A study was made to ascertain the needs of teacher educators for materials and training related to sex equity and to identify the resources currently being used. An analysis of textbooks generally used by most preservice education majors revealed widespread sex bias. It was found that there is a dearth of materials on sex equity readily available for use by teacher educators for preservice or graduate programs. The few materials prepared specifically for aspects of teacher education programs were most likely from Women's Educational Equity Act projects. The majority of materials produced for teacher education have been directed at an inservice audience; very little exists for preservice programs. A survey of members of the American Association of Colleges for Teacher Education revealed that few courses focusing on women are offered to teacher education students as part of their professional training. An outline is presented of specific sex equity needs for teacher education, and recommendations are made on how to meet these needs. (JD)
Final Report

ANALYSIS OF TEACHER EDUCATION'S NEED FOR MATERIALS AND TRAINING RELATED TO SEX EQUITY

for
Women's Program Staff
PO #300-79-0261

Donna M. Gollnick, Principal Investigator
Ralph Cyr, Principal Investigator
Robert A. Burnham, Consultant
Barbara Gerber, Consultant
Consuelo Nieto, Consultant
Myra Sadker, Consultant
Edwina Vold, Consultant

American Association of Colleges for Teacher Education
One Dupont Circle, Suite 610
Washington, D.C. 20036

August 31, 1979

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.
Society is changing! Since 1900 changes have occurred in the lives of women that have freed society to reevaluate the sex roles traditionally assigned to females and males. These include at least five major changes (1):

1. More and more women are entering the labor force. Almost half of the nation's work force is female, and 90 percent of all women will work at some time during their lives. Women with children are also working; 35 percent of all working women have children under 18 years old. (2)

2. More and more women are heading families. Almost one-third of the nation's families are single parent families. (3)

3. Women are having fewer children. Since 1960, family size and fertility rates for all racial groups have dropped markedly. (4)

4. More and more women are living alone or with unrelated individuals. Such relationships increased from 10 percent of all households in 1940 to 20 percent in 1973. (5)

5. More and more women are well-educated. Between 1940 and 1974, the median number of school years completed by women increased from 8.7 to 12.3. (6)

These complex political, economic, and psychological changes have led men and women to assume new sex roles. In some way, everyone in society is affected by these changes. The roles of both males and females have undergone and will continue to undergo major changes and revisions. (7) Both teachers and students live amidst the reality of such changes, yet education programs appear to do little to help them adjust to a society where roles are constantly changing.

Education, as practiced through schooling, functions in two contradictory ways. First, it transmits the experiences and culture of the past, which help to maintain existing societal roles, structures, and institutions. On the other hand, it prepares persons to function in future roles and institutions, which are characterized by accelerating change. Based on an analysis of research and practices, McCune and Matthews concluded that "...schools have served largely to transmit role expectations unrealistic in today's world and have failed to meet the changing needs of women." (9)

What is the role of teacher education in preparing teachers to perform effectively both functions of education? Through professional education courses and experiences, teacher education can assist teachers in developing the skills necessary to transmit the traditional culture within the context of constant change. The problem, however, is that teacher education institutions exist in the same paradoxical situation as other education institutions. Thus,
They have functioned to model and perpetuate these and other conserving effects of education rather than assuming leadership for educational and societal change. Most educators remain unprepared to recognize manifestations and sources of sex role responsibilities for their elimination. (10)

In fact, teacher education appears to contribute to the maintenance of the status quo rather than adaptation to accelerating change.

Does this mean that change within teacher education to reflect more effectively equity concerns and changing sex roles is impossible? Not at all, it means that different strategies are needed in implementing change. Asa Hilliard, dean of education at San Francisco State University, called for teacher educators to lead in this movement.

Change in teaching and learning can start at the top. Teacher educators can and must be models. Quite naturally, one should model nonsexist teaching and leadership. However, a teacher educator also must model nonsexist learning. That is to say, teacher education candidates must know of a mentor's efforts to evaluate himself or herself. Teacher educators must model searching through reading, conferencing, discussions. The task which confronts us is a long-term one and will require hard work. The reduction of sexism must be a conscious priority. The leadership for pedagogical problem solving in this area certainly should come from teacher educators. We lay claim to expertise. Let us demonstrate that expertise. (11)

In recognition of the need for teachers to be better prepared to provide educational equity in classrooms, the National Council for Accreditation of Teacher Education (NCATE) included a standard on multicultural education in its recently revised standards. This standard includes references to several equity issues, including sexism. The standard, which is found in the section on curricula, reads:

Standard 2.1.1 Multicultural Education

Multicultural education is preparation for the social, political, and economic realities that individuals experience in culturally diverse and complex human encounters. These realities have both national and international dimensions. This preparation provides a process by which an individual develops competencies for perceiving, believing, evaluating and behaving in differential cultural settings. Thus, multicultural education is viewed as an intervention and an on-going assessment process to help institutions and individuals become more responsive to the human condition, individual cultural integrity, and cultural pluralism in society.
Provision should be made for instruction in multicultural education in teacher education programs. Multicultural education should receive attention in courses, seminars, directed readings, laboratory and clinical experiences, practicum, and other types of field experiences.

Multicultural education could include but not be limited to experiences which: (1) Promote analytical and evaluative abilities to confront issues such as participatory democracy, racism and sexism, and the parity of power; (2) Develop skills for values clarification including the study of the manifest and latent transmission of values; (3) Examine the dynamics of diverse cultures and the implications for developing teaching strategies; and (4) Examine linguistic variations and diverse learning styles as a basis for the development of appropriate teaching strategies.

Standard: The institution gives evidence of planning for multicultural education in its teacher education curricula including both the general and professional studies components. (12)

References to multicultural education are also made in the standards on governance, faculty, students, resources, and long-range planning.

As of January 1979, all teacher education institutions seeking accreditation or reaccreditation must show evidence of multicultural education in both their basic and advanced programs. Although institutions often incorporate sex equity as a part of multicultural education programs, they are not required specifically to include sex equity in order to meet the standard. This standard is a promising step toward officially recognizing the need to reflect equity in both programs and policies of teacher education, but it is still far from a total solution.

