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ABSTRACT

This reference guide for sex equity coordinators identifies the requirements of the Carl D. Perkins Vocational Education Act of 1984 for sex equity. An introduction discusses the purpose of the Perkins Act and personnel requirements regarding the elimination of sex discrimination and sex stereotyping. The next section identifies the requirements of the state plan, as they relate to the sex equity coordinator. The next eight sections are organized under the eight functions (or responsibilities) of the sex equity coordinator as identified in the Perkins Act, which requires the coordinator to: (1) administer the program of vocational education for single parents and homemakers and the sex equity program; (2) gather, analyze, and disseminate data; (3) review vocational education programs and submit recommendations; (4) submit to the State Board an assessment of the state's progress; (5) review proposed actions on grants, contracts, and the policies of the State Board; (6) develop recommendations for programs of information and outreach; (7) provide technical assistance; and (8) assist administrators, instructors, and counselors in implementing programs and activities. Each section includes examples of ways states are implementing the provisions. A discussion of organizing the sex equity effort follows. A section on resources concludes the guide. Appendixes describe how states are implementing sex equity and provide a list of state sex equity coordinators. (YLB)

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A GUIDE FOR VOCATIONAL EDUCATION SEX EQUITY PERSONNEL

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**UPDATE: A GUIDE FOR
VOCATIONAL EDUCATION
SEX EQUITY PERSONNEL**

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FOREWORD

When the Education Amendments of 1976 were passed, the position of State vocational education sex equity coordinator was mandated. As this was a new position, all of the persons who were selected to fill the positions were coming to a situation that was new to all.

As part of the orientation and training for the sex equity coordinators, the National Center, funded by the National Institute of Education, prepared a publication, *A Guide for Vocational Education Sex Equity Personnel*. The publication was used in workshops and referred to over the life of the Amendments by sex equity coordinators.

When the Perkins Act was passed in 1984, the sex equity provisions for vocational education were strengthened. This publication updates the earlier publication and is intended as a reference for sex equity coordinators—both those who have experience under the earlier legislation and those who are coming to the position since the passage of the Perkins Act.

The National Center is indebted to Harry N. Drier, Development Division Associate Director; Louise Vetter, Senior Research Specialist, who directed the project; and Marsha L. Richey, Graduate Research Associate for the project.

Special appreciation is extended to the sex equity coordinators (see appendix B) who reviewed the first draft of the publication at the conference held at the National Center on September 18-19, 1985, and to Barbara B. Hales, Specialist, Vocational Education, Utah; Marie Mayor, Coordinator, Maryland; Gary Waters, Sex Equity Coordinator, Nevada; Robert A. Gordon, Research Specialist, National Center; and Ned L. Cullom, Senior Program Associate, National Center, who reviewed the second draft.

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Robert E. Taylor
Executive Director
The National Center for Research
in Vocational Education

EXECUTIVE SUMMARY

This publication identifies the requirements of the Carl D. Perkins Vocational Education Act of 1984 (P.L. 98-524) for sex equity, as indicated in the legislation and in the *Final Regulations* for the Act issued in the *Federal Register*.

Sections of the publication are organized by the following categories:

- State plan requirements
- The eight functions (or responsibilities) of the sex equity coordinator as identified in the Perkins Act
- Issues in organizing the sex equity effort
- Resources

Examples of ways in which States are implementing the sex equity provisions of the Perkins Act are included in each section.

The appendixes provide a state-by-state listing of how sex equity is being implemented for the first program year of the Perkins Act and a listing of the sex equity coordinators, current as of December 1, 1985.

INTRODUCTION

The Carl D. Perkins Vocational Education Act of 1994 (P.L. 98-524) maintains and strengthens the sex equity provisions of the previous Federal vocational education act (Title II, Education Amendments of 1976, P.L. 94-482).

Final Regulations for the Perkins Act were issued by the Department of Education, Office of Vocational and Adult Education, in the *Federal Register* on August 16, 1985, pp. 33226-33305, Vol. 50, No. 159. In the following information, when reference is made to specific sections of the *Final Regulations*, the aforementioned document is the source of the information.

Purposes of the Carl D. Perkins Vocational Education Act

The *Final Regulations* of the Perkins Act list the nine purposes of the Act. Three of the purposes of the Act are directly related to sex equity. They are as follows:

- Assure that individuals who are inadequately served under vocational education programs are assured access to quality vocational education programs, especially—
 - individuals who are disadvantaged;
 - individuals who are handicapped;
 - ** men and women who are entering nontraditional occupations;
 - adults who are in need of training and retraining;
 - ** individuals who are single parents or homemakers;
 - individuals with limited English proficiency; and
 - individuals who are incarcerated in correctional institutions.
- Assist the states to utilize a full range of supportive services, special programs, and guidance counseling and placement to achieve the basic purposes of the Act.
- Improve the effectiveness of consumer and homemaking education and to reduce the limiting effects of sex-role stereotyping on occupations, job skills, levels of competency, and careers. (Section 400.1)

Personnel Requirements Regarding the Elimination of Sex Discrimination and Sex Stereotyping

According to the *Final Regulations* for the Carl D. Perkins Vocational Education Act, which were issued in the *Federal Register* on August 16, 1985, a State that desires to participate in the State Vocational Education Program (that is, if the State chooses to receive Federal vocational education funding) shall assign one individual to work full time to assist the State board to fulfill the purposes of the Act by:

1. Administering the program of vocational education for single parents and homemakers and the sex equity program.
2. Gathering, analyzing, and disseminating data on the:
 - i. Adequacy and effectiveness of vocational education programs in the State in meeting the education and employment needs of women, including the preparation of women for employment in technical occupations, new and emerging occupational fields, and occupations regarded as nontraditional for women; and
 - ii. Status of men and women students and employees in the programs described in i.
3.
 - i. Reviewing vocational educational programs, including career guidance and counseling, for sex stereotyping and sex bias, with particular attention to practices which tend to inhibit the entry of women in high technology occupations; and
 - ii. Submitting recommendations for inclusion in the State plan for programs and policies to overcome sex bias and sex stereotyping in the programs in i.
4. Submitting to the State board an assessment of the State's progress in meeting the purposes of the Act with regard to overcoming sex discrimination and sex stereotyping.
5. Reviewing proposed actions on grants, contracts, and the policies of the State board to ensure that the needs of women are addressed in the administration of the (Perkins) Act.
6. Developing recommendations for programs of information and outreach to women concerning vocational education and employment opportunities for women, including opportunities for careers as technicians and workers in technical fields and new and emerging occupational fields.
7. Providing technical assistance and advice to local educational agencies, postsecondary institutions, and other interested parties in the State, on expanding vocational opportunities for women.
8. Assisting administrators, instructors, and counselors in implementing programs and activities to increase access for women, including displaced homemakers and single heads of households, to vocational education and to increase male and female students' enrollment in nontraditional programs. (Section 401.13)

A State is required to reserve at least \$60,000 to carry out the provisions listed, including the provision to the full-time individual of necessary and reasonable staff support. The use of the term "reserve" rather than the term "expend" at least \$60,000 allows the States a period of up to 27

months to use the funds for sex equity, as is true for the use of other funds under the Perkins Act, as described in the supplementary information to the *Final Regulations* (p. 33231).

Organization of the Guide

In the next section of this update, the requirements of the State plan, as they relate to the sex equity coordinator, are identified. The following sections are organized under the eight functions (or responsibilities) of the sex equity coordinator as identified in the Perkins Act and in the *Final Regulations*. These specific sections are followed by a discussion of organizing the sex equity effort. A section on resources completes the text of the guide.

Appendix A provides a listing of how States are implementing sex equity for the first program year of the Perkins Act. Appendix B provides a listing of the sex equity coordinators (current as of December 1, 1985).

STATE PLAN REQUIREMENTS

The initial State plan for implementing the Perkins Act was for a period of three program years (a program year runs from July 1 of one year to June 30 of the next year). Subsequent plans will be for two program year periods. Annual amendments may be submitted. (Section 401.17.a).

The person designated by the State as the sex equity coordinator may be part of the group that develops the State plan. If not (and also if part of the State plan development group), the following areas should be of special concern to the coordinator.

Needs Assessment

In developing the State plan, assessment of the special needs of several groups for access to vocational education and vocational services in terms of labor market needs is required. (Section 401.18.c.3) Two of these groups are as follows:

- Individuals who are single parents or homemakers
- Individuals who participate in programs designed to eliminate sex bias and stereotyping in vocational education (Section 401.51)

Needs assessment is discussed in the section of this publication describing the coordinator's function of gathering, analyzing, and disseminating data, which begins on p. 26.

Assurances

The *Final Regulations* for the Perkins Act require that each State include 22 separate assurances in its State plan. Two of these assurances are the responsibility of the sex equity coordinator. They are as follows:

Section 401.19.a.6. That in using funds allotted for single parents and homemakers—
—The State will emphasize assisting individuals with the greatest financial need; and
—That in serving homemakers, the State will give special consideration to homemakers who, because of divorce, separation, or the death or disability of a spouse, must be prepared for paid employment.

Section 401.19.a.7. That the State will provide relevant training and vocational education activities to men and women who desire to enter occupations that are not traditionally associated with their sex.

Three examples of assurances that relate to these two requirements are provided in the following section.

(Information provided by Marilyn Pergerson, North Carolina State Sex Equity Coordinator)

ASSURANCES

The local education agency agrees:

1. To assure that funds approved to operate sex equity programs will be:
 - a. used to provide programs, services and activities to eliminate sex bias and stereotyping, and/or
 - b. used to provide programs, services and activities for females aged 14-21, and/or
 - c. used to provide support services for individuals participating in programs, services and activities to eliminate sex bias and stereotyping for females aged 14-21.
2. To assure that the school or LEA will follow the sex equity purpose, goals and assurances described in the Sex Equity Program description.
3. To develop a program as identified in the program description.
4. To show commitment to the program by:
 - a. identifying appropriate time to implement the program.
 - b. identifying personnel to implement the program.
 - c. providing vocational shops or laboratory with adequate equipment for instruction as appropriate to the program described.
 - d. providing classrooms for instruction as appropriate to the program described.
 - e. providing appropriate utility costs necessary to support the described program.
 - f. indicating other funds used in the LEA which support the program purposes.
- *5. To ascertain that the school or LEA has completed a self-evaluation of vocational education compliance for civil rights and believes that it is in compliance to the best of its knowledge.

*Author Note: In the question and answer section of the *Final Regulations* (p. 33295), it is clearly stated that the sex equity coordinator cannot be assigned the general responsibilities of another office (such as State Director of Vocational Education or Office of Civil Rights responsibilities) that would preclude full-time attention to sex equity responsibilities. However, the sex equity coordinator may contribute to activities carried out by offices, such as the Office of Civil Rights, if these activities are consistent with the duties of the sex equity coordinator as set forth in section 401 13(a) of the Act.

(North Carolina, continued)

6. To provide the appropriate administrative supervision and support necessary to encourage success of the program.
7. To work cooperatively with the state in monitoring the program.
8. To work cooperatively with the state in evaluating the program.

THIS PROGRAM SHALL NOT SUPPLANT ANY CURRENTLY EXISTING PROGRAM

(Information provided by Barbara Bitters, Wisconsin Supervisor, Sex Equity)

ASSURANCES

SINGLE PARENT

1. An emphasis on assisting individuals with the greatest financial need will be placed in these single parent programs.
2. Appropriate demographic data on participants, quarterly reports, and other evaluation data for single parent programs, as determined by the Vocational Equity Supervisor, will be submitted to the Department of Public Instruction.
3. All curricula and other written materials developed through these funds will be submitted to the Department of Public Instruction, Bureau of Vocational Education.

VOCATIONAL EQUITY

1. Appropriate demographic data on participants, quarterly reports, and other evaluation data for sex equity, as determined by the Vocational Equity Supervisor, will be submitted to the Department of Public Instruction.
2. All curricula and other written materials developed through these funds will be submitted to the Department of Public Instruction, Bureau for Vocational Education.
3. A comprehensive three-year Vocational Equity Plan in accordance with the State Plan will be submitted to the Department of Public Instruction.

(Information provided by Corena Mook, Kansas State Sex Equity Coordinator)

SINGLE PARENTS OR HOMEMAKERS

Assure that, when providing training for single parents or homemakers, consideration will be given to those with the greatest financial needs, and special consideration being given to homemakers who because of divorce, separation, or the death or disability of a spouse must prepare for paid employment.

Recommendations

As indicated earlier in the section on personnel requirements (p. 2), the sex equity coordinator is responsible for submitting recommendations for inclusion in the State plan for programs and policies to overcome sex bias and sex stereotyping in vocational education programs. This requirement is discussed in the later section relating to this function of the State sex equity coordinator, beginning on p. 49.

FUNCTION: ADMINISTER THE PROGRAM OF VOCATIONAL EDUCATION FOR SINGLE PARENTS AND HOME-MAKERS AND THE SEX EQUITY PROGRAM

The basic State grant, authorized by Title II Parts A and B of the Perkins Act, consists of the following two programs:

- The Vocational Education Opportunities Program
- The Vocational Education Improvement, Innovation, and Expansion Program (Section 401.50)

Under the Vocational Education Opportunities Program, vocational education services and activities designed to meet the special needs of, and enhance the participation of, are to be provided to six designated groups of individuals. The programs for two of the groups identified are to be administered by the sex equity coordinator. The two groups are as follows:

- Individuals who are single parents or homemakers (the program of vocational education for single parents and homemakers) (Section 401.51)
- Individuals who participate in programs designed to eliminate sex bias and stereotyping in vocational education (the sex equity program) (Section 401.51)

Single Parent and Homemaker Program

The Perkins Act and the *Final Regulations* for the Act prescribe that eight and one-half percent of the funds reserved under the Vocational Education Opportunities Program be reserved for individuals who are single parents or homemakers (Section 401.92).

The *Final Regulations* (Section 400.4) define a *single parent* as follows:

an individual who (1) is unmarried or legally separated from a spouse; and (2) has a minor child or children for which the parent has either custody or joint custody.

The term *homemaker* is defined as follows:

an individual who (1) is an adult; and (2) has worked as an adult primarily without remuneration to care for the home and family, and for that reason has diminished marketable skills.

The *Final Regulations* require that a State shall use funds reserved for individuals who are single parents or homemakers only to:

- a. Provide, subsidize, reimburse, or pay for vocational education and training activities, including basic literacy instruction and necessary educational materials, that will give single parents or homemakers marketable skills;
- b. Make subgrants to eligible recipients for expanding vocational education services where this expansion directly increases the eligible recipients' capacity for providing single parents or homemakers with marketable skills;
- c. Make subgrants to community-based organizations for the provision of vocational education services to single parents or homemakers, if the State determines that a community-based organization has demonstrated effectiveness in providing comparable or related services to single parent or homemakers, taking into account the demonstrated performance of such an organization in terms of the cost and quality of its training and the characteristics of the participants;
- d. Make vocational education and training programs more accessible to single parents or homemakers by assisting them with child care or transportation services or by organizing and scheduling those programs so that they are more accessible; or
- e. Provide information to single parents or homemakers to inform them of vocational education programs and related support services (Section 401.55).

In the summary of Comments and Responses (Appendix A) in the *Final Regulations*, it is pointed out that some, but not all, of the five points listed previously should be present in each program (p. 33282). Additionally, cooperative and apprenticeship programs may be funded if the programs are for single parents and homemakers (p. 33299).

States may require cost sharing for single parent and homemaker programs, but if the State chooses to do this, the cost sharing requirement must be identified in the State plan and the requirement must be identified as a State requirement, not a Federal requirement (p. 33301).

The *Final Regulations* define *eligible recipient* as follows:

a local educational agency or a postsecondary educational institution (Section 400.4).

The term *community based organization* is defined as follows:

a private nonprofit organization of demonstrated effectiveness which is representative of communities or significant segments of communities and which provides job training services (for example, Opportunities Industrialization Centers, the National Urban League, SER-Jobs for Progress, United Way of America, Mainstream, the National Puerto Rican Forum, National Council of La Raza, 70,001, Jobs for Youth, organizations operating career intern programs, neighborhood groups and organizations, community action agencies, community development corporations, vocational rehabilitation organizations, rehabilitation facilities as defined in the Rehabilitation Act of 1973, agencies serving youth, agencies serving the handicapped, agencies serving displaced homemakers, union-related organizations, and employer-related nonprofit organizations), or an organization of demonstrated effectiveness serving nonreservation Indians (including the National Urban Indian Council), as well as tribal governments and Native Alaskan groups (Section 400.4).

Examples of How States Are Implementing the Single Parent and Homemaker Program

Specific information from five States (Ohio, Missouri, Indiana, California, Wisconsin) on the process used to implement the single parent and homemaker program in the first program year of the Perkins Act follows.

(Information from Carol Whitney, Sex Equity Coordinator) An RFP (request for proposal) process was used to award 96 subgrants under the FY 1986 Single Parents/Homemakers Program. Subgrants were made in the following categories:

Category	Number of Grants
1. Provide occupational training to single parents and homemakers to gain marketable skills	22
2. Center-based dependent care services	13
3. Support services to make vocational education more accessible to single parents, homemakers, and girls and women ages 14-25 (provision of allowance for purchase of dependent care service by participant)	10
4. Support services to make vocational education more accessible to single parents, homemakers, and girls and women ages 14-25 (provision for travel allowance to enable participants to attend vocational education and/or transport dependents to and from dependent care site)	15
5. Instructional materials to support vocational education for single parents and homemakers	16
6. Innovative projects to assist single parents and homemakers to gain marketable skills	20

In addition, 35 Displaced Homemaker Programs that had been established under the sex equity provisions of the Education Amendments of 1976 received continued funding.

In using an allotment system to 58 area vocational schools and 10 junior and community colleges for both the single parent and homemaker program and the sex equity program, Missouri (information from Georganna Beachboard, Missouri State Sex Equity Coordinator) describes the expanded services that can be provided as follows:

(Missouri)

DESCRIPTION OF EXPANDED SERVICES

Outreach —brochures, announcement, flyers, public service announcements, posters, billboards;
—travel for staff to community activities involving presentations;
—telephone costs associated with expanded service inquiries;
—other activities to inform clients of programs and support services.

Orientation —pre-enrollment activities in form of course, series of courses, workshop or seminar designed to focus on:

career exploration, assessment, and decision making including non-traditional, technical and high demand occupations;

self-esteem building, stress management, family and work relationships related to client need.

The activity must demonstrate it assisted the client to gain a marketable skill. The number of clients who, as a result of the activity, enrolled in a vocational program and/or the development of education and an employability plan and/or job placements are indicators.

Tuition —per client enrolled in a long-term preparatory vocational program designed to prepare an adult with sufficient skills and knowledge to enter an occupation new to them or an apprenticeship program.

Basic Literacy Instruction —job readiness training including job application, resume writing, interview, search, et cetera.

—other activities in relation to vocational program (math, science).

Educational Materials —acquisition of materials used in orientation activities including current non-traditional, technical and high demand occupational information; training materials; testing or assessment.

Organization —additional sections, slots, et cetera.

or

Scheduling —other activity that meets clients' needs.

Child Care —dependent care for children of individuals in vocational programs. Local district must provide or arrange for accredited child care service directly with provider.

Through an RFP process, Indiana has set the following guidelines/minimum requirements for single parent and homemaker programs.

(Information from Wendy Helton, Indiana State Coordinator for Reduction of Sex Bias)

GUIDELINES/MINIMUM REQUIREMENTS

1. Develop a plan to:
 - a. Describe the geographic area and estimated number of single parents or homemakers to be served.
 - b. Design a method to search for and identify single parents or homemakers in need of services.
 - c. Form an Advisory Committee composed of representatives from agencies within the region serving single parents or homemakers to develop strategies for coordination of project activities with existing available services to single parents or homemakers.
 - d. Describe the program services to single parents or homemakers that will expand or improve current services. Services can be selected from the following items that include, but are not limited to:

promotion	counseling
retention	placement
career awareness	career exploration
hands on experiences	self esteem building
job readiness preparation	basic skills development
 - e. Assure that proposed project activities will be designed to work in conjunction with other single parent or homemaker projects in the State of Indiana.
 - f. Indicate procedures, processes, timetables and recommended budget to accomplish selected activities for implementation.
2. Designate a cadre member to serve as a single parent and homemaker specialist. Indicate the methods in which the cadre member will serve the following project responsibilities.
 - Receive training and in-service in single parents and homemaker issues and resources.
 - Provide direct services to single parents and homemakers.
 - Access funds for vocational education programs or transportation for single parents and homemakers.

