

## DOCUMENT RESUME

ED 315 850

EA 021 538

AUTHOR Stromquist, Nelly P.  
TITLE The State and Gender Equity in U.S. Education.  
PUB DATE Jul 89  
NOTE 51p.; Revised version of paper presented at the Annual Meeting of the Comparative and International Education Society (Cambridge, MA, March 31-April 2, 1989).  
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143) -- Legal/Legislative/Regulatory Materials (090)  
EDRS PRICE MF01/PC03 Plus Postage.  
DESCRIPTORS Course Content; Educational Administration; \*Educational Legislation; Elementary Secondary Education; Equal Education; \*Federal Legislation; \*Females; Laws; School Organization; \*Sex Discrimination; \*Sex Fairness; Teacher Education

## ABSTRACT

To improve the condition of women in education, women have utilized legislation, particularly federal legislation. Three main federal statutes have protected women's rights in education since 1972. These are the Title IX of the Educational Amendments Act of 1972, the Women's Educational Equity Act passed in 1975, and the Vocational Amendments Act of 1976. In addition, 13 states have enacted legislation that parallels Title IX, and 31 states have some legislation prohibiting sex discrimination in primary and secondary education programs. The implementation of the three federal laws dealing with gender equity are reviewed in detail. The specific changes and achievements have occurred in the areas of textbook materials, curriculum content, teacher training, access of women to advanced educational programs, presence of women in educational institutions as faculty and administrators, and incentives for students. Several elements exist between the legislation and the observed outcomes; these elements focus on inputs in place, transformations in educational organizations, and transformations in students. Ten tables are appended. (34 references) (SI)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

ED315850

THE STATE AND GENDER EQUITY IN U.S. EDUCATION

Nelly P. Stromquist  
University of Southern California  
Los Angeles, CA 90089-0031

July 1989

Revised version of a paper presented at the CIES annual meeting,  
Harvard University, 31 March-2 April 1989.

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

☒ This document has been reproduced as  
received from the person or organization  
originating it  
☐ Minor changes have been made to improve  
reproduction quality

• Points of view or opinions stated in this docu-  
ment do not necessarily represent official  
OERI position or policy

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

*Nelly  
Stromquist*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)."

CA 021 538

ERIC  
Full Text Provided by ERIC

BEST COPY AVAILABLE

## INTRODUCTION

The major thrusts of the feminist movement in this country in the 60s and 70s was the increased access of women to the public sphere and their improved conditions in the labor force. The concern for maternity leave and child care rights that accompanied the movement further emphasized the women's role as workers. Formal education, despite its powerful reproductive as well as transformative power, has received less attention than it deserves. The need for "equal and unsegregated education" was acknowledged by the feminist movement, but it was sixth among its eight objectives.<sup>1</sup> An important means utilized by women to improve their condition in general has been legislation, particularly federal legislation. Feminists anticipated that through pressures upon congress, laws would be passed whose implementation would decrease gender discrimination in the areas of employment, social services, education, and other areas of life. To this effect feminist groups and a small number of male politicians that supported their demands, worked to enact legislation on gender equity.

Specifically in the area of education, three main federal statutes have protected women's rights in education since 1972. These are: Title IX of the Educational Amendments Act of 1972, the Women's Educational Equity Act (WEEA) passed in 1975, and the Vocational Amendments Act (VEA) of 1976.<sup>2</sup> In addition, thirteen states have enacted legislation that parallels Title IX (Kohl, 1987)<sup>3</sup> and 31 states have some legislation prohibiting sex discrimination in primary and secondary education programs (Brown and Reid, 1987).<sup>4</sup>

Title IX, by far the most comprehensive legislation of all three, offered mostly the "stick" of the law. In other words, it consisted of a set of rules and regulations that prohibited discrimination in programs and activities of educational systems under the threat of cutting federal funds to educational agencies and institutions which did not comply. Its prohibitions covered a number of key areas (admissions, recruitment, housing facilities, access to course offerings, financial assistance, employment, and athletics) but it offered only "a miniscule amount of research and demonstration funds" (Fishel and Pottker, 1977). In contrast, WEEA and VEA represented the "carrot" of the law. They provided financial resources and technical assistance to encourage the design, adoption, and implementation of new programs that could foster more gender egalitarian environments in the schools.

Since the enactment of the first of these laws, over 16 years have passed. We have seen this country move from an administration that considered gender equity a nuisance (Nixon's) to one that showed great concern for individual and civil rights (Carter's) to one that concentrated its efforts in the protection of business interests and assumed that social welfare would be solved through greater employment (Reagan's).

The purpose of this paper is to assess the effectiveness of federal legislation as a means to improve women's condition in education. The paper will review the implementation of the three federal laws dealing directly with gender equity, identify the changes they have promoted in the conditions of women's

education, and examine the findings within the framework of a theory linking state and gender. While it is methodologically difficult to establish a clear causal link between macro decisions and micro events, this exercise permits to assess a number of critical outcomes against the background of important legislative intent.

#### GENDER EQUITY IN EDUCATION

As a first step toward the assessment of the effectiveness of the laws in improving women's conditions, we must clarify the meaning of gender equity in education and distinguish it from equality.

Equality, as most people understand it, means that equal treatments and opportunities are given to individuals. Anti-discrimination measures are instances of efforts to produce equality of treatment among different populations. The famous Brown v. Board of Education of Topeka case (1954) ensured that equality of opportunity would be offered to individuals regardless of race. Affirmative action plans, as currently designed, would be instances of measures to promote racial and gender equality. A more complex definition applies to equity. Here the aim is not only to give treatments that are fair to all individuals, but to give differential treatments to disadvantaged individuals so that their rate of success in final outcomes may be comparable to that of the most privileged groups in society (Bornstein, 1981). Quota recruitment and hiring policies, special incentives, and programs for minority groups and women would be instances of equity measures.

Assuming that educational equity is the desired objective, several elements of the educational system emerge as major targets for change. These elements have been identified in previous research as affecting the messages, roles, and processes by which educational institutions shape the gender identity of those who pass through them, both teachers and students.

1. School textbooks are prime sources of messages and images about gender roles in society. They have an important role in the transmission of ideology: the terms, content, and illustrations of textbooks influence students' understandings of what is valued and rewarded in society.

2. Curriculum content is important because it represents the concrete manifestation of what is accepted as legitimate knowledge. From a woman's perspective, curriculum is critical to her identity in two ways: by presenting knowledge that recognizes her experience as a social actor and by offering knowledge that is useful to her in the creation of a society no longer affected by sexual markers. In the latter sense, sex education constitutes an important curriculum area for both girls and boys. Our concepts of women's sexuality, such as inferred biological traits for wives and mothers, play a major part in our determinations of the appropriate roles for women in society. It is therefore important to provide girls and boys greater knowledge about sexuality so that they may have a better understanding of their current and potential roles in the configuration of social relations.

3. Provision of pre- and in-service training to teachers to modify their expectations and practices with female students.

Since teachers have been found to evince gender stereotypical attitudes and behaviors, the retraining of teachers is important to modify their behaviors and aspirations toward girls and boys.

4. Guidance in course selection and field of study for females in high school and college. Otherwise female students will follow the path of least resistance, which means they will select conventionally feminine fields.

5. Presence of women as administrators or professors in educational institutions so that more women attain leadership positions. In this manner, women will, on the one hand, have direct access to decision making and, on the other hand, provide substantive role models for female students.

