr>
<td>Economics</td>
<td>22</td>
<td>0 (0%)</td>
<td>29</td>
<td>2 (7%)</td>
</tr>
<tr>
<td>Humanities</td>
<td>61</td>
<td>3 (5%)</td>
<td>75</td>
<td>25 (33%)</td>
</tr>
<tr>
<td>Linguistics &amp; Philos</td>
<td>14</td>
<td>2 (14%)</td>
<td>24</td>
<td>4 (17%)</td>
</tr>
<tr>
<td>Political Science</td>
<td>27</td>
<td>3 (11%)</td>
<td>27</td>
<td>5 (19%)</td>
</tr>
<tr>
<td>Psychology</td>
<td>7</td>
<td>0 (0%)</td>
<td>12</td>
<td>3 (25%)</td>
</tr>
<tr>
<td>Sci, Tech, &amp; Society</td>
<td>-</td>
<td></td>
<td>14</td>
<td>2 (14%)</td>
</tr>
<tr>
<td>Business, All departments</td>
<td>63</td>
<td>0 (0%)</td>
<td>83</td>
<td>7 (8%)</td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All departments</td>
<td>370</td>
<td>2 (1%)</td>
<td>397</td>
<td>13 (3%)</td>
</tr>
<tr>
<td>Aero &amp; Astro</td>
<td>51</td>
<td>1 (2%)</td>
<td>48</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>Chemical</td>
<td>26</td>
<td>0 (0%)</td>
<td>27</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Civil</td>
<td>53</td>
<td>0 (0%)</td>
<td>49</td>
<td>2 (4%)</td>
</tr>
<tr>
<td>Electrical &amp; Comp Sci</td>
<td>113</td>
<td>1 (1%)</td>
<td>108</td>
<td>5 (5%)</td>
</tr>
<tr>
<td>Mechanical</td>
<td>57</td>
<td>0 (0%)</td>
<td>64</td>
<td>2 (3%)</td>
</tr>
<tr>
<td>Maths Sci</td>
<td>32</td>
<td>0 (0%)</td>
<td>40</td>
<td>1 (3%)</td>
</tr>
<tr>
<td>Ocean</td>
<td>18</td>
<td>0 (0%)</td>
<td>26</td>
<td>1 (4%)</td>
</tr>
<tr>
<td>Nuclear</td>
<td>20</td>
<td>0 (0%)</td>
<td>27</td>
<td>1 (4%)</td>
</tr>
<tr>
<td>Sciences, All departments</td>
<td>294</td>
<td>3 (1%)</td>
<td>306</td>
<td>18 (6%)</td>
</tr>
<tr>
<td>Biology</td>
<td>34</td>
<td>1 (3%)</td>
<td>40</td>
<td>4 (10%)</td>
</tr>
<tr>
<td>Chemistry</td>
<td>36</td>
<td>0 (0%)</td>
<td>32</td>
<td>1 (3%)</td>
</tr>
<tr>
<td>Earth Science</td>
<td>22</td>
<td>0 (0%)</td>
<td>27</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Math</td>
<td>57</td>
<td>0 (0%)</td>
<td>66</td>
<td>5 (8%)</td>
</tr>
<tr>
<td>Meteorology</td>
<td>12</td>
<td>0 (0%)</td>
<td>17</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Nutrition &amp; Food Sci</td>
<td>32</td>
<td>1 (3%)</td>
<td>31</td>
<td>2 (6%)</td>
</tr>
<tr>
<td>Physics</td>
<td>101</td>
<td>1 (1%)</td>
<td>93</td>
<td>6 (6%)</td>
</tr>
</tbody>
</table>

*Numbers include the ranks of Asst., Assoc., and Full professor.

Source: Annual printouts, Equal Opportunity Office, Newton University
Despite this picture of considerable progress, serious concern remains over the grooming of women graduate students for future faculty positions. Some departments at Newton have made a practice of hiring their own graduates, especially in those fields where it is the clear innovator. According to some interviewees, equity will only be achieved when Newton begins hiring its own bright female graduates as often as it hires its male graduates:

I guess that would be a great relief on my part to see that we were appointing our own female graduate students into faculty positions. It has just happened so seldom. I would feel just so relieved if I saw that pattern emerging. There are some, and I don't want to say that it has never happened, but it just is not a normal occurrence as it is with men.

FACTORS CITED

Eighteen faculty and administrators were interviewed during the week-long visit to Newton University in Fall 1982. Titles and affiliations of those people interviewed are listed in Table 16.

As in the previous two cases, the consistency of responses was striking. Two major factors were repeatedly identified by interviewees; a variety of other factors were mentioned as playing supporting roles.

Seventeen of the eighteen interviewees cited directly the commitment and leadership of top administrators as a
<table>
<thead>
<tr>
<th>University Administrators</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Assistant to the President</td>
<td>Assistant Professor, Writing Program</td>
</tr>
<tr>
<td>Special Assistant to the President</td>
<td>Full Professor, School of Management</td>
</tr>
<tr>
<td>Vice President of Administration and Equal Opportunity Officer</td>
<td>Associate Professor, Humanities</td>
</tr>
<tr>
<td>Assistant Equal Opportunity Officer</td>
<td>Assistant Professor, Nuclear Engineering</td>
</tr>
<tr>
<td>Director of Personnel</td>
<td>Professor, Aerospace Engineering</td>
</tr>
<tr>
<td>Director, Academic and Staff Records (former Assistant Equal Opportunity Officer)</td>
<td>Professor and Director, Center for Materials Science</td>
</tr>
<tr>
<td>Manager, Personnel Services</td>
<td></td>
</tr>
<tr>
<td>Associate Director, Financial Aid</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alumnae Affairs</th>
<th>School and Department Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class President, 1974</td>
<td>Head, Physics</td>
</tr>
<tr>
<td>President, Alumnae Association</td>
<td>Dean, School of Humanities &amp; Social Sciences</td>
</tr>
</tbody>
</table>
crucial factor in achieving what success the University has had in hiring and promoting women faculty. The past and current Presidents were most frequently identified. The staff hired to deal with AA concerns was viewed as evidence of this leadership commitment. One of these staff members was described as especially effective in improving conditions for women over the last decade.

Fourteen interviewees cited the role of women themselves in creating positive change at the institution. This factor has many facets, including the effectiveness and cohesiveness of women's groups, the exceptional competence and leadership of a few senior women, and the support women provided to other women.

The objective orientation of the University and its reputation as one of the "world's best" facilitated AA implementation according to four interviewees. Good faith efforts on the part of many on campus were cited by four people—a handful of deans, department and laboratory heads were especially important. Federal government leverage was cited by three. The dramatic increase in the number of women students had a positive effect according to three people. Particular strategies used to implement AA (e.g., applying equal standards to men and women, taking an "across-the-board" approach to AA, involving the Presidents'
wives, fostering mentor relationships, and using "visiting committees") were cited by one person each.

The major factors and their most important dimensions are listed in Table 17.

**SOURCE AND NATURE OF INSTITUTIONAL LEADERSHIP FOR AA**

Strong leadership was a vital part of Newton's affirmative action implementation efforts. Two administrators were identified by many interviewees as especially influential: the past President, Harold Cohen and the past-Chancellor and current President, Tom Carrington. The past Provost was also cited as playing an effective role in AA implementation. This team was in place throughout most of the 1970s.

One (factor) is very strong leadership from the top, from the President ... Certainly with Cohen and Carrington, it became a very conscious direction. So there was just a very clear commitment from the President that these were important issues. Without that, you would get almost nowhere.

Those two guys (Cohen and Carrington) certainly had commitment. I think that colored the attitudes of this place ... AA was practiced. They made it attractive. They gave inducements to departments to hire women, where good women candidates could be found.

I think the single most important factor that affected Newton was presidential support. You can't do anything in the world at a university unless the president of a university really will take the initiative. And its president and provost. It's got to be the support of the top administration especially in the early stages. I think that's the single most important thing.
TABLE 17
Factors Cited by Newton University Interviewees

I. Leadership and commitment from top administrators
   A. Leaders were personally committed, powerful, and competent.
   B. Staff positions were created to deal with AA concerns.
   C. Centralized management structure facilitated implementation.

II. Influence of campus women
   A. Leadership of a few senior women was crucial.
   B. Women (in many roles on campus) worked well together.
   C. Women have effectively presented their concerns to administrators.
   D. Women have helped other women, e.g. assisted entry and socialization of new women faculty, pushed for equal access admissions and equal treatment for women students, recruited new female colleagues, and raised funds for more women to participate at the University.
   E. High quality of women faculty and students facilitated acceptance.

III. Nature of the Institution
   A. Institution sees itself as leader with worldwide reputation -- it sets high standards for those goals it chooses to accomplish and does not want to risk being known as a place that discriminates.
   B. Predominance of scientific and technical disciplines affects their approach to decision making; objective orientation is highly valued.

IV. Good faith efforts on the part of many at the institution facilitated implementation.

V. Increase in number and high quality of female students gave visibility and legitimacy to women's issues.

VI. Federal government leverage provided the impetus to develop an AA program.
These administrators were referred to in a collective sense as "a group of powerful senior white males" who, along with a very few department heads and faculty members, were the "trendsetters, movers, and shakers" at Newton. They "made it very clear that they intended to make a difference and to set the example for the Colleges."

The power held by these leaders emanated from their reputations as scholars and scientists as well as the formal authority vested in their positions:

I have some other ideas about why things have worked here. One of them depends heavily on the top ... Those guys (the past and current Presidents, and past and current Provosts) are, their personal stature in this community is hard to calibrate to any other university... These guys are very tough, very able, very courageous, and no one at Newton can patronize them ... The leadership of people like them, where they choose to exercise it in this arena, is really extraordinary.

Leadership for affirmative action was exercised in several ways: effective substructures were created to deal with AA issues; a centralized management structure facilitated monitoring and implementation; and AA goals were given visibility and priority.

The last of these strategies is a familiar one. Frequent public statements about the importance of diversity and institutional commitments to AA, along with assessments of their progress and problems, were used to give visibility to AA efforts.
The creation of staff positions to deal with affirmative action issues has been vitally important to Newton's progress. Two Special Assistants to the President, one white female and one minority male, were appointed to handle grievances and to facilitate the integration of women and minorities at every level of the University. Additional staff members handle compliance, record-keeping, and monitoring aspects of the Plan. These roles and the effectiveness of the individuals within them reflect the commitment of top administrators to AA implementation:

Probably number one on your list should be the appointment of a presidential assistant for women's issues ... That was a sign. When I talked about presidential leadership, I mean they staffed up to be aware of and to deal with these concerns. Another sign, I think, of presidential leadership is the fact that the Equal Opportunity Officer for Newton is a senior officer. It is not a function that is shifted off to Personnel, or some area of the University that faculty regard as more peripheral. It's kept close in to the senior officers.

Newton's centralized management structure was also thought to facilitate implementation. A set of 22 senior operating managers (Vice Presidents, Deans, President, Provost and Associate Provosts, Library Director, and Chairman of the Faculty) meet weekly to discuss major policy issues, budgeting levels and priorities, significant organizational changes, and major appointments. The regularity of their meetings and the nature of their positions meant that AA
issues could be discussed promptly and decisions disseminated in the same manner as other major issues. The Council was a forum for arriving at a consensus on AA policy and direction.

The highly centralized management structure of Newton was conducive to it. That makes it very easy to get decisions brought (up for discussion) and quickly resolved. If a serious problem arises, it is known very quickly. When we decided that we really better think about the commitment and get moving on it, it was very easy to mobilize resources.

The Council has had a specific responsibility in monitoring all faculty and staff appointments. Recommendations for faculty appointments are brought to the Council along with a description of special recruiting efforts to locate qualified women and blacks. Their approval must be gained before an offer can be extended.