(Indiana continued)

- Promote available resources concerning single parents and homemakers throughout the regional vocational education, training and employment community.
 - Improve or expand current services available to single parents and homemakers.
 - Serve as the State Board for Vocational and Technical Education liaison for statewide single parent and homemakers public information activities.
3. Provide for a method to identify expenditure of funds in compliance with the State Plan for Vocational-Technical Education Fiscal Year 1986-88 and the Carl D. Perkins Vocational Education Act (P.L. #98-524) to include the following:
- 50% of the monies available to training activities and services will be used to serve JTPA eligible single parents and homemakers. This is to include strategies to work in conjunction with the appropriate SBVTE field coordinator and local JTPA administrative personnel.
 - Funds to subsidize, provide, or pay for single parent and homemaker vocational education programs or transportation will be used to assist those students who have completed 50% of their vocational education program. Develop, in conjunction with the appropriate SBVTE staff, criteria to determine 50% program completion.
 - Expenditure of all single parent and homemaker funds will emphasize assisting individuals who are single parents or homemakers with the greatest financial need, and homemakers who, because of divorce, separation, or through the death or disability of a spouse must prepare for paid employment.
4. Develop a follow-up system for single parents and homemakers served by the project.
5. Provide for a third party evaluation at midterm and end of project.

California (information from Connie Gipson, Consultant) has issued a series of RFBs (request for bids) for single parent and homemaker programs. In addition to the typical single parent/homemaker program, two specific kinds of programs can be established. They are as follows:

- Minority Women's Single Parent/Homemaker projects (joint projects between local educational agencies and organizations serving Hispanic women, joint projects between local educational agencies and black women's organizations, joint projects between local educational agencies and Asian women's organizations, and two joint projects between local educational agencies and organizations with expertise in the employment of American Indian women)

- Planning and implementing small-business ownership and management programs (entrepreneurship) for single parents and homemakers

Wisconsin (information from Mary Thompson, Sex Equity Coordinator) informed eligible recipients that they must prioritize their needs and apply for funds to support Activity 1a. and/or no more than three additional activities listed in the following section:

(Wisconsin)

1. **Activities which serve single parents, homemakers, and/or displaced homemakers exclusively.**
 - a. **A program of information which includes a "pre-enrollment" activity, course or series of activities and courses which focus on self-esteem building, career exploration, decision making, and math or technology anxiety, with an emphasis on hands-on experience in technical and nontraditional occupations and/or training programs with a high placement/wage potential. Courses and activities must be designed for, and in order, to meet the unique needs of single parents, homemakers, and/or displaced homemakers. Recruitment, counseling and retention activities may occur in conjunction with this pre-enrollment course(s). Follow-up information must be collected to demonstrate that the course(s) had a direct bearing on the ability of these populations to gain marketable skills. This program of information must be given a name(s) so that the target population(s) knows it's designed for them. Innovative use of audiovisuals and the mass media is encouraged. Part, or all, of this grant may be used in conjunction with the district's displaced homemaker program.**
 - b. **Technical assistance and support services to single parents and homemakers who want to develop home-based or small businesses. This should be designed to address the unique needs of this population and supplement existing district services.**
 - c. **Direct payments to eligible individuals for tuition, child care, and/or transportation; proposals must demonstrate that one or more of these factors is a barrier to single parents', homemakers', and/or displaced homemakers' gaining marketable skills and must provide a sound rationale for the funds requested. Recipients will need to develop criteria for distributing these funds. They should supplement, not supplant, JTPA funds. In submitting a request for this priority, applicants should indicate the dollars requested per individual.**
2. **Activities that enhance the capacity of the institution to help single parents and homemakers gain marketable skills. At least 60 percent of those served must be single parents, homemakers, or displaced homemakers.**
 - a. **New occupational training program or additional sections of an ongoing program in order to enable single parents and homemakers to gain marketable skills. Extensive recruitment, retention and follow-up activities directed at single parents and homemakers must be an integral part of this proposal. Districts are encouraged to coordinate these funds with other Voc. Ed., JTPA and local dollars to accomplish the goal.**

(Wisconsin, continued)

- b. The development and production of a course or series of courses delivered via educational television which prepares single parents and homemakers to gain marketable skills. This could be a course or series of courses to provide information to single parents and homemakers to inform them of vocational education programs and related support services, but designed for distance learning. It must include a follow-up mechanism to demonstrate outcomes and a linkage to on-campus services.
- c. The development and implementation of an interdisciplinary, model, open entry/open exit "Technical Lab" to enhance the ability of single parents, homemakers, and/or displaced homemakers to gain marketable skills. The purpose would be to demystify new technologies, especially computers, and to permit students to become familiar with computer applications in manufacturing, health services and business. Students might gain an entry level skill after achieving certain competencies, as well as academic credits that could be applied to several fields.
- d. The creation or expansion of a child care program to enable single parents and homemakers to gain marketable skills.

Current Programming for Single Parent and Homemaker Programs

Mary M. Wiberg (Iowa's Vocational Equity Consultant) and Marie Mayor (Maryland's Coordinator) summarized many activities underway in their article on the special needs of women students in the October 1985 issue of the *Vocational Education Journal* (Wiberg and Mayor, 1985).

They describe child care efforts in Howard County, Maryland, where children of students who would otherwise drop out of school are being cared for at the county's vocational-technical center. The child care is provided by students who are preparing for careers in the child care field.

Ohio's two programs for pregnant students and young parents are described. The GRADS (Graduation, Reality, and Dual Role Skills) program is an in-school program, offered through home economics, to help students stay in school, provide knowledge and skills related to child development and positive parenting practices, help students obtain health care, provide an orientation to the world of work and the community, and encourage students to set goals related to balancing the dual role of employee and parent. The GOALS (Graduation, Occupation, and Living Skills) program provides similar services for young single parents aged 18-25 who dropped out of school because of parenting responsibilities.

Wiberg and Mayor point out that many programs have been developed to serve both displaced homemakers and single parents. They describe programs in Washington (Everett Community College's Women on the Move and Breakthrough for Women, South Seattle Community College's Women in Transition, and the SOS (Statewide Outreach Services) program, which are designed to

meet the needs of women who live in rural areas or smaller towns not served by displaced homemaker centers) and the program at Western Iowa Tech Community College, which is known as PACE (Programming for Alternative Careers-Employment), that provides opportunities to explore nontraditional careers in a nonthreatening environment.

Daytona Beach Community College provides a Career Alternatives Program (Blanchard and Rose 1985). Funded under the sex equity portion of the 1976 vocational education legislation, the program recruits and retrains women in traditionally male vocational-technical training programs at the college. The programs include: architectural woodworking, fire science, emergency medical technician, electronics, commercial art, small and gas engine repair, automotive mechanics, auto body repair, diesel mechanics, air-conditioning and refrigeration, computerized machine and computer-aided drafting, building and contracting, law enforcement and corrections, and professional photography.

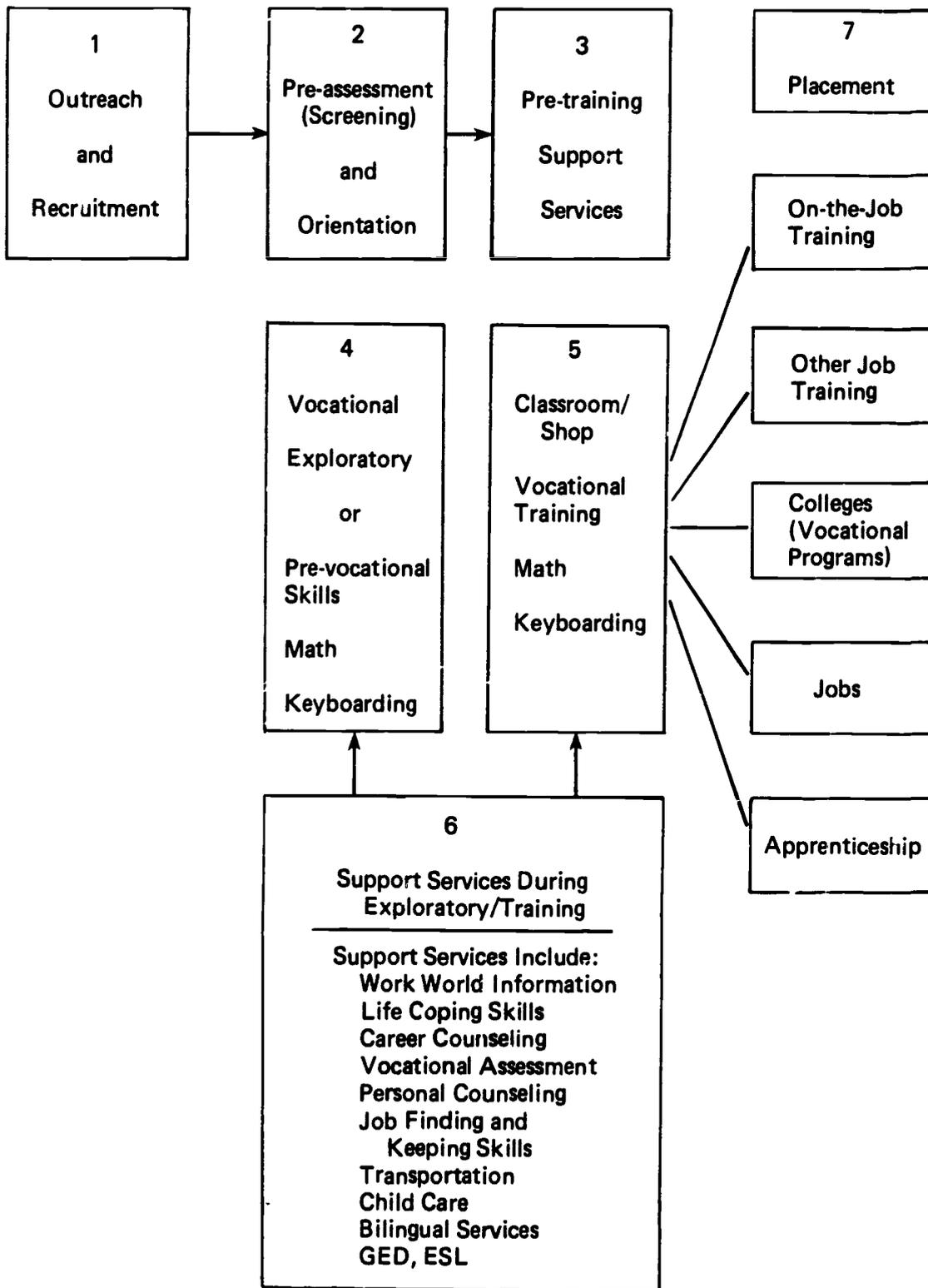
A 2-week displaced homemaker class is provided through the women's center at Daytona Beach. Topics included in the class are confidence building, testing, goal setting, and support.

Arizona (information provided by Jenny L. Erwin, Arizona State Sex Equity Coordinator) uses the job skill training components in programs for single parents and homemakers that are identified on the following page.

Many available resources for working with single parent and displaced homemaker programs are listed in the section of this publication that is devoted to resources.

(Information from Jenny L. Erwin, Arizona's State Sex Equity Coordinator)

JOB SKILL TRAINING COMPONENTS FOR SINGLE PARENTS AND HOMEMAKERS



Sex Equity Program

The Perkins Act and the *Final Regulations* for the Act prescribe that three and one-half percent of the funds reserved under the Vocational Education Opportunities Program be reserved for individuals who are participants in programs designed to eliminate sex bias and stereotyping in vocational education (Section 401.92).

The *Final Regulations* for the Perkins Act do not include definitions of sex bias and stereotyping. However, the *Final Regulations* for the previous law (P.L. 94-482, Education Amendments of 1976) provided the following definitions (Vetter, Burkhardt, and Sechler, 1978):

Sex Bias—Behaviors resulting from the assumption that one sex is superior to the other

Sex Stereotyping—Attributing behaviors, abilities, interests, values, and roles to a person or a group of persons on the basis of their sex

The *Final Regulations* require that a State shall use funds reserved for individuals who participate in programs designed to eliminate sex bias and stereotyping in vocational education for the following activities:

1. Programs, services, and activities to eliminate sex bias and stereotyping in secondary and postsecondary vocational education programs
2. Vocational education programs, services, and activities for girls and women aged 14 through 25, designed to enable the participants to support themselves and their families
3. Support services for individuals participating in vocational education programs, services, and activities described in 1 and 2 above, including dependent-care services and transportation (Section 401.56)

The *Final Regulations* go on to state that the age limitations (14-25) may be waived if the sex equity coordinator determines that the waiver is essential to meet the objectives of the program.

As with the Single Parent and Homemaker Program, Appendix A of the *Final Regulations* indicates that one or more of the three aforementioned areas should be included in each program funded (p. 33299). Also, cooperative and apprenticeship programs may be funded if the programs are to eliminate sex bias and stereotyping (p. 33299).

States may require cost sharing for sex equity programs, but if the State chooses to do this, the cost sharing requirement must be identified in the State plan, and it must be identified as a State requirement, not a Federal requirement (p. 33301).

Research Findings

Houser and Garvey (1985), in studying factors that affect nontraditional vocational enrollment among women, surveyed 470 women enrolled in 3 secondary schools, 3 community colleges, and 3 Regional Occupational Centers/Programs in California. They found that the one dimension that most significantly differentiated women enrolled in nontraditional courses (in which over 80 percent of the students were men) from both women enrolled in traditional courses who had never

considered enrolling in a nontraditional course and women enrolled in a traditional course who had considered enrolling in a nontraditional course was the amount of support and encouragement they received from important others in their lives. The nontraditional students consistently received more support from male and female friends and family members and from teachers and counselors.

Houser and Garvey recommend that, for the purpose of improving educational quality and fostering equality of educational opportunity, the attention of both policymakers and educational staff members should be focused on educating the important others—family members, friends, teachers, counselors—in the lives of today's young men and women.

Examples of State Implementation of the Sex Equity Program

For the first program year of the Perkins Act, information from three States on ways their Sex Equity Program is being implemented follows.

(Information from Carol Whitney, Ohio's Sex Equity Coordinator) An RFP process was used to award 177 subgrants under the FY 1986 Sex Equity Program. Subgrants were made in the following categories:

Category	Number of Subgrants
1. Orientation and recruitment of ninth and tenth grade high school students for secondary vocational programs historically dominated by one sex.	28
2. Acquisition of instructional resources that depict a balanced representation of males and females in occupational and/or home roles.	25
3. Support services for students enrolled in nontraditional programs (minimum 10 students).	12
4. In-service for all counselors in a school district and/or Vocational Education Planning District (VEPD).	30
5. Career exploration activities for students in grades 7-10 with an emphasis on nontraditional careers.	46
6. Activities to eliminate sex bias and sex stereotyping in Consumer and Homemaking Education.	16
7. In-service for teachers in a school district and/or VEPD.	20

Indiana (information from Wendy Helton, State Coordinator for Reduction of Sex Bias) has issued an RFP for projects, which is open to publicly supported secondary education agencies and postsecondary institutions within economically depressed areas, for the purpose of developing partnerships between vocational education and business/industry to examine barriers to employment in nontraditional occupations and develop strategies to eliminate those barriers. The requirements of the projects will include the following:

- Having personnel with expertise in working with sex equity activities
- Establishing contact with the State Board project for establishing education and business/industry partnerships
- Identifying and gaining commitment from key decision makers in education and business/industry for working as a task force on sex equity issues concerning education and employment in nontraditional occupations
- Providing for third-party evaluation of project activities

Wisconsin (information from Mary Thompson, Sex Equity Coordinator) provided for three statewide projects and local projects through an RFP process. The statewide projects were as follows:

(Wisconsin)

1. A project which is statewide in scope and assists all VTAE districts to eliminate sex bias and sex role stereotyping in vocational education. Primary emphasis in a proposal which addresses this priority should be given to:
 - a. Assisting districts with the sex equity component of occupational program evaluations and resulting recommendations.
 - b. Promoting linkages and coordination among staff throughout the VTAE system who are actively working to promote sex equity.
 - c. Assisting VTAE instructors, coordinators and supervisors to integrate sex equity concepts into existing curricula.
 - d. Developing a resource center coupled with a newsletter published four to six times a year.
 - e. Developing tools to assess staff practices, the impact of sex equity activities, and to achieve other goals identified by the districts.
 - f. Providing inservice training and other technical assistance to districts.
2. A statewide Leadership Identification Program to identify and tap the talents of women, minorities, and handicapped individuals who have the potential for expanded leadership opportunities and upward mobility, and to address sex bias and stereotyping among the VTAE staff as it relates to career development and

(Wisconsin, continued)

upward mobility. The recipient of this proposal will co-sponsor the Leadership Identification Program with the Wisconsin Board of VTAE. It may be modeled after and improve upon the current state Leadership Identification Program. It should include the basic components of the program, i.e., the mentor/mentee relationship, an orientation meeting, a four-day management meeting, and a final meeting at the end of the project. Proposals that expand the current program to provide additional experiences for those who have participated in the state Leadership Identification Program for the last three years will be given priority. The project should promote and operate in coordination with local leadership programs.

3. A project which links and evaluates existing resources for single parent and homemaker programs, provides or subcontracts for a quarterly newsletter, identifies needs and unmet needs, and provides training and technical assistance based on unmet needs. Statewide in scope.

Local Wisconsin projects were defined as follows:

1. Sex equity grants which address one or more of the following:
 - a. Extensive recruitment and retention activities to attract the nontraditional sex into a specific program or cluster of programs that offer(s) high placement potential and an average entry level monthly wage of \$1,000.
 - b. Supportive activities for staff who are looking for help in promoting sex equity.
 - c. A district/community public relations campaign that could include posters, public service announcements, audio visuals, contests, etc., to communicate the district's commitment to sex equity, and the opportunities available to women and men in nontraditional occupations.
 - d. Curriculum development to help instructors integrate sex equity competencies into regular curriculum and prepare students for the changing roles of men and women in the work place.
 - e. Sex equity activities in relationship to student organizations.
 - f. An Industry - Education Partnership project to promote sex equity and non-traditional occupations in close cooperation with local business and industry and with an emphasis on job development and placement in nontraditional occupations.
 - g. *Other* locally identified projects which would help to eliminate sex bias and sex role stereotyping in vocational education, including a comprehensive "model" to promote sex equity in vocational education.

(Wisconsin, continued)

2. A Women in Technology Project that emphasizes preenrollment, "hands-on" experiences in the trade and technical field; proposals are encouraged to work with high school students as well as adults and to coordinate with resources available through the Department of Public Instruction.
3. The development and implementation (over a two-three year period) of an interdisciplinary, model, open entry/open exit technical lab to enhance the likelihood that women and men will enroll and succeed in nontraditional occupations. Funds for this project should be coordinated with single parent and homemaker funds as well as other funding sources as necessary.
4. Employer linked training to attract females if the program is nontraditional for females and males if the program is nontraditional for males which is designed to eliminate sex bias and stereotyping in a particular occupational area. Applicants are encouraged to coordinate this priority with JTPA and/or other VEA funds to fund a full fledged occupational program.

Current Programming for the Sex Equity Program

The Pennsylvania Advisory Council on Vocational Education and the Pennsylvania Department of Education have jointly produced a booklet, *Do a Double Take*, that includes photographs of and interviews with students and workers in nontraditional areas. The interviews and photographs were done by high school students who are members of the Pennsylvania Vocational Industrial Clubs of America (VICA). Most of the articles and photographs were submitted at the equity contest of the Annual VICA Leadership Conference.

