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ABSTRACT

This report identifies and reviews projects and strategies that have proved successful in eliminating sex bias in vocational education. The information is intended to facilitate the development of affirmative measures by the States to eliminate sex discrimination in vocational education programs and to aid them in complying with regulations of Title IX of the Education Amendments of 1972. The 24 projects described are grouped into four categories according to major purpose: (1) To increase career awareness, (2) to recruit women into non-traditional vocational training, (3) to increase commitment and concern of education personnel through conferences, and/or (4) to develop materials for use by students, parents, and community. Some of the projects are in various stages of completion: Developing materials, evaluating project successes, and/or writing final reports. For each project a contact person, address, and telephone number are provided and the funding source is identified. General conclusions drawn from the analysis of the projects reviewed are presented, and four other lists of resources are included (with addresses and phone numbers): (1) Individuals and organizations, materials, projects, and studies. (HD)

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EXEMPLARY STRATEGIES FOR ELIMINATION
OF SEX BIAS IN VOCATIONAL EDUCATION PROGRAMS

Final Report

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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INTRODUCTION

It is a well substantiated fact that vocational education has not provided the same opportunities for females as it has for their male counterparts.¹ Socialization patterns in the home and the schools have served to channel women into preparation for traditionally female occupations and away from male-intensive technical and skilled training programs. The "male only" aura of traditionally male vocational education programs has prevailed even after the programs were opened to women by law. Cultural reinforcement, counseling, peer, and teacher attitudes and the predominance of males in such programs inhibit women from taking advantage of previously restricted occupational training and, thus, perpetuates sex segregation in vocational education.

Two pieces of legislation have brought the issue of discrimination by sex to the attention of the vocational education community. The regulations released in July, 1975 for Title IX of the Education Amendments of 1972 have indicated that segregation by sex is illegal. Positive steps must be taken to ensure equal access to vocational education programs for all students. It is stated in the regulations that, "A recipient may be required to undertake additional recruitment efforts for one sex as remedial action."² Furthermore,

1. Among others Steele, M., Women in Vocational Education, Technical Education Research Center, Washington, D.C., 1974; Roby, P., Toward full equality more job education for women, The School Review, Vol. 84, Feb. 1976; Manpower Report of the President, Washington, D.C., U.S. GPO, 1975; Steiger, J. and Cooper S., Vocational Preparation of Women: A Report of the Secretary's Advisory Committee on the Rights and Responsibilities of Women, July 1975; Ellis, M., Women at Work, Technical Education Research Center, Washington, D.C., 1974; and Hearings Before the Subcommittee on Elementary, Secondary and Vocational Education, March 17, April 21 & 28, 1975 have dealt with this issue.
2. "Nondiscrimination on the Basis of Sex." Federal Register, Vol. 40, No. 108, Wednesday, June 4, 1975, p. 24140.

Title IX regulations stipulate that before July 21, 1976 each recipient institution shall have completed a self-evaluation, modified any discriminatory policies and taken remedial action "to eliminate the effects of any discrimination which resulted or may have resulted from adherence to these policies and practices."³ The Women's Educational Equity Act of 1974 provides federal funds for activities designed to promote equal educational opportunities for women throughout the nation. Section 160F.4 indicates specifically that one goal of the activities supported by this act will be "the expansion and improvement of educational programs and activities for women in vocational education..."⁴

The above legislation mandates and provides funds for efforts to counteract the effects of early and persistent socialization of males and females in society that channel them into "sex appropriate" activities, interests, education, training and, ultimately, occupations. These efforts are critical in the field of vocational education which has in the past perpetuated the distinction between the sexes. It has been said that "the most direct link between the dual occupational and educational systems for females and males is found in the vocational programs in schools throughout the nation."⁵

Since the problem has been researched, legislation passed and funds allocated, energies should be directed to the development of appropriate strategies and techniques suitable for (1) eliminating sexist policies, programs and ideas that foster discrimination in vocational education; (2) expanding women's knowledge of

3. Op. cit., Federal Register, p. 24138.

4. Women's Educational Equity Act Program, Federal Register, Vol. 41, No. 30, Thursday, February 12, 1976, p. 6438.

5. Equal Vocational Education: A Project by the Center for Human Resources, University of Houston, October, 1975, p. 2.

work and career options; and (3) actively recruiting women into non-traditional fields as both teachers (role models) and students. Several projects have already been undertaken to equalize opportunities in vocational education. It is the purpose of this report to identify and review projects and strategies that have proved successful and to coordinate that information to provide practical solutions, examples and materials for use by the states. This information is intended to facilitate the development of affirmative measures to eliminate sex discrimination in vocational education programs and to comply with Title IX regulations.

The projects, materials and programs collected for this purpose were identified through a myriad of resources, contacts and reports (see Appendix A). The immediate and long-range plans of the state plans for 1976 and the recommendations of state advisory council reports for 1975 were also reviewed as possible sources of information relating to pertinent projects and/or materials. Since these reports were prepared to provide specifically mandated information and include very general goals, procedures and recommendations, they were not a very good source of program information. Furthermore, because of the wording of the objectives, it was difficult in many cases to assess whether a specific program would provide greater access to female students unless that was stated as a goal. Thus, it was impossible to determine whether a plan "to increase students' awareness" included specific activities for expanding women's career options. Very few of these documents included plans to equalize treatment of the sexes. In the cases (e.g., Massachusetts and New Jersey) where objectives for women were mentioned, it was only in very sweeping goal statements. The 1976 budget plans for Illinois did include a provision to "contract for the extensive field test

and refinement of lesson materials designed to expand the opportunities available to young women in vocational education." It was only through other sources that details of this project were identified.

The one exception to the lack of specifics regarding sex discrimination elimination strategies in the state plans was provided by the District of Columbia. In an appendix to Part I, the D.C. staff provided a description of their program to rectify previous sexual inequalities in vocational education. A description of that program is included later in this report.

The Minnesota Advisory Council on Vocational Education had created a Subcommittee on Women in the World of Work and was involved in a review of materials for sex bias (presented in greater detail later in this report). However, the individuals involved indicated that no mention was made of these activities in the Advisory Council Reports because it was not required.

The majority of information uncovered in this project focused on the discussion of the problem of sex discrimination in vocational education rather than on practical solutions. However, since the elimination of sexism and increasing career choices is a goal common to several areas of education and labor, projects in related fields were also reviewed and included when the material or techniques were applicable to vocational education.

PROJECTS

Each of the projects described below represents one attempt to effect an awareness of sex discrimination for school personnel and/or to restructure sexist policies or programs. Five approaches to the elimination of sex bias in vocational education have been identified from an analysis of the goals and strategies of relevant projects.

The approaches seek to:

- increase career awareness
- recruit women into non-traditional vocational training
- increase commitment and concern of education personnel through conferences
- develop materials for use at students, parents and community

Projects utilizing a common approach usually have similar overall strategies although they may use different materials and techniques.

Since the concern for reducing the differences in the treatment of the sexes in vocational education has begun to bring action only within the last three years, many of these projects are still in progress. They are in various stages of completion: developing materials, evaluating project successes and/or writing final reports. Thus, the present review and analysis of these projects is limited by their stages of development and by the availability of pertinent information, materials or data. For each project, therefore, a contact person, address and telephone number are provided to facilitate follow-up.

I. PROJECTS TO INCREASE CAREER AWARENESS OF STUDENTS

Though these projects do not specifically attack the problems of sex discrimination in vocational education, they supply insights into career planning and greater career exploration. Ultimately, therefore, they may increase the number of non-traditional enrollees in vocational education programs.

Each of the projects utilizes a strategy of intervention into school or into the home for high school graduates for the purpose of career awareness and planning at or before the secondary level. It is particularly necessary for potential vocational students to receive early intervention since their training usually ends at high school.

Broadening the Scope of Involvement Of Young Women in Occupational Education

JoAnn Steiger
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Funding Source: Part C of Vocational Education Amendment of 1968 and grant under Title IV of Civil Rights Act of 1964 through Illinois Equal Education Opportunity.

One of the first problems faced by many of the projects was the lack of acceptable materials to provide students with information about career options and the world of work. Broadening the Scope of Involvement Of Young Women in Occupational Education was initiated to develop a curriculum and materials for increasing students' awareness of relevant laws and to introduce female students to facts about non-traditional occupations, the limitations placed on women in career choice and the interrelationship between occupations and wages.

The curriculum and materials are being developed for students in their early high school years. They are presently being evaluated in several different classroom settings, across age and ability levels. The one-week package is being designed to be included in any course outline. It will be recommended that the

career awareness and information unit be given early in the first semester of the school year. In that way, the last session of the unit can be used by a school counselor to explain the course options available to students in the next semester. Students will be encouraged to "try out" non-traditional courses to see if they have any interest in them.

Of all the materials of this project, the game that is being developed is particularly innovative. Similar to Monopoly, it is played with male and female partners representing a married couple. The partners must decide whether one or both will work. Those who work will choose their careers which determine their starting salaries and then progress along the board with the roll of the dice. At certain stops along their paths, players must pay for illness, accidents and other expenditures. On each trip around the board, the players collect a salary and must pay the cost of living. Some of the players go bankrupt or end up on welfare. With this ingenious game, students begin to realize the relationship between career choice and earnings potential, the costs of maintaining a household and the effects that certain decisions (such as the number of children to have) have on a family's lifestyle.

Relevance to Other Programs

Although these materials are still in the development and testing phase, their author indicates from anecdotal evidence that there appears to be an increase in the students' awareness of the consequences of career choice and in student interest in non-traditional fields. Both the students and the teachers enjoy the experience and are enthusiastic about continuing to explore career options.

An analysis of the evaluation materials will reveal whether there was any increase in the students' knowledge of the world of work. Materials from this project will be ready for dissemination in 1977.

Project HEAR (Human Educational Awareness Resource)

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(609) 921-1484

Funding Source: Grant under Elementary and Secondary Education Act, Title III.

The goal of Project HEAR (Human Education Awareness Resource) is to allow each individual to better fulfill his or her own potential. The basic assumption is that self-understanding, knowledge of the working world and the ability to make intelligent decisions based on this knowledge will provide youngsters with the background necessary to make realistic preparations for careers that reflect their own individual interests, needs and abilities.

Funded under the Elementary and Secondary Education Act of 1965 (Title III), HEAR has developed Career Education resource materials and curricula which go beyond stereotypes and open a spectrum of informative career opportunities to both sexes. HEAR also trains elementary, intermediate and high school teachers and counselors in the use of these materials and their important role in guiding students to career information.