While these formal mechanisms were essential aspects of Newton's implementation efforts, the personal behavior and values of University leaders were equally visible and underscored the seriousness of their intent. The past and current Presidents were described as not tolerating sexist and/or malicious behavior and they have each appointed very able, feminist, senior women managers, who in turn play an important role. In addition, the wives of the past and current President actively participate in the women's activities on campus. Their views and efforts in support of
women's advancement have both direct and indirect positive effects on women at the University.

Thus, in this third case, leadership of top administrators once again plays a crucial role. At Newton, this leadership was provided by the President and a cadre of committed officers of the University. They developed effective formal and informal mechanisms to support AA implementation and lent their personal credibility to the issue.

NATURE AND EXTENT OF FEDERAL INVOLVEMENT

Government intervention has had positive and negative effects at Newton. Revised Order 4 and a threatening letter jolted administrators into action in 1971, but more recent interventions have been counterproductive according to interviewees who had contact with federal investigators.

The development of the first plan was a memorable sequence of events for those who were involved:

I have to tell you that the first affirmative action ... plan that Newton put together, was put together in 29 days in 1971 or 1972, under the gun that millions of dollars in federal support were going to be cut off if we didn't.

We received a letter that said we had the rest of the month to show cause why we shouldn't have a plan (with) goals and timetables. I recall working 27 or 29 days just flat out, nothing else. And we came out with 82 plans for the whole place--82 departmental plans. Don't even ask how. (At the end of the month), Carrington, Rice, and I took a cab--to the Federal Building with huge books. But they didn't seem to care; they had a
lot of paper. Lo and behold, about one month later we were told it was a model plan and they wanted to show it to others. We did it the Newton way.

While HEW was the "2 by 4" that brought affirmative action issues to the top of the administrative agenda, further intervention appears to have had little positive effect on the implementation process. Administrators were highly critical of federal investigators, especially those from the Office of Federal Contract Compliance in the Department of Labor, whose understanding of higher education was judged minimal at best. Although the continued federal requirement of affirmative action was viewed as essential, the reality of federal enforcement practices left much to be desired:

We had pretty good relationships with HEW when they became part of Department of Education. For a while they had responsibility for us. Then we switched to the Department of Labor about four years ago I guess. And since then the reviews have been really cursory reviews. Most of the people there have been dealing with private industry and they really didn't know much about universities and still do not actually. We really don't expect, and haven't been receiving for the last 3 or 4 years, any great assistance, or any real close scrutiny. That's one of the problems of all of our agencies now, that they are not really staffed or equipped to do it and where they are staffed they are not very good at all and that's putting it mildly.

It is helpful for them not coming in. When they come in and do a review now, it is detrimental to the effort. You are afraid to let them out in the departments to talk to somebody because they give people ammunition to say, "Why are we doing this?"
Newton has not had any formal complaints of sex discrimination affirmed by federal agencies or the courts. Complaints have generally been resolved through the University's formal or informal grievance procedures.

In this case, federal intervention had a positive effect on the decision to adopt comply with the federal mandate. It was the catalyst which brought affirmative action to the attention of administrators. Further direct intervention has been all but unnecessary to sustain the implementation process once administrative commitment was assured.

NATURE AND EXTENT OF COALITION GROUP ACTIVITY ON BEHALF OF WOMEN FACULTY

Both male and female interviewees at Newton cited the important role women played in improving their own status. The handful of women faculty on campus during the 60s and early 70s were an extraordinary group with visibility and influence far beyond their tiny numbers. Just how did women work to create change within the system? This section provides a brief look at the history of women's organizing efforts, then describes those aspects of feminist activism that interviewees felt had enhanced their success.
Early Organizing Efforts

The formation of the Women's Forum is a well-documented event. Two female faculty members organized a study/discussion group for the independent activity period in January 1972. Their idea was to focus on problems of women students. Notices of the planned activity were posted around campus, but the word "students" was inadvertently omitted. The response at the first and subsequent sessions was overwhelming. Meetings were attended by women students, secretaries, technicians, faculty, researchers, and a few wives of students and faculty who wanted to talk about what it meant to be a woman at male-dominated Newton University.

The group met throughout January and into the spring term to consider a wide range of issues relating to the lives of women at Newton. A position paper was eventually hammered out with recommendations for the administration.

We were really dealing with a situation we perceived as rather serious and which the University itself perceived as rather serious. I don't think the University really knew how to respond in an administrative way to the concerns of women ... I think they were more than willing to have a group of people give some thought to this and the fact that would could get a large and diverse group of women to agree on something--you are talking about all the way from secretaries to faculty to students, you're talking about an extremely broad constituency. They had very little else in common, except that they happened to be women. I think as a result of getting that agreement from that community, this proposal became legitimized in that sense. It wasn't just a random proposal. It had legitimacy in the sense that it had been a
compromise proposal with women who had a variety of relationships to the University.

The proposal called for the appointment of two women. One was to be a high-level administrator whose responsibilities would be primarily but not exclusively women's affairs. The second woman was to be an assistant to the President and Chancellor "whose primary responsibility will be to act as an advocate for women with respect to employment practices and personnel matters." Two appointments were made: Jane Jacobs as Dean of Students in 1972 and Ann Jamison as Special Assistant to the President for Women and Work in 1973.

The Women's Forum has continued as an effective women's organization, but numerous other groups have been formed to represent women in a variety of roles. Twenty or more campus women's groups are currently represented on an advisory board which meets monthly with Dr. Jamison. She has been especially helpful in maintaining links between these groups and helping them define and work on common issues.

Sources of Power and Legitimacy

A handful of senior women were widely regarded by interviewees as deserving much of the credit for advancing women's issues on campus. Faculty women hired during the 70s were joining a small but exceptional group of women already on campus.
We did have the advantage of starting from somewhere. We did have in the sciences, some very good women, who were in a position to provide a degree of leadership, continuity, and professional standards, things that matter ... It really did matter that there were people around already who were well-established.

In addition to the role these women played within specific organizations, they influenced events and policies of importance to women faculty and students through their involvement on special and regular committees. They pushed for change on behalf of women in multiple forums and action followed them to some degree.

These women had the clout and autonomy shared by senior male faculty who had succeeded in the highly competitive environment at Newton.

With this background (as faculty entrepreneurs) we can go to the administration and say X, Y, & Z, and if we have a good case we expect them to listen to us and make the changes. Whether we are men or women, all of us are operating ... "big bucks", that is professors are managing large programs ... we had a totally different level of autonomy from ... professors (at other universities) and it creates quite a different relation with the administration. So now what does this have to do with the women's issue? When the women faculty here decided they wanted to do something, we put our act together, we documented what we wanted and why, we presented it and we always got it. And there's not much of a hassle. As a matter of fact, I am always amazed because we get more than I ever expect that we will. In every case where we have asked for something, we've not got less, we've got more than I thought we could, or even should get.
Women's demands were considered more legitimate by some because they represented the views of a wide variety of constituencies:

To the extent that we have achieved some success at Newton with respect to women's issues, it is because we have never allowed splinter groups to develop. We have always tried to define what we were doing in such a way that it included everybody. So that when the Board of Trustees, or the President, or anybody is looking for the women's views, or the voice of women, or who speaks for women students, we have to make sure that our views are broad enough, that everybody feels included...

Power and legitimacy for coalition groups working on behalf of women were enhanced by the status and competence of the leaders, the broad representation of women included in their deliberations, and their effective presentation of concerns.

Feminist Philanthropy

Women students and faculty at Newton have directly benefitted from feminist philanthropy—large sums of money given to the University for the explicit purpose of bringing more women to campus. The gift of a women's dormitory in the early 60s was the beginning of a substantial increase in the female student body. An endowed chair funded in the mid-60s to bring in a female faculty member at the senior level also had a substantial impact. The endowment was used
for several years to bring in established women scientists and to have them interact with women students and male faculty. In the late 60s, the chair was given permanently to a female engineer whose subsequent leadership in the women's community has been invaluable. During the 1970s, funds were solicited for a second chair to honor Newton's first female graduate. Once funded, the position stood vacant for three years while administrators searched for a qualified woman. Members of the faculty women's group, alumnae, and staff were eventually responsible for locating and attracting a computer specialist who begins in 1983. These positions are especially important because they bring women in at the tenured professor rank and provide funds for their salaries. Although dollars from the general fund used for women's advancement far exceed the total from these special gifts, they have made a symbolic as well as practical contribution to improving the status of women at Newton.

Creating a Supportive Environment

The faculty women's organization has also played a role in socializing junior faculty and supporting its members. Senior women continually share information about how Newton works, what the expectations are for achieving tenure, and how women can realistically evaluate and improve their own
chances. On the other side, the women's faculty group has worked with top administrators to develop a university-wide, but individually-tailored mentoring program for junior faculty.

Women at Newton have benefitted from their own efforts to identify problems and create positive change. Their effectiveness was enhanced by the leadership of several highly-regarded senior women, an approach which incorporated the concerns of a broad female constituency, and a responsive administration. Their personal and financial contributions have resulted in greater numbers of women students and faculty and an environment more conducive to women's growth and achievement.

**INFLUENCES FROM INSTITUTIONAL CLIMATE, STRUCTURE, OR ENVIRONMENT**

Institutional Identity

Two aspects of the University culture appear to have facilitated affirmative action implementation. The first is the University's reputation as a first rate institution and leader in "designing the future." Being "one of the best" necessarily means setting and achieving exceptionally high standards in those areas the University chooses to pursue. This has helped create high expectations for affirmative action performance as well as other areas. While interview-
ees were proud of the success they have had in hiring women faculty, they are disappointed that results fall short of expectations. One administrator suggested that they were not going to win any "Nobels" in affirmative action, but that level of achievement should be their goal.

In addition, the University did not want to be known as a place which discriminates against women and minorities, a reputation which would jeopardize their self- and public image.

Interest in being top-notch. They really have a vision of it being an excellent institution. That's very important for them ... It is quite clear to be top-notch you have to be impeccable--not open to suits. So I think one of the main reasons is, from the point of view of Newton's self-interest, you can't afford to discriminate against women....This was particularly incumbent on them because of Newton's reputation and stereotype of being a nonfemale place.

The objective orientation of the institution may have facilitated AA implementation as well. One manifestation of their orientation was the willingness to treat affirmative action as a problem with a solution. The engineering mentality, claimed one interviewee, meant AA was approached like any other problem by "putting a stick against the dam," "adding a brick," or tinkering with the mechanism until it did what it was supposed to do. Others suggested frequent and radical changes in scientific disciplines made them more open to change of another sort and that experimentation was considered a viable management approach:
It could be part of the make-up of this place with engineers and scientists traditionally who are less interested in sitting around and talking about a lot of things. Given a direction, they'll say "Well it's an experiment, let's try to implement it." We got very little faculty resistance for many of the things we're doing ... Generally it was very easy to mobilize.

In addition, an objective, data-driven mindset helped some women achieve acceptance at Newton because the quality of their work could not be denied.

Another thing that matters a lot here is the objective orientation of the place. It is very hard to overlook a woman who is a first-class bridge builder or theoretician, because the criteria for rating her are objective in science and engineering.

Other Factors

Newton's response to the increasing size and obvious quality of its female student body was much like the responses of Denby College and CKSU. Increased visibility of women students lent credibility to women's issues in general on the campus and served as a supportive rationale for hiring more women faculty.

While leadership was crucial, progress was also dependent on the good faith efforts of those on campus who served on search committees and who worked to make change happen in their own departments.

I think it also ... requires a community ... that on the whole accepts these ideas and subscribes to the values. And I think it is only fair to say
that Newton would not have made the progress it has made in the past decade if there were not a readiness to accept the philosophies and ideas, the liberal ideas behind affirmative action/equal access for education. Nothing would have happened here, even the top could not have brought that off without a kind of general awareness of the rightness of these policies.