Maryland's sex equity coordinator, Marie Mayor, has worked with the Regional Planning Council for the Baltimore area to develop a booklet listing alphabetically all the occupations available in the area. Occupations are identified as predominantly male or female (as of 1980) and median weekly wages are listed (as of 1983).

Washington, D.C. (information from Eunice Wright Jones, Sex Equity Coordinator) has developed the Sex Equity Student Leader Vocational Education Project. Student members of the vocational clubs form a three-person panel to lead discussions that inform and encourage their peers to consider nontraditional occupations. The students who lead the presentations are themselves enrolled in vocational education courses and serve as role models to other students.

Vermont (information from Henry Bissex, Sex Equity Coordinator) has begun a sex equity high-technology program for women in a correctional facility. The project involves training in keyboarding, using spread sheets and graphics, and data analysis.

Many resources for programming are described in the final section of this publication.

- FUNCTION: GATHER, ANALYZE, AND DISSEMINATE DATA ON THE**
- (I) ADEQUACY AND EFFECTIVENESS OF VOCATIONAL EDUCATION PROGRAMS IN THE STATE IN MEETING THE EDUCATION AND EMPLOYMENT NEEDS OF WOMEN, INCLUDING THE PREPARATION OF WOMEN FOR EMPLOYMENT IN TECHNICAL OCCUPATIONS, NEW AND EMERGING OCCUPATIONAL FIELDS, AND OCCUPATIONS REGARDED AS NONTRADITIONAL FOR WOMEN; AND**
 - (II) STATUS OF MEN AND WOMEN STUDENTS AND EMPLOYEES IN THE PROGRAMS LISTED IN (I) ABOVE**

Adequacy and Effectiveness in Meeting Needs

No definitions for the terms *technical occupations*, *new and emerging occupational fields*, or *nontraditional occupations* are provided by the *Final Regulations* for the Perkins Act.

However, the vocational education programs identified as technical programs by the National Center for Education Statistics are the following:

- Architectural Technology
- Automotive Technology
- Civil Technology
- Electrical Technology
- Electronics Technology
- Environmental Control Technology
- Industrial Technology
- Mechanical Technology
- Scientific Data Processing
- Commercial Pilot Training

- Fire and Safety Technology
- Police Science Technology
- Water and Waste Water Technology

Presumably, the occupations for which these programs prepare people could be identified as technical occupations.

New and emerging occupational fields will vary from State to State depending on the basis of the economy of the State. Information will probably be available from the State office responsible for economic development in the State on what are viewed as new and emerging occupations for that State.

In a recent publication (Wolkowir 1985) 10 careers were listed as being on the rise. Those listed were as follows:

- Fire-protection engineers
- Database managers
- Aquaculturists
- Laser technologists
- Space technologists
- Professional humanists
- Digitechnicians
- Educationists
- Geriatricians
- Artificial-intelligence engineers

The Women's Bureau of the Department of Labor defines a nontraditional occupation for women as an occupation in which women make up 25 percent or less of the total number of workers (Kolde, 1985). The Women's Bureau looks at National employment figures. However, the sex equity coordinator may choose to look at State employment figures in determining the occupations regarded as nontraditional for women in a specific State.

Needs Assessment

As pointed out in the earlier section on State Plan Requirements, assessment of the special needs of (1) individuals who are single parents or homemakers and (2) individuals who participate in programs designed to eliminate sex bias and stereotyping in vocational education is required.

The needs assessment will provide the database for determining how well vocational education programs are doing in meeting the education and employment needs of women.

The following discussion of needs assessment is adapted from Uhlmann and Olson (1983). (Julie Uhlmann is Wyoming's Equal Vocational Education Opportunity Coordinator.)

(Adapted from Uhlmann and Olson)

The following key points about needs assessments should be recognized by those involved in such an effort:

1. The results of needs assessments must be used in establishing priorities. Needs assessments are futile if there are no options for responding to identified needs. Even though assessments of needs are mandated as a function of sex equity coordinators, they do serve a purpose other than meeting regulations.
2. Information collected through a needs assessment should relate specifically to the goals and objectives previously set by the sex equity coordinator and State board. These goals and objectives help determine the following:
 - a. The types of needs assessments that would be most useful to the State
 - b. Who should participate in the needs assessment process
 - c. The actual content of the needs assessment instruments
3. Needs assessments have greater validity if one uses several techniques for gathering data and several data sources. The following points need to be kept in mind:
 - a. Interviews or surveys with different groups may yield different results.
 - b. If results are consistent from one technique to another, the planning group will have more confidence in the results.
4. Assessing needs should be an ongoing process, conducted at regular intervals. Care should be taken that any data collected are in a form that can be used in the future rather than only for the current year. Thus, a comparative base will be established and trends over time can be examined.

Methods of Needs Assessment

1. Community Forums

The *community forum* is a meeting or a series of meetings of citizens to assess needs. The meetings should be advertised widely and held in a neutral place at a convenient time, to encourage participation of a wide range of citizens. It is important to ensure that all in attendance have the opportunity to express their opinions: A good technique for encouraging input is to have the participants break into smaller discussion groups for part of the meeting.

(Uhlmann and Olsor, continued)

a. Advantages of the Community Forum Approach

- Serves as a low-cost method for providing public input into the planning process
- Usually enables citizens to feel a high level of involvement and satisfaction with the experience if it is conducted so as to assure that all participants have an opportunity to express their views
- Can be a vehicle for identifying leaders who are willing to assist with future programs

b. Disadvantages of the Community Forum Approach

- May not be attended by an unbiased cross section of the community
- May be monopolized by a vocal minority or turn into gripe sessions if not organized correctly
- May raise citizens' expectations that the State will meet needs that are beyond its resources or capabilities
- Yields data that are impressionistic and should be cross-validated by other techniques

2. Focused Group Discussions

Another method for soliciting input from the general public is the use of *focused group discussions*. This approach involves gathering together small, homogeneous groups (not more than 12 members is recommended) to identify needs. An effort should be made to ensure that the participants represent their population category. It is also important to ensure equal participation through a technique such as the *nominal group technique*.

The conditions for a *nominal group* are simulated by having members first write their ideas on a slip of paper without discussing them. A period of from 5 to 15 minutes is usually required to write ideas, and the leader ensures that there is no talking during this time. The next step in the procedure recommended by Delbecq, Van de Ven, and Gustafson (1975) is a round-robin contribution of ideas. Each member in turn is asked to contribute one of her or his ideas. As an idea is suggested, it is written by the leader on a blackboard or flipchart. No evaluation of ideas or discussion of them is permitted during the posting. As the round-robin continues, some members may pass if they have no more ideas differing from those already posted. A person may suggest ideas not on her or his original list, and members are encouraged to build on each other's ideas. After all the ideas are posted, the leader goes down the list of ideas and asks if there are any questions, statements of clarification, or statements of agreement or disagreement regarding

(Uhlmann and Olson, continued)

the relevance of the ideas to the problem. Note that the nominal group technique described here is only one of many possible ways to conduct the *focused group discussion* method of needs assessment.

a. Advantages of Focused Group Discussions

- Is a cost effective means for gaining public input
- Allows for the easy assembly of groups through existing organizations, although some bias may exist
- Allows participants to gain a high degree of satisfaction from the experience if everyone's ideas are considered

b. Disadvantage of Focused Group Discussions

- Yields data that are impressionistic and should be cross-validated by other techniques

3. Key Informant Approach

This is a method designed to elicit needs information from influential community members, such as public officials, industry representatives, or agency directors. Either personal interviews may be conducted or questionnaires mailed with phone follow-ups.

a. Advantages of the Key Informant Approach

- Is quick, relatively uncomplicated, and inexpensive, especially when the mailed questionnaire with phone follow-up format is used
- Provides the following public relations benefits because it—
 - can improve communication between those concerned with sex equity issues and key persons in the community.
 - can develop support for sex equity concerns.
 - can increase understanding of sex equity issues if some time is taken to provide interviewees with information.

b. Disadvantages of the Key Informant Approach

- May result in biased data if key informants represent special interests or do not know other segments of the community fully

(Uhlmann and Olson, continued)

- May lead to biases if those who are most concerned about sex equity are selected for interview or are the ones most likely to respond
- May yield results that are impressionistic and should be cross-validated

4. **Survey Research**

Another method of gaining general public input to the needs identification process is through *survey research*. In order of methodological "purity," this method involves administering questionnaires through the newspaper, mail, phone, or personal interviews to obtain information on citizen perceptions of needs.

a. **Advantage of Survey Research**

- Is the most scientifically valid means of obtaining information if the instrument is well designed, pre-tested, and administered to a random sample and if the response rate is high

b. **Disadvantages of Survey Research**

- Can be the most expensive method of needs assessment
- Requires advanced research skills to design and analyze the survey instrument and to select the sample
- Necessitates interviewer hiring and training
- Requires that quality control be maintained throughout the data collection process
- Necessitates that data must be analyzed by a computer
- May yield low response rates, particularly with mail surveys

5. **Social Indicators**

The *social indicators* approach involves the use of public records and reports, such as census data, vital statistics, economic indicators, and employment reports. These data are then examined for incidences of social problems and related characteristics. It is best to have data in a time series, so that trends can be identified. These trends may indicate areas for prevention and/or new programs.

a. **Advantages of Social Indicators Approach**

- Uses data that have already been collected
- Is helpful in substantiating other more impressionistic methods of needs assessments with "facts"

(Uhlmann and Olson, continued)

b. Disadvantages of Social Indicators Approach

- Yields a type of data that rapidly becomes outdated
- Often involves a time lag in reporting and collecting data of a year or longer at the State level
- Can be time consuming and costly

6. Agency Data

This approach involves an analysis of data collected by agencies regarding client characteristics, patterns of utilization of agency services, interagency referrals, and agency operations. Such information is usually required by funding sources or collected by agencies in order to monitor internal goals, objectives, and operations. The basic assumption underlying the use of these data for needs assessment is the need is reflected by information on clients and the services they have received.

a. Advantages of Agency Data Approach

- Can provide limited needs information with reference to agency services and the people who receive them
- May be of use for State planning and resource allocation with regard to specific agencies, especially as decisions regarding service expansion or the funding of new programs

b. Disadvantages of Agency Data Approach

- May not reflect accurate picture, as individuals in need of service may not be using the service
- Is not likely to identify *new problems*
- May necessitate the use of records that are of questionable accuracy and/or not comparable across agencies
- May involve the additional issue of confidentiality of client records

The use of at least two needs assessment methods that include both qualitative and quantitative data is recommended. Choice of the methods will depend on resources available for needs assessment. The methods vary considerably with respect to the investment of time, money, and personnel required. The cost of the methods employed should reflect the utility of the information obtained.

An example of a combination of assessment methods can be seen by examining the *assessment task force* that the state of North Dakota used to assess the needs of women and girls to access vocational education programs. (Information from Nancy Thorndal, Coordinator, Educational Equity in Vocational Education.) This task force, made up of 24 individuals, is an example of using segments of the *key informant approach* along with the concept of *focused group discussion*. People from the following disciplines and backgrounds made up the task force:

- Business (department manager)
- School board member
- Researcher (displaced homemaker)
- Vocational instructor (technical programs)
- Guidance and counseling
- Vocational instructor (consumer homemaking)
- Human services
- Alternative education
- Researcher (rural women)
- Displaced homemaker
- School administrator (large school)
- Researcher (men in nontraditional programs)
- Single parent
- General public
- State board staff (special needs)
- State board staff (vocational guidance)
- Native American community college
- School administrator (small school)
- State board staff (home economics)
- JTPA (state WIN coordinator)
- School administrator (superintendent)
- Clergy

- State board staff (educational equality)
- Vocational director

The task of this group was to identify the equity issues emerging from changing societal conditions and changing conditions in vocational education as well as implications these issues generate.

Preparation by members. Prior to the meeting, each participant received excerpts from the Carl Perkins Vocational Education Act of 1984 and other data provided by the educational equality coordinator. This information included demographic data from the 1980-1984 census, enrollment information from the Department of Public Instruction and the Vocational Education Evaluation Data report on enrollment and nontraditional participation of students.

Process. The day-long meeting began with an overview by the Assistant State Director who is in charge of State plan development, of the new legislation, the focus of Federal intent on women and girls, single parent/homemakers, sex stereotyping, and sex affirmative guidance and counseling. Information from current research, sociopolitical data, and educational data were summarized, and a review of projections and expectations of State leaders and community members was conducted as an initial step in the process.

Through the input of the knowledge, experience, and widely varied areas of expertise of the task force members as well as through the back-up data provided by the paper-and-pencil assessment, the equity issues were identified and clarified, thereby resulting in specific implications and recommendations for vocational education.

Assessing Effectiveness in Meeting Needs

Every State probably has a data collection system in operation. However, the data collection system may not include the collection of the information needed to determine the effectiveness of vocational education in meeting the education and employment needs of women.

In April 1985, the National Leadership Development Conference of the State sex equity coordinators identified the data needed by each State. The information needed from program participants is the following:

- Age
- Race
- Sex
- Disability
- Marital status
- Number and age(s) of children
- Educational level

- Financial status (before and after services)
- Work history (years employed outside the home)

Although questions have been raised about the legality of requesting information on the marital and family status of individuals, Appendix A of the *Final Regulations* provides the following statement:

To the extent it is necessary to request information regarding a person's marital and family status to establish his or her eligibility for programs intended for single parents and homemakers, States are authorized by the Act to make reasonable inquiries. (p. 33298)

Further, the National Leadership Development Conference identified the program components and services that can best meet the needs of target populations (single parents and homemakers). The program components and services are the following:

- **Outreach**—specifically designed to reach identified populations
- **Intake/Orientation**
- **Counseling/Personal**—crisis intervention, support groups, health and drug abuse
- **Assessment and Testing**
- **Career and Educational Counseling**
- **Life Skills Development**—assertiveness training, parenting, goal setting, health care
- **Educational/Skills/Vocational Training**—both traditional and nontraditional areas, including GED
- **Supportive Services**—child care, transportation, stipends, books, materials, tutoring
- **Referrals**—for all necessary services; legal, health, housing, financial, and vocational rehabilitation
- **Preemployment Preparation**
- **Job Development/Placement**
- **Follow-up**

Vermont (information from Henry Bissex, Sex Equity Coordinator) provides the following reporting requirements to each single parent/homemaker program.

(Vermont)

REPORTING

This program will be evaluated in terms of benefits to participants. All the information we request is necessary to describe either the participants or the program benefits they have received.

On your record forms you probably have or will have at least the following information. We will ask for it in your final report.

1. Age, sex, race of participant.
2. Did the participant complete high school?
3. What is the participant's employment status?
4. Is the participant on public assistance?
5. Is the participant a single parent? Homemaker? Both?
6. The number of dependent children under 18?
7. The history of this participant in the program and after.
 - a. What services did the participant receive in your program? Kind. Days. Hours.
 - b. What skills did the participant acquire by time of leaving or completion of the program? Brief summary of before/after status.
 - c. Was the participant referred out of the program to other services?
 - d. What is the employment and education status of the participant after 6 months?

Arizona (information from Jenny L. Erwin, Arizona State Sex Equity Coordinator) uses the following two forms to obtain information from single parent and homemaker participants.

(Arizona)

SINGLE PARENT & HOMEMAKER PROGRAM DEMOGRAPHIC INTAKE DATA

_____ **Program** _____ **Date** _____ **Your Age** _____ **Location**

1. Race or Ethnic Group

- American Indian or Alaskan Hispanic
 Asian or Pacific Islander White (Non-Hispanic)
 Black (Non-Hispanic)

2. Which best describes where you live?

- large urban area (100,000 + population) _____
 small urban area (20-50,000) _____
 small rural community (less than 20,000) _____
 Indian Reservation _____

3. What is your current marital status?

- single _____ married _____ divorced separated _____ widowed _____

How long have you been divorced, separated, or widowed? _____

4. How many dependent children do you have? _____

5. What is the age of your youngest dependent child? _____

6. If you are married, is your spouse permanently disabled? Are you, yourself handicapped?

- Yes No Yes No

If yes, specify handicap:

- Visual Speech Impaired Mentally Retarded
 Hearing Impaired Ortnopedically Impaired Emotional
 Deafness Health Impaired Learning Disability
 Other (Specify) _____

(Arizona, continued)

Education - Indicate the highest number of years completed:

Elementary/High School

0 1 2 3 4 5 6 7 8 9 10 11 12
— — — — — — — — — — — — — —

Post High School

13 14 15 16 17 18 19 20 21 22
— — — — — — — — — —

7. What is the highest degree or certificate that you have earned?

Non Associate Degree
 GED Undergraduate Degree
 High School Graduate Degree
 Technical Certificate

8. Employment - Are you currently employed? (If yes, skip to Section 10)

Yes No

9. **Unemployed only** (Do not answer this section if you are employed). Have you ever worked for pay outside your home?

Yes No

Have you ever worked for pay inside your home?

Yes No

How long has it been since you were last employed?

Less than one month More than 2 years-less than 5 years
 More than 1 month-less than one year 5 years or more
 More than 1 year- less than 2 years

Give job title of last job you held _____ Employer _____

(Arizona, continued)

10. **Employed only**

Job title of current job _____ Employer _____

Is your job full-time _____ part-time _____

Is your job seasonal? _____ Yes _____ No

How long have you held this job?

1-6 months _____ 1-2 years _____

6-12 months _____ 2 or more years _____

What is your hourly wage? _____

Are you receiving commission and/or tips? _____ Yes _____ No

Economic Status - How much did *you* earn last year? _____

Are you receiving fringe benefits? _____ Yes _____ No

Does your current job provide adequate income to support you and your dependents?
_____ Yes _____ No

Indicate all which make up your total income:

_____ Salary

_____ Alimony

_____ Child Support

_____ Regular Insurance Payments

_____ Other (specify) _____

_____ Interest or Dividends

_____ Unemployment Compensation

_____ AFDC

_____ Other Public Assistance

_____ Rental Income

_____ Savings

_____ General Assistance

11. **How did you hear about this program?**

Indicate all the ways you have heard about the program.

_____ A current participant

_____ Social Service Agency (specify) _____

_____ School or College

_____ Brochure/Poster

_____ Radio

_____ Self-help Group (Al-Anon, PWP, We Care, etc.)

_____ Relative or friend who heard about the program

_____ Staff Public Presentation

_____ Other (specify) _____

_____ Newspaper or Magazine

_____ Professional (Doctor, Lawyer, Counselor)

_____ Employer

_____ Television

12. **What are two major things you want to accomplish in this program?**

1. _____

2. _____

(Arizona)

SINGLE PARENT & HOMEMAKER COMPLETION INFORMATION

Program	Date	Your Age	Location
---------	------	----------	----------

1. EMPLOYMENT STATUS (Check One):

- Employed (Permanent and Unsubsidized)
- Self-employed
- Employed (Subsidized)
- Temporary Employment (Seasonal Temporary Employment Service, etc.)
- Unemployed: Not seeking employment at this time
 Actively seeking employment at this time

If employed, please answer the following questions:

_____ \$ _____

Job Title	Employer	Hourly Wage
-----------	----------	-------------

- Are you receiving commission and/or tips? Yes No
- Are you receiving fringe benefits? Yes No
- Number of hours working per week? _____

2. TRAINING STATUS (Check One):

- Not in Training
- Awaiting Admission
- Actually Enrolled

PROGRAM:

- GED
- Vocational/Technical
- Adult Education Courses
- Employer In-plant Training
- 2-Year College Program
- 4-Year College Program
- Graduate School
- Private Training Institute

3. ADDITIONAL INFORMATION (Check all that apply)

Check all sources which make up the participant's total family income:

- Salary
- Alimony
- Child Support
- AFDC
- General Assistance
- Unemployment Compensation
- Other Public Assistance
- Regular Insurance Payment
- Rental Income
- Interest or Dividends
- Savings
- Other (Specify) _____

Length of time you received services from this program:

- 0-3 Mos.
- 4-6 Mos.
- 7-12 Mos.
- More than 12 Mos.