Three learning units have been developed for field test purposes for use at the primary level, the intermediate level and the secondary level. Each learning unit contains student workbooks, accompanying teacher's manual, audio-visual materials, games, stories and pre and post-test forms. HEAR also has created a legal rights brochure which is entitled, "A Guide for Women: The Law and

Employment." This brochure is included in both the intermediate and secondary learning units.

In addition, Project HEAR has designed a comprehensive Occupational Resource Card Classification System. The system contains information about 1,860 occupations. A student can shuffle through nine job categories using 18 personal variables and lift out a group of occupations and careers personally tailored to suit his/her needs and interests.

Relevance for Vocational Education

Project HEAR is related in a general way to the objectives of equal treatment of the sexes in vocational education. By increasing the students' self-awareness, HEAR facilitates greater career and training choices. By providing general career awareness and information on the world of work, it provides the first step in the effort to create equal access to the sexes in vocational training.

One interesting finding of the project is that at the junior high school level, the degree of stereotyped interests and goals increases as the young girls become interested in boys. Luckily, this effect dissipates in the high school years. From this finding, the question arises of whether this regression can be eliminated by earlier intervention, and whether or not presentations during this period are effective in reducing the stereotyped behavior.

Career Decision Making Guide for Adult Basic Education Teachers

Huntsville, Alabama City Schools
Adult Education Program
2627 Hall Avenue, N.W.
Huntsville, Alabama

Funding Source: U.S. Office of Education
Project Monitor: Robert Marshall
(202) 245-9760

The purpose of this project was to perfect a career decision-making model for use by an adult basic education teacher to help the disadvantaged upgrade.

themselves educationally and to make a realistic career decision. Once the adult has selected a career goal, the model helps determine career strategies.

The emphasis was placed on counseling and assisting the teachers in counseling the unemployed and underemployed adult who is enrolled in the adult education program.

Relevance for Vocational Education

The vocational counseling of adults, especially disadvantaged adults, requires different approaches than the counseling used with students who have usually had no work experience. The material developed in this project will be useful for vocational counseling in other adult educational programs.

Career Counseling and Guidance Project

Vivian Guilfooy
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Newton, Massachusetts
(617) 969-7100

Funding Source: National Institute of
Education, Education and Work Division
Project Monitor: Ella Kelly
(202) 254-5470

This project is the only research and development program of its kind concerned exclusively with the career-related needs of home-based adults. This group includes persons 16 or older who are neither working full-time nor attending school on a full-time basis. Since its inception, the project has provided information, guidance and referrals to over 5000 adults, aged 16 to 75, most of whom were women.

Although these clients have come to the service with a variety of employment histories, educational backgrounds and career aspirations, many of them have expressed similar needs which required:

- A better understanding of their own interests, abilities, values and goals.

- Facts about career trends, opportunities and requirements.
- Information about the available educational and skill-training opportunities.
- Information about sources of help in such problem areas such as financial support, discrimination, child care and training.
- Help in developing and implementing career plans.

To meet these needs, the project has developed a number of components that relate to and reinforce one another. The core of the project is "Career Counseling" by telephone, provided by trained paraprofessionals. Because the information about topics related to adult counseling is widely dispersed, a Resource Center collects career-related materials for use by clients, counselors and other staff members. The public is informed of these activities and clients are attracted through the outreach component. Finally, a research and evaluation component continually informs the staff about the project's development and described client characteristics, needs, decisions and plans.

The project is in its third and final year of operation. It's developers want to share their experiences, both to help others interested in establishing similar services and to gain valuable feedback. To encourage this exchange of information, the staff has created a number of products for practitioners, policy makers and clients.

Relevance for Vocational Education

This project exemplifies an innovative approach to provision of occupational counseling and guidance to a population that would not usually have access to such services. It provides an excellent opportunity to reach women who had previously been discouraged from entering skilled technical training. Guidebooks

have been created to help initiate and develop similar programs throughout the country. Many of the program components could be useful as is or adapted for use by vocational programs for any of its students. Values assessment and occupational and training information are useful for anyone making career decisions.

Career Exploration Project for High School Senior Women

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Supported in part by National Science
Foundation, Grant GY11382

The focus of the Career Exploration Project was to aid outstanding high school senior women in becoming aware of traditionally male opportunities in math and science. It would seem to be a far cry from the needs of vocational students. However, the thoughtfully planned and presented strategies and the outlines for self-exploration in the workshops would be helpful resources for those programs in the process of developing techniques for increasing female student's awareness of abilities and opportunities in vocational education.

There were three parts of the Career Exploration Project. The first part was a workshop for students and their parents. The workshop emphasizes the importance of life-planning and introduces the fact that "career planning" affects other aspects of life and non-career goals affects career decisions. The workshop was followed by a home course of study. Finally, a supportive career seminar was offered the following (Freshman) year for those who attended the University of Kansas.

Relevance for Vocational Education

The level of sophistication required for many of the activities included

in the Manual for this project may be beyond the capability of the majority of vocational education students. However, the focus and methods of presentation of those activities provide a good starting place from which to develop similar materials for female students interested in vocational training.

The program and activities would need to be scaled for junior high or early high school students in order to have any relevance for potential enrollees in vocational training.

The parent workshops provide an interesting approach to increasing their awareness and creating a supportive environment for students considering non-traditional career choices. The workshops and activities would require revision but the basic technique is innovative and may be adapted to vocational education situations.

II. PROJECTS TO RECRUIT WOMEN INTO NON-TRADITIONAL VOCATIONAL TRAINING

It is presently illegal to prevent students from enrolling in any class because of their sex. Yet, relatively few students are taking advantage of the opportunity to explore courses or undertake career training that were previously restricted. Early and continued socialization and ideas about sex appropriate activities create "blindness" that limit a student's range of options. For the most part, students do not even consider the choices that were previously unavailable to them. For female students, the possibility of enrolling in male-intensive skilled and technical training has the particular benefit of preparing them for jobs with higher wages and with a greater likelihood of employment than is possible with most of the "female" jobs.

Projects have recently been initiated to increase the number of female trainees in the male dominated vocational training programs by educating them to the advantages of such training and actively recruiting them into these non-traditional programs.

These projects differ in scope and several of the component techniques are unique but the basic strategies follow much the same pattern. The strategies include:

- o materials collection and/or development.
- o stimulation of interest and support
- o increasing career options of students through presentation of information, to skilled trades and training and provision of role models.
- o availability of support services.

New Pioneers Project to Eliminate Sex Bias in Occupational Education

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State Department of Education
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(919) 829-3614

Funding Source: State grant under Vocational Education Amendments of 1968, Part C, Section 131b
Project Monitor: Velma Brawner, Bureau of Occupational and Adult Education
(202) 245-2617

The most widely recognized project to eliminate sex bias in vocational education is the New Pioneers Project, administered by the State of North Carolina. The initial objective of this project was to expand options for women in occupational education programs. However, the project staff determined that to accomplish that objective it was necessary to undertake a course of action to provide a "fundamental understanding of the sex bias in general and how it damages both sexes."⁶

6. Straser, M., "Broadening Vocational Horizons," Undated Mimeo, p. 3.

The New Pioneers Project is directed toward systemic change, that is, alteration of the prevailing education and work system to improve attitudes relating to women and work and to increase opportunities for women in occupational education. As originally planned, the project had five objectives and three products.

Objectives:

1. To assess any traditions, conditions and artificial restraints in the occupational education programs in North Carolina that restrict training opportunities for women.
2. To develop a set of recommendations for eliminating barriers to occupational training for women.
3. To develop a model for implementing the recommendations in the educational system of North Carolina.
4. To identify barriers to the employment of women in the North Carolina labor force.
5. To assess the attitudes of employers toward the employment of women in traditional male occupations.

Expected Products:

1. A position paper on the status of women in occupational education and in the labor force in North Carolina.
2. A strategic model for changing the education system to accommodate a wider variety of educational and occupational options for women (and men).
3. An in-service program to initiate state and local planning to reshape occupational education programs and structure to better accommodate the needs and interests of female (and male) students.

Because of the limited staff available, and work by other agencies obviating the need for a status report on women's occupational opportunities, the decision was made to focus on Objectives 1, 2 and 3 and Products 2 and 3.

7. Proposal for Extension of the New Pioneers Project, Occupational Research Unit, State Department of Public Instruction, Raleigh, N.C., December, 1975, p. 2.

The introductory phase of the project began by informing state vocational educators about the problem and the objectives of this project. The project director visited inservice meetings between the area directors (responsible for 1/8 of the state), local directors and chief consultants for each area of subject matter to explain the rationale and focus of the project, to increase awareness of the problem and to gain support for the project.

Local directors and chief consultants in each subject area were encouraged to draw up viable plans to eliminate sex stereotypes and sex bias. One of the tasks of the introductory phase was to identify suitable materials for use in achieving the project objectives. Because no other suitable materials could be identified, the project staff developed a filmstrip entitled, "I'm Glad I'm a She! I'm Glad I'm a He!" as a general introduction to the issue of sex bias in education.

In December of 1974, ten occupational education units were chosen from the 17 units whose local directors had volunteered to participate in the pilot run of the New Pioneers Project. These ten units worked with the project director to create indepth plans and strategies to eliminate sex bias in their programs and to serve as models for other units in their geographic areas.

Their strategies included:

- The revision of course descriptions to make clear that all are welcome.
- Group guidance events to introduce all students to all course offerings.
- Guest speakers and poster contests to provide real or pictorial role models.
- Staff development necessary for the backing of the occupational teachers in each unit.

- Affirmative steps to draw students into non-traditional courses, including poster campaigns and better counseling on both individual and group levels.

Throughout the year, the project staff became increasingly aware that inservice teacher training was a key factor in the effort to reduce sex bias. It was felt that "the most effective staff development is that which can continue over an extended period of time, as changing attitudes need time to percolate."⁸ Local agencies were invited to nominate one person to participate in a sex discrimination awareness training program. As a condition for selection, each participant agreed to conduct a similar program in their local unit during the following year. Forty-six individuals participated in the initial training and then recreated the course at their schools.

Although the format of the courses to be taught was left to the discretion of the local units, it was recommended that the maximum benefit would result from a 20-hour course extending over ten weeks. These courses would be available to the whole school, not limited to occupational educators, and all participants were required to develop strategies to extend the concern for sex bias to their colleagues.

Overall Assessment

Informal evaluations indicate that a change has occurred in the climate of opinion on the subject of sex bias. Many educators who previously thought there was no problem realized that there is a problem and that it is worthy of their attention.

The inservice training technique was highly successful in most cases. It

8. Proposal for extension of New Pioneers Project, Op. cit.; p. 7.

one instance, the instructor who repeated the seminar requested that participants also agree to recreate the training in that unit, thus exposing a large percentage of that educational community to the ideas and concerns of the project.