SPECIFIC STRATEGIES TO IMPLEMENT AFFIRMATIVE ACTION AT NEWTON UNIVERSITY

The Affirmative Action Structure

A Vice President is the designated Affirmative Action Officer. An Assistant Equal Opportunity Officer works full-time on preparing, auditing and monitoring the Plan; providing resources and assistance for equal opportunity efforts around campus; listening to grievances; monitoring the search process for faculty and administrative appointments; and building networks. Incumbents have had responsibility for compliance aspects of the AA program but have shaped the job in accordance with their own interests and skills.

Two Special Assistants to the President have played an important role in affirmative action as internal ombudsmen for the University. They are a commonly used informal channel, and a possible last step in the formal grievance procedure. They handle a wide range of complaints and problems from staff, students, faculty, and others, whether the com-
plaintant is minority or majority, male or female. The grievance procedure itself is designed to allow a choice of listener and flexibility in tailoring an appropriate solution. Potential barriers to communication between people of different races or gender are recognized and dealt with by providing multiple resource persons to handle problems:

People with concerns have, by design, many different places to go. A black and/or a female person with any kind of concern here could go to (the Asst. Equal Opportunity Officer), could go to (one of the Special Assistants), or could go up the line structure attached to his or her employment, or could go to Personnel, or in the case of a student, could go through the Dean of Student Affairs or through the academic department... There really are a lot of places to find someone who looks like you. And we encourage people to go to more than one.

In addition to hearing grievances and fielding inquiries of women (and men), Ann Jamison uses this information to improve the collective treatment of women, minorities, and men. For instance, a long-term concern has been developing functional mentoring relationships between senior and junior faculty. She has spent considerable time working with and persuading department heads about the importance of mentoring by senior faculty. She coaches junior faculty on how to seek out mentors for themselves and how to be mentors for others. She has also tracked promotion and tenure processes for junior faculty, worked with individuals to find grants or locate helpful colleagues, and to develop an effective
tenure dossier. As already noted, she meets with the women's advisory board and keeps the President informed of critical issues. Her published articles on these and similar topics have given national visibility to the problems of subtle discrimination and the ways in which institutions can deal effectively with them.

Several managers in Personnel provide some support for AA through data management, training programs, and supervision of personnel services. All of the individuals above meet regularly with the Vice President/AA Officer (this is called the Equal Opportunity Staff Group) to coordinate efforts and direction.

These individual administrative roles are supported by two several major councils and committees. The Academic Council, a policy making body composed of the senior administrators, considers alterations in AA policy and has a specific responsibility in approving appointments. The Equal Opportunity Committee is headed by a faculty member appointed by the President; it has chiefly worked on faculty issues in recent years. Their function, however, is to review, evaluate, and advise on the implementation of affirmative action.
Faculty Recruitment

Two issues are addressed in this section--the "serious search policy" and the long-term approach to faculty recruitment.

Exhibit 8 contains the text of Newton University's serious search policy.

There are several critical elements in the policy. The first is a two-stage review of search committee efforts. The search plan and final candidate selection must each be approved before the position can be offered. Currently, the Assistant Equal Opportunity Officer in the School and/or the University reviews these plans in detail raising questions and making suggestions as needed. The School Councils and the Academic Council review the material along with the EO Officers' recommendations at their weekly meetings. A second element of the policy is the insistence that an effective search requires more than open advertising; personal contacts must be made. Third, one member of every search committee is designated Equal Opportunity Representative with responsibility for ensuring that an active search for women and minorities is carried out.

The serious search policy, with review of decisions by School and Academic Councils, has been in effect for a number of years. Questions have been raised by new members on
The following are statements of policies bearing on affirmative action which are included in Policies and Procedures: A Guide for Faculty and Staff Members.

D-1. Affirmative Action

Serious Search Policy

In furtherance of commitment to affirmative action in the employment of women and members of minority groups, Institute policy requires a thorough search of the relevant employment market for qualified candidates, including women and minority candidates, whenever underrepresentation is found to exist. For particular groups or positions, outlined below, approval of the Academic Council must be obtained prior to making an offer of appointment. These positions include (1) salaried appointments for an academic year or longer to the three faculty ranks (including visiting faculty) and instructors, and (2) salaried full-time sponsored research staff, administrative and academic administrative staff, library staff, or medical staff appointments with a term of one year or more.

At the time a search is begun for a person to fill one of the above positions, the department head or laboratory director will forward to the appropriate Academic Council member a statement of the qualifications being sought and the plan for the search. Search plans must indicate the specific means by which active efforts will be made to positively identify minority and women candidates. Such means are expected to go beyond posting and advertising the availability of positions and may include, but not be limited to, such active efforts as (1) personal telephone and/or written contacts with colleagues or other individuals or groups who can assist in locating candidates; (2) visits by members of search committees to locations where minority and/or women candidates may be contacted; or (3) personal contact with minority and female colleagues at professional gatherings. In cases involving a search committee, and especially for faculty appointments, the head of the department should ensure that at least one member of the committee is assigned the specific responsibility to see that an active search is carried out. This responsibility as Equal Opportunity Representative may be assigned to the chair of the committee, to a committee member other than the chair, or to someone outside the committee who will serve ex-officio as a member of each search committee that is formed. In cases where a search committee is not formed, the person having major responsibility for candidate evaluation will also serve as the Equal Opportunity Representative for that search. The head of the department will advise the Equal Opportunity Representative and encourage exploration of ways to strengthen the search process. Search plans forwarded to the Academic Council should include the name of the Equal Opportunity Representative. The Assistant Equal Opportunity Officer will review search plans and, where appropriate, suggest ways in which the search might be improved. If satisfied that the qualifications are not unnecessarily restrictive and that the search plan is appropriate to the position and the relevant employment market, the Council member will review the proposal with the Council. The search need not await Academic Council approval to begin, but may be modified following the Council review.

When the search is completed and the best qualified candidate is determined, after full consideration of the various candidates' potential for growth and development (Affirmative Action Policy, Section II, Item 6), the Academic Council member should bring to the Council a recommendation for an offer of appointment, reporting that the approved search plan was followed with detail as to the candidates generated and considered, method of evaluation, reasons for the preferred choice and resumes of minority and women candidates who received serious consideration. This procedure should be followed regardless of the race or sex of the proposed candidate.
the Council as to whether there might not be a more effective way to accomplish their aims. The paperwork is burdensome and the results too few. A new proposal for reviewing appointments at the school-level rather than university-level is now under consideration. The proposal has received support from the Equal Opportunity Staff Group who see the deans, if committed to progress, as better able to manipulate rewards and disincentives which may have a beneficial effect on hiring outcomes. Accountability remains a concern and a number of checks have been created, including a centrally-reviewed log of personnel decisions.

The serious search policy has codified Newton's accumulated experience in trying to attract women and/or minority candidates in nontraditional fields. Personal contacts are essential and the investment is expected to pay off only in the long term:

I think the goals are fairly meaningless. What's more important is all the activities, all the real activity that surrounds the hunt for a faculty member or for a staff member. That has nothing to do with goal setting. It is making contacts in the right places, cultivating those contacts, identifying people who are potential faculty members early in their careers, keeping in touch with them, cultivating an interest in Newton, following through on the students who are here to encourage them to continue their education at the graduate level, and indeed making sure that they are ... that the best ones stay here and beyond that, trying to interest them in staying here in faculty and research positions, becoming involved in the various organizations of minority and female professionals ... and I mean involved in a meaningful
way so that recommendations flow out of that, out of the contacts. Those are the things that really make a difference in the hiring process. Not setting down on paper some numbers that may or may not mean anything...get four black faculty members in the next two years...that doesn't say anything about the efforts that have gone on in locating and cultivating those people and making sure that they choose Newton from a variety of places that may want them.

Incentives and Special Programs

Many of Newton's special efforts provide financial support for their long-term recruitment approach. Visiting faculty, lecture series, and other temporary appointments are used to bring minority and female scholars to campus for short periods. The University funded five post-doctoral positions for minorities and provided seed money for a very successful black administrators conference. The target-of-opportunity program was set up to assure departments which identified an outstanding woman and/or minority that a slot and/or additional money would be allocated to bring that person in. The existence of these incentives symbolizes the administration's willingness to provide risk capital:

When it comes to this whole affair of affirmative action for women and blacks..., the thing that counts is not some written-up plan. You need to have some administrative support and that's been very important to us...You cannot manage any of this without having that support. It's just not possible. The reason for it is, you have a very small pool and you therefore must gamble. People will not gamble if they don't have money; gambling costs. In part, that's been one of the things the administration has been willing to do.
The amount of general funds used to support affirmative action activities of all kinds has been substantial. In addition, the past and current President were responsible for raising large sums of money to support AA-related programs. Special recruitment efforts for women and minority students, extensive changes in athletic and medical facilities and programs, the Special Assistant positions, day care programs, women's studies, and the "carrot" funds are examples of major on-going obligations. Special projects have also been funded, including post-docs, purchase of unpublished feminist documents for the library, and seed money for conferences and a feminist newspaper. The Women's Forum gets a small allotment to fund its programs. At least one large grant was received (by Ann Jamison) from the Carnegie Foundation for the creation and support of activities for women students and faculty.

Progress made by particular departments is publicly acknowledged and a prestigious University service award was given to the faculty chair of the EO Committee for his outstanding work on behalf of affirmative action.
Other Policies

Unpaid parental leave is available to regular full- and part-time personnel (men and women) for up to eight weeks at the time of the birth or adoption of each child. Four child care programs are available on campus for children of varying ages. Child-care coordinators handle referrals for home-based care and babysitting. Flexible working hours and unpaid leaves for educational reasons are possible depending on specific job constraints. At least one female faculty member presently has a part-time tenure track position which allows her to spend more time with her young family, and others have used the part-time option in the past. A sexual harassment policy is in force and complaints are handled by the Special Assistants.

CURRENT ISSUES RELATED TO AFFIRMATIVE ACTION IMPLEMENTATION

Newton administrators view their current stage of implementation as one of institutionalizing commitment and procedures throughout the system in a very difficult decade. For example, several appointments in Personnel have helped ensure inclusion of AA concerns in the daily operations of their respective areas.

The eighties pose a serious challenge for affirmative action however. Cutbacks and changes in funding patterns
for federal research have meant the loss of positions and a real loss of flexibility and opportunity. Further progress will be far more difficult to achieve given a higher retirement age for faculty. Interviewees had varying opinions about the likely impact of these conditions on opportunities for women. While no one felt the financial picture would facilitate future efforts, some were more confident than others that the momentum could be sustained.

In summary, there are several key factors which account for Newton's success in hiring and promoting women faculty. Leadership provided by the President and a cadre of top administrators was and is crucial to AA implementation efforts. Federal intervention helped secure their commitment in the early stages of adoption of the mandate. Women worked to effect change through participation in women's organizations, networks, and other forums, as well as on their jobs. Policy and program changes resulted from their individual and collective efforts. A competent affirmative action staff monitored progress and resolved implementation difficulties. Other factors, such as the increase in women students, aspects of the institutional culture, and good faith efforts by many on campus, played a supporting role.
Chapter VIII
CROSS-SITE COMPARISONS

INTRODUCTION

Multisite studies are a hybrid research form which grew out of a need for both description and generalization. Although large-scale quantitative studies provide the best opportunity for generalization, policy makers often find the results of such studies to be of little help in understanding program processes and outcomes. Finding and measuring appropriate independent and dependent variables are also a problem. Single site case studies provide the detailed description necessary to understand the institutional context and actual implementation processes for educational reforms, but they lack generalizability. In order to optimize description and generalization, researchers have experimented with multisite qualitative studies, often imbedding them in a larger research design with quantitative components (Herriott & Firestone, 1983).