(Arizona, continued)

4. As a result of your participation in this program, which of the following occurred?
(Check all that apply):

- | | |
|--|---|
| <input type="checkbox"/> I became employed. | <input type="checkbox"/> I improved my personal appearance. |
| <input type="checkbox"/> I received skill training to become employed. | <input type="checkbox"/> I learned to deal with stress. |
| <input type="checkbox"/> I learned job search skills, resume writing-interview techniques. | <input type="checkbox"/> I earned my GED. |
| <input type="checkbox"/> I received counseling. | <input type="checkbox"/> I gained self-confidence and improved my self-image. |
| <input type="checkbox"/> I changed jobs. | <input type="checkbox"/> I received support services, including child care, transportation. |
| <input type="checkbox"/> I learned how to manage money more effectively. | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> I became more independent. | _____ |
| | _____ |

Program evaluation (assessing program effectiveness) is discussed under the function of review of programs later in this publication, beginning on p. 47.

Determining the Status of Students and Employees

This function of the State sex equity coordinator has been part of the role of the coordinator since the 1976 amendments. Systems are probably in place for the collection of enrollment statistics. Special attention must now be paid to enrollments (by sex) in technical programs, programs for new and emerging occupational fields, and programs leading to occupations regarded as non-traditional for women.

In addition to enrollments by sex, information on employees (for example, teachers, counselors, and administrators) is required.

Along with enrollment and employment statistics, it would be useful to identify budget expenditures for programs related to enrollments by men and women.

The following pages include a reprint of Vetter and Hickey's (1985) paper on National enrollment figures. Although there are many problems with the National statistics (identified in the paper), it may be useful to compare the State figures with the National figures.

Additionally, identifying trends in enrollment figures and employment figures over the years provides information, not only on the current status of students and employees, but on the changes that have occurred (or not occurred) as sex equity requirements have been implemented in vocational education.

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Where the Women Are Enrolled

by Louise Vetter and Delina R. Hickey

Before the passage of Title IX of the Education Amendments of 1972, which prohibited sex discrimination in federally supported programs, little attention was given to providing women with the whole range of occupational preparation offered by vocational education. In the 1971-72 school year, nearly 3 million girls and women were enrolled in occupationally specific high school and postsecondary programs, and 60 percent of them were in office occupations. Girls and women could be, and were, excluded from some vocational programs simply on the basis of their sex.

Regulations implementing Title IX were not issued until 1975. During the interim three years, advocacy groups and vocational educators looked hard at where women were being served in vocational education. Because women's enrollments were primarily in home economics (both consumer and homemaking and occupational programs), health occupations and office occupations, sex equity provisions were included in the vocational education section (Title II) of the Education Amendments of 1976. Title II provided for each state to have a full-time sex equity coordinator to work on broadening the range of opportunities for women through a series of legally prescribed functions.

The figures charted on these pages provide an indication of the extent of change in women's enrollment patterns since the passage of this important federal legislation. Because it is difficult to collect statistics on vocational education enrollments, there are some caveats, however. Conclusions based on data included here must be considered somewhat tentative, and the 1971-81 percentage of change must be interpreted with extreme caution.

To begin with, the procedure of collecting enrollment data has changed, so that in order to make a comparison over the

10-year time span we have had to use two sets of figures with a somewhat different data base. The 1971-72 figures include grades 9-12 and postsecondary enrollments. The 1981-82 figures are for grades 11-12 and postsecondary enrollments, and we have excluded more than 525,000 students whose sex was not reported.

There are also problems with the accuracy of enrollment data. The National Center for Education Statistics (NCES) asks states to ask school districts reporting for the Vocational Education Data System (VEDS) to count each student enrolled in vocational education only once, even though the student may be taking more than one vocational course or program. However, schools do not necessarily follow this procedure. As a result, some students may be counted in more than one place in the national aggregations. In addition, as NCES points out, VEDS data are dependent on the reporting of the states, and inaccuracies in the reporting of only one state can cause major changes in the total figures.

Given these caveats, what can we tentatively say about the progress in broadening opportunities for girls and women in vocational education? Here are some highlights.

In the traditionally male programs of agriculture, technical, and trade and industry, both the numbers and the percentages of students who are women have increased. Agriculture shows the highest overall percentage increase in female enrollments. The largest number of women enrollees in agriculture is not in the horticulture programs, as is sometimes suggested, but in agricultural production programs.

The two technical programs that show the largest increases in enrollment of women are scientific data processing—possibly because of the program's close

relationship to office occupations—and police science technology. The growth of women enrollments in police science technology is perhaps a result of the growth of affirmative action programs in the public sector. Programs in the technical area are concentrated at the postsecondary level.

Cosmetology continues to be popular among women. But more and more female students are signing up for new programs like biotechnology.

The increased enrollment of women in the traditionally male trade and industry area is primarily accounted for by cosmetology (a traditionally female program), commercial photography, drafting, graphic arts, and law enforcement programs. Additionally, there are over 10,000 women enrolled in auto mechanics, commercial art, electronics, metalworking and quantity food occupations. Although the total number of students enrolled in foremanship (sic), supervision and management has apparently decreased considerably, women's share of the enrollment has increased more than 20 percent.

In marketing and distributive education, which has traditionally had balanced enrollments, the number of women enrolled remains about the same, but the percentage of women has increased. (This may be the result of changes in the data collection procedure.) Approximately one third of the women in marketing and distributive education continue to be enrolled in one program, general merchandise. However, there have been some shifts in enrollment, mostly noticeable in finance and credit and insurance.

The number of women enrolled in traditionally female health occupations has increased, but their share of the total has remained steady at around 85 percent.

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Female Enrollment in Occupationally Specific Vocational Programs

1971-72¹ and 1981-82²

(Ranked by 1981-82 program enrollments)

Program	1971-72		1981-82		Percent change
	Number	Percent of students who are women	Number	Percent of students who are women	
OFFICE OCCUPATIONS	1,797,205	76.4	1,342,527	73.8	- 2.8
Supervisory and Administrative	21,481	27.6	80,551	53.3	+ 25.7
Accounting and Computing	210,255	59.8	244,193	68.8	+ 9.0
Business Data Processing	76,763	49.0	180,250	57.1	+ 8.1
Personnel	8,671	63.3	8,444	65.1	+ 1.8
Typing	500,517	79.6	192,926	80.5	+ 0.9
Communication	17,241	72.4	13,175	72.7	+ 0.3
Filing/General Office	327,454	82.2	238,732	82.4	+ 0.2
Stenographer/Secretary	528,863	96.0	322,925	93.5	- 2.5
Other Office	100,636	71.2	59,044	68.2	- 3.0
Materials Support	5,324	51.7	2,287	47.3	- 4.4

¹From *Summary Data Vocational Education Fiscal Year 1972*. U.S. Office of Education 1973. Figures include grades 9-12 and postsecondary enrollments.

²Calculated from Table 1206 Unpublished Data, Vocational Education Data System, National Center for Education Statistics, June 4, 1984. 525,294 "Status Unknown" students were excluded from the calculations. Figures include grades 11 and 12 and postsecondary enrollments.

About the authors

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Program	1971-72		1981-82		Percent change
	Number	Percent of students who are women	Number	Percent of students who are women	
HEALTH OCCUPATIONS	285,241	84.7	388,229	84.8	+ 8.1
Other Health	42,659	66.1	78,046	81.3	+ 15.2
Radiologic Technology	3,543	61.4	7,749	73.7	+ 12.3
Dental Lab Technician	1,221	41.4	1,836	53.5	+ 12.1
Inhalation Therapy Technician	3,206	55.7	6,953	66.8	+ 11.1
Rehabilitation Therapy	2,267	75.4	5,402	83.9	+ 8.5
Mental Health Technician	2,880	73.9	6,258	78.7	+ 4.8
Dental Assisting	14,406	93.1	16,364	95.5	+ 2.4
Medical Lab Assistant	8,176	77.7	5,568	80.1	+ 2.4
Nurse, Associate Degree	58,474	90.1	93,283	91.2	+ 1.1
Dental Hygiene	4,584	96.4	6,167	96.4	0.0
Practical (Vocational) Nurse	78,302	94.5	72,678	94.2	- 0.3
Medical Assistant	9,539	92.4	18,579	92.0	- 0.4
Nursing Assistant	53,308	90.5	48,616	89.7	- 0.8
Other Medical Lab Technicians	2,676	84.8	3,987	75.6	- 9.2
Medical Emergency Technician	—	—	8,743	36.1	—
MARKETING AND DISTRIBUTIVE EDUCATION	298,628	45.3	298,744	57.4	+ 12.1
Finance/Credit	11,828	42.2	23,089	72.5	+ 30.3
Insurance	3,551	27.0	2,586	50.3	+ 23.3
Apparel/Accessories	16,603	67.0	20,855	84.9	+ 17.9
Recreation/Tourism	6,108	47.8	11,051	65.7	+ 17.9
Industrial Marketing	2,501	29.0	8,244	46.6	+ 17.6
Transportation	4,197	33.7	6,496	51.3	+ 17.6
Personal Services	9,161	51.4	3,919	66.6	+ 15.2
Advertising Services	7,933	45.2	10,108	59.5	+ 14.3
Real Estate	26,165	31.9	24,067	45.7	+ 13.8
Fashion	3,616	69.1	5,180	80.8	+ 11.7
Other M&DE	50,344	43.4	41,825	54.8	+ 11.4
General Merchandise	104,582	51.1	95,079	59.8	+ 8.7
Food Distribution	10,899	37.5	11,968	44.1	+ 6.6
Hotel and Lodgings	5,218	41.1	5,007	47.2	+ 6.1
Hardware and Building Materials	1,276	22.3	671	23.2	+ 0.9
Home Furnishings	3,516	59.9	1,497	60.4	+ 0.5
Automotive	1,391	14.4	798	13.7	- 0.7
Food Services	21,139	61.9	18,304	58.5	- 3.4

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Female Enrollment

Continued

Program	1971-72		1981-82		Percent change
	Number	Percent of students who are women	Number	Percent of students who are women	
TRADE AND INDUSTRY	278,510	11.7	298,782	18.5	+ 6.8
Graphic Arts	8,290	12.1	23,976	39.1	+27.0
Foremanship, Supervision, Management	22,562	18.7	4,906	40.4	+21.7
Other Public Services	22,483	38.4	9,462	57.2	+18.8
Commercial Photography	3,756	25.7	7,983	44.1	+18.4
Law					
Enforcement	5,943	7.9	12,589	24.4	+16.5
Drafting	6,892	5.4	20,940	20.6	+15.2
Instrument Maintenance and Repair	107	3.5	485	17.9	+14.4
Quantity Food Occupations	14,094	37.6	15,343	47.4	+9.8
Other T & I	32,457	18.6	29,785	28.1	+9.5
Electronic	4,412	4.5	11,833	12.5	+8.0
Metallurgy	43	0.8	48	8.7	+7.9
Commercial Art	15,766	50.1	20,725	57.5	+7.4
Mantime	202	3.0	321	10.4	+7.4
Firefighting	3,321	2.1	1,502	9.2	+7.1
Stationary Energy Sources	274	3.7	186	10.0	+6.3
Other					
Construction	1,566	2.0	4,907	7.4	+5.4
Other					
Automotive	1,640	4.1	1,184	8.7	+4.6
Electrical	909	1.1	1,846	5.7	+4.6
Aviation	2,187	6.9	2,063	10.8	+3.9
Appliance Repair	507	2.9	634	6.6	+3.7
Carpentry	1,451	1.5	4,302	5.2	+3.7
Metalworking	3,081	1.1	11,212	4.7	+3.6
Refrigeration	814	7.3	348	10.3	+3.0
Woodworking	5,373	6.3	2,387	9.2	+2.9
Auto Mechanics	5,299	2.3	11,012	5.1	+2.8
Plumbing/Pipe Fitting	34	0.1	461	2.9	+2.8
Electricity	590	1.0	900	3.6	+2.6
Masonry	236	0.8	652	2.9	+2.1
Diesel Mechanic	185	1.4	834	3.3	+1.9
Small Engine Repair	305	2.3	804	3.8	+1.5
Auto Body and Fender Repair	1,082	1.9	1,943	3.1	+1.2
Cosmetology	45,870	94.0	70,092	94.1	+0.1
Custodial	2,547	15.7	1,115	15.8	+0.1
Air Conditioning	2,664	3.9	1,568	3.3	-0.6
Other Personal Services	11,300	65.2	6,923	61.7	-3.5
Upholstering	7,605	46.0	3,268	38.9	-7.1
Plastics	1,153	22.5	250	10.8	-11.7
Textile Products	42,210	82.4	7,913	70.7	-11.7

Program	1971-72		1981-82		Percent change
	Number	Percent of students who are women	Number	Percent of students who are women	
OCCUPATIONAL HOME ECONOMICS	241,239	88.1	188,881	78.8	- 6.5
Care and Guidance of Children	71,586	92.8	91,426	92.4	-0.4
Other Home Economics	28,585	78.0	14,658	75.5	-2.5
Clothing Management, Production, Services	56,818	95.5	22,483	89.6	-5.9
Home Furnishings Equipment	18,698	87.9	6,528	80.7	-7.2
Food Management, Production, Services	58,359	75.2	47,772	62.0	-13.2
Institutional/ Home Management	7,193	89.2	5,194	69.7	-19.5
TECHNICAL	33,887	8.8	83,384	22.3	+12.5
Scientific Data Processing	5,397	31.8	11,756	55.7	+23.9
Police Science	4,180	9.5	17,942	30.7	+21.2
Other Technology	16,935	17.7	34,084	35.1	+15.8
Architectural Technology	1,151	8.1	5,174	22.1	+14.0
Commercial Pilot Training	389	6.6	1,371	18.8	+12.2
Civil Technology	799	4.0	2,168	13.8	+9.8
Electronics	1,350	2.1	11,814	11.7	+9.6
Mechanical Technology	905	3.4	2,606	11.9	+8.5
Fire and Safety	78	0.9	1,293	8.1	+7.2
Industrial Technology	1,143	9.8	2,512	15.6	+5.8
Electrical Technology	222	1.4	862	7.0	+5.6
Automotive Technology	60	0.8	738	5.1	+4.3
Environmental Control	10	4.5	491	8.7	+4.2
Water and Waste Water Technology	188	13.3	573	14.8	+1.5
AGRICULTURE	48,183	5.4	82,810	21.7	+16.3
Other Agriculture	4,719	6.6	5,371	31.5	+24.9
Agricultural Supplies/Services	1,172	4.8	4,562	22.4	+17.6
Horticulture	15,157	26.9	29,142	43.9	+17.0
Natural Resources	1,863	7.6	2,336	23.5	+15.9
Agricultural Production	22,581	4.0	34,194	18.5	+14.5
Forestry	527	2.9	2,973	17.0	+14.1
Agricultural Products	736	7.8	829	20.6	+12.8
Agricultural Mechanics	1,408	1.1	3,203	5.3	+4.2

(Because most of the health occupations programs are at the postsecondary level, the elimination of ninth and tenth graders in the data collection procedure probably has not had much effect on the figures.) With the exception of two programs, dental laboratory technician and medical emergency technician, all of the programs have over 70 percent enrollment of women

Both occupational home economics and office occupations, the other two traditionally female programs, appear to show an increase in male student enrollment. The apparent change could be a result of the change in data collection procedures. But it is also possible that efforts to recruit nontraditional students are responsible for the changes. Child care is the only program within occupational home economics that does not appear to have increasing enrollments of male nontraditional students

Within office occupations, the most noteworthy advance for women is in supervisory and administrative management. Women now constitute over half the students enrolled in this program; in 1971, only about one quarter of the students were women. Over the 10-year period from 1971-72 to 1981-82, the concentration of enrollments of women in office occupations decreased from 60 to 50 percent. More recent figures are not yet available

Efforts to increase nontraditional enrollments by women may have slowed during the early 1980s due to the uncertainty of the field about the reauthorization of federal legislation. However, with the passage of the Carl D. Perkins Vocational Education Act in October, 1984, these uncertainties have been removed. The Perkins Act provides for the continuation of the state sex equity coordinator position and includes two set-asides for women: 35 percent for programs for young women and 85 percent for programs for single parents and homemakers.

Given the continued national impetus toward broadening opportunities for women in vocational education, how should we proceed? Some suggestions for useful strategies emerge from the findings and recommendations in a report on sex equity recently issued by the Michigan State Advisory Council for Vocational Education

The Michigan council points out that while administrators, teachers and counselors report recruiting efforts centering on individual or group counseling, very few of the students interviewed report ever receiving information or encouragement that would make them consider a nontraditional class or career. Furthermore, while teachers and counselors did not perceive classes as "closed" to students because of sex, almost one in four of the students surveyed perceived that

they were. The report also indicates that interventions said to be the most influential—those directed at the workplace, to parents and to students themselves—have been absent or minimal in state and local program plans

These findings suggest some strategies that could broaden the range of nontraditional opportunities for girls and women in vocational education. None is new, but all are important—and effective

- Continue (or upgrade) efforts to inform students about nontraditional options

- Use statements, photographs in course catalogs, posters, and other recruitment materials to show that women are welcome in all vocational education programs.

- Bring nontraditional students and nontraditional workers to the attention of all students through panel presentations and career day conferences

- Through media publicity and parent-school organizations, provide information to parents about the range of opportunities for women and girls in vocational education

- Work with employers to assist them in obtaining highly skilled workers, regardless of gender

We all have opportunities to widen opportunities for girls and women in vocational education. Let's take advantage of them

Gathering Data

The sex equity coordinator will probably not be the person who is directly responsible for gathering data. As mentioned earlier, requirements for the provision of data from local programs can be put into place. Additionally, other staff members of the State department of vocational education probably have the responsibility for collecting data on students and employees. Thus, in terms of gathering data, the sex equity coordinator must work with a range of other people in order to obtain the necessary data.

Analyzing Data

The sex equity coordinator may be the person who does the data analysis, or again, may be working with other State department staff to determine the analyses needed.

The following is a list of some basic techniques of analysis that are commonly used and offer useable information (Fessenden and Porter, 1969).

1. Numerical Count

For many purposes, it may be sufficient to know *how many*—how many of the participants reached a certain educational objective or how many females enrolled in nontraditional programs.

Such counts are needed to serve as a base for whatever further analysis is done. Sometimes this is all that needs to be known; at other times, this is merely the starting point.

2. Percentages

Probably the next most frequently used statistic after the count is the *percentage*, or the proportion of the whole that the part represents. Percentages are useful in making relationships and comparisons meaningful. For example, it is more difficult to grasp a relationship such as 67 out of 179 compared with 30 out of 70 than it is to grasp 37 percent as compared with 43 percent.

3. Measures of Central Tendency

Those devices which help visualize or identify the central characteristic, the representative unit, or the average are referred to collectively as *measures of central tendency*. The ones most likely to be used by sex equity personnel are as follows:

- a. **Mean** (the average)
- b. **Mode** (the answer that most frequently occurs in a distribution)
- c. **Median** (the middle value, where 1/2 of the cases fall below and 1/2 above)

4. Measures of Dispersion

The most commonly used measure of dispersion is the *frequency distribution*. This is a classification of the answers or values into various groups or classes and arranged in order of size or magnitude.

In preparing a frequency distribution, care must be taken to select classes or groups (class intervals) that are meaningful in terms of the local situation. Another requirement is that class intervals should not overlap. For instance, if analyzing participants according to age, it would be correct to use the categories "under 16", "16-19", "20-23", rather than "0-16", "16-20", "20-24".

There are, of course, more complex and precise measurements of dispersion than this. However, for the majority of studies, frequency distributions will probably suffice. Whenever one conducts a study in which the data have been collected in a manner that justifies more precise analyses, consultation with a trained statistician can provide information on how to use the more complex methods.