6. The provision of facilities and incentives to girls so that they have equal access to benefits offered by the school. This includes the provision of scholarships, athletic facilities, and other resources.

#### THE LEGISLATION: INTENTIONS AND ACTUAL PRACTICES

##### Title IX

Feminist groups struggled for several years to have federal legislation enacted against sexual discrimination. Ironically, many observers agree that the most revolutionary educational legislation to date was passed as an unnoticed addendum in a general bill (Fishel and Pottker, 1977; Califano, 1981; Galb and Palley, 1982); thus Title IX of the Education Amendments of 1972 was born. It read:

No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under



any program or activity receiving Federal financial assistance.

After passage, this requirement was seen by certain groups, particularly those related to intercollegiate sports, as such an undesirable condition that the then Department of Health, Education, and Welfare (HEW) took three years (1972-75) to translate it into specific regulations and four additional years to produce "policy interpretations" dealing with the issues of equity in athletics.

A little known and rather amazing fact is that the regulations of Title IX explicitly omitted consideration of texts and even curricular content. Section 86.42 of Title IX regulations states:

Nothing in this regulation shall be interpreted as requiring or prohibiting or abridging in any way the use of particular textbooks or curricular materials.

The circumstances and concerns which led to the inclusion of this provision are unclear, but among them was a letter from the president of Stanford University to G. Weinberger, then the secretary of HEW, asking him to exclude textbooks (Fishel and Pottker, 1977; The Editors, 1979). It was after Weinberger made his decision to comply with the request that his staff found the legal justification for doing so: HEW claimed that to have covered textbooks would have infringed upon the freedom of speech provisions of the First Amendment (Fishel and Pottker, 1977).

The enforcement of Title IX, as important as it was, was not given to a separate agency but assigned to HEW's Office for Civil Rights (OCR), which was already charged with enforcing nondiscrimination along the lines of race, age, and physical



disability. The overall appropriations for OCR has ranged from \$45,847,000 in 1980 to \$40,530,00 in 1988 (U.S. Congress, 1988). When the Carter Administration took over in 1977 there were 1400 sex discrimination complaints pending in HEW that had not been investigated (The Editors, 1979, p. 511). In the first year of Title IX, HEW investigators resolved less than one complaint per investigator per year, but OCR officials claimed that by 1979 12 cases per year were being handled per investigator (The Editors, pp. 512 and 518). Since 1982 OCR has received about 1400-1800 complaints per year. By 1987, Title IX represented less than 10% of the total OCR complaint loads; most of the complaints has focused on handicapped (54%) and race (20%) issues. According to an OCR informant, complaints were not handled through computerized procedures until 1982--before that they had been in "3x5 cards in shoeboxes."

#### Women's Education Equity Act (WEEA)

Feminist groups spent three years (1971-74) of lobbying efforts before this law was enacted. It passed as part of the Special Projects Act of 1974 and was extended in 1978, this time as part of the Educational Amendments of 1978. WEEA legislation has provided discretionary grants to funds projects to develop, evaluate, and disseminate curricula, textbooks, and other educational materials, to provide pre- and in-service teacher training, to improve guidance and promote quality of education for women at all levels of education, and to offer adult education for women, particularly those underemployed. Further amendments took place in 1984 so that WEEA could fund "comprehensive plans for implementation of equity programs at

evey educational level" and "innovative approaches to school-community partnerships."

Initially the WEEA program had been expected to provide a large amount of financial resources so that school districts and states would be encouraged to explore alternative educational environments to achieve gender equity. Its advocates expected that some \$40 million would be available to carry out the program each year. As noted earlier, however, the WEEA Act itself was legislated as part of the Special Projects Act, which was supposed to be funded for \$200 million a year. When President Ford requested only \$39 million for the Special Projects Act, the share for the WEEA Program became \$6.3 million. WEEA attained its highest level of funding at \$10 million in FY 1981 but since then has declined to \$2.9 million in FY 1989. With only limited funding was provided for the implementation of this legislation, HEW has given priority to projects dealing with teacher training to develop awareness of sex-role stereotyping, to programs to fostering women's access into leadership positions, and to initiatives encouraging broader career options for women. The monies available for research and demonstration grants are extremely competitive, with approximately 30 grants funded out of over 500 presented. The funds have been allocated to either universities/research centers and state educational agencies; local school districts have not yet benefited directly from WEEA funds.

#### Vocational Education Act (VEA)

Vocational education is important because it covers training

for all jobs not requiring a bachelor of arts or higher degree; it is estimated to be necessary for four out of five jobs in the labor market. The VEA legislation, unlike Title IX, requires federal recipients to undertake positive measures to eliminate sex bias, sex stereotypes, and sex discrimination from their vocational programs. The legislation places emphasis on the development of counseling programs and career tests to orient female students away from traditionally feminine occupations. VEA funds a sex equity coordinator at the state level and provides funds for technical assistance and corrective actions in LEAs.

Those who have reviewed the law in depth contend that "the sex equity provisions of the VEA are mainly rhetorical: Much is authorized but little is required" (Mertens, 1984, p. 403). Only two funding provisions are mandatory: the hiring of the sex equity coordinator at the state level and the creation of programs to serve the vocational needs of displaced homemakers. A study of its implementation conducted by the National Institute of Education four years after passage of the VEA found that only 25 states had spent any funds on grants to overcome sex bias and that six states (California, Maryland, Minnesota, Missouri, New York, and New Jersey) accounted for more than 80% of the total spent (Mertens, 1984, p. 404). The study also found that while programs for displaced homemakers had been implemented, they used less than one percent of the federal funds available (Mertens, 1984, p. 404).

It should be noted that these two "carrot" laws, WEEA and VEA, are voluntary laws. This means that to obtain these funds

states and school districts must develop proposals and apply for funding. This also means that funds are limited and not expected to cover all requests. In fact, it has been found that most of the educational equity activities conducted by the states and the LEAs have been supported not through Title IX, WEEA, or VEA, but through technical assistance funds provided by Title IV of the Civil Rights Act of 1964 (Brown and Reid, 1987, p. 11). Further weakening state initiatives is that a substantial part of the costs must be borne by the states themselves. During FY 1982, for instance, the federal government covered 42% of the average state operating costs in the areas of equity (all kinds of equity) (Brown and Reid, 1987, p. 7).

#### THE CONDITION OF WOMEN'S EDUCATION TODAY

This section traces achievements in the educational areas previously identified as critical to the successful attainment of gender equity in education.

##### 1. Textbook materials

Though, as seen earlier, the Title IX guidelines excluded textbooks, the impetus of the feminist movement prompted the creation of textbook review committees in many LEAs to examine the presence of stereotyped messages in school textbooks. Also, some publishers did issue guidelines for the publication of nonsexist materials, notably the guidelines set up by Scott, Foresman in 1972<sup>5</sup>, which were later followed by other publishers.

Little information is available on the extent to which educational textbooks have changed at the primary and the secondary level. Important changes may have taken place, yet

some voice serious doubts. Martinez (1974) observed that while states have enacted legislation requiring that public school texts be purged of sexually defamatory materials and that affirmative materials about the contributions of members of both sexes be added, there has been relatively little implementation or enforcement of the provision. Writing 12 years later, Shakeshaft (1986) reported on the uneven treatment of males and females in school textbooks, including the invisibility of female characters and the use of male-exclusive language.