This study was based on a similar rationale. It was assumed, for instance, that measurable institutional characteristics such as enrollment size, region of the country, or curriculum emphasis might be associated with greater or lesser change, but these characteristics would tell us lit-
tles about how and to what extent affirmative action mandates have actually been implemented at the institution. The three case studies help fill this gap. The purpose of this chapter is to make cross-site comparisons for each of the five major research areas drawn from the work of Newcombe (1981) and Taylor (1981). Relevant findings from their research are briefly reviewed within each section, followed by a discussion of commonalities and significant differences in the findings of this study.

THE THREE SITES IN PERSPECTIVE

The three selected sites proved to be a diverse collection of institutions. Denby College and Newton University are both private institutions with long-established reputations for excellence and leadership in higher education. Yet Denby's reputation is built on the strength of its undergraduate education in the liberal arts, while Newton is at the opposite end of the continuum with its heavy involvement in graduate education and research in the sciences and technology. CKSU is a public landgrant institution, representing yet a third, very different kind of institution. Its growing size and sophistication are typical of recent dramatic changes occurring at some southern universities.
Concerning affirmative action implementation, it is apparent that Denby and Newton confronted the problem earlier, more thoroughly, and with somewhat more success than CKSU. Both Denby and Newton had precursor programs in the 60s focused on increasing black participation at their universities. The development of a formal affirmative action plan required by Revised Order 4 in 1971 was facilitated to some degree by those earlier experiences in identifying institutional barriers and strategies for remediation. CKSU appears to have responded to affirmative action mandates later and with a history of greater resistance. Their current AA policies and programs are less numerous, comprehensive, and progressive than those at Denby or Newton. For instance, women faculty at CKSU have long pressed for salary equalization, a first-generation equity issue compared to child care, part-time tenure-track positions, and flexible working hours. CKSU also had fewer internal reports, committee recommendations, and historical documents related to women's concerns than did the other two sites. This may be a further indication of their less formalistic approach to implementation.

Despite these differences, an important finding of the case studies was the mere existence of identifiable, functional affirmative action programs on all three campuses.
The change index developed for the study and described in Chapter II was an outcome measure. Full implementation of affirmative action mandates may have been the "hoped for" factor accounting for greater change, but there was no assumption that a vigorous program would be found at any, or all, of the three sites. Too many other factors could have produced a similar result. In all three cases, the level of effort devoted to AA implementation was substantial. The degree of success they had achieved was largely credited to the leadership and commitment of top administrators.

LEADERSHIP FOR AFFIRMATIVE ACTION IMPLEMENTATION

The role played by a top administrator was a significant factor differentiating the successful from unsuccessful examples of Title IX implementation on campuses studied by Newcombe (1980). She describes the importance of this theoretical variable as follows:

Institutional progress toward implementation of a mandate is largely contingent upon the leadership of a central administrator who assumes a role as change agent . . . 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. (Newcombe, 1981, pp. 562, 573)
Taylor (1981) also found the attitudes and behavior of institutional leaders were an important, though not the (her emphasis) major factor facilitating affirmative action implementation. The kind of leadership chosen for an organization may also interact with the historical thrust and self-image of the organization--thus, a socially responsible organization may tend to choose socially responsive leaders (1981, p. 65). Stability of the top executive was identified as an additional factor enabling successful affirmative action implementation.

Leadership of a top administrator was identified more frequently than any other factor at the three institutions in this study. At CKSU, leadership was provided by the Provost. The key change agent at Denby College was the President, and the past and current Presidents were instrumental in guiding reform efforts at Newton University. There are more similarities than differences in the way leadership was exercised by these men. Findings common to all three institutions were:

1. Leaders were perceived as personally committed to affirmative action principles and implementation.

2. AA was accorded high visibility in their administrations. Leaders repeatedly discussed AA goals and their progress in achieving them in public speeches and informal gatherings.
3. AA was treated as an important institutional priority.
   a) Resources were dedicated to implementation efforts.
   b) Staff roles were created to implement affirmative action. These positions were filled by competent members of protected groups who reported directly to the key change agent and operated with his full support.
   c) Hiring decisions were closely monitored and decision makers held accountable for good faith efforts.

4. Effective two-way communication was evident.

The source of each leader's commitment to affirmative action is not precisely known, but in the case of the Denby and Newton Presidents, commitment predates their appointments as head of the institution and seems to stem from very personal experiences and values.

Administrators drew on multiple sources of power to encourage widespread implementation of the mandate. Six sources of power have been identified by Raven and French (1959): (a) coercion or the threat of punishment for non-compliance; (b) expertise associated with superior knowledge or ability in a particular area; (c) legitimacy or the right
to influence on the basis of one's position; (d) information or persuasive communication presented by the influencing agent; (e) reward offered for compliance and cooperation; (f) reference which stems from charismatic or reputational influence.

Legitimate power was exercised in all three cases, but other power sources were tapped as well. All three used coercive power to some extent. "Punishment" consisted of delaying or denying approval of faculty appointments in departments or units where good faith efforts were lacking. There were no reported cases of firing a department head whose recruiting record was less than satisfactory, but some effort was made to include affirmative action results in the performance evaluation process. Institutional leaders also used those incentives available to them to encourage and reward appropriate behavior--public praise, selection of academic administrators whose commitment was visible, distribution of extra dollars for recruitment and visiting lecturers and a few extra positions. While all three institutions had leaders with considerable persuasive power, Denby and Newton administrators were also able to draw on their national reputations to advance affirmative action reforms.

Findings from this study lend support to Taylor's conclusion that stability of the top executive was a facilitat-
ing factor. Stability was helpful in several ways. First, the key change agent had time to guide the reform through its crucial first stages and to provide the necessary resources for implementation. Second, when affirmative action was made an important institutional priority by the top executive, others soon learned the issue would not go away. It is also clear from experiences at all three campuses that institutionalization of AA commitment is extremely difficult to achieve. The underlying structure which supports discrimination has yet to be dismantled. Old behaviors are quickly reasserted. One interviewee described these recurring manifestations of sexism and racism as the "extraordinary Gibraltar-like consistency of the old formation."

**COALITION GROUP ACTIVITY ON BEHALF OF WOMEN FACULTY**

Newcombe found that the presence of individual change agents with sufficient skill, clout, and resources facilitated Title IX implementation in athletic programs. This finding led her to suggest that subsystems were more likely to implement policy if an effective change agent was present in the subsystem. Yet this aspect of her theory really does not address the issue of collective action focused at the institution-level rather than the subsystem-level. Taylor
found coalition groups for women and minorities were a posi-
tive impetus for organizational change in her case study sites.

These findings represent different, but not necessarily contradictory, perspectives. They are very likely a result of focusing on different federal policies. Affirmative action employment policies affect nearly every unit in the university, whereas Title IX athletic policies have a nar-
rower focus and impact.

Identification of the coalition group factor was a helpful first step, but Taylor's case studies really do not delineate the ways in which their activities influenced pol-
icy, or interacted with other critical factors. In order to better understand this influence on policy implementation, the nature and effectiveness of collective action on behalf of women faculty were explored at each of the three sites in this study.

The decision to adopt affirmative action policies was made by university administrators on the three campuses in this study, but bottom-up pressure from women served an important function during subsequent stages of implementa-
tion. Women at Newton and at Denby organized early to press for change on behalf of women. At both institutions, con-
siderable effort was made to include issues of importance to
women in all roles at the institution. Faculty women at CKSU organized several years later. They have been somewhat less successful in achieving their demands despite the generally sympathetic reception they receive from the Provost. Although the current issues are different on each campus, there were similar patterns in the evolution of the interest groups and the strategies they pursued:

1. The targets of interest group activity are key leaders in the central administration. AA policies are perceived as university-wide concerns which the president and chief academic officer are in a position to influence.

2. On each campus, two or three senior women were repeatedly identified as having played a crucial role in organizing other women and providing an articulate voice for women's concerns. These women were highly competent and provided credible leadership for the group in the eyes of male faculty and administrators.

3. Women provided support for other women. They located women candidates, provided professional and personal support to increase retention, and worked individually and collectively to change male attitudes and policies which hindered women's progress.
4. AA implementation efforts were directly assisted by women's groups which identified problems and proposed solutions. Although this presentation suggests that women's efforts were exercised within the confines of a single organization, the reality is far more complex. While the organization was the nucleus of feminist activity, the same individuals often worked in other contexts (e.g., university committees) to effect change. This is especially true of the leaders who used their official and unofficial roles in whatever way they could to address women's concerns.

One possible explanation for the difference in impact between the women's organization at CKSU on the one hand, and at Newton and Denby on the other, may be a difference in political culture. Both Newton and Denby leaders have had experience in dealing with unions; collective negotiation is a familiar and acceptable pattern. The Provost's personal- istic approach at CKSU seems to reflect a different politi- cal culture, one in which collective action is far less familiar and not actively encouraged. Thus, women at CKSU have had to overcome skepticism about both the nature of their concerns and the legitimacy of group-based claims.
FEDERAL INTERVENTION

Governmental intervention is viewed as a variable having a potential direct impact on every stage of the policy implementation process and an indirect impact through its effect on administrative leadership and conditions within the units on campus. Newcombe describes this variable as follows:

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. . . . 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. (1981, p. 563)

Newcombe also suggests that changes in the government position/regulations can have a negative effect on implementation.

Taylor also identified government action as a factor impelling organizations toward implementation of affirmative action. Various aspects of government action were felt differentially at the sites she investigated. The threat of funds cutoff was taken seriously by one organization; federal approval or lack of approval of the AA Plan affected
several others; individual complaints and lawsuits were present and mentioned at several sites but with equivocal significance for progress at the institution as a whole.

At these three sites, federal intervention appears to have played its most useful role as a catalyst in the early stages of policy adoption and implementation. The three campuses were subject to very different levels of scrutiny by federal investigators, although none reported receiving much useful assistance, especially in recent years.

Denby College made its decision to adopt the mandate and invest in its implementation without direct government intervention. Publication of Revised Order 4 was a sufficient catalyst for already committed leaders. Newton's administrators faced a more serious threat to cut off their federal funds. Although federal investigators periodically scrutinized Newton's AA program, their intervention had little positive effect on implementation. CKSU is at the opposite end of the spectrum from Denby. Government oversight pervaded the administrative environment throughout the decade. However, the evidence seems to suggest that its most positive effect was in garnering the commitment of the Provost. It is possible that the high public visibility given the negotiations between HEW and the State University System also sensitized the University community to the issue and made the environment more conducive to change.
ENVIRONMENTAL AND STRUCTURAL INFLUENCES ON AA IMPLEMENTATION

In Newcombe's study, government intervention was the only major influence on implementation emanating from outside the institution, although linkage to national associations was one of several influences on leader behavior and attitudes. Thus environmental variables play a minimal role in her theory of mandated change.

In addition to government action, Taylor identifies three variables—social milieu, competitors' actions, and availability of women and minorities—which could be considered environmental influences on implementation. Three other factors were intrinsic to the organization: identity of the organization, financial resources, and turnover or net additions.

There are many similarities in the list of environmental influences and structural changes generated from this study and those identified by Taylor. Findings from these case studies also reaffirm the influence of several factors identified in the first phase of this study.

Denby, Newton, and CKSU shared several of the characteristics associated with greater change which were reported in Chapter IV. One of these was a change to a coeducational student body. Newton University and CKSU were nominally coeducational but both experienced dramatic increases in
their female student enrollments during the 1970s. Denby was all-male and began admitting women for the first time in 1972. The change was quite deliberate at Denby and Newton, but fortuitous at CKSU. The consequences were much the same however. Women became a more visible presence on campus. Highly competitive female students impressed skeptical male faculty in nontraditional disciplines and helped erode negative stereotypes. The presence of more women students legitimized demands for more women faculty.