5. Ranking

Most people like to know where they stand in relation to others. Groups like to know how they compare with others as to number of contacts or participants and other performance factors.

Quite often, rankings can be used very effectively in evaluation tasks. Even if the differences may be slight, knowledge that you rank well up on a list can be a source of satisfaction. However, placing too much emphasis on ranking rather than on potential achievements can have an inhibiting effect on motivation and incentive to improve.

Rankings are meaningful to most people, although there is a persistent tendency to interpret rankings as measurements instead of evidences of sequence. It is easy to forget that there may be a difference of only a small fraction of a unit between the 30th- and 31st-ranked items and a difference of several units between the first and second ranked items or between the last and next-to-last items.

Disseminating Data

Once needs assessments, program evaluations, and data analyses are completed, the resulting information should be shared with others. Sharing or disseminating this information allows others to take advantage of work already completed. Findings are more credible if procedures as well as results are reported.

Further details of specific reporting procedures are discussed later in this guide, beginning on page 49.

- FUNCTION:**
- (i) REVIEW VOCATIONAL EDUCATION PROGRAMS, INCLUDING CAREER GUIDANCE AND COUNSELING, FOR SEX STEREOTYPING AND SEX BIAS, WITH PARTICULAR ATTENTION TO PRACTICES WHICH TEND TO INHIBIT THE ENTRY OF WOMEN IN HIGH TECHNOLOGY OCCUPATIONS; AND**
 - (ii) SUBMIT RECOMMENDATIONS FOR INCLUSION IN THE STATE PLAN FOR PROGRAMS AND POLICIES TO OVERCOME SEX BIAS AND SEX STEREOTYPING IN THE PROGRAMS IN (i) ABOVE**

Review Vocational Education Programs

The *Final Regulations* provide the following definitions relevant to this responsibility. *Career guidance and counseling* means those programs—

- (1) Which pertain to the body of subject matter and related techniques and methods organized for the development in individuals of career awareness, career planning, career decisionmaking, placement skills, and knowledge and understanding of local, State, and national occupational, educational, and labor market needs, trends, and opportunities; and
- (2) Which assist individuals in making and implementing informed educational and occupational choices. (Section 400.4)

High technology means—

state-of-the-art computer, microelectronic, hydraulic, pneumatic, laser, nuclear, chemical, telecommunication, and other technologies being used to enhance productivity in manufacturing, communication, transportation, agriculture, mining, energy, commercial, and similar economic activity, and to improve the provision of health care. (Section 400.4)

This responsibility is an extension, with additional specifications, of one of the functions of the sex equity coordinator under the Education Amendments of 1976.

Collection of Information from Eligible Recipients

The ease with which this function can be accomplished will depend very much on the kinds of information required from eligible recipients. If the eligible recipients are required to provide adequate information in the plans they submit, the review task is very much simplified.

For example, Michigan (Center for Women's Services, 1985) calls for annual reports from eligible recipients, which take into account the following:

1. Directions recipients are taking to support local efforts to reduce sex bias and sex role stereotyping in vocational education (listing and description of activities, products, services, and assistance offered)
2. Changes in the percentages of students entering nontraditional vocational education programs
3. Past and current perceptions of the status of sex equity from respondents in the field

Coordination with Career Guidance and Counseling Staff

The sex equity coordinator can work with State department guidance and counseling staff to assure that information regarding sex stereotyping and sex bias, especially barriers to the entry of women into high-technology occupations, is provided from eligible recipients regarding their career guidance and counseling program.

The kinds of information that may be requested include the following:

- Have admission procedures been reviewed to overcome sex bias and sex stereotyping?
- Have testing procedures been reviewed to overcome sex bias and sex stereotyping?
- What activities aimed at overcoming sex bias and sex stereotyping have been implemented?
- What are the results of such activities?
- Have the barriers to women's participation in high-technology programs been identified?
- Have specific encouragements been provided to women to participate in high-technology programs?

Required Evaluation of All Programs

The sex equity coordinator can work with the State department staff assigned to the evaluation requirements to assure that information regarding overcoming sex stereotyping and sex bias is requested in the required evaluations.

The required evaluations are described in the *Final Regulations as follows*:

To participate in the programs authorized under the State Vocational Education Program, the State shall include the following assurances in its State plan:

(10) That each program year the State will evaluate all of the projects, services, and activities, supported under this part, of at least twenty percent of the participating eligible recipients, so that by the end of a five year period every local program which has received Federal funds will have been evaluated (Section 401.19).

Submit State Plan Recommendations

When information from the three sources described previously (information from eligible recipients, information from State career guidance and counseling staff, and information from the required evaluations) is organized, the State sex equity coordinator will be able to use the information to develop recommendations for programs and policies to overcome sex bias and sex stereotyping for the State plan.

This responsibility again requires coordination with the State vocational education department staff who are responsible for the State plan. (See earlier section on State plan requirements, beginning on p. 5).

FUNCTION: SUBMIT TO THE STATE BOARD AN ASSESSMENT OF THE STATE'S PROGRESS IN MEETING THE PURPOSES OF THE ACT WITH REGARD TO OVERCOMING SEX DISCRIMINATION AND SEX STEREOTYPING

Neither the Perkins Act nor the *Final Regulations* provide a definition of sex discrimination. However, the *Final Regulations* for the Education Amendments of 1976 provided the following definition.

Sex Discrimination: Any action which limits or denies a person or a group of persons opportunities, privileges, roles, or rewards on the basis of their sex. (Vetter, Burkhardt, and Sechler, 1976, p. 1)

To fulfill this function, the information from the completion of the functions described earlier must be reported. The amount of detail and actual content will depend on the individual State situation and interests of State board members.

Immediately following is an outline of the Minnesota postsecondary report for 1984 (*Commission on the Economic Status of Women, 1984*). It is a detailed report that offers a great deal of useable information.

(Minnesota)

1. **Area Vocational Technical Institute (AVTI) Enrollment**
 - a. Numbers and percentages of total males and females enrolled
 - b. Trends in enrollments over recent years
2. **Program Types**
 - a. Percentage of courses that are:
 - (1) **Traditionally female** (more than 80 percent of the students are female)
 - (2) **Traditionally male** (more than 80 percent of the students are male)
 - (3) **Integrated** (not more than 80 percent of the students are of one sex)
 - b. Recent trends in the number of courses fitting each program type.

(Minnesota, continued)

3. Enrollments by Program Type

- a. Percentage of students enrolled in—
 - Traditionally female programs
 - Traditionally male programs
 - Integrated programs
- b. Recent trends in the number of students enrolled in each program type.

4. Enrollments by Curriculum Area

- a. Distribution of female and male students in the different curriculum areas
- b. Trends in enrollment, by curriculum area

5. Program Budgets

- a. Comparison of the amount of budgets spent on male and female students
- b. Percentage of students women account for and percentage of budgets they receive statewide
- c. Trends in budgets

6. Staff Patterns

- a. Numbers and percentages of women and men staff members
- b. Average salaries of male and female teachers
- c. Sex of teachers, by curriculum area
- d. Recent trends in staffing

7. Student Follow-up

- a. Comparison of female and male graduates in the following areas:
 - Number employed
 - Occupations
 - Satisfaction with AVTI experience and present jobs
 - Employers' ranking of graduates
- b. Recent trends in these areas

Similar status reports from other states included other interesting information as well as information similar to that in the Minnesota report.

Arkansas (*Vocational Equity and Special Populations*, 1984) included facts on women workers, such as the number of women working, relationships between the educational level and earnings of both men and women in the State, and the number of families maintained by women.

Georgia's report (Lary and Landay, 1984) specified enrollments not only according to gender, but also by race and handicap. An analysis of the race and sex of persons occupying the authority positions of the State department of education, office of vocational education and serving as heads of vocational departments was also included.

The Michigan report (Center for Women's Services, 1985) included specific recommendations for sex equity efforts in the State's vocational education programs. It also summarized sex equity efforts in the State over the past few years in the areas of incentive funding, technical assistance, funded agencies and materials, products for field use, and participation. The Michigan report also included an overview of Federal and State legislation relating to civil rights, sex equity, and vocational education.

All of the State reports mentioned here made effective use of charts, graphs, and tables in presenting their data. In particular, the Minnesota report included some innovative figures that made it readily understandable.

In preparing reports, for the State board or other audiences, it is important to organize the information so that it illustrates the true results of studies and evaluations. Tables, charts, and graphs allow the reader to select those items or pieces of information most important to her or him. Such organization in reports allows readers to make better use of their time and the results of the report.

FUNCTION: REVIEW PROPOSED ACTIONS ON GRANTS, CONTRACTS, AND THE POLICIES OF THE STATE BOARD TO ENSURE THAT THE NEEDS OF WOMEN ARE ADDRESSED IN THE ADMINISTRATION OF THE ACT

The review function of the sex equity coordinator is part of a general review function in each State department of vocational education. The sex equity coordinator will need to work with the established system to ensure that the following three kinds of criteria are in place:

- General criteria that relate to all grants and contracts under the Perkins Act
- Specific criteria for the Single Parent and Homemaker Program and the Sex Equity Program
- General criteria for policies

General Criteria for All Grants and Contracts

In much the same way as discussed under the heading Assurances in the section of this document dealing with State plans, general criteria can be established so that reviewers of any proposal for a grant or contract will consider whether the needs of women are being addressed in the project proposed.

For example, general criteria may be established to determine whether:

- positive action to remove sex bias and stereotyping from all vocational programs is indicated.
- relevant training and vocational education activities will be furnished to males and females who desire to enter occupations that are not traditionally associated with their sex.
- opportunities are provided for single parents to participate in vocational education programs and activities.
- opportunities are provided for homemakers to participate in vocational education programs and activities.
- the applicant will be in compliance with the Perkins Act, including appropriate Federal regulations.

- the applicant will be in compliance with Federal and State laws regarding discrimination on the basis of sex.
- the applicant will be in compliance with all State policies related to sex equity issues.

Arizona (information from Jenny L. Erwin, State Sex Equity Coordinator) assigns 25 of 100 possible points to equity requirements. The entire review form is provided immediately following as an example.

**Arizona Department of Education
Vocational Education
Federal Funds Technical Review Sheets**

I. Project Description	Yes	No	Maximum Points	Points Awarded
Project description clearly defines the following:				
a) The extent to which the proposal directly addresses the identified funding topics, criteria and special considerations.	_____	_____	5	_____
b) The extent to which the overall proposal appears to be realistic and manageable.	_____	_____	5	_____
c) The extent to which the applicant appears capable of achieving projected results (size, scope, support services).	_____	_____	5	_____
d) What linkages and coordination efforts will be utilized? How will the project build on previous accomplishments in the funding area or related areas?	_____	_____	5	_____
e) Does the description substantiate the budget request?	_____	_____	5	_____
	(section total)		25	_____

Comments _____

(Arizona, continued)

II. Objectives	Yes	No	Maximum Points	Points Awarded
a) Are the objectives directly related to the funding topic, criteria and project description?	_____	_____	10	_____
b) Do the objectives possess the five required components: outcome _____, target audience _____, beginning date _____, ending date _____, and evaluation method _____?	_____	_____	10	_____
c) Are the stated objectives specific enough to convey intent?	_____	_____	5	_____
d) Will the number of objectives presented accomplish the criteria listed?	_____	_____	5	_____
e) Are the objectives sequenced in a chronological order?	_____	_____	5	_____
f) Is a realistic start and end date specified for each objective?	_____	_____	5	_____
(section total)			40	_____

Comments _____

III. Equity Requirements	Yes	No	Maximum Points	Points Awarded
a) Are there specific objectives describing how the project will promote equal opportunities (does not discriminate on the basis of race, color, national origin, age, sex or handicapping condition) through curriculum and resource materials, teaching strategies or support services?	_____	_____	10	_____
b) Are the outcomes for these equity objectives clearly stated and measurable?	_____	_____	10	_____

(Arizona, continued)

	Yes	No	Maximum Points	Points Awarded
c) Does the project describe how it will accomplish one of the following:				
1. Provide relevant training and support for students entering nontraditional programs;				
OR				
2. Assist single parents and homemakers with greatest financial need.	_____	_____	5	_____
	(section total)		25	_____

Comments _____

IV. Budget	Yes	No	Maximum Points	Points Awarded
a) Does the budget address the assurances and match where required?	_____	_____		_____
b) Is the budget proposal cost effective in order to support the given objectives as related to the Project Description?	_____	_____	10	_____
	Section I total			_____
	Section II total			_____
	Section III total			_____
	Section IV total			_____
	Grand Total		100	_____

Recommendations to improve quality of project proposal application:

Reviewer's initials and/or name _____

Date of review _____

Specific Criteria for the Single Parent and Homemaker Program and the Sex Equity Program

Depending on the ways in which a State has decided to implement the single parent and homemaker program and the sex equity program, criteria may need to be developed for general projects or specific projects. Examples of both kinds of criteria follow.

Wisconsin (information from Mary Thompson, Sex Equity Coordinator) uses the following criteria to evaluate proposals for the single parent and homemaker program.

(Wisconsin)

Evaluation Criteria:

1. A maximum of 100 points will be awarded to each proposal broken down in the following manner:
 - a. Statement of Need - 10 pts.
 - provides appropriate local demographic and other relevant data
 - provides specific documentation to justify the particular activities for which funds are requested
 - b. Relationship of Labor Market Needs to Activities - 10 pts.
 - describes local labor market needs
 - identifies occupational programs which offer good placement and wages
 - project design incorporates information on local labor market needs and occupational programs which offer good placement and wages
 - c. Measurable Objectives and Outcomes - 25 pts.
 - are responsive to population needs
 - are clearly stated, results oriented and *measurable*
 - are cost effective
 - d. Project Design - 25 pts.
 - activities are clearly described
 - are logically related to objectives
 - describes adequately how the project will promote sex equity

(Wisconsin, continued)

- describes the process for direct tuition, child care and transportation payments where appropriate
- e. Participants - 10 pts.
 - describes the populations targeted
 - provides sound methodology for serving those with greatest financial need and for serving displaced homemakers
- f. Coordination of Funding to Achieve Objectives - 10 pts.
 - funds for proposed program, services and activities are coordinated with other VEA, JTPA, State GPR and other funds
 - coordination is described clearly
- g. Relationship to Instructional and Student Services - 5 pts.
 - relationship clearly described, logical and not duplicative
- h. Advisory Committee Members - 5 pts.
 - advisory committee membership broad based and logical for accomplishing goals
- i. Evaluation Methodology - 15 pts.
 - adequate for program improvement and accountability purposes

Additional Criteria:

In cases where a choice must be made between two or more proposals of similar quality, priority will be given to those which provide the greatest local match.

Priority must be given to districts in depressed areas until at least \$388,400 is allocated.

The following criteria are used by Wisconsin (information from Mary Thompson, Sex Equity Coordinator) to evaluate proposals for the sex equity program.

(Wisconsin)

Evaluation Criteria:

1. A maximum of 100 points will be awarded to each proposal broken down in the following manner:
 - a. Statement of need - 15 pts.
 - provides appropriate background information to justify need for the activity or activities
 - demonstrates need for the particular activities requested in relationship to state and/or to district's demographic data, enrollment data, placement data, past efforts and activities, and future needs
 - b. Measurable objectives and outcomes - 25 pts.
 - objectives make sense in light of the statement of need
 - objectives and outcomes are clearly stated and measurable
 - objectives are cost effective
 - c. Project design - 30 pts.
 - activities are clearly described
 - are logically related to objectives
 - d. Participants - 5 pts.
 - proposal describes the populations targeted and the reasons for the selection
 - e. Coordination - 5 pts.
 - proposal demonstrates adequate understanding of the coordination efforts which need to occur for it to be successful
 - coordination efforts are explicit and logical in light of objectives
 - f. Advisory committee members - 5 pts. (required only for projects which are statewide in scope)
 - advisory committee membership is broad-based and logical for accomplishing goals

(Wisconsin, continued)

g. Evaluation methodology - 15 pts.

- adequate for program improvement and accountability purposes

A team of state staff will review the proposals. If the funds requested exceeds the amount available, the team will prioritize the proposals on the basis of the quality of each proposal, the "depressed/non-depressed" consideration, and the local dollar contribution to the activity. Districts may be requested to reduce the amount of funds requested for the proposed activity.

In requesting bids from eligible recipients for single parent and homemaker programs to provide, primarily, counseling, job training, job development and placement, and supportive services through joint projects between local educational agencies and community service or community-based organizations, California (information from Connie Gipson, Sex Equity Coordinator) assigned the following point values to outcomes to be achieved.

(California)

Outcomes to Be Achieved:

Point Value

- | | |
|--|----|
| A. The eligible recipient will provide outreach, assessment, and guidance and counseling services through a joint agreement with a community service or community-based organization. | 15 |
| B. The eligible recipient will work cooperatively with minority organization projects funded by Vocational Education to enhance the participation of minority women in the project, if any of these projects are funded. | 5 |
| C. The eligible recipient will refer participants who seek training to the appropriate vocational programs and will work cooperatively with school districts and Regional Occupational Centers/Programs having single parent/homemaker grants. | 15 |
| D. The eligible recipient will conduct outreach activities for the area to be served, utilizing the media, special seminars in different parts of the region, and newsletters containing information on vocational programs and services. | 10 |
| E. An assessment will be conducted for each participant, and a personal development plan will be developed for each participant. | 15 |

(California, continued)

	Point Value
F. Each participant will be paired with another participant, preferably of a different culture, for support.	5
G. Each group of participants will receive no less than 60 hours of guidance and counseling.	10
H. The guidance and counseling program will include time and money management, personal appearance development, employability skills, and decision-making activities.	10
I. The eligible recipient must network with churches and community agencies to provide comprehensive services to participants.	5

For the project to plan for the implementation of a model competency-based small business ownership and management program for single parents and homemakers, California (information from Connie Ginzon, Sex Equity Coordinator) assigned the following point values to the outcomes to be achieved.

(California)

Outcomes to Be Achieved:	Point Value
The eligible recipient will:	
1. Develop student selection criteria and implement processes for recruiting qualified students into the small business ownership and management program	20
2. Develop community-based linkages to provide program support in the areas of program promotion, technical assistance, and providing community-based learning sites and experiences	15
3. Identify project teaching staff and schedule program offering for fall 1986	5
4. Provide in-service training to teaching staff, administrators, and counselors	5

(California, continued)

	Point Value
5. Develop a project advisory committee composed of small business owners and managers to provide program operators with input regarding standards, facilities/equipment, curriculum, and program evaluation	10
6. Develop a promotional brochure designed to inform and promote the program to parents and students	5
7. Develop processes and pursue approvals necessary for granting economics graduation credit for students who successfully completed the program	10
8. Develop a written plan for implementing the program which describes:	20
• The extent to which single parents and homemakers will be served	
• Strategies for delivering instructional content: community-based experiences, job shadowing, internships, home-based instruction, and scheduling of instructional times and locations to meet client group need	
• Articulation with community-based organizations, high schools, ROC/Ps, and adult schools	
• Processes for assessing program and student outcomes	

General Criteria for Policies

Policy development for the State vocational education program may be determined by one person (the State Director) or by groups of persons (the State Board for Vocational Education, a policy committee in the State department). It is most probable that policy development is done by a different group than that responsible for the review of grants and contracts.

However, the general criteria for review of grants and contracts may reflect the same sorts of concerns that relate to policy establishment. In addition, the sex equity coordinator will need to determine who is responsible for policy establishment within her or his agency in order to review the policies so as to ensure that the needs of women are addressed.

Often, it may be possible for the sex equity coordinator to submit recommendations for policies to the appropriate person(s). By providing draft wording for policies, the process of establishing a policy is often enhanced.