The inservice training course was also successful as a technique for systemic change in North Carolina since credit was given for teaching certificate renewal.

Throughout the project, several peripheral activities also occurred. These activities included statewide workshops for guidance counselors as a forum for discussion of non-sexist procedures and meetings with local employers, community groups, parents and PTA's to stimulate interest and concern and obtain support for the project. As a result of the presentations to these groups, a greater community commitment was established.

Relevance for other Programs

The strategy employed by this project created a broad base of attack on sexism and of support for activities to eliminate sex discrimination in occupational education, training and employment. Of particular interest is the multiplier effect of the replication of inservice training sessions.

It was difficult to determine the success of the program in recruiting women to train in non-traditional fields since no complete evaluation has been published.

The project staff reported that the plans of local directors and area consultants varied considerably in quality. It was not felt that their working with the local directors had made a major impact on the quality of the plan.

No data is available on the relationship of plans to program improvement. The project has received an extension for six months ending July, 1976.

Project EVE (Equal Vocational Education)

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College of Business Administration
Cullen Boulevard
Houston, Texas 77004
(713) 749-3755

Funding Source: State grant under
1968, Part C, Section 131b.
Project Monitor: Velma Brawner,
Bureau of Occupational and Adult
Education
(202) 245-2617

The ultimate goal of Project EVE is to "insure that all female students are fully informed of opportunities available to them through vocational education and are free to pursue (emphasis added) their area of interest."⁹ The project staff has set as its immediate objective the development of a model to recruit females into traditionally male vocational programs and to maintain female enrollment in these courses.

The strategy to achieve this objective was outlined as follows:

1. Recreate the image of vocational education so that students, teachers, parents and counselors view it as a viable alternative to traditional academic courses of study.
2. Provide female students information regarding the world of work and the availability of a wide variety of educational and career opportunities available to them. This information will enable them to make rational decisions about their futures.
3. Actively recruit females into traditionally male vocational programs, monitor their progress and provide services to enhance their experience.

The first step in facilitating the realization that vocational education is a viable option for women and in providing the necessary information regarding the world of work was to undertake several presentations to female students at

9. Equal Vocational Education, A Project by the Center for Human Resources, op cit., p. 3.

the high school and feeder junior high schools. One method of presentation was an open house of vocational classrooms to enable the female students to sit in on a class and, thus, to decrease the alienation that females felt in the traditionally male areas.

Project staff reviewed available materials and films and found them unacceptable (as had the staff of the New Pioneers Project). They developed their own slide show entitled, "All About EVE." It depicts the history of women working, presents women currently working in non-traditional jobs and explains the job training that is available to all high school women, including mechanics, welding, radio and television repair, air conditioning and refrigeration. This show, presented in the classrooms, was followed by a discussion of the information.

Representatives from industry came to the school for a "non-traditional career day" and took serious students on a tour of actual job sites. Counselors and project staff were available during school hours to answer questions and to discuss and provide information. An extensive multi-media campaign was developed to encourage parents and the community to accept the project goals. An open house for parents was held by the project staff at the participating high school. "All About EVE" was shown to PTA's on three occasions.

Relevance for Other Programs

Project EVE started out small with six female students enrolled in non-traditional programs: two in auto mechanics, one in radio and television repair, and three in plumbing. All six are keeping up with their courses and have been accepted by the majority of their male peers.

The initial prognosis for the model is favorable. During the first year, teachers have expressed positive feelings toward the inclusion of female students into their classes. Their presence seems to eliminate some of the discipline problems that sometimes occur in all-male classes.

All of the school counselors, five academic and one vocational, were supportive and cooperative. However, it was reported that the counselors seemed to "spend all their time in paper work and have little time for other activities." This problem is likely to be common to other vocational education programs. Perhaps a reassessment of counselor work loads and creative restructuring of bureaucratic demands could result in counselors having more time for students.

Many of the parents involved expressed great enthusiasm and support for the project. Similarly, employers of skilled craft workers indicated a need for skilled women and offered to assist the project in any way possible. Thus, the project identified and focused community support for women in non-traditional jobs.

The results of Project EVE will be published in a final report in June, 1976. The report will be in the form of a manual to be used to develop workshops on equal vocational education.

Career Development Centers

D.C. Public Schools
Dr. Otho Jones
415 12th Street, N.W., Rm.1001
Washington, D.C. 20004
(202) 724-4178

Funding Source: State grant under
Vocational Education Amendments of
1968, Part C, Section 131b
Project Monitor: Harris Taylor
(202) 727-2557

With the realization that 40 to 60 percent of the students in that system do not go on to college, the District of Columbia Public Schools initiated the

✓ Career Development Program. The objective of this program is to provide a system for awakening these students to facts about the working world and the training and career options open to them. Career Advisors were hired to work with counselors to educate the student body about available job and training options. These advisors are introduced to the students at the junior high level where they present an orientation program. In the junior high schools they begin the long process of providing career orientation, facilitating career exploration and eradicating male/female job distinctions. The Career Advisors work in conjunction with the Sex Equality in Guidance Opportunities (SEGO) trainers (described later in this report) and vocational counselors to develop techniques and deliver services to increase the career options of female students.

At the high school level, the emphasis shifts to exploration, preparation and placement. Placement at this stage means one of two things: placement at a Career Development Center or in the Interdisciplinary Cooperative Education Program(ICEP).

The Career Development Centers (CDC) have evolved from the former Vocational Training Institutes and actually utilize the same physical plant. However, unlike their predecessors, the CDC's complement the basic liberal arts education of the academic high school with part-time specialized skill training associated with one or more career clusters. The cluster centers are designed to include areas of specialization traditionally popular with males and traditionally popular with female students. This ensures coed participation and facilitates introduction of students to a range of career options within the cluster. Students are bussed to these centers from their academic high schools, spending half a day in each program. At the CDCs, female students are presently enrolled in welding, printing and other trade areas.

The ICEP program is a work-study arrangement where local employers provide skill training to students and, if possible, hire them upon graduation. Efforts are being undertaken to work with employers and potential student participants to initiate female work-study arrangements in non-traditional programs. Personnel report that the Chesapeake and Potomac Telephone Company presently is training female ICEP participants in many of the previously all-male technical skills and, conversely, training some male students as operators.

Relevance to Other Programs

Obviously, this program has direct relevance to other vocational education systems. There is a SEGO trainer in every state who is capable of providing technical assistance in the development of similar projects.

The author regrets that the time constraints of this project restricted further examination of the techniques and effectiveness of the Career Advisors and Career Development Centers in recruiting women into non-traditional job training.

Women in New Careers (WINC)

Jane Siegel
Consad Research Corporation
121 North Highland Avenue
Pittsburgh, Pennsylvania 15206
(412) 363-5500

Funding Source: Originally from
Manpower Development and Training
Act of 1964, then from Comprehensive
Employment and Training Act of 1973.
Project Monitor: Ann Donovan, Director
of CETA Coordinating Unit, Office of
Education
(202) 245-9730

This project is designed to develop and test a model Career Development Program to widen actual and perceived occupational opportunities for women and to increase the number of women entering careers other than clerical, health and food service.

WINC has three major goals:

1. To identify attitudinal barriers to the employment of women in non-traditional jobs (defined as any job not classified in the clerical, health and food service cluster).
2. To assist a pilot group of women in five locations to enroll in non-traditional training and find them related jobs after they complete training.
3. To increase awareness of women's aptitudes and potential for women themselves, their families, counselors, instructors, job developers and employers.¹⁰

The project was implemented in Comprehensive Employment Training Act (CETA) skills centers in Baltimore, Cincinnati, Denver, Miami and Phoenix that agreed to offer training to unemployed and underemployed women in occupations traditionally open only to men. Each center developed local cooperation for a pilot project involving non-traditional training. Counseling for the women trainees was also provided.

A pilot implementation of a career development model program was carried out in the five selected sites, with services to be provided prior to, during and for up to two months after a woman's vocational training. Intensive services were provided to a minimum of five and maximum of 25 women per site.

The project staff developed and tested a career development Package to broaden job opportunities in previously all-male occupations. Materials and techniques were directed at women, their families, program personnel and employers.

This pilot effort provided an identification of women enrollee characteristics and attitudes which influence occupational choices and provide obstacles to women entering non-traditional occupations.

10. Sedaka, J., "Why not a woman?" American Education, December, 1975, p.12.

Relevance for Vocational Education

Since this project was undertaken in CETA skill centers, the women tended to be somewhat older (18-24) than most vocational education students. The major effect of the age differential is that the CETA women had had opportunities to work before entering training. Many had been employed as clerks, cashiers, waitresses and in other low-paying deadend jobs. They had learned how little advancement is possible in such positions. Most importantly, they found out the hard way how difficult it is to live on a meager income. They were, therefore, more open to trying something new and relatively receptive to opportunities in non-traditional occupations. Thus, they have an advantage over the vocational education student to whom salaries, rent and the cost of living are still abstract terms.

Though more informed about the deadend jobs and the meaning of money, the WINC trainees were very stereotyped in their opinions of their job opportunities and were uninformed about available options and training. The techniques developed in this project for recruitment, orientation, self-concept enhancement and the provision of information out of the WINC project can be applied to vocational education programs.

Among the materials developed is a student workbook which contains a progression of 26 exercises and a companion instructor's manual which outlines the variety of ways the exercises can be presented. The workbook contains self-concept and self-awareness exercises, identification of worker characteristics, job satisfaction and goal achievement checklists, on-the-job problem solving and assertiveness training exercises. ("Ms. or Mouse").

III. CONFERENCES TO CREATE A CONCERN FOR SEX DISCRIMINATION

Besides the individual projects geared toward elimination of sex bias in specific school districts or areas, an alternate approach has been developed to attempt to reach a greater audience. The goal of this approach is to effect change by motivating key people through a conference. The rationale, strategies, and unique features of each of these conferences are provided below.

Seminar/Workshops on Women in the World of Work

Dr. Mary Ellis
P.O. Box 166
College Park, Maryland
(301) 864-7600

Funding Source: U.S. Office of
Education, Bureau of Occupational
and Adult Education, under the
Education Professions Development
Act.

Project Monitor: Grace Watson
(202) 245-2331

The Technical Education Research Centers, under the sponsorship of the U.S. Office of Education and the Center for Occupational Education at North Carolina State University, conducted three two-day Regional Seminar/Workshops and one National Invitational Seminar/Workshop on Women in the World of Work from 1973 to 1974. The Seminar/Workshops were designed specifically to further the professional development of leaders in vocational-technical education.