We do have evidence from textbooks utilized in teacher training programs. Here a study by Sadker and Sadker (1980) is critical. The authors reviewed 24 of the most popular textbooks used in pre-service teacher training programs during 1973-78, covering the areas of foundations of education, psychology of education, and teaching methods in five content areas (reading, language arts, social studies, mathematics, and science). Their content analysis of these textbooks revealed that the topic of sexism was given less than 1% of the narrative space, that sex equity tended to be omitted entirely or given incomplete treatment, and that the contributions of women to education were not even mentioned. The authors also found that science and math textbooks--subject areas in which women tend to be considerably less prominent--showed the greatest imbalance in the treatment of boys and girls. The authors discovered, however, that illustrations in the textbooks (in terms of photographs but not drawings) were well balanced by gender, which they took as an indication that the textbook publishers were more sensitive to equity issues than the authors of textbooks. The Sadkers warned

that teachers needed to gain an adequate understanding of sexism if they are to alleviate sex bias in the classroom and concluded that "since it is often difficult for classroom teachers to gain access to educational research, it is crucial that this information be included in teacher-education texts" (p. 43).

In all, when looking at changes in the area of textbooks, it appears that market forces rather than legislation (i.e., the fear of boycott of certain books by feminist parents) may have led publishers to modify the gender content of textbooks.

## 2. Curriculum Content

Since Title IX also excluded curriculum, the modifications that have been made in programs to provide for greater equity have been exclusively voluntary. WEEA funding has made it possible to introduce new content areas in the classrooms; since these funds are limited, only a few demonstration cases and innovations have occurred. Between 1974-79 the WEEA Program funded 220 grants totaling over \$21 million to develop curriculum and training materials. The most useful products were the training materials for administrators and teachers which were designed to familiarize them with the rationale and methodology for implementing Title IX. Less successful appears to have been the design of materials for actual classroom use (Bornstein, 1985). WEEA has produced over 100 educational materials, ranging from texts to videotapes. These materials, however, seem to have had limited circulation since only three of its publications have sold more than 5,000 copies and six more than 3,000 copies (Applied Systems Institute, 1985).

Although schools now offer sex education, only 29 states



include it as part of their regular curriculum and only six make it a required class. There is a wide range of variation in what is covered under the "sex education" label (Diamond, 1983). Because of loose definitions, it is estimated that between 10 and 55% of the U.S. school districts offer these courses. What goes on in these classes? Is sexuality treated in a way that dispels misconceptions about sexual drives and practices? A study that observed sex educational classes concluded:

In such classes the content of sex education is so strictly monitored that sensitive subjects such as intercourse, venereal disease, masturbation, and homosexuality are usually banned from discussion. In general, sex education does not integrate information about the sex act with other aspects of sexuality such as gender-role stereotyping and values (Rogers and Strover, 1980, p. 176).

If this is true of most classes, the coverage given by them is far from satisfactory because women and men need not only knowledge to assume reproductive control but also knowledge of how sexuality structures social relations. As Diamond (1983, p. 233) expresses it well: "We must begin to think of sex education not only as education about the sex organs and intercourse but about the sexual relations between women and men."

### 3. Teacher Training

As noted earlier, efforts under this rubric were to be covered by WEEA, but its limited funding has allowed only a scant number of training initiatives. Nonetheless, some demonstration projects have been successful in changing intra-district behaviors and attitudes. An important initiative supported by the WEEA Program was the development of national models of educational equity at the school-district level; five such models



were funded. One such case is the three year effort in Broward County, Florida, where teachers and administrators underwent various activities to develop gender awareness and adopt educational materials for use in their classroom. The evaluation of this project showed that the LEA gained a good understanding of sex equity education and new practices emerged in several classrooms, but that the project did not succeed in producing an exportable model (Bornstein, 1985), a not surprising finding, given the high degree of embeddedness that characterizes efforts to redefine traditional practices and adopt new ones.

#### 4. Access of Women to Advanced Educational Programs

In the U.S., parity between men and women in primary and secondary education has existed for a long time. By 1972, however, there were significant gender disparities in higher education, and the gap was wider as the degree moved from the B.A. to the Ph.D. As Table 1 shows, in the 13-year period between 1972 and 1978, women have achieved parity with men in both the B.A. and the M.A. Considerable progress has been made at the Ph.D. level, as women have increased their representation from 16% to 34%. More marked have been the gains of women in the professional fields (medicine, law, education), where the gains have been from 6% to 33%.<sup>6</sup>

Table 1 goes here

Title IX did not establish quotas for student admissions to educational programs, but both Title IX and VEA introduced requirements for gender counseling that were intended to have a positive impact on the selection of fields and careers by women.

The evolution of field of study choices in a sample of 10 fields in presented on Table 2.

Table 2 goes here

The data shows that enrollment within these fields has been remarkably stable in fields such as education, English, and math, while impressive shifts have occurred toward a greater participation of women in the fields of electrical engineering, law, medicine, physics, and economics. The tendency thus has been for fields with traditionally strong female participation to remain so and for fields with weak female participation to improve over time. The data also indicates that the participation of women in the latter fields has successfully culminated in their attaining academic degrees (Table 3).

Table 3 goes here

Despite evident progress in several fields, women continue to be concentrated in a narrow range of professions; for instance, they earn 50% or more of the doctorates in education, foreign languages, and letters (U.S. Department of Education, 1986).

In vocational education, as can be seen in Table 4, there have been some modest gains. But we must remember that vocational education was one of the most segregated educational areas prior to Title IX. A study by the American Institutes of Research found that overt restrictions to participation such as quotas or denial of admission of girls to nontraditional fields had been eliminated by 1978 (cited in Applied Systems Institute,

1985); yet, a survey of 1400 vocational schools conducted by OCR in 1979, three years into VEA implementation, discovered that 1000 schools offered five or more vocational courses in one-sex only classrooms. Also by 1979, only 11% of the students in traditional male vocational courses were women: the representation of women in the areas of agriculture, trade and industry, and technical education was less than 20% in each; and almost one-fourth of the students still perceived that classes were closed to students of the other sex. It has been reported that under the new spirit of gender equity, more boys moved into traditionally female areas, such as home economics, than girls moved into traditionally male vocational courses (The Editors, 1979). In 1981 women represented only 8.5% of those involved in apprenticeship programs.

Table 4 goes here

Notwithstanding the gains reported above, women are still in a narrow range of occupations and in positions with low wages and highly subject to layoffs. Comparisons of the male-female pattern with that of minorities in wages and employment have found more diversity in occupation representation among minorities than among women (Mertens, 1984, p. 406). Observing the meager gains reflected by the vocational education statistics, Vetter and Hickey concluded that still much more encouragement is needed for students to enter nontraditional courses or careers, and held that interventions on behalf of employers, parents, and students "have been absent or minimal in

state and local program plans" (1986, p. 31).

A positive development is that the gender equity provisions were continued under the Carl D. Perkins Vocational Education Act passed in October 1984. The total appropriations for VEA in 1985 were \$742 million, of which 3.5% was earmarked for programs designed to eliminate sex bias and stereotyping and 8.5% for single parents and homemakers (which include almost exclusively women). Actual budget appropriations for these programs are \$27 and \$66 million, respectively (U.S. Congress, 1988, pp. 408 and 411). These amounts represent the largest appropriations approved by the federal government for gender equity programs, but it is unclear to what extent they are adequate to meet existing needs.