FUNCTION: DEVELOP RECOMMENDATIONS FOR PROGRAMS OF INFORMATION AND OUTREACH TO WOMEN CONCERNING VOCATIONAL EDUCATION AND EMPLOYMENT OPPORTUNITIES FOR WOMEN, INCLUDING OPPORTUNITIES FOR CAREERS AS TECHNICIANS AND SKILLED WORKERS IN TECHNICAL FIELDS AND NEW AND EMERGING OCCUPATIONAL FIELDS

The sex equity coordinator may implement this responsibility in a variety of ways. RFPs may be developed as the result of recommendations for programs of information and outreach. Centers or projects may be established. Newsletters may be developed. Opportunities for networking with other State agencies and with community-based organizations may be realized.

Examples of various ways in which this responsibility is being implemented in the States follow.

As part of an RFP to prepare a public information package for local/regional and statewide use in an effort to promote the opportunities available in vocational/technical education, Indiana (information from Wendy Helton, State Coordinator for Reduction of Sex Bias) included requirements for the development of public service announcements that promote available local and State services for single parents and homemakers. A slide series on single parents and homemakers that explains who they are and what services are available will also be part of the project.

Maryland (information from Marie Mayor, Coordinator) has established an Interdepartmental Committee on Teenage Pregnancy and Parenting. Agencies represented on the committee are as follows:

- Governor's Employment and Training Council
- Maryland Department of Education
- Maryland Department of Employment and Training
- Maryland Department of Health and Mental Hygiene
- Maryland Department of Human Resources

A statewide conference was sponsored by the interdepartmental committee in December 1984 ("Promoting Self-Sufficiency: Opportunities for the Future") and a second statewide conference is scheduled for November 1985 ("Promoting Self-Sufficiency Through Creative Programming"). Consultative services and support were provided to the interdepartmental committee by the Resource Center on Educational Equity of the Council of Chief State School Officers (CCSSO).

The focus of the interdepartmental committee is interagency cooperation and coordination to prevent teenage pregnancy when possible and to provide needed services when teenage pregnancy and parenting occur.

The Massachusetts Vocational Curriculum Resource Center (information from Maureen Shannon, State Sex Equity Coordinator), located at a regional vocational technical high school, makes both print and audiovisual materials relating to sex equity available to vocational educators across the State.

Ohio (information from Carol Whitney, Sex Equity Coordinator) has a similar resource center, based at Ohio State University. Michigan's career resource center is located at Michigan State University. Other states have similar resource centers.

Mary Thompson, Sex Equity Consultant, prepared a booklet describing all the single parent and homemaker, displaced homemaker, and sex equity projects of the Wisconsin Board of Vocational Technical and Adult Education. The booklet describes each project, including projected outcomes, funding, and a contact person for each project.

Also in Wisconsin, a conference entitled "Choices: Building the Future for Adolescent Girls" was sponsored by the Wisconsin Women's Council, the Department of Health and Social Services, the Department of Public Instruction, and the Governor's Employment and Training Office (information from Barbara Bitters, Supervisor, Vocational Equity). The conference, which was held in May 1985, focused on breaking barriers for teenage girls.

FUNCTION: PROVIDE TECHNICAL ASSISTANCE AND ADVICE TO LOCAL EDUCATION AGENCIES, POST-SECONDARY INSTITUTIONS, AND OTHER INTERESTED PARTIES IN THE STATE, ON EXPANDING VOCATIONAL OPPORTUNITIES FOR WOMEN

Neither the Perkins Act nor the *Final Regulations* provide a definition of the term *technical assistance* for the work required of the sex equity coordinators. However, McAdam (1979) indicates that the technical assistance process can be divided into the following five fairly specific stages:

1. Diagnosis
 - Gather facts
 - Define problem
2. Analysis
 - Refine problem
 - Gather facts
 - Conduct analysis
 - Develop alternatives
3. Recommendations
 - Develop criteria
 - Select action
 - Communicate
4. Implementation
 - Prepare action plans
 - Resolve problems
 - Follow up on implementation

5. Evaluation

- Monitor progress
- Measure results
- Launch corrective action

McAdam goes on to indicate that these stages are not totally discrete and may be repeated.

The National Governor's Association (1983), in discussing JTPA programs, defines *technical assistance* as follows:

Technical assistance refers to those activities that build organizational capacity and develop staff skills. . . . and that provide management assistance directed at correcting administrative and programmatic weaknesses (p. 25).

They define the steps in providing technical assistance as follows:

- Organizing technical assistance services
- Determining needs for and types of technical assistance to be provided
- Identifying available resources for technical assistance
- Determining the method and schedule for providing or arranging technical assistance
- Developing procedures to track the provision of technical assistance and progress

Peterson and Emrick (1983), in synthesizing findings from five studies of educational . . . semi-nation, technical assistance, and networking, point out that there are three separate, but . . . parallel dimensions to the change process. These are as follows:

- Personal dimension (change processes within individuals—cognitive, behavioral, and affective—as they acquire and make use of new knowledge)
- Systemic dimension (changes in the users' organizational, social, and political environment)
- Technical support (information, materials, resources, and human change agents that serve to guide and facilitate the two change dimensions)

Peterson and Emrick (1983) offer five generalizations from their synthesis, as follows:

- Meaningful change occurs as a process, not as an event.
- Directed personal intervention is by far the most potent technical support resource, and it may be a necessary condition for many forms of utilization.
- Continuous personal application of the implementing staff is needed to firmly root and sustain the utilization.

- Administrators occupy a crucial role in supporting the utilization process.
- Comprehensive and well-articulated materials that contain "how-to" information are needed, particularly for utilizations that require modifications in existing organizational arrangements and/or methods and materials of instruction.

In discussing the last generalization, Peterson and Emrick point out that the provision of descriptive materials (printed matter, visual displays, and other forms of information) seems to be a necessary, but not sufficient, condition for utilization. A combination of in-person assistance and materials seems to be necessary.

Examples of Planned Technical Assistance

In providing technical assistance, Indiana (information from Wendy Helton, State Coordinator for Reduction of Sex Bias) plans to set up a center that includes sex equity, single parents or homemakers, consumer and homemaking, and curriculum and dissemination concerns. For information on this program, see the RFP that follows.

(Indiana)

RFP #09-86

REQUEST FOR PROPOSAL

STATE PLAN OBJECTIVES:

Provide technical assistance, resource development, product purchasing, cataloging, free loaning, regarding single parents or homemakers programs. State Plan Reference G.1.c.4)e) pg. 28

Provide technical assistance, resource development, product purchasing, cataloging, free loaning regarding sex stereotyping and bias. State Plan Reference G.1.c.5)a) pg. 29

Disseminate results and materials of community directed partnership project. State Plan Reference G.1.e.2) pg. 32

Provide a comprehensive retrieval, storage, reference and dissemination service to vocational educators through the continuation of Vocational/Technical Education Services (VES). State Plan Reference G.1.e.2) pg. 32.

MAXIMUM FUNDING LEVEL:	\$45,000 (Single Parents or Homemakers)
	\$45,000 (Sex Equity)
	\$50,000 (Consumer and Homemaking)
	<u>\$184,000 (Curriculum and Dissemination)</u>
Total	\$324,000

COST SHARING REQUIRED: \$23,920

(Indiana, continued)

PROJECT INTENT:

The project shall: Provide a centralized resource center of curriculum development, review, acquisition and dissemination in relation to activities and directions of the Technical Committees. Provide curriculum and research information for the Indiana Vocational Education delivery system. Provide technical assistance, resource development and library services regarding the special concerns of Single Parents or Homemakers and Sex Equity issues. Print and disseminate results and materials of community-directed Consumer and Homemaking Partnership project.

GUIDELINES/MINIMUM REQUIREMENTS:

Applicant agency shall:

1. Have experience with the management and implementation of a system for providing vocational education curriculum and research resource information.
2. Have personnel experienced in vocational education curriculum acquisition, storage, printing, and operation of a loan library.
3. Have personnel assigned to develop a cadre of people to provide technical assistance to Vocational/Technical Education in serving the needs of Single Parents or Homemakers. Cadre members shall address issues pertaining to Sex Bias and Stereotyping within their region. Cadre members shall be representatives from the regional planning projects in those economic development regions that have received SBVTE funding for Single Parents or Homemakers and Sex Equity projects.
4. Have the capability to disseminate large mailings of curriculum materials and curriculum information by bulk mail, or other equivalent methods for large group mailings and package mailings.
5. Have access to professional printing facilities capable of printing and duplication to include typesetting, camera-ready art work; printing of photographic materials; supplies of numerous paper styles, colors, and weight; and various binding modes.
6. Have computer equipment compatible with State Board of Vocational and Technical Education (SBVTE) for
 - a. searching state and national information data files.
 - b. communicating with the SBVTE and other agencies.
 - c. review and evaluation of computerized curriculum materials.
 - d. technical assistance to vocational educators.
7. Have personnel assigned to provide technical assistance in access and use of the computerized occupational and data analysis system and serve as technical con-

(Indiana, continued)

tact for the Vocational and Technical Education Consortium of States (VTEC'S) activities.

8. Provide personnel to determine strategies and operate a statewide curriculum dissemination system in coordination with the State Professional Development Plan.
9. Provide personnel assigned to technical assistance in the use of computer equipment and software for vocational educators.
10. Have personnel knowledgeable with performance based vocational education curriculum development.
11. Have personnel with expertise in working with Single Parents or Homemakers and Sex Equity issues.
12. Have access to technical content experts for assistance in development and review of curriculum materials.
13. Provide for an evaluation report of services at midterm and end of project through a third party evaluator.

PRODUCTS/PROCESSES/SERVICES TO BE DEVELOPED OR PROVIDED:

Project shall:

1. Serve as Technical Committees' assistance project to assemble curriculum information and materials and develop performance based vocational education curriculum materials as needed.
2. Provide a Cadre' made up of representatives from each economic development region to assist vocational education in serving the needs of Single Parents and Homemakers and to assist in addressing issues pertaining to sex bias and stereotyping.
3. Have loan materials displayed for on-site use as well as available for mail lending.
4. Print, store and acquire library resources for dissemination and loan.
5. Provide a computerized data base for Indiana including bibliographic information from the State Board of Vocational and Technical Education (SBVTE) funded projects and name and address file of appropriate audiences for dissemination of curriculum materials and available to the SBVTE for public information activities.
6. Provide resource reference information and assistance to researchers to better address local and regional needs and priorities.
7. Participate and gain access for Indiana into the Vocational Technical Education Consortium of States (VTEC'S) for access of:

(Indiana, continued)

- a. The Occupational and Data Analysis System for curriculum job title and task inventory information.
 - b. The Job Title Catalogs and other curriculum and instructional materials.
 - c. The Performance Test Item Data Bank for vocational education.
8. Provide a minimum of three workshops to serve the needs of vocational educators in using computer hardware and software for purpose of electronics communication and computerized curriculum and management software.
 9. Provide for the dissemination of curriculum materials in coordination with the State Professional Development Plan.
 10. Provide information and assistance for public information items of the project in coordination with the Public Information Plan. All references to the project must include acknowledgement of the State Board of Vocational and Technical Education as the funding agent.
 11. Develop Performance Based Vocational Education Curriculum materials as requested by the State Board of Vocational and Technical Education and the Technical Committees. Development of materials shall follow VTEC'S procedures and format.
 12. Provide technical assistance for drafting articles and information to be used in newsletters for Single Parents or Homemakers and Sex Equity.
 13. Maintain monthly and annual transaction reports summarizing information on services provided.
 14. One page abstract of the proposed project.
 15. File quarterly descriptive and fiscal reports using SBVTE format.
 16. File final report using SBVTE format.

GENERAL INFORMATION:

1. Use State Board of Vocational and Technical Education Proposal Format. (SBVTE 11-1)
2. Contact Person: Ed Brown (317) 232-1823

FUNDING PERIOD:

Beginning: **October 1, 1985** Ending: **September 30, 1986**

Submission Date: Materials are to be submitted to State Board of Vocational and Technical Education and be postmarked no later than August 2, 1985.

(Missouri)

In RFPs, Missouri (information from Georganna Beachboard, Missouri State Sex Equity Coordinator) indicates that technical assistance and personnel development services and activities may be, but are not limited to, the following:

- development of an action plan and strategies to recruit, retain, and/or place males and females into nontraditional occupations
- expansion of vocational opportunities for women, particularly in the high technologies, high demand occupations, and/or new and emerging occupations including entrepreneurship
- evaluation of instructional materials and media for sex fair language and illustration usage
- enhancement of girls' and women's opportunities to gain marketable skills
- development and dissemination of sex-fair resource materials and curriculum guides that expand services and enhance occupational opportunities to all vocational education users
- identification of resources and role models for related interest areas within the vocational program
- assistance or services to single parent, homemaker, and displaced homemaker programming to enhance the adult client's ability to obtain marketable skills.

SUGGESTED MINIMUM REQUIREMENT FOR ACHIEVING PROJECT GOAL:

The strategic plan for providing sex equity resources and services to vocational educators involved in expanding services to numerous groups of student and client users must ensure ease in utilizing the services on a local level and provide a statewide network to access the services.

The plan must address the administrative and management procedures involved in the identification, acquisition, and dissemination of resources and materials; the indexing, recordkeeping and accountability procedures; the mode and method of communication to users, i.e., announcements, telephone, computer, flyers, catalog, newsletter, et cetera; the personnel by name, role, function, and job description.

Example of Current Activities

Massachusetts is using the following materials and activities to provide sex equity technical assistance (information from Maureen Shannon, State Sex Equity Coordinator).

(Massachusetts)

The *You Can Do It* series, with fact packs and posters translated into several languages, suggests techniques for recruiting Black, Hispanic, limited English-proficient and handicapped students of both sexes, as well as females and males into nontraditional programs. In addition to background information on the participation of target populations in vocational education, a Recruitment Guide includes step-by-step instructions for conducting various recruitment activities. These include producing a slide-tape, writing press releases, and speaking before parent and employer groups. (1983)

Making It Work, a vocational education inservice package focusing on drop-out prevention, was selected as one of ten National Dissemination 1984 Exemplary Product Award recipients. The package, including trainer and participant manuals, is divided into three modules: "Conquering Your Dropout Woes," "Placing Your Vocational Education Students," and "A Blueprint for Student Achievement." (1983)

Future Shares: Strategies for Increasing Sex-Fair Educational Practices in Nontraditional Training Courses, is designed to assist vocational teachers in coping with changes required once nontraditional students are enrolled in their classes. (1984)

Admissions Strategies That Work: A Guide for Vocational Educators, presents workable strategies for developing and implementing admissions procedures that are useful, reliable and equitable. (1984)

Project SCOPE (Support for Co-Educational Occupational Programs in Education), is a series of handbooks of activities for support groups for vocational students in nontraditional programs. (1981)

You Want To Be a What? Sex Equity in Massachusetts Vocational Programs, is a study of sex equity implementation in Massachusetts schools from the perspective of nontraditional students.

Further technical assistance efforts include inservice training in equity issues at the Fitchburg Conference, assistance in developing equitable admissions policies for selective vocational schools and programs, curriculum development and staff development in competency-based vocational education, and technical assistance in forming and maintaining support groups for nontraditional students.

FUNCTION: ASSIST ADMINISTRATORS, INSTRUCTORS, AND COUNSELORS IN IMPLEMENTING PROGRAMS AND ACTIVITIES TO INCREASE ACCESS FOR WOMEN, INCLUDING DISPLACED HOMEMAKERS AND SINGLE HEADS OF HOUSEHOLDS, TO VOCATIONAL EDUCATION AND TO INCREASE MALE AND FEMALE STUDENTS' ENROLLMENT IN NONTRADITIONAL PROGRAMS

Many of the responsibilities carried out by the sex equity coordinator under the other assigned functions of the position are related to carrying out this function.

For example, in administering the single parent and homemaker program and the sex equity program, opportunities are provided to eligible recipients to obtain funding for programs. Providing data to administrators, instructors, and counselors assists them in understanding where their programs are currently and where they need to make changes to increase access and to increase nontraditional enrollments.

Similarly, the information from the reviews of programs provide specific information that can be fed back directly to the administrators, instructors, and counselors employed in the programs reviewed.

The review process for grants, contracts, and policies provides another mechanism for assisting eligible recipient personnel. Changes needed in proposed programs to increase access and nontraditional enrollments can be identified through the review process and the information provided to the local personnel.

Programs of information and outreach can be used to assist administrators, instructors and counselors in implementing programs and activities. Technical assistance can provide direct assistance to a range of school personnel.

Many of the States begin the assistance process with workshops designed to assist eligible recipients in preparing their proposals for programs. Other workshops on specific topics, which have been identified as being the areas in which assistance is needed, will assist administrators, instructors, and counselors in implementing programs and activities to increase access for women and to increase nontraditional enrollments.

ISSUES IN ORGANIZING THE SEX EQUITY EFFORT

In many states, only one person is responsible for all of the work laid out in the previous sections. What are some of the techniques for managing all of these responsibilities when the sex equity coordinator can provide only one person's time and effort in accomplishing all of the tasks?

One possible technique, as illustrated earlier, is to subcontract some of the functions (for example, technical assistance) to an eligible recipient.

As was pointed out in the first edition of this guide, the sex equity coordinator probably has few, if any, lines of authority over staff members in the vocational education department (Vetter, Burkhardt, and Sechler, 1978). Yet, it is apparent from the discussion in the previous pages that there are many persons with whom the sex equity coordinator will need to coordinate in order to carry out the functions of the position. Among these people are the following:

- The group within the department responsible for preparing the State plan
- The people (or person) responsible for issuing RFPs or program announcements
- The people (or person) responsible for the review process for all grants and contracts
- The people (or person) responsible for policy development
- The people (or person) responsible for data collection efforts
- The people (or person) responsible for the required evaluation of vocational education programs
- The people (or person) responsible for career guidance and counseling programs

The techniques recommended by Cook (1971) for use in such a situation include using persuasive abilities, reputation, rapport, influence, status, and prestige to accomplish tasks. Additionally, the ability to use funds is an important part of managing the sex equity effort.

In discussing the best-run American companies in their best seller, *In Search of Excellence*, Peters and Waterman (1982) list eight basic principles for being successful. The principles are as follows:

1. A bias for action (a preference for doing something—anything—rather than sending a question through cycles and cycles of analyses and committee reports)
2. Staying close to the customer (learning preferences and catering to them)
3. Autonomy and entrepreneurship (breaking the corporation into small companies and encouraging them to think independently and competitively)

4. Productivity through people (creating in all employees the awareness that their best efforts are essential and that they will share in the rewards of the company's success)
5. Hands-on, value driven (insisting that executives keep in touch with the firm's essential business)
6. Stick to the knitting (remaining with the business the company knows best)
7. Simple form, lean staff (few administrative layers, few people at the upper levels)
8. Simultaneous loose-tight properties (fostering a climate where there is dedication to the central values of the company combined with tolerance for all employees who accept those values)

Peters and Austin (1985), in *A Passion for Excellence*, point out the value of participation in management by the use of the acronym MBWA (Management by Wandering Around). To them, MBWA entails the following:

- listening (to co-workers, supervisors, students, and local program people)
- visiting (local situations)
- facilitating
- teaching and reinforcing values
- paying attention

They state that MBWA is the *technology of leadership*.

Current Issues of Concern

At the Sex Equity Coordinators Conference that was held at the National Center on September 18-19, 1985, the participants identified three major issues that are of concern in State departments of vocational education at this time. The issues are: responses to the series of "excellence" reports concerning and proposals for changing education; organization of vocational education at the high school and/or postsecondary level; and statewide economic problems.

"Excellence" Reports

Many States are responding to reports such as the National Commission on Excellence in Education's *A Nation at Risk: The Imperative for Educational Reform* (1983) and the Task Force on Education for Economic Growth's *Action for Excellence: A Comprehensive Plan to Improve Our Nation's Schools* (1983) by changing requirements for high school graduation in such a way that it makes it difficult for students to participate in vocational education

Additionally, it is quite apparent that the "excellence" reports paid very little attention to sex equity issues. After reviewing eight such reports, Tetreault and Schmuck (1983) summarize as follows:

The reform books and commissioned report selected for our analysis clearly indicate that the past decade of legislation, new scholarship on women, research, and action for sex equity in schools has gone unheeded. Gender is not a relevant category in the analysis of excellence in schools. When gender was considered, it appears to merely embellish the traditional—and male's—portrait of the school. The proposed vision for excellence in the schools is of education for the male student in the public and productive sphere. Because gender, as a relevant concept, is absent, even Title IX is ignored. Issues of gender in relation to policy, students, curricula, and faculty are not identified nor treated as educational problems to be solved. The goal of excellence does not even have the female student in mind (p. 63).