THE STUDY

This study was undertaken to ascertain for the Women's Educational Equity Program staff the needs of teacher educators for materials and training related to sex equity. The study had three objectives:

1. To identify to what extent women's equity concerns have been incorporated in American teacher education;

2. To identify materials related to women's equity currently being used in American teacher education programs; and

3. To identify future institutional training and curriculum materials development needs that will facilitate the incorporation of a women's equity dimension in American teacher education.
Several existing data bases, including ERIC and WEECN, were searched to identify the kinds of resources available. In addition, data collected by AACTE from two sources; (1) a 1977-78 survey of the implementation of multicultural education in teacher education, and (2) on-site visits to 14 teacher education institutions in spring 1979, were used to determine how broadly sex equity issues are being incorporated into teacher education programs. Finally, five consultants knowledgeable about sex equity and teacher education met with the AACTE staff to (1) share related findings, (2) review the data compiled from the data base searches, (3) identify the needs of teacher educators for materials and training in this area, and (4) develop recommendations for WEEA.

SEX EQUITY IN TEACHER EDUCATION MATERIALS

To begin the discussion of sex equity in teacher education materials, let's examine the staple resource in most education courses - the textbook. Most preservice education majors take at least three education courses and student teaching to fulfill certification requirements. These courses are (1) educational foundations or introduction to education, (2) educational psychology, and (3) methods in the area of specialization. Usually, textbooks are used in these course along with clinical and field experiences and other supplementary resources.

Texts have the potential for decreasing sex bias in teacher attitudes and behaviors. They can discuss the way sex-role stereotyping limits the potential of both female and male students. They can provide an accurate and thorough description of Title IX and its implications for schools. They can discuss curricular resources to supplement biased instructional materials. They can discuss instructional approaches that will encourage all students to reach their potential. They can describe the experiences and contributions of women in education. They can encourage future teachers to be aware of and committed to educational equity. Or, through omission and stereotyping, they can reinforce or create biased attitudes and behaviors. Their content is critical. (13)

Do teacher education textbooks adequately reflect sex equity as suggested above? Myra Sadker and David Sadker, teacher educators at American University, investigated 24 teacher education texts widely used in basic preservice courses. Their purpose was to determine what these texts included about the contributions of women, about sexism, and about sex differences. The textbooks analyzed were published between 1973 and 1978. The Sadker's findings revealed widespread sex bias in teacher education textbooks that more likely reinforces than reduces sexist attitudes and behaviors of future teachers. (14) Specifically, the researchers found:
Over 95 percent of the reviewed texts gave the issues of sex equity less than one percent of book space;

One-third of the books did not mention the issues of sexism at all; the methods books for science and mathematics were the worst offenders;

None of the books provided future teachers with curricular resources and instructional strategies to counteract sexism in the classroom and its harmful impact on children;

The most space given to the issue of sexism was 1.7 percent of the content in one book; for example,
  - one-half of the foundations books did not discuss sexism in education,
  - two-thirds of the educational psychology books devoted less than one percent of the content space to sexism,
  - none of the mathematics texts mentioned sexism, and
  - three-fifths of the reading texts did not mention sexism;

Three-fourths of the foundations texts did not mention Title IX of the Education Amendments of 1972;

None of the foundations texts told the history of women in American education including the fact that they were denied access to education;

All of the educational psychology texts discussed sex differences, but none provided a thorough and current analysis of the extant research;

Two-thirds of the science texts did not mention that science achievement scores were higher for males than for females;

None of the mathematics texts discussed the difference in math achievement between female and male students;

All reading texts discussed sex differences in reading interests, usually in a stereotypic manner; and

All books allocated more content space to males than to females; for example,
  - in foundations texts, four times as much content space was allocated to males;
• in educational psychology texts, five times as much content space was allocated to males;
• in science texts, seven times as much content space was allocated to males; and
• in reading texts, twice as much content space was allocated to males. (15)

Thus, teacher education textbooks currently are not models of nonsexist content; in fact, they have a long way to go provide future teachers with information about the contributions of women to education, sexism, and sex differences. In lieu of the textbook, teacher educators could use supplementary resources to teach both preservice and inservice teachers the sex equity information omitted from regular textbooks. Also, they could develop other classroom activities to help students discover this information gap and to develop strategies for combating sexism in their classrooms later. Thus, the next step in the study was to determine what materials exist to help teacher educators to supplement the textbook.

MATERIALS AVAILABLE THROUGH ERIC AND WEECN

The ERIC data bases (RIE and CIJE) were searched using the DIALOG system of Lockheed Informaion Retrieval Service, Inc. The search strategy was based on the following descriptors: preservice education; inservice education; teacher educator education; sex discrimination; sex fairness; sex role; sex stereotypes; sexism; equal opportunities; equal education; equity; and feminism. This search produced a total of 454 "likely" document and journal article citations. In addition, Resources in Women's Educational Equity, Volumes 1 and 2, were searched manually using the same descriptors.

The content of the document and journal abstracts was analyzed on a number of factors to ascertain applicability to preservice and inservice training of education personnel. A total of 62 citations, 11 journal articles and 51 documents, was found to be relevant to these areas. Highlights of the content analyses of these citations follow. Please note that many of the percentages do not equal 100, as most of the analysis categories were multiple choice.

More than 95 percent of the citations concerned inservice education. Forty-seven citations related exclusively to inservice, and six more related to both preservice and inservice. It should be noted that very little of this inservice activity was generated by schools, colleges, or departments of education (SCDE). Regarding the subject area or areas of the citations, 51.6 percent were concerned with general curriculum. Another 16.1 percent dealt with career education, and 11.3 percent were concerned with vocational education. The remainder of the citations addressed specific subject areas, e.g. counseling and guidance, reading and language arts, and social studies.
Most of the citations about career education and vocational education were two or three years old, indicating an early emergence of equity issues in these areas.