##### 5. Presence of Women in Educational Institutions as Faculty and Administrators

Contrary to common belief, none of the educational laws contains quota provisions. Title IX does, however, permit educational institutions to engage in affirmative action, even in the absence of proven discrimination, if there is limited participation of women or men in a federally assisted educational program (Dunkle and Sandler, 1974).

The employment clause of Title IX has reportedly been the most difficult to implement for "at least eight district courts and three courts of appeal have ruled that [the OCR] has no jurisdiction" (The Editors, 1979) to apply it to cover staff employment. Moreover, the Supreme Court has refused to review these cases.

Some observers hold that there have been only limited

affirmative action initiatives. Others believe that they have occurred but that have served to benefit mostly white women over Blacks, especially Black females. One such view maintains that:

The greatest impact of the affirmative action and special admission programs won through the civil rights struggles of the 1960s has been to increase the access of women of the petite bourgeoisie and some of the upper strata of the working class to middle management, to a number of the professions, and to institutions of higher education. For example, in 1981, women made up 14% of the nation's lawyers and judges, up from 4% in 1971, while Black men had gained only 1.9% and Black women only .8% of these positions. In 1981, women were 22%, or one in five, of all doctors, up from 9% in 1971. By contrast, 2.7% of all doctors were Black men and .7% were Black women (AAWO, 1983, p. 2).

The interaction between gender and race subordination is an issue of great importance and one that needs much closer examination. The statistics that are available often do not present simultaneous breakdowns by gender and race, thus preventing analysis of these issues.

Four key indicators of women's presence in important educational leadership positions are their numbers as school principals, LEA superintendents, university professors, and university presidents. Table 5 shows the gains women have made compared to men in the formal educational system as school principals and superintendents. The changes between 1972 and 1985 have been relatively small among principals and, although large increases occurred within the superintendent position, the proportion of women in that category is appallingly small.

Table 5 goes here

Table 6 shows women's gains in the position of university

president. The data indicate that gains have been more evident in public than private institutions, which might be an artifact of the very small presence of women in public institutions in 1975. Between 1975 and 1985 women overall increased their representation by 3.4% in four-year colleges and by 5.5% in two-year colleges--very small gains by any standard. By 1984, the latest available statistics, women represented a very small proportion of university presidents, or about 9%.

Table 6 goes here

Finally, Table 7 shows the presence of women as university faculty members. It indicates that in a 10-year period women have made significant progress in the category of instructor but that the position of full professor continues to be inaccessible to most women. On the other hand, moderate progress has been made in the positions of associate and assistant professors.

Table 7 goes here

#### 6. Incentives for Students

In part because of the prominence of male sports in high school and college extracurricular activities, and the consequent revenues they produce, gender equity provisions related to athletics is the part of Title IX that has received the most attention and controversy. Athletics was (and is) an important area of contention not only because women needed to increase their choices regarding the sports in which they can engage but also because athletic scholarships are a major means by which low-income students gain access to higher education. While male

minority students had benefited greatly from these incentives, female minority students have not received similar benefits.

It was also in the area of athletics that political support from legislators was the most difficult to obtain (The Editors, 1979). HEW's own assessment has been that athletics is the area in which Title IX faced the strongest resistance to change but also the area in which it has been most successful, citing an increase of over 600% in the number of girls involved in interscholastic sports between 1971 and 1977 (Bornstein, 1981). Although even today women athletes do not receive as many benefits as their male counterparts, they certainly receive much more than they did prior to 1972. A female student could by 1982 choose four sports for every seven offered to male students; she could choose only two sports for every seven offered to men in 1974 (Hogan, 1982). On the other hand, the budgets for athletics are far from being equitably distributed: two-thirds of all budget increases between 1974 and 1982 were allocated to men's programs (Hogan, 1982). Pertinent statistics covering a 10-year period are offered in Table 8.

Table 8 goes here

Also within the category of incentives to women, we should consider the treatment of pregnant girls<sup>7</sup>. Pregnancy of unmarried teenagers is an unfortunate occurrence and it used to be that when social punishment ensued it was only the teenage girls who received it. According to Title IX, girls who become



pregnant are no longer expelled from school nor required to join special programs and classes (i.e., to take programs in other facilities and thus be socially removed from their peers). Studies of the effects of current guidelines addressing teenage pregnancy in the schools are limited; one such study, by the Rand Corporation, found that since Title IX did not mandate programs to help these youths (it merely prohibits their discriminatory treatment), only a few schools system had responded in a positive, constructive manner (Zellman, 1981).

#### ACCOUNTING FOR THE OUTCOMES

The linking of legislative intentions to concrete indicators of women's educational conditions presupposes an intermediary process by which inputs (the law) are transferred into outcomes (improved conditions in women's education). This process unquestionably contains a complex chain of events to which the researcher, using secondary data sources and examining the process after several years have gone by, can have only a crude approximation.

Reconstituting the process, we can assume the following points and sequence. As Figure A shows, a chain of events can be traced to the legislation. Between the legislation and the observed outcomes, three elements can be identified: the inputs that were put in place to implement the legislation, the changes it might have created within educational institutions, and the changes it might have promoted among the new generations of students. On the other hand, it is clearer that simultaneous factors such as the women's movement, economic conditions, and

demographic changes are also responsible for the observable outcomes.

Figure A goes here

Focusing on the elements between the legislation and the observed outcomes, the following can be said:

1. Inputs in Place

The state responded to feminist pressure by passing legislation that acknowledged women's inferior status in education and the need for immediate improvement. Unfortunately, however, the state has failed to follow through in providing the support needed to bring about the desired changes. Thus, state actions have:

- o provided insufficient enforcement mechanisms. There is wide consensus that OCR has been a poor enforcer of Title IX since inception (PEER, 1977; Califano, 1981, Gelb and Pauley, 1982; Flygare, 1984; Brown and Reid, 1987, Snider, 1989). Fishel and Pottker, noting also that OCR is not funded so that it can be an effective enforcement agency, state that: "Title IX will remain largely a rhetorical statement of what women's rights in education should be, rather than a legal statement of the obligations schools and colleges have to their women students and employees" (1977, p. 134).

- o offered minimal response to women's needs in education. Drafters of Title IX guidelines did not affect the content of textbooks or curricular materials. Moreover, several measures that could contribute to the equalization of opportunities in higher education, such as infusing a greater concern for women in

mainstream courses, providing them with child care programs, special counseling services, and women's social and study centers, were not provided (Bar-Yosef, 1977; Bornstein, 1981).

- o eliminated categorical funds designed to encourage local gender equity efforts. Former Secretary Bennett justified this as allowing the states "greater flexibility to use available funds to meet their specific needs" (U.S. Congress, 1988).

- o reduced funding for programming to encourage change at local levels. Under the Reagan administration, the funds for Title IV of the Civil Rights Act and the WEEA Program were halved (Brown and Reid, 1987, p. 11). The OCR's technical assistance budget of FY 1982 was less than one-tenth of the FY 1980 funding level (Brown and Reid, 1987, p. 11). This technical assistance consists of the provision of information and other services to inform beneficiaries of their rights and to facilitate the compliance of educational institutions with civil rights laws. Federal appropriations for education in 1989 total \$9.086 billion; of this, WEEA receives close to \$3 million, or .03% of the federal budget. Vocational education receives about 10%, but as noted earlier, only a small proportion of this goes specifically to women's programs.