Policy makers in Regions I, II, VI, VII, VIII, IX and X attended the Regional Seminar/Workshop held in Stillwater, Oklahoma; Las Vegas, Nevada; and Hartford, Connecticut. Vocational planners in State Departments of Education; Education Professional Development Assistance (EPDA) Directors and regional project officers, as well as other interested persons, participated in the National Invitational Seminar/Workshop in Washington, D.C.

The Workshops conducted in 1973-74 concluded regional coverage which was initiated in 1972-73, when the Technical Education Research Centers conducted

Seminar/Workshops on Women in the World of Work in Regions III, IV, and V. The 1972-73 Workshops were sponsored by the U.S. Office of Education and the Delaware Department of Public Instruction.

During the Workshops, distinguished speakers with expertise in specific areas relating to women in education and employment made provocative presentations on the following topics: the composition of the nation's labor force, laws on equal education and employment opportunities for women, problems and issues associated with the education and employment of women, the desirability of equal education and employment opportunities, the implications or issues emerging from the women's rights movement, and career education concepts associated with women in the world of work.

Following discussions of the speeches, participants joined workshop groups to develop practical suggestions and recommendations which could be included in a replicable Program for Action directed toward creating equal educational and employment opportunities for girls and women.

In July and August of 1974, a follow-up survey of participants was conducted by the Technical Education Research Centers to ascertain the immediate impact of the Seminar/Workshops. Results of the survey, including special action taken by participants, are contained in "Women at Work", the final report of the Project.¹¹

Though the report does not provide complete strategies for change or recruitment of women, the recommendations and action requirements outline steps to further the cause of women in training and work.

11. Ellis, M. opcut., p. 1.

As background information, Dr. Ellis examines the effects of the Women's Movement on education and its implications for vocational, technical and career education, and reviewed pertinent legislation.

Education Equity

Billie Meflow, Jr.
Alabama State Dept. of Education
Montgomery, Alabama
(205) 832-3290

Funding Source: State grant
under Elementary and Secondary
Education Act, Title III

The rationale for this project is that State Education Agencies (SEA's) should assume positions of leadership in the development of programs to enhance opportunities for women in public education. This rationale results from the management principle that lasting change can only be brought about through top-management interest and involvement.

During the planning period project staff worked with the SEA to identify opportunities for the study of women, and generated support for future research and vocational training for women in Alabama, Louisiana and Mississippi. In this twelve month period conferences were held in the three states involved. The conference participants were top-level administrators in the respective state agencies who were selected by the appropriate state superintendent. Each SEA was represented by no more than five individuals.

The objectives of this project were developed to facilitate interagency cooperation and communication. It was assumed that the results of the study would have relevance for other areas.

Specifically, the objectives of this project were as follows:

1. To disseminate information (written and oral) concerning the past, present, and future contributions of women in society to the state agency participants from the three cooperating states. The participants can use this information in working with public school staff and society in general.

2. To conduct conferences at which the state agency participants can discuss opportunities which exist in the development of curricula so that equal access to information for individuals of both sexes and minority groups can be provided.
3. To provide sessions during the conferences for participants to discuss opportunities which exist in the use of non-sexist textbooks, in the provision of special programs for women students, and in the development of special counseling for women students.
4. To assist state agency personnel in the identification of other areas that may have relevance to the study of women in which research should be conducted.
5. To develop a model which depicts the steps necessary in identifying women's educational opportunities in one state or a group of states.
6. To disseminate all reports and information about the model to participating states, the United States Office of Education, and requesting agencies.

Relevance for Vocational Education

The Education Equity project is somewhat removed from the practical problem of motivating women and men to explore a variety of fields regardless of their traditional orientation. This project tests the assumption that the State Education Agencies can supply the impetus to programming and the development of activities to eliminate inequalities due to the sex of students.

Since the project is currently in progress it is not yet possible to judge success. It will be important to note the success of the "top management" in solving problems, creating courses and materials, spreading the concern for sex discrimination to the educational system, and maintaining concern or momentum within the State to increase educational and training opportunities for women.

For every project the initiative may come from either the teachers, parents or community groups who will then be responsible for convincing administrators

of the merits of the concern, or it may come from administrators who will direct the course of local solutions. This project will demonstrate the effectiveness of the latter technique. If local groups, personnel or schools are not taking any initiative, the motivated personnel within state agencies may effectively begin to identify strategies and solutions and work with the local systems under their jurisdiction to raise awareness and begin implementation.

Sex Equality in Guidance Opportunities (SEGO)

Mary Ellen Varheyden-Hilliard
formerly with

American Personnel and Guidance Association
1607 New Hampshire Avenue, N.W.
Washington, D.C. 20099
(202) 483-4633; (202) 966-6997

Funding Source: Office of Education,
Women's Program Staff
Project Monitor: Pat Goins
(202) 245-2181

The Sex Equality in Guidance Opportunities Project (SEGO) represents a national technical assistance effort for elementary and secondary school counselors and related educational personnel. The objective is for personnel to recognize and change the detrimental effects of sex role stereotyping which prevents the full utilization of student capabilities. The project was funded by the U.S. Office of Education under a contract to the American Personnel and Guidance Association.

SEGO project staff recognized that sex bias need not be blatant or malicious to be damaging. Regardless of intent, the subtle and pervasive stereotypic expectations of what is "appropriate" sex role behavior for female and male students can be a powerfully negative force which limits opportunities and growth. Counselors and other educators are influential individuals who help motivate and guide students in the selection of course offerings and careers. Their advice, activities and materials should be free of sex bias.

Fifty-one counselors were selected to be Trainers of the SEGO Project (one from each state and the District of Columbia). They were brought to Washington, D.C. for an intensive four-day training workshop in sex fair guidance practices and attitudes. Among the topics included in the Training Workshop were the implications of Title IX, which prohibits sex discrimination in educational institutions, guidelines for sex fair interest measurement, research on sex roles, assertiveness training, non-traditional counseling for boys and men, the double stereotyping of minority females, values clarification, the counselor role as consultant to educational personnel and strategies for change.

It was intended that the ripple effect of the Project would occur with the State Trainers going back to their states and conducting local workshops on sex fairness and equality under the Project's direction and funding. These local workshops presented information on sex equality as well as techniques in ensure a sex fair guidance program and educational experience for the nation's students.

The Project has developed a Multi-Media Kit for the State Trainers to use in the local workshops. The Kit contains nearly 100 items of printed material on the subjects related to the purposes of the Project. The Kit also contains a new filmstrip, A Chance to Choose, on sex fair guidance produced by the Project. Also created was a booklet listing the materials in the Kit along with the source and cost of each item. Additional information included in that booklet are lists of organizations, publishers and reports which provide helpful information and materials in regard to sex bias. These lists are not inclusive and are designed as a "starter" set which were intended to lead to further resources. A final report of the Project will be available in March, 1976.

Relevance for Vocational Education

As was seen by the cooperative effort in the District of Columbia program, the SEGO trainers are valuable assets to the planning and implementation of non-discriminative programs. A complete list of SEGO trainers is provided in Appendix B.

Freeing Men and Women to Explore New Careers

Co-sponsored by the American Council of Education, American Personnel and Guidance Association, National Institute of Education and the University of Maryland.

Janice Birk
Counseling Center
College Park, Maryland
(301) 454-2931

Funding Source: National Institute of Education, Education and Work Division
Project Monitor: Mary Lou Randour
(20) 254-5470

This conference was conceived and developed on the premise that more and better programs are needed to expand the career options of men and women. Program leaders were invited who could present specific insights into the existence and elimination of sex stereotypes. The goal was that conference participants would be stimulated to initiate programs to attack sexism in education. Participants included counselors, administrators, professors and graduate students, chiefly from post-secondary institutions and community agencies concerned with career guidance.

Three specific objectives of the conference were:

1. to stimulate counselors to think through the issues of sex-role socialization and stereotyping,
2. to provide skills in career development techniques and counseling;
3. to encourage participants to develop meaningful programs in their own setting.

In a four month follow-up of the results of the conference, the majority of the participants indicated that the three major objectives had been achieved. The most repeatedly cited conference strengths were the interaction and exchange of ideas, skills, training and informative program content.

The majority of the programs initiated as a result of the conference were workshops, seminars and panels for campus and community groups. The second most common outcome was the development of assertiveness training sessions. Other reported programs included inservice training for teachers, and counseling services for the vocationally undecided.

Civil Rights Institutes

Desegregation Institutes based on Sex
Discrimination
400 Maryland Avenue, S.W., Rm. 2017
Washington, D.C. 20202
(202) 245-2465

Funding Source: Office of Education,
Special Projects under Title IV
Civil Rights Act of 1964.
Project Monitor: Donna Gold
(202) 245-2465

Title IV of the Civil Rights Act provided funds to deal with the problems of discrimination. In 1975, for the first time, 11 institutes were funded to focus specifically on sex discrimination. These institutes were funded to reach local education agencies (LEAs) and assist them in identifying and modifying sexist practices. No data is available on the effectiveness of these programs at present. The first evaluations are due to the Office of Education on June 30, 1976. At that time it will be possible to assess the impact and relevance of these institutes for vocational education programs.

A general description of University of Oklahoma Institute is presented below. A list of the contact persons for the eleven institutes is provided in Appendix C.

The University of Oklahoma Institute - Kay Nolan

The Institute is designed to provide educators of eight Oklahoma school districts with information, appropriate knowledge and skills enabling them to deal more effectively with problems directly incident to sex discrimination and equal educational opportunity as contained in Title IX Regulations.

In addition, each of the participating school districts will be given assistance in the following areas:

- Development of policies and guidelines to insure that students are treated without discrimination on the basis of sex, with equal access to and participation in course offerings and extra-curricular activities, including competitive athletics;
- Development of an affirmative action plan which covers issues related to counseling, athletics, extra-curricular activities, textbooks, etc.;
- Development of techniques to eliminate sex role stereotyping in educational materials and problems;
- Development of non-sexist supplementary resource and curriculum materials;
- Development of procedures for the handling of grievances and the assignment of sex desegregation problems;
- Modification of administrative structures or procedures in compliance with Title IX guidelines and regulations;
- Development of ability in dealing with attitudinal change on the part of school administrators and teachers; and
- Development of an understanding of the law and its implications under Title IX.

The Institute is divided into three phases. During Phase One, Theory Unit, the participants engaged in a "classroom setting" on the O.U. campus where they were presented with the theories and information directly related to Title IX and sex discrimination.