The grade level emphasized in the citations was usually broad. Four citations focused on preschool education, and five on elementary education. Two citations focused on junior high schools, and eight on senior high schools. By contrast, 30 citations, 48.4 percent, dealt with grades K-12, and 22 citations, 35.5 percent, focused on postsecondary education.

More than half of the citations contained guidelines related to equity issues. Almost all of these guidelines were directed at teachers rather than students in preservice programs. Many of the guidelines were products of research projects or school district self studies, and the predominant topic was the elimination of textbook bias. About one-quarter, 25.8 percent, of the citations reported on inservice workshops or training programs on equity issues, and a similar proportion, 24.2 percent, reported the results of research. A larger percentage, 30.6 percent, contained course or workshop outlines. Twelve of the citations, 19.4 percent, reported on courses or modules dealing with equity issues. Three of these were undergraduate courses. About 20 percent of the citations contained bibliographies or other lists of available resources.

Finally, the citations were analyzed for specific equity issues. Three issues dominated: sex stereotyping, 75.8 percent of the citations; sex discrimination, 56 percent; and sex roles, 51.6 percent. Other issues covered were: bias, usually in texts, 22.6 percent; sexist curricula, 17.7 percent; attitudes and sexism in the classroom, 12.9 percent; sex differences, 11.3 percent; and awareness, 6.5 percent.

Discussion

In general, education personnel receive little exposure to equity issues at the preservice level. According to the citations analyzed, the typical preservice involvement with sex equity issues is an instructional module inserted in an existing education course, or an elective course outside the SCDE. Institutional data presented later in this report support the notion that exposure of prospective teachers to sex equity issues is often elective and usually occurs outside the SCDE. The apparent lack of courses and instructional modules on sex equity within SCDEs suggests a need as yet unfulfilled. Appendix A contains abstracts of example preservice activities that were taken from the citations studied.

At the inservice level, exposure to equity issues is often indirect, i.e., guidelines, bibliographies, or research reports as opposed to workshops or other kinds of training. In many instances, teachers were one of several groups addressed by a set of guidelines or
a workshop, e.g., a set of guidelines on text bias for parents, teachers, and school administrators. Many inservice activities appeared to be focused on making teachers aware of sex equity issues more than on specific kinds of training activities. Appendix B contains abstracts of example inservice activities that were taken from the citations studied.

PROJECTS AND PRODUCTS OF THE WOMEN'S EDUCATIONAL EQUITY ACT

The Women's Educational Equity Act authorizes the support of an extremely broad range of activities that target on every area of education that perpetuates sex bias, and thereby opens many avenues to carry out the purpose of providing educational equity for women. The activities include: the development, evaluation, and dissemination of curricula, textbooks, and other educational materials; preservice and inservice training for educational personnel, including guidance and counseling personnel; research, development, and other educational activities designed to advance educational equity; guidance and counseling activities, including the development of tests which are nondiscriminatory on the basis of sex; educational activities to increase opportunities for adult women, including continuing educational activities and programs for underemployed and unemployed women; and the expansion and improvement of educational programs and activities for women in vocational education, career education, physical education, and educational administration. (16)

During its first three years of operation, the Women's Educational Equity Act Program (WEEAP) awarded 220 single or multiyear grants and 17 single or multiyear contracts for a total of $21,625,000. (17) A total of 65 grants awarded during the first three years was for preservice/inservice training activities; 27 were small grants and 38 were general and continuation grants. Figure 1 indicates the number of grants awarded each year for preservice/inservice training activities.

<table>
<thead>
<tr>
<th>Year</th>
<th>Small Grants</th>
<th>General</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>2</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>1977</td>
<td>20</td>
<td>12</td>
<td>32</td>
</tr>
<tr>
<td>1978</td>
<td>5</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>38</td>
<td>65</td>
</tr>
</tbody>
</table>

Figure 1

WEEA Projects Focusing on Preservice/Inservice Training Activities (18)

An examination of the 1978 WEEA projects yielded information about the kinds of preservice/inservice training activities funded during that year. None of the small grants focused on preservice teacher education, but, three of the projects funded by small grants are developing modules or models for undergraduate programs or courses other
than education. One of the inservice training activities included training for teachers, administrators, and counselors to provide sex-fair instruction. The second provided teachers, parents, and researchers with skills for encouraging flexible sex role attitudes and behaviors in young children. Abstracts of the two inservice projects are presented in Appendix C. Two of the general and continuation grants focused on preservice teacher education; two others included both preservice and inservice training activities; and another 12 projects focused only on inservice activities. Three of the preservice activities were designed to help students develop skills (a) in identifying sex bias in curriculum materials and classroom activities, and (b) in developing strategies to combat the bias. The fourth preservice project focused on the development of leadership skills by female educators. The scope of the inservice training projects varied. Two projects were designed for community college faculty, one for preschool faculty, one for elementary faculty, and three for K-12 faculty. Some projects were designed for career guidance activities, one for physical education. Others examined stereotyping and sexism in a curriculum. The abstracts of these projects are included in Appendix C.

The Education Development Center in Newton, Massachusetts, disseminates products produced by WEEA projects. At least six of the products now available are adaptable to preservice and inservice teacher education programs. All six products include an examination of sex stereotyping; one focuses on the contributions of women to different academic areas; two focus on career choices; and two include strategies for combating sex bias in the curriculum and environment. Two of the six products are workshop or training programs; the other four are materials ranging from modules to lesson plans to videotapes.

Discussion

Products developed with funding from WEEA appear to be targeted more specifically to the needs of preservice and inservice programs than are many of the products identified through other data bases. Like the products in other data bases, the WEEA projects and products are more likely to be developed for inservice training programs than for preservice programs. Project and product abstracts indicate that the sex equity issue most often addressed is sex role stereotyping; career choices is another issue often addressed. Only one project addressed the issue of math anxiety and preparing teachers to overcome their own biases in that area and develop curriculum and classroom strategies to help future students overcome math anxiety. The major emphasis in both inservice and preservice training is on creating awareness with less emphasis on strategies to combat biases.
SEX EQUITY IN TEACHER EDUCATION CURRICULA

During the 1977-78 academic year, AACTE surveyed its membership to determine how multicultural education was being implemented by teacher education institutions. Of AACTE's approximately 800 institutional members, 446 responded to the survey. For this survey, multicultural education was defined thus:

Multicultural Educational is an educational concept which values the culturally pluralistic nature of the United States and thus the community and student population that schools serve.