- o supported narrow judicial interpretations and decisions which require Congress to clarify the gender equity laws (Flygare, 1982; Flygare, 1984). Two important examples are: (a) the Grove City College v. Bell case in 1984, in which the Supreme Court decided that Title IX regulations applied only to those portions of school programs and activities funded directly or

indirectly, not to the total institution, and (b) the dismissal by a federal court in December 1987 of the Adams order that required the OCR to respond to complaints within 90 days.

A positive development, however, has been the passing of the Civil Rights Restoration Bill<sup>8</sup> in March 1988, which defined "program and activity" as involving "all operations" of a department or agency of the state, university, local education agency, or corporation involved in education and thus grants OCR jurisdiction to initiate an investigation of any institution that is a recipient of federal funds. This legislation is meant to counter the Supreme Court decision on Grove City College v. Bell, but it came after four years of near paralysis in the implementation of Title IX.

o provided extremely limited funds for research on gender issues. In the past some funds were provided by NIE and to a lesser extent OCR. Today this is no longer the case and no other source, public or private has filled this void (Brown and Reid, 1987, p. 14).<sup>9</sup> At present, approximately 95% of the research funds distributed by the federal government go to 19 research centers; none of these centers focuses a significant amount of its research effort on issues dealing with gender (cf. U.S. Congress, 1988, pp. 507-524).

## 2. Transformations in Educational Organizations

As noted earlier, this study did not have access to specific information on organizational level responses to the legislation. Nonetheless, some dynamics can be inferred from looking at the available educational outcome indicators.

The number of women school principals and superintendents

still represents a large disparity compared to that of men. Although the presence of women superintendents has increased by a factor of 10 among superintendents, their number continues to be very low, with only 7 women for every 100 superintendents. How is this fact to be assessed? One approach would be to focus on the relative increase vis-a-vis original conditions and be satisfied with the 10-factor growth, and assume that these increases will hold over time until parity between women and men is reached. Another approach would be to consider it a very limited progress, question its possible linear development, and reflect upon the causes of existing gender disparities. Two alternative reasonings are proposed by the two approaches: (A) The existing pool of women in education who could become superintendents today represents an older generation socialized into "feminine" ideals; these women, according to this explanations, do not seek to become superintendents because they still either skirt the notion of politics as "being aggressive" or dislike the long hours that go with the job (likely to conflict with the women's responsibilities toward their family). (B) Conversely, it could be argued that the position of superintendent is closely linked to power and that men are most reluctant to share this type of position with women (or any other low-status social groups, such as Blacks or Hispanics). So, what we have at work is not a lingering women's reluctance to seek office, as explanation A suggests, but rather the men's active gatekeeping role--a role, which it must be noted, has not been sufficiently challenged by the existing legislation.

If explanation A is correct, we would expect to see an increased presence of women in superintendent positions as the first cohort of women who received a more progressive gender socialization in the mid 70s reaches professional maturity in the 80s and applies for the highest educational positions in the early 90s. This would predict a rapid increase of women in superintendent positions in the future, with a clearly marked rate of increase starting about now. If explanation B is correct, the presence of women should be rather constant, with only marginal increases over time.

The same alternative explanations could be used to account for women in the principalship and the positions of university professor and president. Explanation B would predict a greater proportion of women as principals than superintendents and a greater proportion of principals than university professors or presidents because a principalship has less access to power than the superintendent or either university position. A position as university professor is more prestigious and possesses a greater capability to shape and legitimate knowledge. On the other hand, it is less subject to gatekeeping than the superintendency because criteria such as publications and contributions to research tend to be measured by rather tangible indicators whereas the selection of a superintendent might be accompanied by criteria such as "ability to provide educational leadership" and a "personality capable to establish friendly relations with community and staff"--frequent job descriptions of superintendent positions. The position of university president may be subject to gatekeeping as much as the superintendency because it not only



is one of the most prestigious jobs in society but appointment to it operates through less tangible criteria.

The statistics examined in this paper reveal neither a fast nor steep linear progression. The proportion of women principals has been increasing but the increments indicate a very flat slope. The representation of women superintendents is forecasted to jump during the 1988-90 period and it would be interesting to observe whether their numbers indeed increase rapidly in the 1990s. As to the presence of women in university positions, the gains are extremely low and suggest that either women are not interested in becoming full professors (a questionable assumption given the strong participation of women in the various professional associations to seek better opportunities for them<sup>10</sup>) or that very little organizational change has occurred in university institutions to provide women with equal access to tenured positions decisions or to provide equity measures to foster a restructuring of the faculty's gender composition. In this respect, it must be observed that affirmative action plans are weak instruments that merely formalize a university's awareness that it still has a skewed faculty distribution in terms of race and gender; these plans do not commit institutions to concrete conditions by a specific period of time.

### 3. Transformations in Students

The data on the participation of women students by field of study indicates substantial gains (in both absolute and relative terms) in nonconventional careers. As we have seen, significant areas of increased women's participation are law, medicine, and



business administration.

Why have gains for women been greater in field of study choices than in high-power positions? Here, the hypothesis that young women have been more able to make mental transitions than older women may be at work. It might be that their choices do represent the product of a new gender socialization in the schools that became materialized as they attained university. If this is the case, however, we would expect those women to take their careers more seriously and to seek much greater parity with men in high-level positions, particularly as university professors and presidents. The first cohort of women "resocialized" in gender issues emerged in the late 70s and finished advanced university studies in the 80s. Assuming 10 years to achieve full professorial status and 20 years to be considered as presidents of universities, we should expect to see more women in these categories in the late 1980s and late 1990s, respectively. Two events, parallel to the legislation, that should further support the anticipated developments is the opening of a large number of university faculty positions as a result of the retirement of many professors in the next few years, and the growing presence of the feminist movement in universities, reflected in the large number of women's studies programs--estimated at approximately 500 in 1989--and the substantial number of courses addressing gender issues--approximately 30,000 by 1988.

#### THE STATE AND GENDER LINK

How can we best assess the impact of educational legislation

upon the condition of women? Some observers argue that social changes of this type take time because the resocialization they imply might be more effective among the younger generations. Accepting this premise, we have indicated that the next two decades should give us a more certain picture of the accomplishments in gender equity attained through legislative efforts.

However, we cannot dismiss the fact that the current educational legislation has been characterized by very weak features in three key areas: the content of the laws, the funding levels to enable their adequate implementation, and the enforcement mechanisms to ensure that educational organizations will comply with the law. From the perspective of the inputs in place, those interested in the improvement of women's conditions have reason to suspect the state because its actions have not shown a strong willingness to alter the status quo in society.

Our analysis now focuses on the state as a key mediating agency between women and social change. It should be clarified that to examine law as the state is not tantamount to asserting that all relevant state behavior occurs in legal texts, but rather that "legal decisions expose power on the level of legitimizing rationale, and that law, as words in power, is central in the social erection of the liberal state" (MacKinnon, 1987, p. 152).

In the case of the educational legislation reviewed herein, it seems that the state, not being able to reject outright the concerns of a sizable segment of the American population, passed a series of legislative measures to address gender equity in

education. At the same time, it used other means to render the laws largely ineffective.