During Phase Two, Practical Applications, institute team members will develop and conduct sex discrimination workshops within their district providing technical assistance in the development of training programs. Program specialists will meet with the teams at periodic, ninety-day intervals to develop new model, non-sexist, supplementary instructional materials, assist the schools in writing administrative policies, handbooks, etc., and provide information on current developments on Title IX implementation.

During Phase Three, the New Model Unit, the teams will develop non-sexist supplementary instructional materials and will meet as a single unit to present these new models.

Project on Expanding Career Options for Women

Jane Seidman
Center for Research on Women
Wellesley College
(617) 237-5980

Funding Source: Office of Education
Woman's Program Staff
Project Monitor: Mary Jane Smalley
(202) 245-2757

The stated aim of this pilot project is to formulate action programs to broaden the career options of women in New England, and, in so doing, to develop guidelines for similar projects in other regions of the nation. They state the problem as the fact that despite the passage of legislation and development of governmental policy with the declared intention of ensuring equal career opportunities for women, the actual status of women working for pay has, if anything, worsened.

The project consists of three phases. The first phase involved a literature search, the compilation of annotated bibliographies, and formulation of statements as to the primary causes of the problems confronting women who seek work in the paid labor force throughout the nation, as well as in the region.

The second phase was designed to bring together in small, weekend-long workshops, persons with knowledge and experience relating to selected categories of women in the paid labor force. They were asked to examine and revise the problem statements drawn from the literature search in the context of the particular institutions and attitudes prevailing in the six states of New England. On this basis, they were requested to propose strategies and programs to overcome the barriers to improve career options of women in the region.

Phase III of the project is to consist of a final report on the entire project, and to provide guidelines which may be used for replicating all or parts of it in other regions.

IV. MATERIALS DEVELOPED TO ELIMINATE SEX STEREOTYPING OF CAREER CHOICE

The focus of this report is to identify exemplary programs and to examine their development and implementation strategies. As has been previously illustrated the first obstacle encountered by many of these programs is that there is a great lack of appropriate materials, curricula and films that can be used effectively to combat sex discrimination. The first task, therefore, in the majority of these programs has been to create suitable materials. In order to facilitate the implementation of other programs, several projects have been initiated to create acceptable materials which can be disseminated to other projects.

It should be noted at this point that although no curriculum project of the Bureau of Occupational and Adult Education has dealt specifically with the creation of materials to eliminate sex bias in vocational education each skill directed curriculum developed under contract to this bureau have been screened for sexism since 1973.

Sex Fairness In Career Guidance; A Learning Kit

Abt Publications
55 Wheeler Street
Cambridge, Massachusetts 02138
(617) 492-7100
\$15.00

Funding Source: Education and
Work Division
Project Monitor: Mary Lou Randour
(202) 254-5470

Created under contract to NIE, this kit is truly an excellent resource which can be used by counselors, teachers or students. The Kit includes materials designed to aid in the elimination of sex-role stereotyping and sex bias in the process of career choice.

The curriculum materials are organized into four chapters:

- CHAPTER 1, Orientation to Sex Fairness, contains an introduction to the dual role system which limits career and other life choices for both women and men. Biological and historical variables all reviewed for their effect on the roles of both women and men. This chapter discusses traditional family and occupational roles for both sexes, their antecedents and consequences, as well as current challenges to the system.

- CHAPTER 2, Recommendations for a Comprehensive Sex-Fair Career Guidance Program, discusses strategies a counselor can take in developing self awareness, interacting with clients as individuals or in groups, and working with others in the client's environment -- parents, spouses, teachers, employers and policy makers. The chapter includes a perspective on sex fairness in the counseling

process as well as recommendations and activity suggestions for each of the components of a comprehensive guidance program.

- CHAPTER 3, Guidelines and Recommendations for Sex-Fair Use of Career Interest Inventories, is designed to help counselors identify sex bias in career interest inventories and to minimize bias in administering, reporting, and interpreting these inventories. Included in this chapter is a technical interpretation of the NIE guidelines for assessing career interest inventories.

- CHAPTER 4, A Resource Guide, contains an extensive list of currently available supplementary readings and audio-visual materials pertaining to issues of sex fairness. The annotated bibliography includes general information on sex role stereotyping and sex-fair counseling, career guides, activities for counselors and educators, and organizations and agencies providing information and assistance.

The Learning Kit also includes a variety of supplementary materials to assist in developing methods of integrating and applying the recommendations and suggestions. Among these are:

- pre and post-assessment techniques,
- spirit masters for easy duplication,
- transcripts of counselor-client interactions,
- role play scenarios, and an
- audio-tape of four counseling interviews.

Although the material contained in the kit does not specifically address issues unique to vocational training it provides activities to facilitate exploration beyond sex stereotyped limits, information on women and work and value assessment techniques.

Far West Laboratory for Educational Research and Development

Betty Tuck/Lisa Hunter
1853 Folsom Street
San Francisco, California 94103
(415) 565-3000 or 3112

Funding Source: Protocol Materials
Grant from the Office of Education

The Far West Laboratory has developed a series of handbooks and films directed toward increasing awareness of sex stereotyping.

The Process of Change: A Handbook for Teachers on the Concept of Sex Role Stereotypes and the two films which accompany it, Changing Images and Women Emerging, present examples of the process of changing stereotyped perceptions of students toward their roles. The films document changes over time in a fourth grade class and a high school class as students examine the myths and realities of sex role stereotyping in their own lives.

Sex Role Stereotyping in Schools: A Handbook for Teachers and the accompanying films, Hey What About Us?, I Is For Important and Anything They Want To Be, are meant to help teachers become aware of sex stereotyping. Anything They Want To Be deals with sex role stereotyping in career oriented experiences. The contents cover among other things the perpetuation of the myth about equal opportunity in career choices, sex bias among students in a crafts class, and a female student's attempt to solve a mechanical problem. This author has not had the opportunity to review these films but the description of the film above indicates a particular relevance for vocational education.

Project Equality

Lena LaRae Glennon
Highline Public Schools
15675 Ambaum Blvd., S.W.
Seattle, Washington 98166
(202) 433-2365

Funding Source: Grant under
Elementary and Secondary Educa-
tion Act, Title III

Project Equality's goal is to "expand the occupational perceptions of girls" by developing new approaches in curricular design and teaching strategies for

grades K-12. The goals of Highline School District and the State of Washington includes the development of positive self-image, self-confidence, and curricular relevancy. Four areas of emphasis were identified to be approached in the curriculum:

1. expanding role of women in the world of work
2. cultural stereotyping of goals into restricted roles
3. curricular stereotyping of materials and course content
4. recommendations for change

The focus of curricula change initially were the field of language arts and social studies.

Program Accomplishments

Development of media and materials is the major emphasis of Project Equality as it attempts to expand and occupational perceptions of students. Materials developed include:

Elementary

1. A review of sex-role bias in current elementary texts. This review is accompanied by suggestions for adapting the materials to give a more balanced perspective.
2. "Many Thousand Words"- Work Pictures: - A loose-leaf notebook containing pictures of adults and students involved in a variety of work activities
3. Six Occupation Simulation Activity packets - Hands-on career activities using the isolated skill concept. Skills are not dependent on gender.
4. An idea packet for teachers which suggests activities and practical techniques of countering sex stereotyping (role reversal, role-playing, games, etc.).

Secondary

1. Semester, nine-week and mini-length (one day to two weeks) course outlines in the Social Studies, Language Arts, Home Economics and Physical Education area. All focus on the participation of females in society and/or career exploration.
2. Ten work-related filmstrips with accompanying cassettes which provide role model variety presently unavailable in commercially produced media.

K-12

1. A speakers bureau of people engaged in a variety of non-traditional jobs who will talk to students about their work.
2. A bibliography of current materials appropriate for educators who are seeking to expand the occupational perceptions of females.
3. A traveling media display (three levels - elementary, junior high and senior high school) consisting of books, filmstrips, records and posters. This display will aid students and educators in expanding their view of of women in our society.¹²

Though complete analysis of evaluations were not available at the time of this writing, initial pre and post-test results indicate that the curriculum units increased the students' knowledge of skills in relation to jobs and expanded their view of female and male participation in the working world.

Utilization of grades K-12 language arts and social studies courses as the medium for presentations of career options can provide basic awareness of sex stereotyping and resultant restrictions to the entire student body: college bound, vocational and general. Using this introduction as a springboard, more specific information can then be provided to potential vocational students regarding training and career opportunities in non-traditional skilled

12. Equality Choice. Project Equality 1975-1976, Highline Public School District 401, P.O. Box 66100, Seattle, Washington 98166, May 1975.

or technical occupations. Vocational educators could provide initial outreach into these classes as one aspect of their recruitment strategy.

EPIE Career Education S.E.T. (Selection of Evaluation Tools)

The Education Products Information
Exchange Institute
463 West Street
New York, New York
(212) 675-1163
\$31.00

Funding Source: National Institute
of Education, Education and Work
Group
Project Monitor: Ella Kelly
(202) 254-5470

This two volume set provides the objectives and the procedures of career education. The contents provide a description of the materials:

Volume 1: How to Select and Evaluate Instructional Materials (124 pages)

Chapter One: Career Education in Your School: How to Select Materials

Chapter Two: Racism in Materials: How to Detect It and How to Counteract Its Effects in the Classroom

Chapter Three: Sexism in Materials: How to Detect It and How to Counteract Its Effects in the Classroom

Chapter Four: Producers' Evaluation Activities: How to Assess Them

Appendix A: List of State Career Education Coordinators

Appendix B: List of Career Education Periodicals

Appendix C: Manuals Describing Skill-Training Materials

Appendix D: Feedback Form

Volume 2: Analysis of Seven Hundred Prescreened Materials (316 pages)

including printed materials; filmstrips; films; multi-media; miscellanea; noncommercial products; index of noncommercial products; index of publishers/distributors: commercial and noncommercial.

Planning Ahead For The World Of Work

The Center for Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210
(614) 486-3655

Funding Source: National Institute
of Education, Grant OEG-3-7-000158-2037

This curriculum was designed to be presented as a unit to help students begin to think about career planning. It is limited in scope but provides some activities that help students explore values and directions concerning career choices.

The general objectives of this unit are listed below in terms of behaviors that students are intended to exhibit following the unit.

After participating in this unit, students:

1. Will show more acceptance of the working role in their lives.
2. Will have more knowledge about women in the work force.
3. Will be able to list alternative choices for occupations and indicate why these choices were made.
4. Will indicate plans for the future which show work force participation at some time in their lives.
5. Will indicate that they have considered work-life expectancy projections for the total life span.

These materials have published evaluations and follow-up evaluations. The authors recommend that they be used with ninth graders where they were found to be most effective.