Multicultural education is preparation for the social, political, and economic realities that individuals experience in culturally diverse and complex human encounters. These realities have both national and international dimensions. This preparation provides a process by which an individual develops competencies for perceiving, believing, evaluating, and behaving in differential cultural settings. Thus, multicultural education is viewed as an intervention and on-going assessment process to help institutions and individuals become more responsive to the human condition, individual cultural integrity, and cultural pluralism in society.

Several questions in that survey instrument also provided some insight into the extent to which institutions are incorporating sex equity into teacher education curricula.

Respondents were asked to identify if their education unit had provisions for 15 different activities that had been identified as possible components of multicultural education. One of these 15 activities was the "study of sexism." Fifty-two percent of the 446 institutional respondents indicated that this was provided by the education unit. On a scale of desirability, "study of sexism" was ranked 10th of the 15 activities by the institutions with such provisions. However, responses to this question did not indicate how or where the education unit makes this provision, i.e., in a separate course on discrimination, as a part of the foundations course, etc. We also were not able to determine whether all students in the teacher education program were exposed to the study of sexism or only some students.

For all respondents "study of sexism" was ranked 13th out of the 15 activities, still, 70.7 percent of the respondents indicated that this activity was highly desirable. Figure 2 shows the responses to this question from the "Survey of Multicultural Education in Teacher Education."

Some respondents indicated that they depend on other resources on campus to provide information related to women's equity. Sixty-seven institutions, 15 percent of all respondents, had a department or division of women's studies. At 270 institutions, 60.5 percent of the total respondents, courses in women's studies were offered.
Thirty-nine institutions, 8.9 percent, required students to take at least one course in women's studies to complete their requirements for degrees in education. However, most of these courses were offered outside the education unit; sometimes students used a course in women's studies to fulfill part of a general studies requirement.

Finally, respondents were asked to list the courses offered in the area of multicultural education. Although 20 undergraduate courses related to women were listed, most were offered in sociology, history, or English rather than in education. Some of these course titles were:

- Women and Education
- Minority Women
- The American Woman: Accomplishments and Aspirations
- Double Jeopardy: Minority Women
- Sex/Race Images in Language and Literature
- Literature by and About Women
- History of Women in America
- Sex Roles in Modern Society

Only three graduate courses focusing specifically on women were listed. All three of these courses were offered by education units. These course titles were:

- Sex Role Stereotypes in School Curriculum
- Impact of Educational Systems on Women
- Sex Roles and Socialization Process

These data suggest that few courses focusing on women are offered to teacher education students as part of their professional education preparation.

In another question, respondents were asked to indicate in which courses multicultural concepts were addressed. These provisions were most often included in foundations or methodology courses, rather than as a separate course. More than 56 percent of the institutions included multicultural concepts in foundations courses; 43.9 percent included the concepts in methodology courses; and less than 21 percent included the concepts in separate courses on or aspects of multicultural education such as sex equity. However, the survey did not indicate the specific issues or concepts included in any of these courses. It is impossible to determine from these data whether any of the issues related to sex equity are included in foundations or
<table>
<thead>
<tr>
<th>Have Provisions</th>
<th>Highly Desirable</th>
<th>Less Desirable</th>
<th>Not Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>76.5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Experiences which prepare educational personnel to work more effectively with minority students</td>
<td>91.9%</td>
<td>7.1%</td>
</tr>
<tr>
<td>83.2</td>
<td>Study of intergroup communications and classroom dynamics</td>
<td>91.4%</td>
<td>7.7%</td>
</tr>
<tr>
<td>63.0</td>
<td>Study of the dynamics of diverse cultures and the implications for developing appropriate teaching strategies</td>
<td>86.4%</td>
<td>11.6%</td>
</tr>
<tr>
<td>59.9</td>
<td>Study of cultures and ethnicity of those groups within the geographical region served by the education unit</td>
<td>84.7%</td>
<td>13.3%</td>
</tr>
<tr>
<td>54.9</td>
<td>Experiences which prepare education personnel to teach content from a multicultural perspective</td>
<td>84.5%</td>
<td>12.5%</td>
</tr>
<tr>
<td>74.4%</td>
<td>Study of values clarification</td>
<td>84.5%</td>
<td>13.8%</td>
</tr>
<tr>
<td>78.9</td>
<td>A student teaching experience in school with students who are racially/ethnically different from the student teachers</td>
<td>83.6%</td>
<td>15.5%</td>
</tr>
<tr>
<td>58.3%</td>
<td>Study of diverse learning styles related to ethnic/cultural differences and the implication for developing appropriate teaching strategies</td>
<td>83.1%</td>
<td>14.9%</td>
</tr>
<tr>
<td>53.4</td>
<td>Study of racism</td>
<td>76.9%</td>
<td>16.4%</td>
</tr>
<tr>
<td>46.9</td>
<td>Study of socioeconomics</td>
<td>73.4%</td>
<td>23.0%</td>
</tr>
<tr>
<td>46.2</td>
<td>Study of linguistic variations and the implications for developing appropriate teaching strategies</td>
<td>72.4%</td>
<td>21.1%</td>
</tr>
<tr>
<td>48.2</td>
<td>Study of specific ethnic groups within the U.S.</td>
<td>71.1%</td>
<td>23.5%</td>
</tr>
<tr>
<td>52.0</td>
<td>Study of sexism</td>
<td>70.7%</td>
<td>20.6%</td>
</tr>
<tr>
<td>39.2</td>
<td>Study of cultural competencies that can be transferred from one cultural or multicultural setting to another</td>
<td>69.6%</td>
<td>27.4%</td>
</tr>
<tr>
<td>38.8</td>
<td>Study of foreign cultures</td>
<td>58.4%</td>
<td>32.5%</td>
</tr>
</tbody>
</table>

**FIGURE 2**

Responses to statement #1 on "Survey of Multicultural Education in Teacher Education:"
Please indicate on the left hand side of the following chart which activities your education unit has provisions for during the fall, 1977 session. On the right hand side, please indicate your assessment of the educational desirability for such activities.
methodology courses, much less which specific concepts are addressed in such courses.