However, in the report of the National Commission on Secondary Vocational Education, *The Unfinished Agenda: The Role of Vocational Education in the High School* (1984), access to secondary vocational education is a major concern.

The National Commission points out four reasons that access to secondary vocational education is becoming increasingly limited. These reasons are as follows:

- Increased emphasis on academics
- Consolidation of programs
- Time scheduling
- Inadequate or inaccurate student knowledge of vocational education

The sex equity coordinator is in a position to provide assistance, especially with the fourth reason, in overcoming the problem of lack of access.

Further, the National Commission speaks directly to the sex equity issue, as follows:

Meanwhile, sex-linked enrollment patterns in vocational courses resist most efforts to change them—males still are found mostly in such areas as trade and industrial, and females in office and clerical. These gender biases reflect ingrained societal attitudes held in the family and in the workplace that vocational education cannot directly affect. Nonetheless, vocational programs and guidance services need to place more emphasis on redressing issues of sex bias and equity, comparable pay, discrimination in the workplace, and the problems of multiple wage-earner families. (p. 11)

Although the National Commission is sceptical about vocational education's ability to affect family and workplace attitudes, programs in consumer and homemaking education could make a difference in the long run if the consumer and homemaking focus is revised to meet the challenges of today's society. Additionally, joint programs between schools and employers have the possibilities for making changes.

Secondary and/or Postsecondary Vocational Education

The question of whether specific job skill programs should be offered at the secondary level of education is currently being hotly debated. Some States are moving toward "employability" programs at the secondary level and reserving specific job skill programs for the postsecondary level. Other States are retaining the "service areas" (agriculture, business and office, and so forth) in vocational education, but identifying "core competencies" that all programs should have. Still other States are retaining the specific job skill programs at the secondary level.

The sex equity coordinator needs to be aware of the debate that surrounds this issue, especially as it relates to her or his prescribed functions. The ways in which the single parent and homemaker program and the sex equity program can be implemented in a State are very much related to the structure adopted by the State for delivering vocational education programs.

Statewide Economic Problems

In States where major industries are closing down or large segments of the economic base (for example, agriculture) are in trouble, it is often difficult for people to focus on sex equity issues.

However, the opportunities for providing focus on economic development issues (new and emerging occupations, high technology, entrepreneurship) can be used to the advantage of sex equity in relation to economic development.

Accountability Concerns

In order to provide records to the Office of Vocational and Adult Education, U.S. Department of Education, the sex equity coordinator will need to document all of the activities conducted under all of the responsibilities assigned to the coordinator. This documentation is especially important as education moves into the "age of the auditor," where all expenditures of funds have to be justified. Expenditure of funds is justified by the plans represented in the approved State plan. However, it is up to the coordinator to maintain the records that show what has happened as a result of expenditure of the funds.

As discussed earlier, there is some overlapping among the designated responsibilities of the sex equity coordinator. It may be useful to maintain records showing how many of the responsibilities are being fulfilled by each of the activities that are undertaken. A sample matrix form for such recordkeeping is provided on the following page.

ACTIVITY RECORD

Activity	1. Administer Programs	2. Gather Data	3. Review Programs	4. Progress Assessment	5. Review Actions	6. Information and Outreach	7. Technical Assistance	8. Implementation Assistance
<p>EXAMPLE:</p> <p>Workshop for Eligible Recipients on Applying for Single Parent and Homemaker Programs</p> <p>Date:</p> <p>No. of participants:</p>	X				X	X	X	X

RESOURCES

This listing of resources includes items identified by current sex equity coordinators as being especially valuable in their work. Many of the coordinators indicate that networking with other coordinators is their most valuable resource (see Appendix B for a listing of coordinators).

Mention was made of use of current statistics published through *School and Law News*, *Displaced Homemaker Network Newsletter*, studies completed by local education agencies, and the popular press and media in order to provide up-to-date facts and issues.

For clarification of the requirements of the Perkins Act, it is suggested that contact be made with the Equity Education Program Specialist at the Office of Vocational and Adult Education, U.S. Department of Education. Currently, the specialist is as follows:

Joan Siebert Dalton
Office of the Assistant Secretary for
Vocational and Adult Education
400 Maryland Ave., S.W.
Washington, D.C. 20202
(202) 732-2438

Resources are organized in the following categories:

- Legislation
- State Vocational Education Sex Equity Materials
- Materials from Federally Funded Organizations
- Commercially Published Materials
- Periodicals
- Audiovisuals
- Organizations

There are many other resources available that will be useful to sex equity coordinators and many new materials will be developed under the Perkins Act. This listing is provided as a "starter."

Legislation

Carl D. Perkins Vocational Education Act of 1984 (P.L. 98-524)

To obtain a copy of the law, contact your Federal Congressperson or the Federal legislative hotline (202-225-1772) which provides the latest information on all legislation

State Vocational Education Program and Secretary's Discretionary Programs of Vocational Education: Final Regulations. Federal Register, Friday, August 16, 1985, pp. 33226-33305.

To obtain a copy of the *Final Regulations*, contact your Federal Congressperson, a library that subscribes to the *Federal Register*, or request a copy of the *Federal Register*, dated August 16, 1985 from the following address:

Government Printing Office Bookstore
200 N. High Street
Columbus, OH 43215

Enclose a check for \$1.50 with the request.

For historical information on legislation, ask your Federal Congressperson's office to contact the Congressional Research Service in Washington, DC for such materials as the "Info Pack" on "Sex Discrimination in Education" and "Federal Policies and Programs Relating to Sex Discrimination and Sex Equity in Education 1963-1985."

State Vocational Education Sex Equity Materials

Arizona

Preparing for a Nontraditional Job. An Arizona Resource Directory by V. Brew and J. Erwin, Arizona Department of Education.
1984

For availability and cost, contact:
Jenny L. Erwin
State Sex Equity Coordinator
State Department of Education
1535 W. Jefferson Street
Phoenix, AZ 85007
(602) 255-5357

District of Columbia

Achieving Sex Equity Through Social Studies (Levels K-6 and Levels 7-12)

These two curriculum guides provide lessons on equity awareness for social studies classes. The lesson plans are fun, practical and easy to integrate into the regular curriculum.

Sex Equity Ideabook for D.C. Public Schools

This publication provides a sampling of lesson plans and classroom activities to assist in developing sex equity themes in work with students. Also included are activities to increase awareness of teachers on educational sex equity issues.

Sex Equity Resource Directory for the D.C. Public Schools

This directory is a guide to sex equity resources available in the school system and in the Washington, D.C. Metropolitan area. It is designed to facilitate efforts of educators to increase educational sex equity in their work with students.

For availability and cost, contact:

Eunice Wright Jones
Division of Vocational Education
Presidential Building
415 Twelfth Street, NW
Washington, DC 20004
(202) 724-4218

Illinois

Building Sex Equity in Vocational Education

1980

Materials for four 90-minute inservice training sessions designed to increase vocational educators' capability to achieve sex equity in vocational education. The four sessions may be implemented as four short workshops or they may be combined for a full six-hour day of inservice training. The materials include an inservice training program guide which provides an outline that may be used by the workshop facilitator for all four sessions. Materials also include a participant workbook for each of the sessions. \$15.00

Expanding Career Horizons (kit)

1979

Developed to help students, male and female, attain the following goals: To understand (1) the meaning of the sex role stereotyping of jobs, (2) that it is illegal under Federal law to discriminate by sex in employment, (3) the patterns and results of participation in the labor force, (4) the effects of multiple family member participation in the labor force on standard of living, and (5) the problem of sex bias in guidance tests and counseling. Each classroom kit is complete with teacher's guide, 20 sets of student materials, 5 games and all their component parts. \$35.00

Fair Recruitment Model and Strategies

1980

Provides a model, guidelines, and strategies for fair recruitment. Each of four nontraditional population target groups—by sex, age, handicap, and ethnic culture—is addressed in each strategy. Also includes appendices with specific "how to" aids on preparing brochures and posters, preparing a display or exhibit, planning an open house, preparing radio and TV spots and several other topics. \$2.00

Materials are available from:
Curriculum Publications Clearinghouse
Western Illinois University
46 Horrabin Hall
Macomb, IL 61455
(309) 296-1917

For assistance regarding materials, contact:
Jane Adair
State Sex Equity Coordinator
Illinois Office of Education
Department of Adult, Vocational and Technical Education
100 North First Street
Springfield, IL 62777
(217) 782-5098

Kansas

Potential Tips to Non-Traditional Employers. Developed by Kansas State Department of Education in cooperation with Emporia State University.

Free brochure

The Reality of the Workingforce Today Developed by Kansas State Department of Education in cooperation with Kansas State University.

Slide/tape set. \$51.00

Materials are available from:
Vocational Equity
Division of Community Colleges
and Vocational Education
120 East 10th Street
Topeka, KS 66612

For assistance regarding the materials, contact:
Corena Mook
State Sex Equity Coordinator
State Department of Education
120 East 10th Street
Topeka, KS 66612
(913) 296-2091

Kentucky

TNT - Nontraditional Occupations

For availability and cost, contact:
Bettie Tipton
State Sex Equity Coordinator
State Department of Education
Capital Plaza Towers, Room 2033
Frankfort, KY 40601
(502) 564-6916

Louisiana

Differences That Count in Your Future - a vocational education awareness/curriculum project brochure for students. Published by Lafayette Parish School Board. Currently being reprinted.

Request from:
Joy Joseph
Sex Equity Office
Louisiana Department of Education
Office of Vocational Education
P.O. Box 94064, Room 222-A
Baton Rouge, LA 70804-9064
(504) 342-3534

Mississippi

Sex Equity in Vocational Education: Counselor's Guide

For availability and cost, contact:
Shirley Haggard or Hollistyne Mothershedd
Office of Equal Access
State Department of Education
P.O. Box 771
Jackson, MS 39205
(601) 359-3466

Missouri

Expanding Options: A Model to Attract Secondary Students into Nontraditional Vocational Programs by James Good and Mary Ann Devore, University of Missouri-Columbia.

There's a Kangaroo in My Classroom - slide-tape presentation, Instructional Materials Laboratory, University of Missouri-Columbia.

Guidelines for Sex-Fair Vocational Education Materials - Women on Words and Images, Princeton, New Jersey, reprinted by the Missouri Department of Elementary and Secondary Education.

Updated Resources in Vocational Education by James Good, Instructional Materials Laboratory, University of Missouri-Columbia.

For cost and availability, contact:
Georganna Beachboard
State Sex Equity Coordinator
Department of Elementary and Secondary Education
P.O. Box 480
Jefferson City, MO 65102
(314) 751-6495

Oklahoma

Educational Equity: Teaching, Learning, Achieving
1981

A curriculum guide consisting of three units: (1) sex fair education strategies, (2) promoting sex fair education, (3) skills for implementing sex fair education in the classroom.

For availability and cost, contact:
Lou Ann Hargrave
Coordinator, Educational Equity
Oklahoma State Department of Vocational-Technical Education
1515 West Sixth Avenue
Stillwater, OK 74074
(405) 377-2000

Pennsylvania

Choosing

Career education multimedia packages for home economics, health, business education, and marketing and distributive education.

Sex Equity Education Module (SEEM)
M. Eloise Murray, Denise Appert, and Virginia Clark
1982

In three sections, SEEM defines sex equity and its implications for vocational educators and examines the recent history of sex equity in vocational education; looks at how sex roles are learned at home, at school, and in the workplace; and offers ideas on how vocational educators can encourage sex equity in the classroom as well as in the community.

For availability and cost, contact:
Jacqueline L. Cullen
State Department of Education
333 Market Street
P.O. Box 911
Harrisburg, PA 17126-0333
(717) 783-8506

Utah

PROJECT VOTE Materials

Includes "Career Conversations" (Teacher and Student Guidebook), "Equity Ideas," "Looking Out for Life" with accompanying filmstrip, "Opening Doors" with accompanying filmstrip, "Support Yourself" with accompanying filmstrip and booklet, "Equity Indicator List," and a set of four posters.

For availability and cost, contact:
Barbara B. Hales
Specialist, Vocational Equity
Utah State Board of Vocational Education
250 East Fifth Street
Salt Lake City, UT 84111
(801) 533-5371

Vermont

Killing Us Both

A half-hour commentary on some 120 slides of advertisements from the best-selling men's lifestyle magazines, illustrating what kind of man is being at once promoted and exploited. A complement to "Killing Us Softly" (see listing under audiovisuals).

For availability, contact:
Henry Bissex
Vocational Sex Equity Consultant
Vermont Department of Education
State Office Building
120 State Street
Montpelier, VT 05602
(802) 282-3131

Wisconsin

Sexual Harrassment (brochure)
What it is and what students can do about it.

For information, contact:
Barbara Bitters
Sex Equity Project of the
Wisconsin Department of Public Instruction
125 S. Webster
P.O. Box 7841
Madison, WI 53707
(608) 267-9157

Materials from Federally Funded Organizations

National Center for Research in Vocational Education

To obtain materials, order through
The National Center for Research in Vocational Education
National Center Publications
1960 Kenny Road
Columbus, OH 43210-1090
Call toll free 800-848-4815 outside Ohio in continental United States or 614-486-3655.

A Guide for Vocational Education Sex Equity Personnel RD 143

Louise Vetter, Carolyn Burkhardt, and Judith Sechler
1978

Guide for state sex equity coordinators, based on the Education Amendments of 1976.
(now available only through ERIC - Order No. ED 173 604)

Guidelines for Sex-Fair Vocational Education Materials SN 22

Developed by Women on Words and Images, disseminated by the National Center
1978
\$4.95

Provides guidelines and checklists for developing nonbiased instructional materials, adapting materials to reflect sex-fair practices, and increasing awareness levels of teachers, teacher trainers, administrators, and students in vocational education programs. Set of three booklets.

Sex Equity Strategies (2nd ed.) RD 144

Louise Vetter, Carolyn Burkhardt, and Judith Sechler
1980
\$11.00

Designed to provide strategies and techniques for sex equity in vocational education to sex equity personnel, instructors, administrators, counselors, and curriculum planning personnel.

Unlocking Nontraditional Careers RD 215

1982
\$44.00 (set)

A set of four sex equity training packages that offers a variety of approaches to improving career options. Each package includes a teaching outline, handout and transparency originals, and a two-page facilitator's guide.

Communication Skills RD 215A

Judith A. Sechler
\$14.00

Contains hands-on instructional materials for improving communication patterns among workers and students in nontraditional occupations. Includes one cassette tape.

Enhancing Placement RD 215B

Judith A. Sechler

\$20.00

Assists in the placement of women and men in nontraditional occupations by improving coordination between vocational educators and employers. Includes three cassette tapes.

Parent Awareness RD 215C

Vivien Canora

\$5.10

Includes attitudinal checklist along with other materials to be used by guidance counselors and vocational instructors for presentations and awareness activities for parents of pre-vocational students.

Recruitment Skills RD 215D

Rodney K. Spain

\$5.50

To be used by educational staff to develop promotional materials that can be used to recruit students for nontraditional programs. Improves skills in creating and using promotional techniques.

Northwest Regional Education Laboratory

Northwest Regional Educational Laboratory

Office of Marketing

300 S. W. Sixth Avenue

Portland, OR 97204

(503) 248-6800 (or)

(800) 547-6339, ext. 430

Women in Nontraditional Careers (WINC)

Rosalind Hamar and others

1982

Curriculum Guide (\$29.50)

Comprehensive source of ideas, activities, and resources designed to promote vocational education and sex equity. The curriculum is flexible and may be adapted to a variety of settings. Each unit provides: overview activities, activity resources and additional (reference) resources.

WINC Journal (\$4.00)

The booklet integrates fact, humor and instruction with blank journal pages to stimulate and guide young women to explore and write down their feelings regarding their career planning.

Women's Educational Equity Act (WEEA) Publishing Center

WEEA Publishing Center
Education Development Center, Inc.
55 Chapel Street
Newton, MA 02160
(617) 969-7100
Toll free: 800-225-3088

Resources for Educational Equity - 198 Catalog describing all available materials. Free

Becoming Sex Fair: The Tredyffrin/Easttown Program: A Comprehensive Model for Public School Districts

Project Director: Marylyn E. Calabrese, Tredyffrin/Easttown School District, Berwyn, Pennsylvania
\$27.25

Includes *Coordinator's Manual*, *Stage One Manual: Preparing for Change*, *Stage Two Manual: Planning the Inservice Program*, and *Stage Three Manual: Revising the Curriculum*. A three-stage, systemwide training program to help select, develop, apply, and evaluate techniques for improving sex fairness in all areas of school life.

The Career Shopper's Guide: A Development Plan Manual for an Employment Resource and Training Service

Project Director: Gerri Hair, Women's Center of Dallas, Texas
\$13.00

The Career Shopper's Guide, a practical guide for workshop planning, treats the job search as a function of a woman's needs and talents. Included are workshops that focus on the special concerns of Black women and Latinas, information for teachers of technical or trade courses, and tips for family members adjusting to a mother working outside the home. The client and business needs survey, diagnostic profile, and attitude checklists help women clarify goals and plan effective strategies.

New Pioneers: A Program to Expand Sex-Role Expectations and Secondary Education

Project Director: Amanda J. Smith, Division of Equal Education, North Carolina Department of Public Instruction
\$14.00

Includes *Seminar Leader's Handbook* and *Reflections and Recommendations*. Specifically developed to increase nontraditional enrollments in vocational education.

Together We Can

Project Director: Glee Ingram, Region XIII Education Service Center, Austin Texas

\$45.00 Elementary and Secondary Training Kit

\$25.00 Preschool Training Kit

\$7.00 Community Training Kit

\$102.00 "Expectations" 16 mm. film (color, 16 min.)

\$32.00 "Expectations" videotape cassette (color, 3/4 inch., 16 min.)

Includes a range of materials and techniques to involve teachers, counselors, parents, and community members in the effort to eradicate sex stereotyping and create the environment students need to become bias-free adults.

The Whole Person Book (I): Toward Self-Discovery and Life Options

Project Director: Dr. Twila Christensen Liggett, Nebraska Commission on the Status of Women, Lincoln, Nebraska

\$8.00

Provides a host of imaginative activities to guide students to examine their personal values, talents and interests. Students practice matching their skills and personalities with job requirements and, through discussions and questions, probe the personal and social reasons for their career choices.

Commercially Published Materials

Equal Their Chances: Children's Activities for Non-Sexist Learning

June Shapiro, Sylvia Kramer, and Catherine Hunerberg

1981

\$6.95 (paperback)

Prentice-Hall, Inc.

P.O. Box 500

Englewood Cliffs, NJ 07632

(201) 592-2352

The 49% Majority: The Male Sex Role

Deborah S. David and Robert Brannon (eds.)

1976

\$12.95

Addison-Wesley Publishing Co., Inc.

One Jacob Way

Reading, MA 01867

(617) 944-3700

In Search of Excellence: Lessons From America's Best Run Companies

Thomas J. Peters and Robert H. Waterman, Jr.

1982

\$19.95 (hard cover)

Harper and Row Publishers, Inc.

E. 53rd Street

New York, NY 10022

\$8.95 (paperback)

Warner Books, Inc.

Fifth Avenue

New York, NY 10103

Open Minds to Equality: Activities to Promote Race, Sex, Class, and Age Equity

Nancy Schniedewind and Ellen Davidson

1983

\$17.95 (paperback)

Prentice-Hall, Inc.

P.O. Box 500

Englewood Cliffs, NJ 07632

(201) 592-2352

Pedagogy of the Oppressed

Paulo Freire

1970

\$7.95 (paperback)

Continuum Publishing Co.