The three pieces of educational legislation examined in this paper leave untouched critical elements that could contribute to social restructuring. It does not address the content of textbooks nor that of courses. It does not introduce new content (e.g., an effective sexual education program) so that social relations can be further redefined. It does not enable a large number of teachers to undergo training in gender issues; it merely opens the possibility that the few who ask for help will receive it. The legislation has not provided support for mothers who wish to be students (i.e., no child care services are facilitated).

By design, WEEA and VEA--the constructive aspects of the law--rely excessively on voluntary efforts. Voluntary equity programs are not likely to be very successful in promoting macrosocial change. They encourage, for the most part, only those already inclined to change, and provide limited funds for the kinds of needs to be satisfied. All this evidence suggests a case of symbolic politics at best.

Finally, the educational legislation was not significantly accompanied by parallel steps to modify social expectation regarding the woman's responsibility within the family or alter practices in the labor force that would have encouraged women to seek more public lives and less conventional occupations. In consequence, change did take place but gains have been much less than expected.

A feminist view of the state would argue that although the state must be a target of pressure for change, essentially it acts to support the social relations of male dominance in society. This view would contend that the state is not a neutral arbiter of competing interest groups but rather an important means by which patriarchal ideology finds legitimation and support. As Eisenstein notes, the subordination of women does not occur simply because men hate women but because men need mothers: "This involves the caring and love they provide, the children they reproduce, the domestic labor they do, the commodities they consume, the ghettoized labor force they provide" (1983, p. 44).

From a feminist perspective, the state is not viewed as unchanging. Quite the contrary, it is seen as making many accommodations, particularly those that might increase its legitimacy without setting in motion a restructuring of society. In a country such as the U.S., where the feminist movement has been the strongest in the world, we would expect the state to be responsive in its legislation. But even so, the state may engage mainly in what has been aptly termed "symbolic politics."

For the state to represent women's interests, it may have to include more women in its ranks. The need to have more women in politics is clearly articulated by Senator Shirley Chisholm, who was instrumental in the enactment of Title IX:

I have come to the conclusion that in order to secure equity of employment and academic opportunities for women in this country there is a necessity for more women to be in the legislature. To the extent that there are more women in the legislative bodies, women's issues and priorities will be given real consideration. The gentlemen are usually so terribly busy with other

kinds of issues that the fact that women do not have equity doesn't even enter some of their minds. And so I feel that it is important that women run for public office on the city level, the state level, and on the national level (The Editors, 1979, p. 509).

There is also a need for women to attain key bureaucratic positions. As Holly Knox, previously a legislative specialist in the Office of Education, recalls the drafting of Title IX guidelines within HEW:

The internal debates in 1974-75 on the proposed regulation were carried out chiefly by those who were special assistants and assistants to the heads of a variety of HEW agencies and units. Most of these people were women--they were not all feminists, but there were women. When the crunch came and the final decisions had to be made about what was going to be published in the Federal Register, those decisions were made at a meeting with the Secretary and his senior officials. At that meeting, staff members of those senior officials were barred. That was virtually unprecedented; the instructions were "no staff." That meant that the room held seven men and not a single woman, and that's the reason they did it. When they sat down to hash out what was really going to go into the regulation, they did not want any women in the room (The Editors, 1979, p. 514).

A similar argument could be made for the increase of women in educational leadership. The literature on organizational change in schools repeatedly identifies the superintendent and the school principal as the most important actors in initiating and sustaining educational improvement. Moreover, a study of factors affecting levels of compliance with Title IX (conducted by Miller and Associates, 1978, and cited by Bornstein, 1981) identified the degree of commitment, leadership, and support of the superintendent as the most cited factor in the successful implementation of Title IX. With fewer than 7% of all superintendents being female, it is rather unlikely that gender equity will become a priority in the school system agenda.

The history of legislation needs to be put in sharper focus by case studies of how the various pieces of legislation were designed, promoted, translated into law, and put in the form of regulations. From what it is known, the role and presence of women in these efforts has been critical.<sup>11</sup> We need to understand these efforts better to get a greater consciousness of the power of women and the resistance of the state to change.

There are strong challenges ahead. Perhaps the most fruitful will be efforts to resocialize students in schools of education so that they will subsequently introduce greater awareness of gender issues in the school system and affect positively new generations of women and men.<sup>12</sup> Perhaps the most difficult will be efforts to ensure that legislation is both complete and truly serves its intended purposes. To move the state past a symbolic posture is a task that demands constant mobilization, careful monitoring of legislation, and persistent skepticism.

---

The comments by William Maxwell and Allen Hunter to the first versions of this paper are gratefully acknowledged.

Table 1. Women as Proportion of Total Degree Holders

Degree earned	1971-72	1979-80	1984-85
B.A. degree	44	49	51
M.A. degree	40	50	50
Ph.D. degree	16	30	34
Professional degree	6	25	33

Source: U.S. Department of Education, National Center for Educational Statistics, 1973, 1981, and 1986.



Table 2. Proportion of Women as Total Enrollment in Selected Undergraduate Majors, 1972 to 1983

Field	1972-73	1975-75	1979-80	1982-83
Education	73.6	72.5	73.8	75.8
Electrical Engineering	1.2	1.9	6.4	9.8
English	64.6	62.8	66.1	66.6
Philosophy	22.7	26.3	28.3	30.3
Law	8.0	19.2	30.4	36.7
Medicine	9.0	16.2	23.4	26.7
Chemistry	19.3	22.5	28.3	33.6
Math	40.2	40.7	42.4	43.8
Physics	7.3	10.9	14.4	14.5
Economics	13.1	18.7	28.9	32.3

Source: American Council on Education, 1987.

Table 3. Proportion of Women Attaining Degrees in Selected Fields

Field	1970	1985
Business and Administration		
B.A.	8	45
M.B.A.	4	31
Engineering		
B.A.	1	15
M.A.	1	11
Dentistry	1	20
Law	7	39
Medicine	9	30

Source: Strober, 1988.

Table 4. Female Participation in Vocational Fields as Percentage of Total Enrollment

Vocational Fields	1971-72	1977	1979	1981-82	1982-83
Agriculture	5.3	14.9	19.2	16.3	-
Occupational home economics	86.0	81.6	77.8	-	-
Consumer and homemaking	92.1	81.6	79.4	-	-
Traditional health occupations	-	-	-	85.0	90.0
Technical programs	9.7	17.0	17.5	-	-
Office occupations					
Supervisory and adm. management	-	25.0	-	50.0	-
Police science technol.	9.5	-	22.0	21.2	-
Scientific data processing	-	-	-	23.9	-
Engineering and related fields	-	-	-	-	13.0

Sources: The 1971-72, 1977, and 1979 data derive from Mertens, 1984, citing NIE statistics. The 1981-82 data come from Vetter and Hickey, 1986, based on data from the National Center for Educational Statistics. The 1971-72 data includes grades 9-12 and postsecondary enrollments while 1981-82 figures are for grades 11-12 and postsecondary enrollment; thus, they are not strictly comparable. The 1982-83 data derives from the U.S. Department of Education's Vocational Education Data System, cited in PEER, 1985.

Table 5. Women in Administrative Positions as a Proportion of  
Total Employment

Positions	1972	1978	1984-85
Women as Principals	13.0	14.0	20.4
Women as Superintendents	.6*	1.0	6.8

Sources: Data for 1972 and 1978 derives from NACWEP, 1981.  
Data for 1984-85 derives from PEER, 1985.