To clarify the implementation of multicultural education in teacher education, on-site visits were made during spring 1979 to 14 teacher education institutions that appeared to have strong multicultural education programs. A major purpose of these visits was to identify the policies, curricula, and resources that were being used to implement multicultural education. During these visits, the staff tried to determine through interviews and examination of syllabi the implementation of multicultural and equity concepts in these programs; sex equity was one of those concepts.

Little evidence of sex equity as a topic in any teacher education class was found. When sex equity was addressed, the presentation, discussion, and activities usually focused on two areas: sexism and stereotyping. Usually, these were included in a unit that also examined racism. Textbook biases, both race and sex, were sometimes addressed; sex differences or females' contributions to education were seldom included in curricula. Although Title IX was a topic in graduate administration classes, it was not introduced in other courses. In administration classes, requirements for meeting the law were presented and discussed, but seldom did faculty focus on sex equity in curriculum materials, or classrooms and school environments. Often information related to sex equity was presented only when an outside speaker came to class; it was not integrated into regular course content.

The data gathered during these visits were not totally negative. In some institutions, there were promising practices. The liberal arts institutions tended to encourage students to take one or more courses in women's studies as part of their general studies requirements. Ball State University requires all secondary education majors to take a multicultural education course during the sophomore year. This course includes presentations, discussions, and activities on sexism, racism, and stereotyping. Students working toward a concentration in multicultural education examine these areas and also strategies for combating sexism and racism in the classroom. Within the human relations component required of all sophomores majoring in education at The Ohio State University, students are exposed to sexism, racism, and stereotyping. These same issues are addressed in the required introductory education courses at St. Olaf College, Ft. Wright College, University of Miami, and the University of the Pacific.

Whether educational equity issues are addressed in preservice courses depends on the professor teaching the course. While these issues are central to one professor's syllabus, they are nonexistent in another professor's syllabus for a different section of the same course. In small institutions, faculty teaching the same course appear to develop a similar syllabus, but in larger institutions the syllabi for the same course differ according to the professor's philosophy and commitment to educational equity. However, The Ohio State University
is an exception. During the last year and a half, a team of professors and graduate assistants have developed a two-quarter core program for all sophomore education majors that includes class lectures, a human relations lab, clinical experience, and field experiences in schools. This program was pilot tested with more than 100 students last year, and soon will be required of all education majors. As mentioned earlier, the human relations lab examines sexism, racism, and stereotyping.

Most administrators interviewed during the site visits indicated that it has been difficult to get faculty members to incorporate equity issues into their courses. Directors of multicultural and bilingual education programs voiced the same concern about convincing colleagues to incorporate these concerns into courses. Many of the female faculty members interviewed indicated that progress is slow; they believed that often sex equity was only a topic when they were invited into another class to make the presentation. Most administrators interviewed would welcome assistance in making faculty aware of the need to incorporate these issues into existing courses, as well as assisting them in the development of strategies and in the identification of resources.

CONCLUSIONS

There is a dearth of materials on sex equity that are readily adaptable for use by teacher education programs. The few materials prepared specifically for aspects of teacher education programs were most likely to result from WEEA projects. The majority of materials produced for teacher education have been directed at an inservice audience; very little exists for preservice or graduate education programs.

The projects and programs described in the data bases searched and those funded by WEEA usually involved training programs on sex equity for public school teachers and administrators. The primary goal of these programs was to make educators aware of sexist practices common in teaching or counseling. Nonsexist materials in the form of teacher's guides or bibliographies were often distributed as a part of the training session.

Training programs for teacher educators (i.e., professors and administrators of teacher education) are almost nonexistent. As a part of the technical assistance contract from WEEA, a workshop package for postsecondary educators was developed and field tested in eight regional workshops. This package addresses "The Teacher Educator's Role," and is the only training package on sex equity available for the retraining of teacher educators. The package was designed specifically for use by persons implementing training or staff development efforts for education personnel. It focuses on the implementation of Title IX of the Education Amendments of 1972 and the attainment of sex equity in postsecondary institutions.
Approximately 180,000 preservice teachers graduate annually from teacher education institutions across the country. The preservice program should include background information on sex equity as well as strategies for nonsexist teaching. Based on data collected by the American Association of Colleges for Teacher Education (AACTE) over the past few years, information on sex equity is included sporadically, if at all. Most teacher educators have no background in this area; many do not consider this and other equity issues as a necessary component of the courses which they teach; many are not aware of the impact of sexist materials and teaching on both male and female students. Teacher educators need materials that can easily be incorporated into the courses which they teach. Even more they need to be made aware of the importance of addressing sex equity in teacher education programs. This could best be accomplished through both dissemination and faculty development activities.

Specific Sex Equity Needs for Teacher Education

Priority should be placed on faculty development activities. As teacher educators become aware of the need to address sex equity in their own courses, both preservice and graduate programs are also likely to change to reflect sex equity concerns and strategies. Emphasis in faculty development activities should be on (1) raising the level of consciousness about sex equity and (2) developing strategies for preparing educators to provide sex equity.

Attitudes about sex roles are very traditional in teacher education; this is an area where faculty development is needed. Teacher educators need assistance to even catch up with societal changes in this area.