Faculty expansion, particularly in areas where women doctorates were readily available, was also a facilitating factor. Expansion in the liberal arts and social sciences was an important factor in CKSU's success. Denby experienced some faculty expansion between 1972 and 1976 which helped bring in a critical mass of junior women faculty. Expansion is more difficult to judge at Newton. However, there was a substantial turnover in the humanities area and a significant number of women were hired. Faculty growth was present at Denby and Newton, but it appeared to play a smaller role in the constellation of factors at these two institutions than it did at CKSU.

Availability of qualified candidates influences the degree of success an affirmative action program is likely to achieve. The same mechanisms were in place to promote
opportunities for women and minorities on these campuses. In fact, far more effort was reported in recruiting black faculty than female faculty. Yet, all three institutions reported serious difficulties locating potential black faculty, while they had some success recruiting women. Low availability of black doctorates is one part of the problem. A difference in the dynamics of racism and sexism may be another. The fact that the pool of black doctorates has not significantly increased in recent years means even longer delays in integrating university faculties.

Campus reform efforts were connected to some extent to events and changes in the environment. The national climate supporting social justice reforms was a positive influence at Denby and Newton. Changes in CKSU's surrounding community had an impact on the institution's growth and mission and indirectly benefitted women.

IMPLEMENTATION STRATEGIES

This fifth area of investigation was derived from a need for descriptive information on actual implementation strategies and does not draw specifically on either Newcombe or Taylor.

Despite significant differences in institutional size and make-up, the three universities utilized very similar
implementation strategies. The most important features of their policies and programs were:

1. Affirmative action reforms had the full support of top administrators.
2. A full-time Affirmative Action Officer reported to the key change agent.
3. The AA Officers were women and/or members of minority groups. They were also described as competent and personally committed.
4. Approval from the AA Officer was required at two stages during the faculty search process—after a search plan had been developed and before a final offer was extended.
5. AA Officers were given the authority to delay or halt a search or an appointment, if good faith efforts had not been made to locate female and minority candidates.
6. Personnel decisions were monitored by central administrators and questioned if they did not help the university meet its goals.
7. Personal contact with women and minorities is considered crucial for successful recruitment, especially where the pool of candidates is very small. (Denby and Newton provided explicit directions on how to make such contacts.)
8. Visiting faculty positions, lectureships, and other temporary appointments were used to bring women and minority scholars to campus.

Denby and Newton used additional measures. For instance, the role of ombudsman, or grievances officer, was more fully developed. Denby's Affirmative Action Officer played this role without the special title, while Newton had two administrators whose full-time responsibilities were problem resolution. Also, incentive programs were designed and implemented, and evaluation of on-going efforts was apparent.

Newton and CKSU had decentralized responsibility for affirmative action with oversight in the central administration. This structure was very likely a reflection of their greater size and complexity compared to Denby College. All three universities had mechanisms to identify and resolve implementation problems. None assumed that the adoption of the policy would lead to significant change.

SUMMARY

In sum, there were a number of similar factors operating on the three campuses. No one factor accounted for the full extent of change; rather, it was a constellation of factors and conditions which allowed these institutions to
make greater progress than their peer institutions in hiring women faculty. While absolute weights would be difficult to assign to each of the contributing elements, some clearly played a more important role than others. Existence of the federal mandate, leadership from a committed administrator, creation of effective substructures to manage implementation, participation of women in the process, and close monitoring of the reform effort were vital elements of successful implementation. Stability of the top executive, availability of women doctorates, faculty expansion, increasing numbers of women students, and an internal and external environment conducive to change facilitated the effort to hire and promote women faculty.
Chapter IX
CONCLUSIONS

INTRODUCTION

Implementation of a federal mandate like affirmative action shares some characteristics with the implementation process for an educational innovation, but there are important differences. The lack of incentives, such as the availability of federal dollars to finance the reform, is a crucial one. However, many barriers to institutional change remain the same. Resistance comes from individual and organizational sources and these sources of resistance must be dealt with if the reform is to be adopted and sustained. While recognizing the multiplicity of barriers to reform in higher education, this study has deliberately focused on the identification of conditions which facilitate change and lead toward full implementation of federal mandates.

Findings from the study contribute to the literature in several ways. First, the case studies add to a growing body of knowledge about implementation experiences at specific universities. The influence of institutional context on policy adoption and implementation is not yet well understood and an accumulation of documented experiences may eventually lead to more useful generalizations. Second, the
key factors identified at the three campuses corroborate the importance of certain theoretical variables identified by Newcombe (1981) and suggest ways in which her theory of mandated change might be modified. The study also has practical value in the description of actual affirmative action practices.

In this final chapter, concepts from the literature on planned change are applied to the study findings. Modifications of Newcombe's theory are suggested and implications drawn for those involved in affirmative action reform efforts.

MODELS OF ORGANIZATIONAL CHANGE AND AA IMPLEMENTATION

Rational-empirical change strategies were used to varying degrees by institutional leaders at Denby, Newton, and CKSU. The clearest case of rational management assumptions at work was evident at Newton. Change advocates repeatedly referred to the necessity of documenting problems and/or inequities in their presentations to officials. "Hard" evidence was expected and, when offered, appeared to influence decision making. One indication of the value attached to data is the recent university prize awarded to the faculty chair of the Equal Opportunity Committee whose contribution to the University was three volumes of tables and charts on
the status of women and minorities. This mass of data proved the obvious, according to the past AA Officer, but did so in terms the University could understand and would appreciate. An experimental approach to the proposal for monitoring appointments at the school-level is also an outgrowth of rational management assumptions.

CKSU officials were perhaps the least convinced of the utility of rational strategies for change. Their skepticism was most evident by their investment in normative-reeducative strategies which were designed to change attitudes. They would argue that discrimination is not based on a rational set of beliefs, and accurate information does little to change nonrational assumptions. Attitude change, they hope, will lead to behavior change, and ultimately to the hiring and more equitable treatment of blacks and women. One of their major AA activities builds on precepts of the organizational development model: an external consultant challenges individuals in a small group setting to examine their personal values and assumptions about race and how these affect interactions between blacks and whites. The experience is highly personal and tends to build a cohesive working group where one had not previously existed. The link between attitude and behavior changes is not as straightforward as one would hope. Differences in the hir-
ing decisions of CKSU attendees and nonattendees have been
difficult to measure (O'Sullivan & Stewart, Note 9).

The political model of planned change emphasizes the
role of interest groups in influencing decision making pro-
cesses. Those who have the authority to institute the
change must be persuaded to do so. The goal is often a rea-
lignment of power (a structural change) rather than a modi-
fication of attitudes and values of persons within the
organization. Interest groups working on behalf of women
faculty were an important factor on all three campuses in
this study. They were a vocal and generally effective con-
stituency for the reform effort. A usual assumption of the
political model was not true however. That is, the decision
to adopt the reform was not a direct result of prior inter-
est group activity, in large part because the mandate was
imposed from the outside and because so few women were actu-
ally employed in these institutions before the 1970s.
Women's groups were more influential in keeping AA on the
administrative agenda during the subsequent stages of imple-
mentation.

Affirmative action change efforts also benefitted from
the involvement of institutional gatekeepers and opinion
leaders, a finding consistent with the social interaction
model of planned change. These people were respected fac-
ulty members and administrators, whose reputations lent credibility to the causes they espoused and who were able to put AA issues on the agenda of groups and individuals who had the power to make change.

Finally, the bureaucratic model sensitizes change leaders to the importance of altering routine decision making conducted at all levels of the organization. Affirmative action was not fully implemented until new procedures had been put into place and operating routines of numerous individuals and committees responsible for personnel decisions altered. The university equivalent to "street-level bureaucrats" is a member of a search committee, a senior faculty member, or a department head whose discretion and expertise are closely guarded. Only by controlling some of their discretionary power and changing previous patterns of recruitment were women and minorities likely to emerge as serious candidates for faculty positions.

None of these models describes completely the process of change as it occurred at Denby, Newton, and CKSU. However, aspects of the institution's culture predisposed change advocates to adopt certain strategies in preference to others. The best examples of this were Newton's reliance on rational management and CKSU's use of strategies consistent with organizational development principles.
REFLECTING BACK ON NEWCOMBE AND TAYLOR

Specific points of agreement among the findings from the case studies and the work of Newcombe and Taylor have already been delineated in Chapter VIII. Certain of these points are elaborated on in this section and modifications suggested for Newcombe's theory of mandated change.

Leadership

Findings from the case studies underline the critical importance of manipulable factors in creating positive change. The most important of these is sustained and effective leadership for the change effort provided by a respected top-level administrator.

Newcombe suggests that leadership is most important during the initial stages of adoption and implementation of a mandate. While leadership was found to be crucial in the early stages in this study, the cases also raise the question whether there is any point at which strong leadership from the top is not needed in order to maintain AA implementation. Affirmative action policies have been actively pursued for more than a decade at Newton and Denby, and nearly that long at CKSU. Yet, nowhere were the policies so well institutionalized that top-level support could be withdrawn without jeopardizing the gains made. This concern was
raised most directly at Denby where a recent change in President and Affirmative Action Officer signaled a change in the priority given to AA issues over the previous decade. The past President was closely identified with the reform effort and the personal skills of the President and the AA Officer had been a driving force for implementation. The "personality dependence" of the policies was most striking in this instance, but very much present on the other campuses as well. It should be noted that although these three universities were selected because they had experienced greater change, they are all still some distance from attaining an equitable representation of women on their faculty. Thus, there is a continuing need for affirmative action efforts in the 1980s.

The concept of a "performance gap" is one of the most useful in the change literature. March and Simon (1958) emphasized the need for a performance gap as a motivating force for change. Unless organizational members, leaders or external supporters perceive a wide gap between what they think the organization should be doing and what they believe it is doing, they are not likely to bother changing it (Lindquist, 1978). Recognition of a performance gap is an important step in gaining the leader's commitment to change and raising the awareness of the organization members that a problem exists.
Recognition of the gap came about in several ways at Denby, Newton, and CKSU. Perhaps the most important source of the gap were their shared histories as male-dominated institutions. These three universities were quite unlike one of Taylor's case sites where AA policies were never fully implemented because they had always had "some blacks and women" and therefore AA was never viewed as a compelling organizational problem. All three of these institutions entered the 1970s with an exceptionally low representation of women (2% at Newton, 4% at Denby, and about 6% at CKSU). However, low representation of women faculty was not a problem any of the three were especially concerned about before the issuance of the federal mandate. Thus, recognition of the gap as a "problem" was precipitated by an outside force. The presence of active women's groups pointing out the existence of discrepancies and pressing for positive change was a third way the performance gap was brought to the attention of the university community. The increasing visibility of highly competent women students worked much the same way.

When the performance gap is recognized and remedial action prescribed by those outside the institution, as is the case for affirmative action mandates, it is exceedingly hard to build a consensus for change if that perception is not shared by those within:
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. (Zaltman, et al, 1977, p. 22)

All three institutions had the (dubious) advantage of starting with a clearly recognizable problem. Although the mandate was imposed from the outside, leaders at these universities framed their remedial efforts in response to an internal recognition of the need for change. This process of claiming ownership of the problem and the means to resolve it was most visible at Denby College, but it was present at Newton and CKSU as well. Leaders made continual references to the gap in public speeches and informal meetings, spreading awareness of the problem and promoting widespread participation in generating solutions.

Findings from this study also support Newcombe's conclusion that change-oriented administrators create and utilize offices, committees, and staff roles to provide the mechanistic and political support needed for implementation. Competent AA Officers were a potent force at Denby, Newton, and CKSU. In addition to their personal skills, their close alliance to the key change agent enhanced their clout and effectiveness.
Thus, this study adds more evidence in support of the important role played by a committed top administrator in effecting substantive change. The case material makes a unique contribution by delineating how leader commitment was translated into action.