\*Refers to 1970, cited in PEER, 1985.

Table 6. Women College Presidents by Type of Institution, 1975-84

Year	Public Institutions		Private Institutions		Women's Colleges		All Institutions	
	No.	%	No.	%	No.	%	No.	%
1975 - Total	16	1.1	132	8.2	n.a.	n.a.	148	4.8
4-yr. inst.	5	.9	98	7.2	n.a.	n.a.	103	5.4
2-yr. inst.	11	1.2	34	14.2	n.a.	n.a.	45	3.9
1978 - Total	31	2.1	146	8.7	75	64.1	177	5.6
4-yr. inst.	9	1.6	114	8.1	62	66.7	123	6.3
2-yr. inst.	22	2.4	32	11.3	13	54.2	54	4.5
1982 - Total <sup>1</sup>	78	5.2	166	9.5	84	75.7	244	7.5
4-yr. inst.	25	4.5	127	8.9	62	69.7	152	7.7
2-yr. inst.	53	5.6	39	11.6	22	100.0	92	7.2
1984 - Total <sup>1</sup>	104	7.0	182	10.1	84	81.6	286	8.7
4-yr. inst.	32	5.8	134	9.9	60	75.0	166	8.8
2-yr. inst.	72	7.8	48	13.7	24	100.0	120	9.4

Sources: The 1981-82 Fact Book for Academic Administrators. Washington, D.C.: American Council on Education, 1982, p. 130.

<sup>1</sup>The 1986-87 Fact Book on Higher Education. Washington, D.C.: American Council on Education, 1987, p. 130.

Table 7. Women as Proportion of University Faculty by Rank

Rank	1972-73	78-79	79-80	82-83
Full professors	9.8	10.1	9.8	10.7
Associate prof.	16.3	19.1	19.4	22.0
Assistant prof.	23.8	33.2	33.9	36.1
Instructors	39.9	52.1	51.8	51.7
All ranks	22.3	26.1	25.9	26.9

Source: Fact Book on Higher Education, 1972-73, 1978-79, 1979-80, 1982-83.

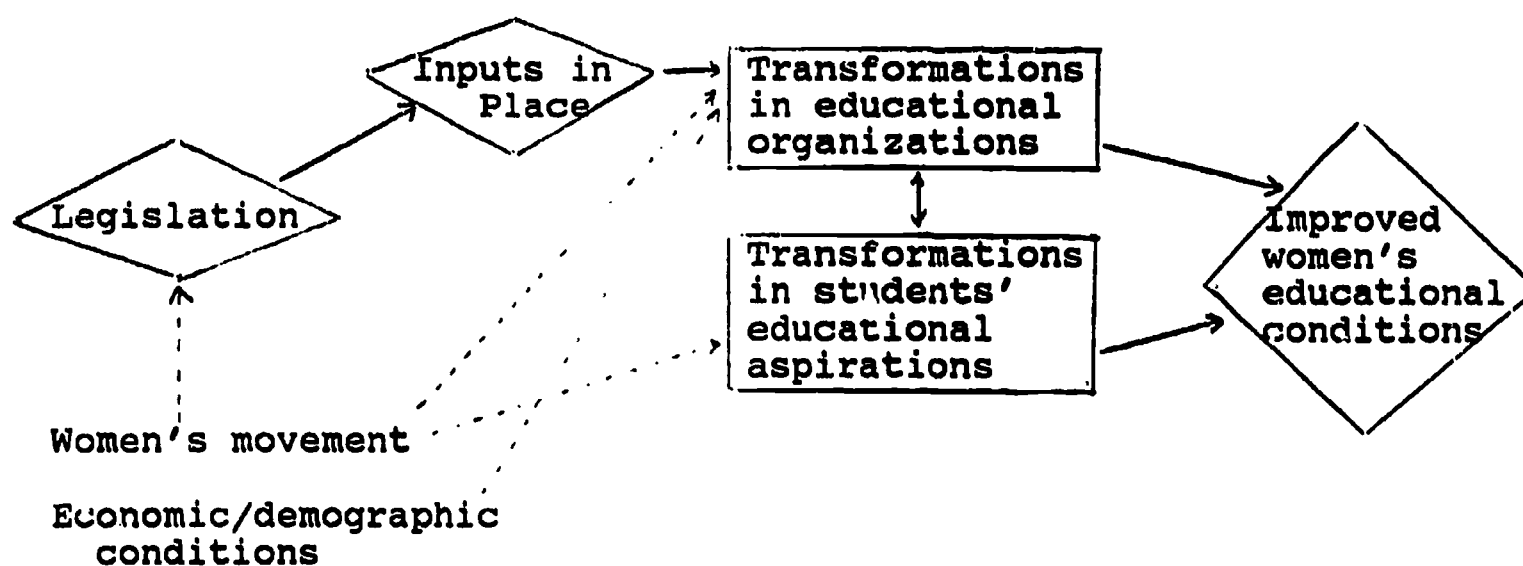


Table 8. Educational Gains by Women in Sports as a Percentage of  
Total Student Participation and Budget Allocation

Sports and Budget Alloc.	1971-74	1981-82	1983-84
Girls in interscholastic sports	7%	35%	35.5%
Girls in intercollegiate athletic programs	15	30	-
Percentage of average college athletic budget assigned to women	2 (1974)	16-24 (1982)	-

Sources: Data for 1971-74 and 1981-82 derive from Hcgan, 1982. 1983-84 data come from PEER, 1985.

Figure A. Events Underlying the Legislation/Improvement of Women's Conditions Process



**Legend:**

- chain of events directly considered in the study
- - - - chain of events assumed but not directly studied
- ◇ event directly studied
- event inferred

## NOTES

<sup>1</sup>These objectives appeared in the 1967 Bill of Rights of NOW, the National Organization for Women, a group amply acknowledged to reflect the general demands of the current women's movement. It should be clarified that while the feminist movement has not zeroed on in formal education with the intensity it merits, the movement has fulfilled intensive and successful educational functions (in the larger sense of the word) through developing feminist critiques of several disciplines; questioning the existence of patriarchal ideologies in society; developing feminist newspapers, magazines, journals, and publishing companies; and establishing women's studies programs in numerous universities.

<sup>2</sup> Broader laws protecting women's equity are Title VII of the Civil Rights Act of 1974, which includes the prohibition of discrimination by educational institutions against students seeking employment, and Title VII and VIII of the Public Health Service Act of 1971, which prohibits discrimination in admissions to federally funded health programs.

<sup>3</sup>These states are Massachusetts, Washington, Connecticut, Hawaii, Illinois, Iowa, Minnesota, Alaska, New Jersey, New York, Oregon, Pennsylvania, and Montana.

<sup>4</sup>Reportedly the most progressive states in gender equity comprise California, New York, and Massachusetts (Brown and Reid, 1987).

<sup>5</sup>This document was entitled Guidelines for Improving the Image of Women in Textbooks. Others that followed suit were Houghton Mifflin's guidelines Avoiding Stereotypes (1975) and

McGraw-Hill with its "Guidelines for Equal Treatment of the Sexes" (1974).

<sup>6</sup>Considering the population as a whole, important difference in education remain: In 1987, 23.6% of men had completed four or more years of education, compared to 16.5% of the women (Census Bureau data, cited in The Chronicle of Higher Education, 1988).