The following materials and training activities on sex equity are needed by teacher educators to more effectively prepare teachers and other educators to deliver nonsexist education in classrooms and schools:

- A training model for teacher educators - the audience to be addressed (teacher educators, faculty and administrators) must be considered in the development of effective training approaches;
- Identification of sex equity materials which are designed for or can be adapted to teacher education programs;
- Technical assistance for developing and implementing nonsexist education programs;
- Identification of resources including speakers and trainers to assist teacher educators in the delivery of sex equity programs;
- Training of graduate students to raise sex equity concerns and issues in classes, seminars, and other professional activities;
Materials and strategies for integrating sex equity through preservice courses in foundations, educational psychology, special and general methods, and the practicum; the following must be addressed in this process:

- What equity issues should be included in these basic courses;
- A balance between elementary and secondary emphasis must be maintained, and
- Materials must deal with knowledge, attitudes, and skills;
- Identification of competencies in sex equity that should be expected of teacher education graduates;
- Development of a model for effectively using resources of Women's Studies Programs on campuses to support sex equity in teacher education;
- Development of a "Teacher Retread Center" to assist educators in the development of new skills for providing equity;
- Development and maintenance of a network (similar to BEH's Deans' Network) of teacher education institutions implementing program and policy changes related to sex equity;
- Development of a mentor system for promoting sex equity in teacher education;
- Development of a definitive statement on sex equity to serve as a framework for development of programs;
- Sex training should be available to the faculty of minority and multicultural education programs; they must be encouraged to also address sex equity issues and to model nonsexist behavior;
- Technical assistance in sex equity should be provided to bilingual and desegregation projects and programs so that their products and training activities reflect sex equity;
- Higher education institutions should be provided technical assistance in planning affirmative approaches to comply with all requirements.
- The following research agenda should be pursued:
  - Differences between male and female learning;
Differences in achievement among sex and ethnic groups;
Interactions between teachers and students by sex and ethnic groups;
Effective intervention strategies for different ethnic/racial groups;
Teaching skills needed to assist both males and females in reading, mathematics, etc., and;
Replication of Guttentag's study on Nonsexist Intervention Curriculum,

State legislative and teacher certification requirements in multicultural education (including sex equity) should be identified.

General Concerns and Needs in Sex Equity

In addition to these specific needs in teacher education, Advisory Panel members identified a number of general concerns and needs for sex equity. Additional research is needed to assist educators and others in effectively implementing programs to provide sex equity for both females and males to help all students meet their potential. The Panel feels that all sex equity materials and training activities produced by either WEEA projects or other sources should reflect multiculturalism; and that multicultural materials and training activities should also reflect sex equity. More coordination is needed among federal projects and programs designed to address one specific equity issue such as bilingual education, sex equity, or race to ensure that all such programs are nonsexist and nonracist. Because a project or program is concerned with a minority issue does not preclude the need for it to also be nonsexist. Specific needs identified by the Advisory Panel in this category are:

- Materials developers and trainers must emphasize the need for sex equity for both males and females;
- Sex equity materials must also reflect cultural diversity, and multicultural materials must be nonsexist;

RECOMMENDATIONS FOR MEETING THE SEX EQUITY NEEDS OF TEACHER EDUCATION THROUGH THE WOMEN'S EDUCATIONAL EQUITY ACT

Although 180,000 preservice teachers graduate annually, few WEEA funded projects have focused on preservice teacher education. The majority of projects classified as directed at inservice/preservice education have been designed for inservice training of educators. In order to change sexist behaviors of teachers and other educators
currently working in schools, inservice training is absolutely necessary. However, intervention strategies at the preservice level are as necessary as at the inservice level. Preservice programs offer an opportunity to influence future educators to more effectively provide nonsexist education from the first time they enter the classroom.

The Advisory Panel strongly recommends that more emphasis be placed on the development of nonsexist preservice teacher education programs. This might be accomplished by WEEA through the development of additional materials prepared for this level and the development and delivery of faculty development activities for teacher educators. The following are specific recommendations to U.S.O.E.'s Women's Program Staff for consideration as long-range plans are made for funding of projects through the Women's Educational Equity Act:

- The organization, development, and maintenance of a resource center on sex equity for use by educators;

- The provision of technical assistance to teacher educators for the development of (1) nonsexist preservice, inservice, and graduate programs and (2) strategies for preparing educators to provide nonsexist education in classrooms and schools;

- Encouragement of thesis and dissertation studies on sex equity through small grant awards to individuals;

- Development and field testing of a model for "training" teacher educators;

- Encouragement of projects that address the needs of teacher education listed earlier; and

- Further encouragement of fundamental research related to sex equity, especially intervention strategies.
REFERENCES


2. United States Department of Labor, Women's Bureau

3. Ibid.

4. McCune, 1975, p. 294

5. Ibid.

6. Ibid.

7. McCune, 1975, p. 295

8. Ibid.

9. Ibid.

10. Ibid.


15. Ibid. p. 2-8


17. Ibid. p. 5

18. Ibid. p. 26, 31
APPENDIX A

SELECTED ERIC ABSTRACTS FOR PRESERVICE TRAINING
Liberating Our Children, Ourselves. A Handbook of Women's Studies Course Materials for Teacher Educators.

Howard, Suzanne
American Association of Univ. Women, Washington, D.C.
75. 560.
Available from: American Association of University Women, 2401 Virginia Avenue, N.W., Washington, D. C. 20037 ($1.50)
EDRS Price MF-$0.83 Plus Postage. HC Not Available from EDRS.