**Interest Group Activity**

Interest group activity is not a variable specifically identified in Newcombe's theory and its important role at these three sites suggests that the theory should be modified to incorporate it. Like leader behavior, interest group activity has many facets and closely interacts with other major variables. For instance, it is questionable whether an "effective" interest group can thrive in a hostile environment where the administration is not responsive to identified problems and pressure to change. The relative cohesiveness among women at Newton and Denby may be a function of the fact that they have had some influence on the policy making process; the administration has been responsive in making dozens of small and large changes at their request.

At all three universities, women have decided that working for change within the system is preferable to legal action. This reflects a positive assessment of their power
resources which were greatly enhanced by the visibility and participation of senior women with established reputations. It also reflects their sense that administrators are responsive to their concerns.

Women's groups were closely allied with those structures designed to implement AA mandates—the AA Office, special and standing committees, and the ombudsmen. Information on on-going and new problems, festering complaints, and inappropriate behavior was fed through the system so appropriate action could be taken.

Given an environment reasonably conducive to female achievement, women's groups can be an asset in attracting new women to the campus. Not only do members actively solicit applications from female colleagues, they socialize new members in the norms and mores of the university, thereby increasing the likelihood they will stay and survive the tenure process. Women at all three campuses devoted substantial time and energy to improving their own status, often at great cost to their own careers. Much of the burden of change rests on the shoulders of the victims of past discrimination. One male administrator at Newton was acknowledging this reality when he said: "If there is going to be anything done for women, women are going to be doing a great deal of it."
The notion of critical mass and its positive effect on further recruitment and retention was mentioned on all campuses. One interviewee summed up its importance by saying: "The more you have, the more you get." This piece of conventional wisdom must be modified by the findings of the quantitative portion of this study however. Many universities which did have a more equitable representation of women in 1971 (15+) did not make notable gains during the decade. Two probable explanations for this are: the lack of a perceived performance gap may have undermined commitment to AA efforts, and perhaps the critical mass must be a satisfied one before it positively influences hiring and retention. Aspects of a climate conducive to female achievement and satisfaction are explored below.

The important role played by women in effecting change on their own behalf suggests that interest group activity should be a variable added to Newcombe's basic model. By identifying problems and continued inequities, women's groups increased awareness of the performance gap and offered solutions to close it. Their visible presence meant that there was an interested constituency for the change effort and continual pressure for full implementation.
STRUCTURAL AND ENVIRONMENTAL INFLUENCES

Taylor's work is the source of several potential variables which can be broadly described as structural and environmental factors. Environmental influences emanate from outside the institution and create conditions more or less conducive to change. The only significant external variable identified in the study of Title IX implementation was government intervention. Certain general environmental conditions were found to have a positive effect on institutions in this study. A national climate supporting social justice reforms in the late 60s and early 70s is one example; increasing availability of female doctorates is another; significant change in the community surrounding the university is a third. These were indirect positive influences that facilitated change on behalf of women.

Structural changes provided the opportunity to make progress in hiring women faculty. Expansion or turnover in disciplines where qualified women were readily available is the best example. Simply removing active discrimination in these departments resulted in a significant pool of qualified women candidates.

A conducive national climate and internal conditions seem to legitimize special attention to AA, but they do not guarantee that someone will make the effort. One inter-
viewee reflected on this in her comments about special recruitment for women students at Newton: "What the national climate will say is that nobody will say "no" to (special efforts), and they might even support them. But without a person willing to do it, I don't think the national climate will see that it gets done. You need both."

The relative importance of environmental and structural influences compared to other factors appears to vary by institution. Change in the local region and substantial expansion in the liberal arts were more important to progress at CKSU. This is very likely a reflection of an internal environment more resistant to change than was characteristic of Denby and Newton. While these factors certainly provide greater opportunity and additional impetus for reform, the question remains why is it that other institutions faced with a very similar set of conditions in their internal and external environment did not make similar gains in the status of women faculty?

There may indeed be a factor such as "institutional climate" of which leadership commitment and women's support groups are an important part, which makes hiring and long-term retention of talented women ultimately more successful. This study did not attempt to measure or define such a vari-
able as a climate conducive to female achievement, but anecdotal evidence suggests that it exist. Good faith efforts to implement affirmative action would certainly be one of its major components. Presence of a critical mass of visible respected women is another possible element; a refusal by top administrators to condone sexist treatment of women faculty and staff may be a third; attention to nurturing and rewarding quality and merit in all people may be another. All of these interact to create an institutional environment conducive to recruitment and retention of women faculty. It is possible that "climate" is an important factor in explaining why the records of some universities show significant fluctuations in the number and percentage of women from year-to-year and others have a steady upward progression.

IMPLICATIONS

The relative importance of manipulable factors in creating positive change for women on the three campuses is encouraging evidence that serious attention to affirmative action implementation can produce measurable gains. Significant reform is unlikely to occur without the sustained leadership of a top administrator. Deep commitment to affirmative action principles seems to derive from personal
values and experiences (a direct or indirect experience with discrimination, e.g., by being Jewish, or being married to a professionally trained woman), and from recognition of a performance gap. This official must be willing and able to act as an internal change agent. Actions that seem most effective in promoting progress are: assigning high priority to implementation; hiring competent staff members to develop and monitor AA procedures and providing them with sufficient clout to do the job; giving high visibility to AA issues and continually evaluating the progress achieved; holding decision makers accountable; encouraging widespread participation in the implementation process; and fostering the development of responsible organizations representing women's interests. The existence of the federal mandate and stated intent to enforce it provided additional leverage for the change effort. However, an internally recognized performance gap and ownership of the reform effort seems to produce more widespread commitment to change.

Specific procedures emerged from this top-down communication of serious intent to comply to the mandate. Especially important was the monitoring of the search and appointment process. Affirmative Action Officers had the authority to delay or stop faculty searches where good faith efforts were lacking. They did so in enough cases that
resistant departments learned the only way that they would get an appointment through was to make an active search and to seriously consider nontraditional candidates. The long-term approach to recruitment was also an important aspect of their success.

The gains made for women on the three campuses might be best described in the words of one Newton interviewee who judged their AA record as not "good" but among the "least bad." However, informants expressed even greater disappointment in the amount of progress they had made in achieving a racially diverse faculty. At CKSU, leadership commitment, AA structures, policies, and resources were largely focused on minority hiring, yet more significant change occurred for white women. On the other two campuses, recruitment of black faculty consumed more resources and produced less success than recruitment of women.

Why is it that affirmative action efforts produced somewhat better results for white women than for blacks of either gender at these campuses? Interviewees suggested a few differences in conditions operating for women and minorities that are possible explanations: (a) the number of blacks completing doctorates is very low and has not substantially increased in the last few years; (b) geographic location and past reputation of the institution may make
recruitment especially difficult for certain universities; and (c) the cumulative effects of educational disadvantage and racist attitudes may make it more difficult to achieve progress for blacks than for women.

Opportunity to make significant progress for women or minorities may be seriously diminished in coming years. The senior, tenured ranks have swelled over the last decade as large cohorts of male faculty hired in earlier years have been promoted. Extension of the retirement age and fiscal constraints further reduce the number of positions available and make the granting of tenure to those women and minorities who have been hired a less likely occurrence. Competition for available positions in many disciplines will be intense. Given these constraints, overall progress in achieving an equitable representation of women in doctorate-granting universities may be even more difficult to achieve in the 80s than it has been over the last decade, despite increasing availability of qualified candidates. While this pessimistic outlook may be generally accurate for higher education, the first phase of this study documents the wide range of existing conditions and of AA performance made in the last decade. There is little risk in predicting that future trends will differentially affect these universities and that some will be more successful than others in diver-
sifying their faculty and creating an environment conducive to female achievement. Full implementation of affirmative action will continue to require the kind of effort and commitment that was invested by individuals and groups at Denby, Newton, and CKSU.
REFERENCES NOTES


264
REFERENCES

Abramson, J. Measuring success; or, whatever happened to affirmative action. *Civil Rights Digest*, 1977, 9(2), 14-17.


Elmore, R. F. Organizational models of social program implementation. Public Policy, 26, 185-228.


Seabury, P. HEW and the universities. Commentary, 1972, 52,, 38-44.


Appendix A

LETTER REQUESTING PERMISSION TO VISIT CAMPUS

A LAND-GRAIN UNIVERSITY

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

August 27, 1982

President
Denby College

Dear Dr. [Blank]:

I spoke with [the Denby AA Officer] earlier this week and she suggested I contact you directly with my request to visit Denby this fall to study affirmative action practices for women faculty on your campus. This letter outlines my proposed research and reasons for wanting to visit Denby in hopes of persuading you that the time spent will be worthwhile.

I have been awarded a dissertation fellowship from the American Association of University Women to conduct research on affirmative action for women at doctorate-granting universities. The first phase of the project involved an assessment of change over the last decade and identification of particular universities which appear to have been more successful than others in hiring and promoting women faculty. The second phase of the research includes on-site visits to four campuses to explore the factors that account for their success. The research is expected to be helpful in identifying conditions, policies, and practices which result in positive change for women. I have enclosed a one-page description of the study for your information and to share with others who may need more background.

Based on records I used from the National Center for Education Statistics, Denby seems to have made significant gains...
for women, especially in hiring at the assistant professor rank. The record for your institution is indeed impressive. I would like to include Denby among my case study institutions and to explore during the site visit those factors which seem to have been most important in creating the change that has occurred there.

My purpose in writing to you is to secure permission for a week long visit to the campus and to ask for assistance in identifying appropriate faculty and officials to interview. I will also need access to documents and reports that will help me trace the evolution and outcome of affirmative action efforts and the critical events which shaped the institution's policies and practices. Much of the information I anticipate needing is considered "public" and the requests should not violate the confidentiality extended to records of particular individuals.

Because of its size, mission, and history, Denby provides an important context for this study of institutional change and successful approaches to affirmative action. I do hope your institution will agree to participate and that the visit can be scheduled at a time convenient for you and others to be interviewed. I will call you after September 1 to discuss the request further and to answer any questions you might have about the study.

Thank you in advance for considering my request. I look forward to talking to you soon.

Sincerely,

Patricia B. Hyer
Education Research and Evaluation
Virginia Polytechnic Institute and State University
Phone (703) 961-5578

enc: Study summary
Letter from G. Fenstermacher

cc: (AA Officer)
Appendix B

STUDY SUMMARY

Affirmative Action for Women:
An Assessment of Progress at Doctorate-Granting Universities

Overview of the Study:

The study has two major phases. The first phase, already completed, included a quantitative assessment of the collective and individual progress made by doctorate-granting universities in hiring women faculty during the 1970s. The records of individual institutions were examined to determine if substantial variation in hiring and promoting women existed among relatively similar institutions. Progress was assessed by comparing 1980-81 data from the annual HEGIS Employee Survey to base-year data (1971 or 1972). Five change variables and a composite change index were created to identify those universities experiencing the greatest positive change during the decade.

Based on the results of the first phase, three high-ranking institutions will be selected for in-depth study and site visits. Information concerning the complex interaction of forces that produced positive change for women on each campus will be sought during interviews with faculty members and university administrators and through a review of records and reports. Those factors accounting for the relative success of the university's affirmative action efforts will be described and analyzed in case study format.
Appendix C

LETTER OF SUPPORT

COLLEGE OF EDUCATION

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blackburg, Virginia 24061

DIVISION OF CURRICULUM AND INSTRUCTION

Realizing that you may receive many requests of the kind Pat Hyer is making, I thought you might want to know something about her work. I and the other members of her dissertation committee hope this information will assure the value of your cooperation.

Pat is one of the few students whose academic achievements qualified her for entry into the Educational Policy Studies Program, an option within the Ph.D. program in Educational Research and Evaluation. With all her coursework completed, her grade point average is 3.98. This year she received a fellowship from the American Association of University Women Foundation, one of 115 successful applicants out of more than 1200. She has completed the most rigorous set of statistics and research courses offered by the College, and is well prepared to undertake this study.