As with the previously reviewed curricula, Planning Ahead For The World Of Work does not address the specific concerns of vocational educators.

Complying With Title IX

Shirley McCune
Resource Center on Sex Roles
in Education
1201 16th Street, Rm. 701
Washington, D.C. 20036
(202) 833-5426

Funding Source: Office of Education,
Women's Program Staff
Project Monitor: Mary Jane Smalley
(202) 245-2757

The two handbooks in this set, The First Twelve Months and Implementing Institutional Evaluation provide technical assistance in complying with the regulations of Title IX for all educators.

The First Twelve Months describes the five requirements which must be implemented by July 21, 1976. It is organized in five sections, each devoted to one of the five general compliance requirements. Each section includes a citation of the relevant portion of the Title IX Regulation, a discussion of requirements for its implementation, and appropriate implementation aids. The two appendices provide a sample program plan and a checklist of procedural steps for ensuring compliance with each of the five requirements.

Implementing Institutional Self-Evaluation is designed to assist local education agencies in conducting an effective institutional self-evaluation to ensure compliance with the Requirements of the Title IX Regulation in all agency policies and practices.

V. REVIEW AND REVISE EXISTING MATERIALS

One of the more subtle forms of bias exists in the stereotyped presentations of printed material. This last approach has as its goal the review and revision of pertinent material to eradicate sex biases.

Minnesota State Advisory Council for Vocational Education

Dean Dannewitz
2850 Metro Drive
Minneapolis, Minnesota 55420
(612) 854-1888

Funding Source: Local Funds

The strategy and scope of each project to reduce bias in vocational training are unique. In Minnesota, the State Advisory Council requested the recruitment bulletins and other information materials of its area vocational technical institutes (AVTI's). These materials were reviewed for biases in four areas: sex, race, scholastic aptitude and economic level by the Women in the World of Work ad hoc committee. Sex biases were found primarily in the use of personal pronouns, the use of photographs, the sex-stereotyped descriptions of employment opportunities and in other subtle references such as "a need for young men" and "the man who possesses..."

The review and analysis of the material submitted by each vocational unit were published in a report which was sent to the schools. Specific discriminating references were identified for each school and suggestions were supplied for eliminating the biases. It was explained that the report was intended to provide constructive criticism and to aid in the revision of the materials.

As a follow-up, an examination of the revised materials was conducted the next year. The new materials were assessed to determine whether the recommendations had been incorporated and whether any biases were still present.

In 75 percent of the cases, notable improvements had taken place. In others, specific recommendations had been overlooked or ignored. Three institutes still included a class in "charm" as part of the secretarial course. The analysis and recommendations were again published and distributed back to the schools. Special commendations were given to the schools that had shown notable improvement.

An additional check against sex discrimination was made during the second review. A female staff member telephoned each school and without identifying herself requested information on enrolling in a male program. The results of this check were also included in the second report. The results of the telephone survey proved to be especially informative as to the attitudes of instructors, counselors and secretaries from the standpoint of perpetuating an image of sex bias. Of the 32 units surveyed, 15 contacted were encouraging to the prospective female applicant. They demonstrated varying degrees of enthusiasm, ranging from genuine friendliness to avid excitement over having a woman in the program for the first time. Eight were neutral being neither encouraging or discouraging. Four were definitely not encouraging either by an abrupt manner, doubt about the inquirer's qualifications or very brief, insufficient answers to questions. Five were openly discouraging to the female seeking information. The receptionist she spoke to at one refused to answer any questions and referred her to the Director of the Admissions Board (a group of lay citizens from the trade) of the program she was inquiring about. She was unable to reach this man after trying on four separate occasions. A counselor at a different school expressed definite skepticism about employment opportunities for the female upon completion of the program and stressed

other options. Another source of frustration was encountered when the applicant requested printed material describing the programs offered at each institute. The units, which distribute individual pamphlets for every program rather than one consolidated bulletin, insisted that the student make a definite career choice, stating that it was not their policy to send out all program descriptions. They were, in effect, forcing the student to make a decision regarding her course of study prior to supplying her with any information which would aid in making this decision.¹³

Relevance to Other Programs

This project provides a concrete example of one of the steps necessary to eliminate the influences that inhibit "cross-sex" choices in job training. Obviously, even if each of the documents were exemplary in their treatment of the sexes, much more work would need to be done to attract women and men into nontraditional training.

Though the direction of the project is by its design toward vocational institutes the findings can be also applied to vocational education within public schools. Materials, occupational handbooks, counselor and teacher attitudes can all be sources of subtle discouragement to enrollment in non-traditional training. Indications that non-traditional field enrollment is just not done limits the options and access of some potential candidates. Similar reviews and telephone surveys could be effective as both a consciousness raising of the staff of the program as well as the individuals undertaking the review and as a means of reducing the subtle discouragement of biased materials.

13. A Re-Examination of the Elimination of Bias in Minnesota's Area Vocational-Technical Institutes, Minnesota State Advisory Council for Vocational Education, August 1975, p. 1-3.

EVALUATION OF STRATEGIES

This project provided an identification and review of several successful strategies to eliminate sex bias in vocational education. A more comprehensive evaluation of those strategies is presently being undertaken in the following project.

Testing of Selected Strategies to Eliminate Sex Bias in Vocational Education Programs

Edgar A. Parsons
System Sciences, Inc.
121 S. Estes Drive
P. O. Box 2345
Chapel Hill, North Carolina 27514

Funding Source: U.S.O.E., Bureau of
Occupational and Adult Education,
Grant under Part C, Vocational Edu-
cation Amendment of 1968, Section 131A

The project purpose is to identify and evaluate alternative strategies which educators, particularly vocational education administrators and instructors can employ at the student, teacher and/or administrator level to impact upon and overcome the restrictive influences of sex stereotyping on the individual attitudes, choice of occupations and training offered to students of both sexes.

A comprehensive list of possible strategies will be compiled from the literature, case studies, and existing projects or approaches which are being employed throughout the nation. This information will be analyzed and synthesized in the form of a matrix showing the mechanism(s) of change used and the impact each has on particular positions within the school organization. This matrix will be used to develop a series of intervention activities, each of which may be a single strategy or a combination of strategies that can be tested. The interventions will be tested at selected sites. Pre- and post-test data will be collected for evaluation. Particular emphasis is given to strategies that impact directly on students.

Several products will be developed during the course of the project.

One will be an implementation guide for use by local administrators. This manual will describe in detail the alternative interventions, their relative effectiveness, required materials, procedures for implementation, costs, time requirements, potential barriers, and evaluation.

A second product will be an information/recommendation guide for state level vocational educators suggesting recommendations for state action in overcoming the problem of sex discrimination including activities such as local assistance, monitoring, and long-term strategies.

A third product, a brief technical report which describes details of the research and development underlying the implementation guide will be included.

Relevance for Other Programs

The results should provide vocational education administrators with practical interventions to remove the barriers to full occupational opportunity which have been raised by traditional sex stereotyping and discriminatory counseling and training practices.

CONCLUSIONS

Several general conclusions can be drawn from the analysis of the information reviewed for this report. These findings pertain to two levels of problems encountered in this study: A) obstacles hindering identification of projects or resources for this report and B) difficulties observed in the projects in development and implementation. Issues relating to problems in identification include:

- 1) lack of coordinated information system of projects to improve status of women in vocational education.
- 2) stage of completion of projects identified.
- 3) benefits to identify that would result from Mondale Amendments.

Project impediments include:

- 1) lack of acceptable materials.
- 2) need for assistance in developing programs to attack students to sexist conceptions.
- 3) concern for the quality of Title IX self-evaluations.

A. PROBLEMS IN IDENTIFICATION AND REVIEW OF PROJECTS

A.1) Lack of Coordinated Information System

At the first level, hindrances to the identification of resources illustrate a need for an effort to coordinate information on projects designed to eliminate sexism in vocational education. Numerous sources exist for funding and administration of these projects: federal agencies, state and local agencies or a combination of the two, and private grants¹⁴ and individuals

14. An excellent beginning has been made to identify relevant projects funded at the federal level by Steiger and Cooper in the Report to the Secretary's Advisory Council on the Rights and Responsibilities of Women, 1975. It is important to consolidate state and local efforts and projects to give a complete picture of what is being done. The present project made an initial attempt to accomplish that task.

have attempted to identify the range of such activities, no systematic arrangement has been developed for the coordination and dissemination of information related to attempts to eliminate sexism in vocational education.

A.2) State of Completion

Many of the projects identified during this project are in progress. It was impossible, therefore, to completely analyze their strategies or evaluate their success or failure. Many had not completed written reports, most had not reached evaluation stages and in almost all projects the materials that were developed were not ready for publication or available for release. It is recommended that at a later date an attempt be made to obtain the finished copies of materials and to review evaluation data that is presently being collected.

A.3) Benefits from Mondale Amendments

The acquisition of information regarding state programs would be facilitated if the Mondale amendments were adopted. They require each state to develop an annual report on the status of women in vocational education, one copy of which would be sent to the National Advisory Council on Vocational Education. The amendments require "a thorough study of the policies, procedures, materials and administrative procedures that the State will follow in vocational education programs so as to permit equal access...including...actions that will be taken to overcome sexism in all vocational education programs."¹⁵

B. PROJECT IMPEDIMENTS

B.1) Lack of Acceptable Materials

On the second level one of the most commonly reported problems in the implementation of projects to eliminate sex bias in vocational education is the lack of

15. The Congressional Record, Vol. 121, No. 161, Monday, November 3, 1975.

acceptable material designed to increase the potential candidate's awareness of the range of vocational training opportunities. The first task of each of the projects was to develop suitable materials to introduce non-traditional occupations to potential enrollees. The materials produced by the projects, for the most part, were not developed for distribution or dissemination to other projects. Several career education and awareness kits and curricula have been identified in this report which are readily available. These materials, though excellent for the purpose for which they were developed do not specifically approach the problems related to women in vocational education. There is a great need for materials and information concerning nontraditional jobs and training. These resources ~~could~~ be developed to supplement the more-general career awareness activities.

B.2) Program Assistance

Opening course offerings to female students does not eliminate the effects of early and continued socialization. Thus, the students enter traditional programs perpetuating male/female training distinctions. Very few vocational education programs and institutions have instituted affirmative programs to alter the sex stereotyped training patterns. Related to this issue is the finding, reported by Jane Siegel of the Women in New Careers Project and others, that the personnel in the systems where projects have been implemented feel that they would not have been able to develop and implement such programs without outside help or assistance. Teachers and administrators of vocational education have their hands full meeting the everyday demands of the system and thus have little energy to devote to developing, funding and implementing innovative programs. In some cases the initial impetus can come from active citizen groups such as those in Pennsylvania. 16

16. The handbook on How to End Sexism in Your Schools prepared by the Leadership Training Institute, 1001 Connecticut Avenue, N.W., Washington, D.C. 20036, (202) 833-9051, is a good resource for citizen action.