This document presents a rationale for the use of women's studies courses in teacher education programs and offers suggestions concerning possible topics to cover, books to read, and projects to do. It stresses that women's courses are ideally team taught and nonhierarchical, placing a strong emphasis on student involvement in the direction of the course. Units are suggested for a model course, "Sex-Role and Education." Suggested topics include hiring and other employment practices, children's books, the socialization process, and changing discriminatory attitudes. Specific objectives are outlined in terms of what any college course should provide and what a women's course in particular should offer. Among the suggested learning projects are journals, individual experiments, and case studies of particular women. A number of ideas for research topics are suggested, along with possible ways of researching the topics. Suggested books are grouped under headings such as the History of the American Woman, Women's Place, Women as Minority Group, Sex Roles, and Counseling. A list of organizations dealing with women's rights issues is also included. (CD)

Descriptors: *Curriculum Guides/ Educational Resources/ *Feminism/ Instructional Innovation/ Political Socialization/ School Role/ Sex Discrimination/ Sex Role/ Sex Stereotypes/ *Teacher Education/ *Women's Studies
Facilitating Sex-Fair Teacher Training: A Module for Inclusion in an Elementary Mathematics Methods Course.
Burton, Grace L.; Russell, Dorothy
Sep 78 37p.; Contains light and broken type
EDRS Price MF-$0.83 HC-$2.06 Plus Postage.
Language: English
Geographic Source: U.S./North Carolina
This module was developed to help those who train elementary teachers to increase the awareness of preservice elementary school teachers of the effects of sex role stereotypes as they pertain to women's achievement in mathematics. The topics covered include: (1) career implications of mathematics; (2) countering the stereotypes; (3) encouraging the development of spatial ability; and (4) mathematics anxiety. Worksheets are included in the Appendix. (MP)
Descriptors: Anxiety/Career Awareness/Elementary School Teachers/Higher Education/Instruction/Instructional Materials/Mathematics Education/Sex Stereotypes/Teacher Education/Units of Study/Worksheets
Identifiers: Visual Spatial Ability

Introducing High School Students to the Women's Movement: A Directed-Study Project for Undergraduates.
Magnuson, Etta; Yoetzel, Jodi
Minnesota Univ., Minneapolis. Minnesota Women's Center.
73 '17p.; Report of a project cosponsored by the University of Minnesota Living-Learning Center
EDRS Price MF-$0.76 HC-$1.58 Plus POSTAGE
The ongoing project, first initiated at the University of Minnesota in the spring of 1973, has two objectives: (1) to provide interested undergraduate women at the university with research and development training in Women's Studies; and (2) to provide metropolitan area high schools with information and education regarding the women's movement. College students enrolled in this two-quarter course spend the first quarter preparing informative presentations on the women's movement. During the second quarter the students go into local high schools and deliver the presentations. This report describes the project and offers hints to others who may be interested in developing a similar course. The following are discussed: (1) project background; (2) hints for preparing to offer a women's studies course; and (3) course curriculum, requirements, and objectives. A project sample syllabus is included. The appendixes contain samples of advertisements used by the project, a news release, a letter to high school administrators explaining the project, a proposal form outlining course evaluation form, and a course bibliography.
Descriptors: Course Descriptions/Course Evaluation/Course Objectives/Course Organization/Curriculum Development/Educational Innovation/Feminism/Higher Education/Resource Materials/Secondary Education/Student Projects/Women Studies
APPENDIX B

SELECTED ERIC ABSTRACTS FOR INSERVICE TRAINING
Checklist: Rate Your School for Racism and Sexism

Racism and Sexism Resource Center for Educators, New York, N.Y.

77 13p.


Available from: Racism/Sexism Resource Center for Educators, 1841 Broadway, Room 300, New York, New York 10023 ($2.50)

EDRS Price MF-$0.83 Plus Postage. HC Not Available from EDRS.

Through the use of these checklists, participants increase their awareness of racism and sexism in their schools and clarify what they would like to change. The checklists are designed to be administered by a trainer to a group of participants. The trainer first gathers information concerning racial characteristics of the community, degree of integration of the schools, and number and type of district employees of each race and sex. After presenting this information to the participants, the trainer administers the checklists. Both checklists are divided into sections concerning community, school board, administration, teachers, guidance, students, and curriculum. As a supplement to the checklist, examples of institutional racism in education are cited, including biased curricula, culturally-biased IQ tests, tracking, incorrect classification of students as mentally retarded, inequitable school financing, unfair discipline measures, poor teacher expectations and attitudes, and exclusionary hiring procedures. Examples of sexism in education include biased textbooks, unequal teacher expectations, and institutional channeling.

Descriptors: *Check Lists/ Elementary Secondary Education/ *Racism/ *Sex Discrimination
Sex Fairness in Career Guidance: A Learning Kit.
Stebbins, Linda B.; And Others
75 265p.
Sponsoring Agency: National Inst. of Education (DHEW),
Washington, D.C.
Contract No.: NIE-C-74-0141
Available from: Abt Publications, 55 Wheeler Street,
Cambridge, Massachusetts 02139 ($15.00 plus $1.50 for
shipping/handling)
Document Not Available from EDRS.
This learning kit presents self-administered curriculum
materials which can be used by counselors and counselor
educators to aid in the elimination of sex-role stereotyping
and sex bias in career choice. Curriculum materials are
organized into four chapters: (1) "Orientation to Sex
Fairness", introduces the dual role system, discusses
traditional family and occupational roles for both sexes,
their antecedents and consequences, and current challenges to
the system; (2) "Recommendations for a Comprehensive Sex-Fair
Career Guidance Program" offers a perspective on sex fairness
in the counseling process, and also discusses counseling
strategies for developing counselor self-awareness for
interacting with clients individually or in groups, and for
working with others in the client's environment; (3)
"Guidelines and Recommendations for Sex-Fair Use of Career
Interest Inventories" is designed to help counselors identify
sex bias, and to minimize it in administering, reporting, and
interpreting these inventories; (4) "A Resource Guide" provides an
extensive list of currently available supplementary reading and, audiovisual materials, and an
annotated bibliography. The text includes pre- and
post-assessment techniques, transcripts of counselor-client
interactions, and role play scenarios. Separate supplementary
materials available as part of the kit include seven different
spirit masters, eight role play cards, counselor-client
interaction exercises, and an audio-cassette tape of four
counseling interviews. (TA)
Descriptors: *Career Choice/ *Career Education/ *Career
Planning/ *Counselor Educators/ *Counselor Training/
Discriminatory Attitudes (Social)/ Guidance Personnel/
Individualized Curriculum/ *Instructional Materials/ Interest
Tests/ *Nondiscriminatory Education/ *Occupational Guidance/
Resource Guides/ *Sex Discrimination/ *Sex Role/ *Sex
Stereotypes
Designed to help vocational instructors recognize sexist and non-sexist behavior, this learning module includes a rationale, objectives, prerequisite tests for each of the four sections, and a posttest. Section I discusses male/female participation in the labor force, female/male enrollments in vocational education; and the relationship between areas for which students are training and occupations in which men and women are employed. Section II summarizes the major legislation which aims for equal opportunity for female/male students and men/women employees in vocational education. Section III differentiates between behavior which is discriminatory, sex biased, sex fair, and sex affirmative. Section IV suggests strategies the instructor can use to promote sex equity. This last section includes a checklist of sex-fair teaching behaviors and a values questionnaire for students, suggests providing time for students to discuss the advantages of being female or male in America, provides information on the changing occupational roles of men and women, suggests how to use biased and stereotyped textbooks, and gives guidelines for evaluating textbooks formerly for one sex. The appendix provides further discussion on legislation which addresses equal opportunity in education and employment.