Her dissertation committee is impressed with her topic, and all members of the committee are working closely with her. With your assistance, we believe her work will be a significant contribution to a topic of great importance. Should you have any questions or concerns, please feel free to discuss them with Pat or me. You will find her a warm and engaging person, easy to speak with though very discreet. Should you want to talk with me, my office number is (703) 961-3442; home number is (703) 933-1922.

Thank you for your help.

Cordially,

Gary Fenstermacher
Professor, and Program Area Leader
Appendix D
LETTER REQUESTING AN INTERVIEW

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blackburg, Virginia 24061

October 1982

Dear ________:

I am writing at the suggestion of (the former AA Officer) to request an interview with you in mid-November on the topic of affirmative action for women faculty. I have been awarded a dissertation fellowship from the American Association of University Women to conduct research on affirmative action for women at doctorate-granting universities. The first phase of the project involved an assessment of change over the last decade and identification of particular universities which appear to have been more successful than others in hiring and promoting women faculty. The second phase of the research includes on-site visits to three campuses to explore the factors that account for their success. The research is expected to be helpful in identifying conditions, policies, and practices which result in positive change for women.

Denby makes an important and interesting case study because of its size, mission, and history, and the significant gains made for women faculty, especially in hiring at the assistant professor rank.

President ________ has reviewed and approved my request to visit Denby and I plan to come the week of November 15th to interview faculty and administrators whose views and experiences might shed some insight into the development of affirmative action policies on your campus. Ms. ________ in the

274
Affirmative Action Office has offered to help schedule appointments for me. If you are able and willing to share your impressions and experiences with me sometime during that week, please call the AA Office to set up an appointment convenient for your schedule. I am fully aware of the many pressing commitments faced by college faculty and administrators and therefore appreciate your willingness to consider and, hopefully, consent to my request for an interview.

I look forward to meeting with you during the week of November 15th. Additional background on my study is attached for your information.

Sincerely,

Patricia B. Hyer
Educational Research &
Evaluation
Virginia Polytechnic Institute
and State University
Phone: 703-961-5578

att: Study Summary
Letter from G. Fenstermacher
Dear __________: 

Many thanks for sharing with me your experiences and thoughts on affirmative action at Denby College over the last decade. I was warmly welcomed everywhere I went on campus and was impressed by the thoughtful attention these issues have attracted. While there is more that can and should be done, Denby can be proud of the changes that have occurred. I hope that a diversified faculty will continue to be an important priority and that more progress will be achieved in the years to come.

Again, thank you so much for your time and thoughts. My visit was both enjoyable and informative.

Sincerely,

Patricia B. Hyer  
Education Research and Evaluation
Appendix F

LETTER REQUESTING VALIDATION OF CASE STUDY

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

May 1983

Dear ______________:

Thanks so much for agreeing to review the case study. I realize this is a considerable imposition on your time, but I had hoped that checking with you and __________ would help identify those misstatements of fact and interpretation that should be corrected before publication.

It was my intent to present a reasonably faithful and readable portrait of affirmative action implementation on your campus. If I have failed to do so, I would appreciate your suggestions as to how it might be improved.

If possible, I would like to have your corrections and/or comments by __________. I can be reached at home (703) 951-3883 or at the office (703) 961-5578, if you would prefer to call.

Please accept my sincere thanks for your assistance in validating the case study.

Sincerely,

Pat Hyer
Education Research
and Evaluation
Appendix G

VARIABLE DEFINITIONS

<table>
<thead>
<tr>
<th>Abbreviated Variable Name</th>
<th>Variable Name</th>
<th>Variable Definition &amp; Coding Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>pro_f</td>
<td>Proportion women, 1980</td>
<td>Proportion of total 1980 faculty which is female; includes all ranks</td>
</tr>
<tr>
<td>stpt</td>
<td>Starting point</td>
<td>Proportion of total faculty in the base year (1971 or 1972) which is female; includes all ranks</td>
</tr>
<tr>
<td>cfacsize</td>
<td>Change in faculty size</td>
<td>(1980 faculty total - Base year faculty total)/Base year faculty total</td>
</tr>
<tr>
<td>tot</td>
<td>Total faculty 1980</td>
<td>Total number F-T instructional faculty, 1980-81.</td>
</tr>
<tr>
<td>scitech</td>
<td>Proportion scientific/technical degrees awarded</td>
<td>(Sum of degrees awarded at all levels in agriculture, engineering, biological &amp; physical sciences, computer science, &amp; math in 1980)/Total degrees awarded, 1980</td>
</tr>
<tr>
<td>enroll</td>
<td>Student enrollment, 1980</td>
<td>Student enrollment, Fall 1980</td>
</tr>
<tr>
<td>egrowth</td>
<td>Enrollment growth</td>
<td>(1980 enrollment - Base year enrollment)/Base year enrollment</td>
</tr>
<tr>
<td>profstu</td>
<td>Proportion women students</td>
<td>Proportion of women students, 1979</td>
</tr>
<tr>
<td>control</td>
<td>Control</td>
<td>Combination pub/priv (0); public (1); private (2)</td>
</tr>
<tr>
<td>carnegie</td>
<td>Carnegie classification</td>
<td>Four subclassifications of Doctorate-Granting Universities: Research I (1); Research II (2); Doctorate-Granting I (3); Doctorate-Granting II (4)</td>
</tr>
<tr>
<td>obereg</td>
<td>Region of the country</td>
<td>Regions as determined by Dept of Commerce: (1) New Eng: CT ME MA NH RI VT (2) Mid East: DE DC MD NJ NY PA (3) Great Lakes: IL IN MI OH WI (4) Plains: IA KS MN MO NE ND SD (5) Southeast: AL AR FL GA KY LA MS NC SC TN VA WV</td>
</tr>
<tr>
<td>Abbreviated Variable Name</td>
<td>Variable Name</td>
<td>Variable Definition &amp; Coding Information</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>obereg (cont)</td>
<td>(6) Southwest: AZ NM OK TX</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(7) Rocky Mountains: CO ID MT UT WY</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(8) Far West: AK CA HI NV OR WA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(9) Outlying areas: AO CZ GU PR TO VI</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0) US Service Schools</td>
<td></td>
</tr>
<tr>
<td>citysize</td>
<td>Size of SMSA in which univ is located</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0) Not identified</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) outside any SMSA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) anywhere w/in an SMSA of less than 250,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3) anywhere w/in an SMSA of 250,000-499,999</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4) anywhere w/in an SMSA of 500,000-999,999</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(5) in SMSA of 1,000,000-1,999,999 outside center city</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(6) in SMSA of 1,000,000-1,999,999 inside center city</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(7) in SMSA or SCSA of 2,000,000 or more outside center city</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(8) in SMSA or SCSA of 2,000,000 or more w/in center city</td>
<td></td>
</tr>
<tr>
<td>landgr</td>
<td>Landgrant status Non-landgrant (0)/Landgrant (1)/Member NASULGC (2)</td>
<td></td>
</tr>
<tr>
<td>c_pro_f</td>
<td>Change in proportion of women faculty 1980 proportion - Base year proportion</td>
<td></td>
</tr>
<tr>
<td>cratio</td>
<td>Change in ratio male:female (Base year ratio - 1980 ratio)/Base year ratio</td>
<td></td>
</tr>
<tr>
<td>inwjobs</td>
<td>Change in number of women (1980 number - Base year number)/Base year number</td>
<td></td>
</tr>
<tr>
<td>c_ffull</td>
<td>Change in no. of female full professors (1980 number - Base year number)/Base year number</td>
<td></td>
</tr>
<tr>
<td>ctenwom</td>
<td>Change in no. tenured women (1980 number - 1974 number)/1974 number</td>
<td></td>
</tr>
<tr>
<td>cindex</td>
<td>Composite change index (Sum of standardized variables: c_pro_f, cratio, inwjobs, c_ffull, &amp; ctenwom)</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix H

**INTERCORRELATION MATRIX**

<table>
<thead>
<tr>
<th></th>
<th>CINDEX</th>
<th>PROF</th>
<th>STAT</th>
<th>PROFSTU</th>
<th>CPSIZE</th>
<th>SCITECH</th>
<th>EGROWTH</th>
<th>ENROLL</th>
<th>CONTROL</th>
<th>CITYSIZE</th>
<th>OBEREG</th>
<th>CARNegie</th>
<th>LANDOR</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CINDEX</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROF</td>
<td>-0.01</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAT</td>
<td>-0.34</td>
<td>0.91</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROFSTU</td>
<td>-0.15</td>
<td>0.79</td>
<td>0.78</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPSIZE</td>
<td>0.30</td>
<td>0.24</td>
<td>0.19</td>
<td>0.15</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCITECH</td>
<td>0.04</td>
<td>-0.58</td>
<td>-0.53</td>
<td>-0.76</td>
<td>-0.06</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EGROWTH</td>
<td>0.19</td>
<td>0.08</td>
<td>0.03</td>
<td>0.02</td>
<td>0.39</td>
<td>0.11</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENROLL</td>
<td>-0.08</td>
<td>0.01</td>
<td>0.04</td>
<td>0.13</td>
<td>0.08</td>
<td>-0.17</td>
<td>0.03</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTROL</td>
<td>0.16</td>
<td>-0.04</td>
<td>-0.13</td>
<td>-0.33</td>
<td>-0.14</td>
<td>0.07</td>
<td>-0.05</td>
<td>-0.44</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CITYSIZE</td>
<td>-0.01</td>
<td>0.12</td>
<td>0.09</td>
<td>-0.10</td>
<td>-0.08</td>
<td>-0.03</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.60</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OBEREG</td>
<td>-0.16</td>
<td>-0.06</td>
<td>-0.01</td>
<td>0.03</td>
<td>0.14</td>
<td>-0.05</td>
<td>0.09</td>
<td>-0.03</td>
<td>-0.28</td>
<td>-0.22</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CARNegie</td>
<td>-0.01</td>
<td>0.31</td>
<td>0.36</td>
<td>0.27</td>
<td>-0.23</td>
<td>0.06</td>
<td>-0.40</td>
<td>-0.09</td>
<td>-0.15</td>
<td>0.02</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LANDOR</td>
<td>-0.06</td>
<td>-0.15</td>
<td>-0.11</td>
<td>0.06</td>
<td>0.06</td>
<td>0.02</td>
<td>0.34</td>
<td>-0.68</td>
<td>-0.38</td>
<td>0.18</td>
<td>-0.10</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>0.00</td>
<td>-0.07</td>
<td>-0.07</td>
<td>0.10</td>
<td>-0.04</td>
<td>0.00</td>
<td>0.88</td>
<td>-0.44</td>
<td>-0.15</td>
<td>0.60</td>
<td>-0.55</td>
<td>0.51</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix I