370 Lexington Avenue

New York, NY 10017

A Room of One's Own

Virginia Woolf

1963

\$2.95 (paperback)

Harcourt Brace Jovanovich

1250 Sixth Avenue

San Diego, CA 92101

Sex Equity Handbook for Schools

David Sadker and Myra Sadker

1981 (currently being updated)

\$25.50 (hard cover) \$17.95 (paperback)

Longman, Inc.

1560 Broadway

New York, NY 10036

(212) 764-3950

The Southern Lady: From Pedestal to Politics 1830-1930

Anne Firor Scott

1972

\$8.95 (paperback)

University of Chicago Press

Chicago Visual Library

Test/Fiche Program

5801 Ellis Avenue

Chicago, IL 60637

Undoing Sex Stereotypes

Marcia Gutentag and Helen Bray

1978

\$5.95 (paperback)

McGraw Hill Book Company

1221 Avenue of the Americas

New York, NY 10020

(212) 512-2000

Women in America: Half of History

Mary K. T. Tetreault

1978

\$9.80

Houghton Mifflin Company

2 Park Street

Boston, MA 02108

(800) 225-1464

Women's Reality: An Emerging Female System in the White Male Society

Anne W. Schaeff

1981

\$12.95

Winston Press, Inc. (subsidiary of CBS Educational Publishing)

450 Oak Grove

Minneapolis, MN 55403

Periodicals

Equity and Choice

\$15/year (3 issues)

Published by:

Institute for Responsive Education

605 Commonwealth

Boston, MA 02215

(617) 353-3309

Journal of Educational Equity and Leadership

\$20/year (4 issues)

Published by:

Sage Publications

P.O. Box 5024

Beverly Hills, CA 90210

Newsletter from Project on the Status and Education of Women

\$15/year (four issues), \$25/two years (eight issues)

Published by:

Project on the Status and Education of Women

Association of American Colleges

1818 R Street, N.W.

Washington, DC 20009

(202) 387-3760

Sex Roles
\$50/year (12 issues)

Published by:
Plenum Press
233 Spring St.
New York, NY 10013
(212) 620-8000

Audiovisuals

Bias—A Four-Letter Word
22 minutes, 1976 16 mm. film

Discusses peoples' attitudes toward themselves and each other concerning typical biases; male/female, young/old, tall/short, and so on.

Available (for \$500) through:
Malibu Corporation
Box 428
Malibu, CA 90265
(213) 456-2859

Fable of He and She
11 minutes, 1974 16 mm. film and 3/4 in. videotape

An animated fable about two groups of creatures on an island who are separated long enough to learn that each can do skills normally reserved by tradition to the other. Challenges stereotyped thinking and sexist philosophies and promotes the advantages of individual self-expression.

Available (for \$250—film, \$175—videotape) through:
Coronet/MTI
108 Wilmot Road
Deerfield, IL 60015
Attn: Beth Shafer
(312) 940-1260

Killing Us Softly
30 minutes, 1979 16 mm. film and 3/4 in. videotape

This film is based on a lecture on how women are portrayed in advertising and the stereotypes involved.

Available (for \$450) through:
Cambridge Documentary Films, Inc.
P.O. Box 385
Cambridge, MA 02139
(617) 354-3677

The Life and Times of Rosie the R veter
65 minutes, 1980 16 mm. film

Explores women who worked in defense plants during World War II and how they returned to their homes following the war (many did so reluctantly).

Available (for \$865) through:
Direct Cinema Limited, Inc.
P.O. Box 315
Franklin Lakes, NJ 07414
(201) 891-8240

Making Points
11 minutes, 1981 16 mm. film

Teenage males discuss their plans for the future as they also assume many roles which have traditionally been viewed as female roles. Developed by Girls Clubs of America National Resource Center.

Available (for \$250) through:
Direct Cinema Ltd. Film Library
P.O. Box 315
Franklin Lakes, NJ 07417
(201) 891-8240

A Man's Place
24 minutes, 1979 16 mm. film

This documentary film describes nontraditional roles held by men with a view toward enlightening or encouraging other men to realize their goals. Encourages discussion on the many facets of sex fairness.

Developed by Deanna Chitayat and Anita Baskind at the Case Institute for Research and Development in Occupational Education, City University of New York.

Available (for \$400) through:
Allan Keith Productions, Inc.
630 Ninth Avenue
New York, NY 10036
(212) 246-0239

Nothing But Options
17.5 minutes, 1983 videotape

Five women in nontraditional math-based careers talk about their backgrounds and how they got where they are.

Available (for \$240) through:
Math/Science Resource Network
c/o Mills College
Oakland, CA 94613
(415) 430-2230

Someone's in the Kitchen with Jamie
25 minutes, 1981 16 mm. color film

A baseball team and a home economics class campaign to reduce sex stereotyping.

Available (for \$500) through:
Learning Corporation of America
108 Wilmot Road
Deerfield, IL 60012
(312) 940-1280

A Tale of "O": On Being Different in an Organization
27 minutes, 1979 Synchronized slide-tape or 3/4" or 1/2" videotape

An innovative presentation that explores common issues facing any individual who must work or live with people from whom she or he is different. Based on research for the award-winning book, *Men and Women of the Corporation* by Rosabeth Moss Kanter, Professor of Sociology and Organization and Management at Yale and co-founder of Goodmeasure.

Available (for \$680) through:
Goodmeasure, Inc.
330 Broadway
P.O. Box 3004
Cambridge, MA 02139
(617) 492-2714

What You Are Is Where You See
75 minutes, 1984 color videotape

Morris Massey's look at the future. A value analysis of the way we look at things. Stresses the importance of shifting from a point of view to a viewing point in order to induce change. Also discusses the impact this shift could have on business, industry and education.

Available (for \$1450) through:
CBS/Fox Video
23290 Commerce Drive
Farmington Hills, MI 48024
(800) 824-8889

When I Grow Up
20 minutes, 1977 16 mm. film, color

This open-ended production serves to increase awareness among educators of the existence of sex-role stereotype practices typically found in the classroom and school. A good workshop aid for school personnel, parents, and older students who can take adult imperfection in stride.

For information about loaning, contact:
Susie Shackleton or Steve Marcar at
E. Central Network/Illinois Vocational Curriculum Center
Sangamon State University, F-2
Springfield, IL 62708
(217) 786-6375

Organizations

Displaced Homemakers Network, Inc.
1010 Vermont Avenue, N.W.
Suite 817
Washington, DC 20005
(202) 628-6767

The Displaced Homemakers Network, Inc., founded in 1979, provides a range of services nationally. The Network:

- initiates State and regional conferences, networking and advocacy.
- works with Government agencies to encourage the development of programs responsive to the real needs of displaced homemakers.
- creates demonstration projects, model programs, and training manuals to focus the energies of displaced homemaker programs and multiply their impact.
- provides technical assistance, funding information, training materials, program resources, and relevant information to individuals and groups seeking to develop or expand services for displaced homemakers.
- operates a referral service for thousands of displaced homemakers to available and appropriate services in their local communities.
- monitors the National legislative process and informs Network members through the publication of a bimonthly newsletter, *Network News*, of policy issues which may affect displaced homemakers and programs.
- acts as a National clearinghouse for information on displaced homemakers and the programs that serve them.
- increases public awareness through public education and outreach programs of the continuing problems that displaced homemakers face in their efforts to make the transition to self-sufficiency.

The Network is a membership organization. Contact the Network at the aforementioned address for more information.

Girls Clubs of America (GCA) National Resource Center
441 West Michigan Street
Indianapolis, IN 46202
(317) 634-7546

Facts and Reflections on Careers for Today's Girls

Raises and reviews the critical issues facing girls as they prepare for future roles.

Traces girls' career awareness and preparation from their early childhood to the late teens.

Recommends practical actions for concerned parents, teachers, youth workers, counselors and policy makers.

Heather Johnston Nicholson, 1985, \$6.95

Careers for Today's Girls and Young Women (a special issue of *Youth and Society: A Quarterly Journal*)

A comprehensive review of what young girls learn about careers.

Information on what has changed and what hasn't in vocational education.

New research on how girls look at preparing for careers and family roles.

A history of the development of one of the best known programs (Choices) on career and life planning for teen women.

A look at the reality of participation in the labor force for today's women and tomorrow's women.

Edited by Heather Johnston Nicholson, March 1985, \$6.95

The GCA supported the development of *Choices* and *Challenges* (described below) and the film, "Making Points," described in the section on audiovisuals.

Choices: A Teen Woman's Journal for Self-awareness and Personal Planning (\$12.95, discounts for multiple copies)

Challenges: A Young Man's Journal for Self-awareness and Personal Planning (\$12.95), discounts for multiple copies)

Instructor's Guide (\$9.95)

Developed by Mindy Bingham and Judy Edmondson through a GCA project. Although some questions have been raised about whether having separate workbooks for males and females violates Title IX, these write-in journals that encourage self-discovery, help young people become aware of economic realities, and facilitate the development of goal setting and decision-making skills have been widely used in classrooms, group settings, and by individuals.

The publications are available through:

Advocacy Press
P.O. Box 236
Santa Barbara, CA 93102-0236
(805) 962-2728

Advocacy Press provides workshops in Santa Barbara on the use of the materials, or they will organize workshops in other locations for a fee.

Math/Science Network and Math/Science Resource Center

Math/Science Network
Math/Science Resource Center
c/o Mills College
Oakland, CA 94613

The Math/Science Network is an association of over 1,200 educators, scientists, engineers, administrators, and business and community people established to promote the participation of women in mathematics and science and to encourage entry into nontraditional occupations.

The Math/Science Resource Center is the clearinghouse and switchboard of the Math/Science Network. The Center has developed a unique library by collecting the following:

- Reports of conferences and programs developed by other groups
- Data on enrollment patterns and educational achievement
- Statistics on participation, salaries, and advancement in various fields
- Analyses
- Research papers
- Professional journals
- Articles from the popular press

The library is open to educators, writers, and researchers, as well as to Network members.

The Mid-Atlantic Center for Sex Equity
The NETWORK, Inc.
5010 Wisconsin Avenue, N.W.
Suite 310
Washington, DC 20016
(202) 686-3511

National Center for Research in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, OH 43210-1090
(614) 485-3655 or (800-848-4815)

In addition to the materials listed earlier, the National Center provides access to computerized databases, workshops, conferences, technical assistance, and opportunities for in-residence study visits.

Project on Equal Educational Rights (PEER)
1029 Vermont Avenue, NW
Suite 800
Washington, DC 20005
(202) 332-7337

Cracking the Glass Slipper: PEER's Guide to Ending Sex Bias in Your Schools (Revised, February 1979)

Project on the Status and Education of Women
Association of American Colleges
1818 R Street, N.W.
Washington, DC 20009
(202) 387-3760

Classroom Climate: A Chilly One for Women?
1983
\$3.00

(See also the listing for the newsletter in the section on periodicals.)

Technical Assistance Center of the Southwest
P.O. Box 13010 A
SFA Station
Nacogdoches, TX 75962

Film Bibliography is recommended.

Wider Opportunities for Women, Inc. (WOW)
1325 G Street, N.W.
Lower Level
Washington, DC 20005
(202) 638-3143

WOW's 20-year track record includes one of the first guides to local part-time and flexibly scheduled work and study (1967), specialized career development employment services, job sharing, accreditation of volunteer work, paraprofessional training programs for women in poverty, the first National magazine for working women (1974), nontraditional technical skills training programs, National monitoring and advocacy network of women's employment programs, the first career education and employment program for low-English-skilled minority deaf women, the first industry analysis of where women will fit into

the National investment in high technology, and the first privately funded model program to train women for the construction trades.

WOW is currently working on the MODELS FOR INSTITUTIONAL CHANGE project, funded by the Women's Educational Equity Act Program. The project will work with six vocational education institutions around the country to—

- identify barriers to the participation by women and girls in nontraditional programs;
- provide vocational educators with proven strategies which can be used to reduce barriers in their institutions;
- examine the Carl D. Perkins Vocational Education Act and the implications of the Act for support of nontraditional training for women and girls;
- work with vocational educators and others to adopt systemic solutions to the identified barriers; package the results; and
- provide and disseminate as replicable models, the experiences of the six institutions.

Women's Bureau
U.S. Department of Labor
200 Constitution Ave., N.W.
Washington, DC 20210
(202) 523-6611

or

Women's Bureau
U.S. Department of Labor
1371 Peachtree Street, N.E.
Room 323
Atlanta, GA 30367
(404) 881-4461

The Women's Bureau funded the development of the *Women in Nontraditional Careers (WINC): Curriculum Guide* (listed under Northwest Regional Educational Laboratory earlier). The *Guide* is also available from the Superintendent of Documents, U.S. Government Printing Office, Department 33, Washington, DC 20402. Stock Number 029-002-00070-3.
\$19.00.

APPENDIX A

HOW STATES ARE IMPLEMENTING THE SEX EQUITY PROVISIONS OF THE PERKINS ACT FOR THE FIRST PROGRAM YEAR

A draft of this table was prepared from information presented at the National Leadership Development Conference of the sex equity coordinators in May, 1985. Copies of the draft table were mailed to all the coordinators in September 1985 to request confirmation of the information in the draft. States listed with blank rows have not yet confirmed the information.

The abbreviation S.P. & H. stands for single parents and homemakers, and the acronym NTO stands for nontraditional occupation.

Other activities, not listed in the table, that are being conducted in at least one State include the following:

- Offering scholarships for nontraditional students as part of a funded program
- Delivering services via educational TV
- Teaching job-hunting, application, and retention techniques
- Training in techniques for women to use in managing multiple roles
- Sending out newsletters and using public service announcements and publications
- Conducting entrepreneurship training
- Training of equity professionals
- Providing inservice training for teacher educators
- Providing training materials for preservice teacher education programs

	Encourage men and women to enter NTOs	Design sex equity curriculum materials	Provide support services for S.P.'s & H.'s	Provide preenrollment career exploration and self-esteem building	Assist women 14-25 prepare to support selves and families	Conduct research to eliminate sex bias/stereotyping	Provide job training	Provide technical training S.P. & H.'s	Expand guidance counseling in NTOs	Train teachers, administrators and parents on sex equity issues	Identify and recruit S.P. & H.'s in Voc. Educ.	Provide basic literacy instruction	Retrain potential young women dropouts in Voc. Educ.	Provide S.P. & H.'s with marketable skills	Evaluate programs and assess continuing needs	Provide technical assistance to CBOs and others
Alabama																
Alaska																
Arizona	X				X	X	X	X	X	X	X			X	X	X
Arkansas	X	X				X			X	X					X	
California	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
Colorado	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Connecticut																
Delaware	X	X	X	X	X	X	X		X	X	X		X	X	X	X
Dist. of Columbia	X	X	X	X	X		X		X	X	X	X	X	X	X	X
Florida	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Georgia	X					X				X					X	X
Hawaii																
Idaho																
Illinois	X	X	X	X	X	X			X	X	X	X	X	X	X	X
Indiana	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Iowa	X	X	X	X	X				X	X	X		X	X	X	X
Kansas	X	X	X		X		X			X	X	X		X	X	
Kentucky	X	X	X	X	X		X	X	X	X		X		X		X
Louisiana	X	X	X		X	X			X	X	X	X		X	X	X
Maine																

	Encourage men and women to enter NTOs	Design sex equity curriculum materials	Provide support services for S.P.'s & H.'s	Provide preenrollment career exploration and self-esteem building	Assist women 14-25 prepare to support selves and families	Conduct research to eliminate sex bias/stereotyping	Provide job training	Provide technical training S.P.'s & H.'s	Expand guidance counseling in NTOs	Train teachers, administrators and parents on sex equity issues	Identify and recruit S.P.'s & H.'s in Voc. Educ.	Provide basic literacy instruction	Retrain potential young women dropouts in Voc. Educ.	Provide S.P.'s & H.'s with marketable skills	Evaluate programs and assess continuing needs	Provide technical assistance to CBOs and others
Maryland	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Massachusetts	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Michigan	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
Minnesota																
Mississippi																
Missouri	X		X	X	X			X	X		X	X		X		
Montana																
Nebraska																
Nevada	X		X	X	X		X			X	X					
New Hampshire																
New Jersey	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
New Mexico	X	X	X		X	X	X	X		X	X			X	X	
New York	X	X	X	X	X		X	X	X	X	X		X	X	X	X
North Carolina	X		X	X	X	X	X	X	X	X	X	X	X	X	X	
North Dakota	X	X	X		X			X	X	X	X			X		
Ohio	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X
Oklahoma	X		X	X	X		X	X	X	X	X	X	X	X	X	X
Oregon	X		X	X	X		X	X	X	X	X	X	X	X	X	X
Pennsylvania	X	X	X	X	X	X	X	X	X	X	X			X	X	X
Puerto Rico																
Rhode Island	X		X	X		X		X	X	X	X	X		X		X
South Carolina	X		X		X		X	X	X		X	X	X	X	X	X

	Encourage men and women to enter NTOs	Design sex equity curriculum materials	Provide support services for S.P.'s & H.'s	Provide pre placement self-esteem building	Assist women 14-25 prepare to support selves and families	Conduct research to eliminate sex bias/stereotyping	Provide job training	Provide technical training S.P. & H.'s	Expand guidance counseling in NTOs	Train teachers, administrators and parents on sex equity issues	Identify and recruit S.P. & H.'s in Voc. Educ.	Provide basic literacy instruction	Retrain potential young women dropouts in Voc. Educ.	Provide S.P. & H.'s with marketable skills	Evaluate programs and assess continuing needs	Provide technical assistance to CBOs and others
South Dakota																
Tennessee	X									X					X	X
Texas	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
Utah	X	X	X		X		X	X	X	X	X	X	X	X	X	X
Vermont	X		X	X	X		X	X		X		X		X		
Virginia																
Washington																
West Virginia																
Wisconsin																
Wyoming	X	X	X	X	X				X	X	X	X				X

APPENDIX B

12/1/85

STATE SEX EQUITY COORDINATORS

ALABAMA

Ann T. Smith
State Sex Equity Coordinator
State Dept. of Education
Room 810, State Office Bldg.
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ALASKA

Naomi Stockdale
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State Sex Equity Coordinator
State Dept. of Education
1535 W. Jefferson Street
Phoenix, AZ 85007
(602) 255-5357

ARKANSAS

Janice Gresham
State Sex Equity Coordinator
State Dept. of Education
Education Building, Room 409 D
Little Rock, AR 72201
(501) 371-2974

CALIFORNIA

*Constance F. Gipson, Consultant
State Department of Ed., Voc. Ed.
721 Capitol Mall, 4th Floor
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(916) 323-3481

COLORADO

Carol Vote
State Sex Equity Coordinator
Centennial Building, Rm. 223
1313 Sherman Street
Denver, CO 80203
(303) 866-4381

CONNECTICUT

(position vacant)
State Department of Education
Division of Vocational Education
165 Capital Avenue
Hartford, CT 06115
(203) 566-7877

DELAWARE

Carol O'Neill Mayhew
Coordinator, Sex Equity Program
State Department of Education
Dover, DE 19901
(302) 328-5194

DISTRICT OF COLUMBIA

*Ms. Eunice Wright-Jones
Division of Vocational Education
Presidential Building
415 Twelfth Street, NW
Washington, DC 20004
(202) 724-4218

FLORIDA

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Voc. Ed. Equity Coordinator
Div. of Voc-Tech. Education
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715 E. Bird St., Suite 412
Tampa, FL 33604
(813) 933-3495

*Participated in September Sex Equity Coordinators Conference.

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IDAHO

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INDIANA

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State Board of Voc.-Tech. Ed.
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IOWA

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State Department of Education
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State Sex Equity Coordinator
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MICHIGAN

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MINNESOTA

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(601) 359-3467

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NEW HAMPSHIRE

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Equal Access Education
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NEW JERSEY

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New Jersey Dept. of Education, CN500
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NEW MEXICO

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