Identifiers: Education Amendments 1972 Title IX/ Education Amendments 1976 Title II
APPENDIX C

Selected Abstracts of WEEA Projects
with Preservice/Inservice Training
NONSEXIST CURRICULUM FOR PRE-SERVICE TEACHER EDUCATION

American University
School of Education
Massachusetts & Nebraska Avenue, N.W.
Washington, District of Columbia 20016

Amount: $121,011
Duration: Two Years/
First Year
Director: Dr. Myra Sadker
Dr. David Sadker
Phone: (202) 686-2186

To develop a sound and coherent model for Nonsexist Teacher Education and to develop instructional materials and training strategies based on the model. Materials will be designed for easy integration into the current core of teacher education courses and programs. Model and materials will be implemented and validated in 10 colleges and universities affiliated in a network of demonstration sites.

MATH ANXIETY REDUCTION TEACHER EDUCATION (K6)

Research Foundation and
Queens College of CUNY
505 Park Avenue
New York, New York 10022

Amount: $139,337
Duration: Two Years/
First Year
Director: Ms. Miriam Weiss
Phone: (212) 520-7444

The purpose of the Teacher Education and Mathematics (TEAM) project is to develop a model program and high utility products to promote systemic change among teacher education students. Goals are 1) to reduce mathematics anxiety in teacher education students 2) to increase their perception of mathematics as a female, as well as male, domain; and 3) to develop their skills in identifying sex role bias in mathematics curriculum materials and teacher-pupil interaction in the classroom.
PRACTITIONER TRAINING MODEL IN NONSEXIST CURRICULUM DEVELOPMENT

Northwest Regional Educational Laboratory Multicultural Division
710 S.W. Second Avenue
Portland, Oregon 97210

Amount : $144,533
Duration : Three Years/
First Year

Director : Ms. Barbara Hutchison
Phone : (503) 248-6960

To develop a replicable pre-service, and in-service teacher and parent training model that will focus on: 1) teachers' awareness of their attitudes toward stereotyping and sex bias, 2) modification of teachers' instructional behavior to increase their ability to provide nonsexist education, 3) implementation of strategies for reducing sex bias and stereotyping in curriculum, and 4) modification of parents' awareness of sex bias and its implications. Products will be: 1) a packaged workshop model including practitioner, parent and technical assistance components that will be available for national dissemination; 2) a nonsexist reading list; 3) an evaluative tool for assessing sexism in classroom materials; 4) a bibliography of nonsexist supplementary material for teachers, curriculum development; 5) a technical assistance model which can be purchased and used by non-NWREL trainers to deliver sex-fair workshops to additional schools.

DEVELOPING INTERPERSONAL COMPETENCIES IN EDUCATIONAL LEADERSHIP

University of Cincinnati
College of Education and Home Economics
Cincinnati, Ohio 45221

Amount : $206,757
Duration : Two Years/
First Year

Director : Dr. Nancy A. Evers
Phone : (513) 475-3617

To develop, validate, and disseminate four prototypic training modules on androgyny, assertion, power and leadership for use in the pre-service and in-service preparation of educational leaders in educational administration and counselor education. The training modules will consist of an instructional manual, a clinical experiences manual and an accompanying videotape. The target population will be those persons, especially women, in pre-service and in-service training institutions of higher education, other postsecondary institutions, and elementary and secondary institutions.
SMALL GRANTS

MULTICULTURAL SEX ROLE DEVELOPMENT FOR TEACHERS/PARENTS/RESEARCHERS

Dr. Candace Schau
12812 Hugh Graham Road, N.E.
Albuquerque, New Mexico 87111

Amount : $14,994
Duration : One Year
Director : Dr. Candace Schau
Phone : (505) 292-3567

To identify, describe, and interrelate young children's (2-6 years) verbal sex role stereotypes and their actual sex role behaviors; and, to develop, present, and evaluate a workshop for teachers of young children designed to help teachers gain skills in encouraging flexible sex role attitudes and behaviors. This project will expand a former WEEA project by Schau to include Native American children in addition to Anglo and Hispanic children and their care centers. Project results can be used by teachers, parents, and researchers of young children.

SEX FAIR EDUCATION TEAM ACTION APPROACH

Framingham Public Schools
Pluralistic Education
140 Pearl Street
Framingham, Massachusetts 01701

Amount : $13,246
Duration : One Year
Director : Ms. Ellen Cunniff
Phone : (617) 872-6135

To develop a training model for school administrators, guidance counselors, and teachers in public schools. The model will use a team approach to effectively eliminate sex-bias in schools. Self-awareness activities will be conducted for teams of adults who, in turn, will conduct activities for students. After training, educators will have a resource of information for producing awareness in students and insight into their own biases and its effect on others. Adult team members will use their awareness to identify an issue of discrimination and plan a solution to it. The school teams will combine the efforts of an administrator, a teacher, a guidance counselor, and a parent. Products will consist of: 1) the model of the team approach for action and the training process; 2) an administrator's handbook, and 3) a teacher's manual of activities and a student's workbook.