<sup>7</sup>It is estimated that approximately 10% of all adolescent girls become pregnant each year and that 60% carry their pregnancies to full term (Rogers and Strover, 1980). Between 25 and 40 percent of the girls who give birth decide to keep their babies, which suggests that it is most likely that these young mothers face severe constraints in attaining greater education or joining the labor market in advantageous positions.

<sup>8</sup>This bill was endorsed by over 200 national organizations, including the Leadership Conference on Civil Rights, the National Association of Independent Colleges and Universities, and numerous religious organizations.

<sup>9</sup>Brown and Reid (1987, p. 14-15) identify 10 areas of equity research, including three pertaining mostly to women: (1) the practice and effect of differential enforcement of compulsory attendance law according to race, national origin, or gender of truant youngster; (2) student-to-student sexual harassment, especially in vocational education; and (3) reasons for and consequences of uses of computers in minority and nonminority schools and by girls compared to boys. Since Brown and Reid worked for several years in OCR, it can be surmised that some of these research areas were identified through the complaints

received by the Office and thus represent felt needs for knowledge.

<sup>10</sup>The drive toward gender equality manifested by the National Council of Research on Gender and the National Network of Women's Caucuses is a case in point.

<sup>11</sup>The historical accounts of legislation such as Title IX, WEEA, and Chapter 1117--California's version of Title IX--reveal the decisive role of women and feminist groups in influencing the enactment of these laws. A more comprehensive examination of other laws affecting women's education remains to be conducted.

<sup>12</sup>The field of education, despite the large number of women in it, has not been particularly progressive. It was not until 1974 that Phi Delta Kappa, the education honorary society, accepted women in its membership.

## REFERENCES

- Alliance against Women's Oppression (AAWO). Poverty: Not for Women Only. Discussion Paper No. 3. AAWO, September 1983.
- American Council on Education. 1986-87 Fact Book on Higher Education. New York: Author, 1987.
- Applied Systems Institute, Inc. A Descriptive Analysis of the Women's Educational Equity Program. Washington, D.C.: Author, October 1985.
- Bar-Yosef, Riuka. Equalizing Educational Opportunity for Women. In Stephen Bailey (ed.), Higher Education in the World Community. Washington, D.C.: American Council on Education, 1977.
- Bitter, Barbara. Sex Equity in Vocational Education. In Anne Carelli (ed.), Sex Equity in Education. Springfield: Charles C. Thomas, Publisher, 1988.
- Bornstein, Rita. Ambiguity as Opportunity and Constraint: Evaluation of a Federal Equity Program. Educational Evaluation and Policy Analysis, vol. 7, no. 2, summer 1985, pp. 99-114.
- Bornstein, Rita. Title IX Compliance and Sex Equity: Definitions, Distinctions, Costs, and Benefits. New York: Columbia Teachers College, 1981. ED 202 948.
- Brown, Cynthia and Jill Reid. Twenty Years on: New Federal and State Roles to Achieve Equity in Education. Washington, D.C.: National Center for Policy Alternatives, 1987.
- Califano, Joseph, Jr. Governing America. New York: Simon & Schuster, 1981.
- Diamond, Irene (ed.). Families, Politics, and Public Policy. A Feminist Dialogue on Women and the State. New York: Longman, 1983.
- Dunkle, Margaret and Bernice Sandler. Sex Discrimination against Students: Implications of Title IX of the Education Amendments of 1972. Inequality in Education, no. 18, October 1974, pp. 12-35.
- Eisenstein, Zillah. The State, the Patriarchal Family, and Working Mothers. In Irene Diamond (ed.), Families, Politics, and Public Policy. New York: Longman, 1983.
- Fishel, Andrew and Janice Pottker. National Politics and Sex Discrimination in Education. Lexington: D. C. Heath and Co., 1977.



- Flygare, Thomas. Supreme Court Says Title IX Covers Employment but Raises a Serious Question about the Future Impact of the Law. Phi Delta Kappan, vol. 64, October 1982, pp. 134-136.
- Flygare, Thomas. The Supreme Court's and Title IX Decision: Who Won? Phi Delta Kappan, vol. 65, May 1984, pp. 640-641.
- Gelb, Joyce and Marian Paulley. Women and Public Policies. Princeton: Princeton University Press, 1982.
- Hogan, Candace. Revolutionizing School and Sports: 10 Years of Title IX, Ms, vol. 10, May 1982, pp. 25-29.
- Kohl, Jeanne. Women and Political Action: The Sex Equity in Education Act in California. Contemporary Education, vol. 58, no. 4, summer 1987, pp. 211-215.
- MacKinnon, Catharine. Feminism, Marxism, Method, and the State. Toward Feminist Jurisprudence. In Sandra Harding (ed.), Feminism and Methodology. Bloomington and Indianapolis: Indiana University Press, 1987.
- Martinez, Susanne. Sexism in Public Education: Litigation Issues. Inequality in Education, no. 18, October 1974, pp. 5-11.
- Mertens, Donna. Federal Policy for Sex Equity in Vocational Education, Educational Evaluation and Policy Analysis, vol. 6, no. 4, winter 1984, pp. 401-409.
- National Advisory Council on Women's Educational Programs (NACWEP). Title IX: The Half Full, Half Empty Glass. Washington, D.C.: Author, 1981.
- PEER. The PEER Report Card: Update on Women and Girls in America's Schools. A State-by-State Survey. Washington, D.C.: Author, Autumn 1985.
- PEER. Stalled at the Start. Washington, D.C.: Author, 1977.
- Rogers, Everett and Sharon Strover. Peer Communication and Sexuality. In Elizabeth Roberts (eds.), Childhood Sexual Learning. The Unwritten Curriculum. Cambridge: Ballinger Publishing Co., 1980.
- Sadker, Myra and David Sadker. Sexism in Teacher-Education Texts. Harvard Educational Review, vol. 50, no. 1, February 1980, pp. 36-46.
- Snider, William. Civil-Rights Unit Shirks its Task, 2 Reports Charge. Education Week, vol. viii, no. 23, March 1, 1989. p. 1.
- Strober, Myra. Current Outlook for Women in the Economy. Paper presented at the Symposium on Professional Women: Focus on

Change, Stanford University, March 5, 1988.

The Chronicle of Higher Education. In Brief, p. A2, September 28, 1988.

The Editors. An Interview on Title IX with Shirley Chisholm, Holly Knox, Leslie R. Wolfe, Cynthia G. Brown, and Mary Kaaren Jolly. Harvard Education Review, vol. 4, no. 4, November 1979, pp. 504-526.

U.S. Congress, House, Committee on Appropriations, Departments of Labor, Health and Human Services, Education, and Related Agencies Appropriations for 1989; Hearings before a Subcommittee of the Committee on Appropriations. 100th Cong., 2nd Sess., Part 6. Washington, D.C.: U.S. Government Printing Office, 1988.

U.S. Department of Education. Degrees and Other Formal Degrees Conferred, 1982-1983. Washington, D.C.: Center for Educational Statistics, U.S. Department of Education, 1986.

Vetter, Louise and Delina Hickey. Women in Vocational Education: Changes since Title IX. The Education Digest, vol. 51, March 1986, pp. 29-31.

Zellman, Gail. The Response of the Schools to Teenage Pregnancy and Parenthood. Santa Monica: The Rand Corporation, 1981.