Yet, the composition of such groups is primarily middle class women who are more concerned about sexism in education per se than vocational education. There seems to be little active citizen monitoring of vocational education programs.

B.3) Title IX Self-Evaluation

The self-evaluations and consequent remedial action required by Title IX should provide the impetus necessary to begin positive steps toward equalization of the treatment of the sexes.¹⁷ There is a concern, however, that self-evaluations done by unaware or unsympathetic staff or individuals will not uncover or eliminate the subtle forms of sex discrimination. Such evaluations are not likely to indicate the need for affirmative steps to alleviate prevailing injustices. Technical assistance at this point might prove invaluable.

Several strategies have been identified which can be used to combat sex bias in vocational education. These strategies provide replicable examples for programs in other states. Every effort should be made to encourage the duplication of these techniques and the identification of other ways and means to approach the problem.

17. The handbooks created by Shirley McCune of the Resource Center on Sex Roles in Education are an excellent resource for facilitating Title IX compliance.

APPENDIX A

RESOURCES

Individuals and Organizations

Ambrose, Jean

Assistant for College Relations, Douglass College
Chair-one of Women's Rights Task Force on Education
New Brunswick, New Jersey
(201) 932-1766

American Federation of Teachers

11 Dupont Circle, N.W.
Washington, D.C. 20036
(202) 797-4400

Ashford, Deborah

Bureau of Occupational and Adult Education
Office of Education, HEW
400 Maryland Ave., S.W.
Washington, D.C. 20202

Brown, Cindy

Lawyer's Committee on Civil Rights Enforcement of
Title IX in Vocation Education
Suite 520
733 15th Street, N.W.
Washington, D.C. 20005
(202) 628-6700

Cook, Joyce

Demonstration Branch, Vocational Education
7th & D Streets, N.W.
Room 5026, ROB #3
Washington, D.C. 20202
(202) 245-2614

Cornelson, Leroy

Bureau of Occupational and Adult Education
Office of Education, HEW, Room 4153
400 Maryland Avenue, S.W.
Washington, D.C. 20202
(202) 245-8176

Cusick, Judy
NEA, Resource-Office on Sex-Stereotypes in Education
1201 16th Street, N.W.
Room 701
Washington, D.C. 20036

Dunkle, Margaret
National Coalition for Women and Girls in Education
1818 R Street, N.W.
Washington, D.C. 20009
(202) 387-1300

Ellis, Mary
Ellis Associates
P.O. Box 466
College Park, Maryland 20740
(301) 864-7601

Feminist Press
Clearinghouse on Women's Studies
Old Westbury, New York
(516) 997-7660

Gold, Donna
Office of Education, HEW
Special Projects
400 Maryland Avenue, S.W.
Room 2017
Washington, D.C. 20202
(202) 245-2465

Kievit, Mary
Department of Vocational and Technical Education
Graduate School of Education, Rutgers University
New Brunswick, New Jersey 08913
(201) 932-1766

*Knox, Holly
Project on Equal Education Rights (PEER)
1029 Vermont Avenue, Suite 800
Washington, D.C. 20-05
(202) 332-7337

Maedal, Ouida
Vocational Education Curriculum Unit
Presidential Building, Room 900
415 12th Street, N.W.
Washington, D.C. 20004
(202) 724-4164

McCune, Shirley
Teacher's Rights
1201 16th Street, N.W.
Washington, D.C. 20036
(202) 833-4225

Nadell, Ruth
Department of Labor, Women's Bureau
Room S3313, New Dept. of Labor Bldg.
2nd & Constitution, N.W.
Washington, D.C. 20010
(202) 523-6644

Project on Status of Women
American Association of Colleges
1818 R Street, N.W.
Washington, D. C. 20009
(202) 387-1300

Roby, Pamela
University of California
Santa Cruz, California
(408) 429-2587

Shakin, Doris
Office of Career Education
Room 3318, ROB #3
7th & D Streets, N.W.
Washington, D.C. 20202
(202) 245-2331

Sherman, Susan
Committee on Vocation Education Research and Development
Assembly of Behavioral and Social Sciences
National Research Council
2101 Constitution Avenue, N.W.
Washington, D.C.
(202) 393-8100

Simonson, Joy
Advisory Council on Women's Educational Programs
832 M Street, N.W.
Suite 821
Washington, D.C. 20036
(202) 382-3862

Steele, Marilyn
Project Baseline
Northern Arizona University
Flagstaff, Arizona

Steiger, Joanne
6723 Town Lane Road
McLean, Virginia 22101
(703) 821-2717

Straser, Mary
Office of Education, HEW
Bureau of Occupational and Adult Education
400 Maryland Avenue, S.W.
Room 4153
Washington, D.C. 20202
(202) 245-8176

Verheyden-Hilliard, Mary Ellen
American Personnel and Guidance Association
SEGO Project Director
1607 New Hampshire Avenue, N.W.
Washington, D.C. 20009
(202) 483-4633

Wingrove, Mary
Bureau of Occupational and Adult Education
Office of Education, HEW
7th & D Streets, N.W.
Room 5032, ROB 73
Washington, D.C. 20202
(202) 245-2653

Women's Educational Equity
Women's Program Staff
Duval, Joan
Smalley, Mary Jane
Gowens, Pat
Office of Education FOB6
400 Maryland Avenue, S.W.
Room 3121
Washington, D.C. 20202
(202) 245-2181

Project Equality

Glennon, L.L., Project Director
Yormark, Dr. Ben, Director
Highland Public Schools
Educational Resources Administrative Center
15675 Ambaum Road, S.W.
Weattle, Washington
(206) 443-0111

Today's Changing Roles: An Approach to Non-Sexist Teaching
Resource Center on Sex Roles in Education
1201 16th Street, N.W.
Room 701
Washington, D.C. 20036

California Commission on the Status of Women

1025 P Street
Room 340
Sacramento, California 95814

Women: Issues of Career Guidance and Vocational Counseling FY 1974

Farnes, Dr. Helen
Human Interaction
Research Institute
Los Angeles, California

Resource Center on Sex Roles in Education

Judy Cusick
NEA Building
201 16th Street
Rm. 701
Washington, D.C. 20036
833-5426

Montgomery County N.O.W. Education Task Force
(Slideshow "Sexism Is...")

Attn: Mary Ann Bertrum
P.O. Box 2301
Rockville, Maryland 20852
299-7640

Career Decision-Making Guide for Adult Basic Education Teachers

Mason, Dr. James, Jr.
Project Director
Huntsville City Schools
Adult Education Program
2627 Hall Avenue, N.W.
Huntsville, Alabama 35805

RESOURCES

MATERIALS

Sex-Role Stereotyping, A Multi-Media Program

NEA, Room 609
1201 16th Street, N.W.

Sex Fairness In Careers Guidance

A Learning Kit

by Linda Stebbins, Nancy Ames and Ilana Rhodes
ABT Associates, Inc.

55 Wheeler Street
Cambridge, Massachusetts 02138
(617) 492-7100
\$15.00

Sexism in Education

Emma William Task Force on Education
Box 14229
University Station
Minneapolis, Minnesota 55408

Planning Ahead for the World of Work

Vetter, Louise

Center for Vocational Education
Ohio State University
1960 Kenny Road
Columbus, Ohio 43210
(614) 486-3655

Women In Non-Traditional Occupations Materials

Sprung, Barbara

Women's Action Alliance
New York, New York

Sex Equality Resources in Education
Kennedy, Kathleen
Intergroup Education Advisor
Office of Equal Rights
Department of Education
Commonwealth of Pennsylvania
Box 911
Harrisburg, Pennsylvania 17126
(717) 787-1130

Self-Study Guide to Sexism in Schools
Boydston, Jeanne
Deputy Secretary's Office
Pennsylvania Department of Education
Box 911
Harrisburg, Pennsylvania 17126

Suggested Curriculum Guide
Pittsburgh, Pennsylvania: Administrative Offices
ZiRe, Victor
12200 Gaillard Drive
Pittsburgh, Pennsylvania 15235
(412) 242-7000

Haller, Elizabeth
Image of Women
Pa. Dept. of Education 1973
Harrisburg, Pennsylvania
Bem, D. and Bem S.
Training the Women to Know her Place
Pa. Dept. of Education 1973
Harrisburg, Pennsylvania

Career Planning Support System -- Career Development for Women Work Unit
Vetter, Louise
Center for Vocational & Technical Education
Ohio State University
Columbus, Ohio
(614) 486-3655

EPIE Career S.E.T.
Educational Products Information Exchange Institute
463 West Street
New York, New York
(212) 675-1163

RESOURCES

PROJECTS

New Pioneers Project to Eliminate Sex-Bias in Occupational Education

• Smith, Amanda
State Department of Education
Burn Hotel Building
Raleigh, North Carolina 27611
(919) 829-3614

Broadening the Scope of Involvement of Young Women in Occupational Education

Steiger, Fink, Smith
Steiger, JoAnn
6723 Town Lane Road
McLean, Virginia 22101
(703) 821-2717

PROJECT EVE (Women in Vocational Education)

Lerner, Jane, Co-Director
University of Houston
Center for Human Resources College of Business Administration
Cullen Blvd.
Houston, Texas 77004
(713) 749-3755

Women in New Careers

Siegel, Jane
Consad Research Corporation
121 North Highland Avenue
Pittsburgh, Pennsylvania 15206

Minnesota Advisory Council on Vocational Education

Preston, Jane
St. Paul, Minnesota
(612) 854-1888

Career Exploration Project for High School Senior Women

Smith, Walter S.
Assistant Professor of Education
University of Kansas
Lawrence, Kansas 66045
(913) 864-4435

Mobility Through Work Experience (cooperative education)

Witte, Constance
Project Coordinator
Tidewater Community College
Virginia Beach Campus
700 College Crescent
Virginia Beach, Virginia 23456
(804) 427-3070

Women in Wisconsin Apprenticeship

State of Wisconsin
Division of Apprenticeship and Training
P.O. Box 2209
Madison, Wisconsin 53701

Project HEAR (Human Education Awareness Resources)

Breitenfield, Merle
Cogent Associates
575 Ewing Street
Princeton, New Jersey 08540
(609) 921-1484

Educational Equity: Strengthening the SEA's Ability to Identify Opportunities for Women '75.