#### Raw Scores (Standardized Scores)

<table>
<thead>
<tr>
<th>UNIVERSITY</th>
<th>C PROP</th>
<th>IMGMJOBS</th>
<th>C FPULL</th>
<th>CRATIO</th>
<th>CTENNOM</th>
<th>COMPOSITE</th>
<th>CHANGE INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denby College*</td>
<td>.16</td>
<td>3.44</td>
<td>4.00</td>
<td>.80</td>
<td>2.00</td>
<td>13.77</td>
<td></td>
</tr>
<tr>
<td>(3.57) (4.94) (1.31) (2.08)</td>
<td></td>
<td></td>
<td></td>
<td>(1.87)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CESU*</td>
<td>.10</td>
<td>2.12</td>
<td>6.00</td>
<td>.64</td>
<td>1.92</td>
<td>10.10</td>
<td></td>
</tr>
<tr>
<td>(1.99) (2.70) (2.21)</td>
<td></td>
<td></td>
<td></td>
<td>(1.76)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newton University*</td>
<td>.07</td>
<td>2.75</td>
<td>3.50</td>
<td>.72</td>
<td>2.50</td>
<td>9.95</td>
<td></td>
</tr>
<tr>
<td>(0.68) (3.74) (1.08)</td>
<td></td>
<td></td>
<td></td>
<td>(1.76)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Univ of Notre Dame</td>
<td>.05</td>
<td>1.50</td>
<td>1.00</td>
<td>.68</td>
<td>5.00</td>
<td>9.17</td>
<td></td>
</tr>
<tr>
<td>(0.28) (1.65) (-0.05)</td>
<td></td>
<td></td>
<td></td>
<td>(1.60)</td>
<td>(5.68)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U of SC, Columbia</td>
<td>.09</td>
<td>2.11</td>
<td>2.33</td>
<td>.52</td>
<td>3.00</td>
<td>9.10</td>
<td></td>
</tr>
<tr>
<td>(1.68) (2.69) (0.56)</td>
<td></td>
<td></td>
<td></td>
<td>(1.03)</td>
<td>(3.14)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U of South Florida</td>
<td>.01</td>
<td>-1.11</td>
<td>21.00</td>
<td>.06</td>
<td>1.06</td>
<td>7.24</td>
<td></td>
</tr>
<tr>
<td>(-1.01) (-0.70) (8.78)</td>
<td></td>
<td></td>
<td></td>
<td>(0.68)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice University</td>
<td>.08</td>
<td>1.61</td>
<td>2.33</td>
<td>.63</td>
<td>2.00</td>
<td>6.93</td>
<td></td>
</tr>
<tr>
<td>(1.25) (1.84) (0.56)</td>
<td></td>
<td></td>
<td></td>
<td>(1.42)</td>
<td>(2.87)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W Poly Inst &amp; St U</td>
<td>.07</td>
<td>2.32</td>
<td>0.77</td>
<td>.57</td>
<td>1.67</td>
<td>6.60</td>
<td></td>
</tr>
<tr>
<td>(1.06) (3.05) (-0.18)</td>
<td></td>
<td></td>
<td></td>
<td>(1.22)</td>
<td>(1.45)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rensselaer Poly Inst</td>
<td>.03</td>
<td>2.00</td>
<td>2.00</td>
<td>.64</td>
<td>2.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(-0.41) (2.50) (0.40)</td>
<td></td>
<td></td>
<td></td>
<td>(1.45)</td>
<td>(1.87)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lehigh Univ</td>
<td>.04</td>
<td>1.27</td>
<td>1.00</td>
<td>.31</td>
<td>3.33</td>
<td>5.82</td>
<td></td>
</tr>
<tr>
<td>(-0.10) (0.97) (0.97)</td>
<td></td>
<td></td>
<td></td>
<td>(3.56)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown Univ</td>
<td>.07</td>
<td>1.07</td>
<td>0.93</td>
<td>.55</td>
<td>2.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.90) (0.92) (-0.35)</td>
<td></td>
<td></td>
<td></td>
<td>(1.14)</td>
<td>(2.98)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Princeton U</td>
<td>.06</td>
<td>1.28</td>
<td>2.50</td>
<td>.56</td>
<td>1.93</td>
<td>5.56</td>
<td></td>
</tr>
<tr>
<td>(0.73) (1.28) (0.63)</td>
<td></td>
<td></td>
<td></td>
<td>(1.25)</td>
<td>(1.60)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of FL</td>
<td>.08</td>
<td>2.00</td>
<td>1.00</td>
<td>.50</td>
<td>5.00</td>
<td>5.04</td>
<td></td>
</tr>
<tr>
<td>(1.27) (2.50) (0.06)</td>
<td></td>
<td></td>
<td></td>
<td>(1.24)</td>
<td>(-0.03)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of KY</td>
<td>.07</td>
<td>1.30</td>
<td>3.75</td>
<td>.47</td>
<td>.87</td>
<td>4.65</td>
<td></td>
</tr>
<tr>
<td>(0.89) (1.31) (1.19)</td>
<td></td>
<td></td>
<td></td>
<td>(0.82)</td>
<td>(0.44)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vanderbilt Univ</td>
<td>.09</td>
<td>1.15</td>
<td>0.80</td>
<td>.48</td>
<td>1.45</td>
<td>4.60</td>
<td></td>
</tr>
<tr>
<td>(1.62) (1.07) (-0.14)</td>
<td></td>
<td></td>
<td></td>
<td>(0.87)</td>
<td>(1.18)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeastern U</td>
<td>.04</td>
<td>1.61</td>
<td>6.00</td>
<td>.21</td>
<td>.73</td>
<td>4.26</td>
<td></td>
</tr>
<tr>
<td>(0.08) (1.84) (2.21)</td>
<td></td>
<td></td>
<td></td>
<td>(0.12)</td>
<td>(0.26)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvard Univ</td>
<td>.07</td>
<td>1.45</td>
<td>2.14</td>
<td>.65</td>
<td>.38</td>
<td>4.19</td>
<td></td>
</tr>
<tr>
<td>(0.83) (1.57) (0.47)</td>
<td></td>
<td></td>
<td></td>
<td>(1.52)</td>
<td>(0.19)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Louis Univ</td>
<td>.11</td>
<td>1.23</td>
<td>3.38</td>
<td>.41</td>
<td>2.24</td>
<td>3.85</td>
<td></td>
</tr>
<tr>
<td>(2.08) (-0.51) (-0.32)</td>
<td></td>
<td></td>
<td></td>
<td>(0.62)</td>
<td>(2.17)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stanford Univ</td>
<td>.06</td>
<td>1.39</td>
<td>3.33</td>
<td>.55</td>
<td>.21</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td>(0.63) (1.47) (1.01)</td>
<td></td>
<td></td>
<td></td>
<td>(1.15)</td>
<td>(0.40)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clark Univ</td>
<td>.08</td>
<td>1.08</td>
<td>1.33</td>
<td>.52</td>
<td>.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1.36) (0.95) (0.10)</td>
<td></td>
<td></td>
<td></td>
<td>(1.04)</td>
<td>(0.06)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Pseudonym
<table>
<thead>
<tr>
<th>UNIVERSITY</th>
<th>C_PRO_F</th>
<th>INCHJOBS</th>
<th>C_FFULL</th>
<th>CRATIO</th>
<th>CTENWOM</th>
<th>CHANGE INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cal Inst of Tech</td>
<td>-0.01</td>
<td>-1.00</td>
<td>-1.00</td>
<td>-1.95</td>
<td>-1.00</td>
<td>-15.31</td>
</tr>
<tr>
<td>SUNY at Albany</td>
<td>-0.03</td>
<td>-0.28</td>
<td>-0.42</td>
<td>-0.28</td>
<td>-0.18</td>
<td>-15.31</td>
</tr>
<tr>
<td>Hofstra Univ</td>
<td>-0.05</td>
<td>-0.27</td>
<td>1.00</td>
<td>-0.29</td>
<td>-0.18</td>
<td>-7.19</td>
</tr>
<tr>
<td>Boston Univ</td>
<td>-0.03</td>
<td>-0.29</td>
<td>0.10</td>
<td>-0.22</td>
<td>-0.07</td>
<td>-6.58</td>
</tr>
<tr>
<td>U of Hawaii</td>
<td>-0.03</td>
<td>-0.17</td>
<td>0.00</td>
<td>-0.17</td>
<td>-0.13</td>
<td>-6.18</td>
</tr>
<tr>
<td>Univ of Houston</td>
<td>-0.02</td>
<td>-0.05</td>
<td>-0.12</td>
<td>-0.21</td>
<td>-0.10</td>
<td>-5.98</td>
</tr>
<tr>
<td>U of Ill Chicago</td>
<td>-0.03</td>
<td>-0.21</td>
<td>0.53</td>
<td>-0.20</td>
<td>0.09</td>
<td>-5.97</td>
</tr>
<tr>
<td>Texas Tech Univ</td>
<td>-0.02</td>
<td>-0.03</td>
<td>-0.36</td>
<td>-0.11</td>
<td>-0.13</td>
<td>-5.53</td>
</tr>
<tr>
<td>U of Minn Mpls</td>
<td>0.00</td>
<td>-0.26</td>
<td>-0.30</td>
<td>-0.03</td>
<td>-0.27</td>
<td>-5.33</td>
</tr>
<tr>
<td>Ohio State Univ</td>
<td>0.00</td>
<td>-0.19</td>
<td>-0.02</td>
<td>-0.03</td>
<td>-0.07</td>
<td>-4.92</td>
</tr>
<tr>
<td>Claremont Grad Sch</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>-0.11</td>
<td>0.00</td>
<td>-4.72</td>
</tr>
<tr>
<td>Rockefeller U</td>
<td>0.00</td>
<td>0.06</td>
<td>-0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>-4.57</td>
</tr>
<tr>
<td>Baylor Univ</td>
<td>-0.01</td>
<td>0.39</td>
<td>-0.47</td>
<td>-0.05</td>
<td>0.24</td>
<td>-3.98</td>
</tr>
<tr>
<td>Sttn Ill U Carb</td>
<td>0.00</td>
<td>0.17</td>
<td>0.06</td>
<td>0.01</td>
<td>-0.02</td>
<td>-3.88</td>
</tr>
<tr>
<td>U N C Greensboro</td>
<td>-0.00</td>
<td>0.08</td>
<td>-0.02</td>
<td>0.18</td>
<td>-0.44</td>
<td>-3.69</td>
</tr>
<tr>
<td>Case Western Res</td>
<td>0.02</td>
<td>-0.04</td>
<td>0.23</td>
<td>0.10</td>
<td>-0.28</td>
<td>-3.63</td>
</tr>
<tr>
<td>North Texas St U</td>
<td>0.01</td>
<td>0.18</td>
<td>0.07</td>
<td>0.04</td>
<td>-0.02</td>
<td>-3.57</td>
</tr>
<tr>
<td>Duke University</td>
<td>0.04</td>
<td>-0.53</td>
<td>-0.75</td>
<td>0.75</td>
<td>-0.26</td>
<td>-3.46</td>
</tr>
<tr>
<td>U of Missouri-Col</td>
<td>0.00</td>
<td>-0.02</td>
<td>0.53</td>
<td>-0.01</td>
<td>0.49</td>
<td>-3.45</td>
</tr>
<tr>
<td>U of Ill Urbana</td>
<td>0.01</td>
<td>-0.04</td>
<td>0.08</td>
<td>0.07</td>
<td>-0.27</td>
<td>-3.30</td>
</tr>
</tbody>
</table>
Appendix J

RESULTS OF STEPWISE REGRESSION ON CHANGE INDEX

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
<th>$R^2$ Change</th>
<th>F ($R^2$ Change)</th>
<th>p ($R^2$ Change)</th>
<th>B value</th>
<th>Final Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>STPT</td>
<td>0.1144</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-25.18</td>
</tr>
<tr>
<td>CFACSIZE</td>
<td>0.2538</td>
<td>0.1394</td>
<td>29.14</td>
<td>0.0001</td>
<td>6.76</td>
<td></td>
</tr>
<tr>
<td>SCITECH</td>
<td>0.2878</td>
<td>0.0340</td>
<td>7.41</td>
<td>0.0072</td>
<td>-4.32</td>
<td></td>
</tr>
</tbody>
</table>
VITA

Patricia Brown Hyer

Address: 208 Highview Drive, Blacksburg, VA 24060

Date of Birth: November 26, 1948

Education: Virginia Polytechnic Institute and State University, Ph.D., 1983
University of Michigan, M.A., Adult Education, 1974
University of Michigan, M.A., French, 1971
Hillsdale College, B.A., French, 1970

Professional Experience:

Continuing Education Specialist, VPI & SU,
Blacksburg, VA 1979-1982
Director, Community Services Program, Old Dominion University, Norfolk, VA, 1977-78
Assistant to the Dean, Continuing Studies, Old Dominion University, Norfolk, VA, 1975-1977

Patricia B. Hyer