Mellown, Dr. Billie
State Department of Education
Montgomery, Alabama 36104
(205) 832-3290

The Role of Women in American Society

Naiman, Adeline
Educational Development Corporation
Newton, Massachusetts
(617) 969-7100

The Career Counseling and Guidance Project.

Guilfooy, Vivian
Educational Development Corporation
Newton, Massachusetts
(617) 969-7100

Chrysalis Center for the Development of Human Potential of the under-educated and/or under-employed

Collamer, Rossella
Saginaw Valley College
University Center, Michigan

Individual Planning for Education and Career '74

Ottavi, Louise
Clarke College
Dubuque, Iowa

Project Discovery, Re-entry of Women '74

Lawson, William
Ventura Community College
Ventura, California

Project Awareness -- Alaska, California, Idaho, Montana, Nevada, Oregon
and Washington

Wilke, Beth Vourhees
Associate Supervisor
Equal Educational Opportunity Office of the Superintendent of Public
Instruction
Old Capitol Building
Olympia, Washington 98504

Project to Facilitate Upward Career Decision Making

Huntsville Alabama City Schools
2627 Hall Avenue, N.W.
Huntsville, Alabama

Regional Seminar & Workshops on Women in the World of Work

Ellis, Dr. Mary
Formerly: Technical Education Research Centers
Washington, D. C.

Presently: Ellis Associates
P.O. Box 166
College Park, Maryland
864-7600

Freeing Sex Roles for New Careers Conference

Birk, Janice
Counseling Center
University of Maryland
College Park, Maryland
(301) 454-2931

Sex Equality in Guidance Opportunities (SEGO)

Verkeyden-Hilliard, Mary Ellen
formerly with
American Personnel and Guidance Associates
1607 New Hampshire, N.W.
Washington, D.C. 20099 483-4633
(202) 966-6997

RESOURCES

STUDIES

Research Designed to Facilitate, Improve and Develop Cooperative/
Vocational Education Programs and Affirmative Action/EEO Programs

Buchanan, Dr. E.
Tidewater Community College
Virginia Beach, Virginia
(804) 427-3070

Development of a Model for the Recruitment of Mature Women into
Traditional Male-Oriented Occupational Education Programs.

Mintz, Florence
Rutgers University
Graduate School of Education
Department of Vocational Technical Education
New Brunswick, New Jersey, 08903
(201) 247-7636

Nontraditional Vocational Education Program for Women

Penn State
Institute for Research on Human Resources
406 Kern Grad. Building
University Park, Pennsylvania 16802
Dr. Morgan Lewis

Women of Different Racial Groups in Training for non-traditional
occupations in area vocational technical school

Kane, Mrs. Roslyn
R.J. Associates
1018 Wilson Blvd.
Arlington, Virginia
(703-245-9516

Testing of Selected Strategies to Eliminate Sex Bias in Vocational
Education Programs

Parsons, Edgar A.
System Sciences, Inc.
1215 Estes Drive, P.O. Box 2345
Chapel Hill, North Carolina 27514
(919) 929-7116

Non-Traditional Vocational Education Programs for Women

Kaufman, Jacob and Lewis, Dr. Morgan
Pennsylvania State University
State College, Pennsylvania
(814) 865-9561

**Assessing and Field Testing Career Planning and Development Approaches
for Adults, Minorities and Women 1974**

Bellanger, Joseph
San Jose Unified School District
San Jose, California
(408) 988-6000

Guidance and Counseling

Higher Education Resource Institute, Inc.
924 Wishwood Boulevard
Suite 850
Los Angeles, California 90024

Access to Education

Higher Education Resource Institute
924 Wishwood Boulevard
Suite 850
Los Angeles, California 90024

**An analysis of Participants of Women of Different Racial Ethnic Groups
on Training for Non-traditional Occupations in Area Vocational/Technical
Schools and Factors Which Influence Their Decisions to Enter and Remain in
such Training,**

King, Mrs.
R.J. Associates
1018 Wilson Boulevard
Arlington, Virginia 22209

Formative Evaluation Research Associates

Tolburtt, Margaret
1130 Hill Street
Ann Arbor, Michigan 48104
(313) 994-9060

Mario George -- Research Projects

Occupational and Technical Education
7th and D Streets, S.W.
Washington, D.C. 20202

STATE TRAINERS FOR THE SEGO PROJECT

- ALABAMA**—Ms. Mary Jo Brazelton, P.O. Box 1943, University 35486 (205) 348-6560
- ALASKA**—Ms. Susan B. Merritt, 2916 Knik Avenue, Anchorage 99503 (907) 272-6938
- ARIZONA**—Ms. Jamie Trainer, Pima Community College, 2202 W. Anklam Rd., Tucson 85709 (602) 884-6932
- ARKANSAS**—Ms. Mary Barham, Belle Grove Center, 3205 Jenny Lind, Ft. Smith 72901 (501) 785-2501
- CALIFORNIA**—Ms. Kay Ragan, Mt. San Antonio College, 1100 N. Grand Avenue, Walnut 91789 (714) 598-2811, ext. 353
- COLORADO**—Ms. Nancy Scott, Colorado Women's College, Montview Blvd. and Quebec, Denver 80220 (303) 394-6980
- CONNECTICUT**—Dr. Marguerite Pall Pengel, University of Hartford, 200 Bloomfield, West Hartford 06117 (203) 243-4483
- DELAWARE**—Dr. Richard A. Edwards, 116 Hullihen Hall, University of Delaware, Newark 19711 (302) 738-1219
- DISTRICT OF COLUMBIA**—Ms. Angie King Corley, 3519 14th Street, N.E., Washington, D.C. 20017 (202) 529-7431
- FLORIDA**—Ms. Coleen Story, College of Education, University of South Florida, Tampa 33620 (813) 974-2100 ext. 376, 233
- GEORGIA**—Dr. Kathleen D. Crouch, Georgia State University, University Plaza, Atlanta 30303 (404) 658-2016
- HAWAII**—Dr. Richard White, Leeward Community College, 96-045 Ala Ika, Pearl City 96762 (808) 455-0247
- IDAHO**—Ms. Leila Lewis, Consultant, Pupil Personnel, State Department of Education, Boise 83720 (203) 384-2113
- ILLINOIS**—Ms. Barbara Yocum, Moraine Valley Community College, 10900 South 88th Avenue, Palos Hills 60465 (312) 974-4300 ext. 257, 263
- INDIANA**—Dr. Marianne H. Mitchell, Department of Counseling and Guidance, School of Education, Indiana University, 2805 East Tenth Street, Rm. 180, Bloomington 47401 (317) 337-9118 or 9010
- IOWA**—Dr. Lauralee Rockwell, Division of Counselor Education, W 114, East Hall, University of Iowa, Iowa City 52240 (319) 353-5234
- KANSAS**—Dr. Margery A. Neely, Holton Hall, Kansas State University, Manhattan 66505 (913) 522-5938
- KENTUCKY**—Ms. Angela Wilkins, P.O. Box 17, Frankfort 40601 (502) 227-4727
- LOUISIANA**—Dr. Laurabel Hicks, Counselor Education, Southern University, Baton Rouge (504) 771-2890
- MAINE**—Ms. Barbara K. Spain, Counseling & Testing Services, University of Maine at Fort Kent, Pleasant Street, Fort Kent 04743 (207) 834-3162
- MARYLAND**—Mrs. Brady J. Fletcher, One Waterway Court, Rockville 20855 (301) 400-3952
- MASSACHUSETTS**—Ms. Mary Dunnington Mitchell, 223 Old Beaverbrook Road, Village of Nagog Woods, Acton 01715 (617) 263-9731
- MICHIGAN**—Ms. Celess Mc Lester, Box 420, Michigan Department of Education, Lansing 48902 (517) 373-1434
- MINNESOTA**—Ms. Arlene Beckenridge, 3820 Adair Avenue North, Crystal 55422 (612) 537-0302
- MISSISSIPPI**—Ms. Gayle Roberts, Mississippi State University, Counseling Center, Drawer NL, Mississippi State 39762 (601) 325-5502
- MISSOURI**—Dr. Queen D. Fowler, Washington University, Box 1085, St. Louis 63130 (314) 863-0100 ext. 4634, 4215
- MONTANA**—Ms. Nancy Scott, Colorado Women's College, Montview Blvd. and Quebec, Denver 80220 (303) 394-6980
- NEBRASKA**—Mr. Roger Hudson, 233 South Tenth, Lincoln (402) 435-0993
- NEVADA**—Ms. Beverly Eagan, 115 Smithridge, Reno 89502 825-7394
- NEW HAMPSHIRE**—Ms. Ruth Nemzoff Berman, 57 Raymond Street, Nashua 03060 (603) 889-2800
- NEW JERSEY**—Ms. Donna J. Cubit-Swoyer, 71 Main Street, Woodbridge 07095 (201) 636-0348
- NEW MEXICO**—Ms. Carmen J. Lanston, Route 5, Box 228A, Santa Fe 87501 (505) 455-7472
- NEW YORK**—Dr. Judy Egelston, 1362 West Lake Road, Conesus 14435 (716) 243-2455
- NORTH CAROLINA**—Ms. Cynthia Terres, J. B. Page Elementary, P.O. Box 303, Belmont 28012 (704) 825-2614
- NORTH DAKOTA**—Ms. Diana Pace, Counseling Center, University of North Dakota, Grand Forks 58201 (701) 772-3325
- OHIO**—Dr. Lewis E. Patterson, 1420 University Tower, Cleveland State U., Cleveland 44115 (216) 687-4611
- OKLAHOMA**—Dr. Amour J. Andrews, Counseling Center, University of Oklahoma, 650 Parrington Oval, Norman 73069 (405) 325-2911
- OREGON**—Ms. Pat Moore, 1493 Jordan Drive S., Salem 97302 (503) 363-0018
- PENNSYLVANIA**—Dr. Judith Scott, University of Pittsburgh, 207 Hill Bldg., Pittsburgh 15260 (412) 624-4067
- RHODE ISLAND**—Mrs. Maxine V. S. Nichols, Whale Rock Road, Narragansett 02882 (401) 783-4113
- SOUTH CAROLINA**—Dr. Linda Brooks, Converse College, Spartanburg 29301 (803) 585-6421
- SOUTH DAKOTA**—Dr. Linda Reisser, Division of Student Services, South Dakota State University, Brookings 57006 (605) 688-4122
- TENNESSEE**—Mrs. Ruth S. Benn, c/o Fulton High School, 2509 Broadway, Murfreesboro 37917 (615) 522-1623
- TEXAS**—Dr. Jeannie Werner, East Texas State University, Box 5512, Texarkana 75501 (214) 838-0507
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