

LEGISLATIVE REFERENCE LIBRARY  
LC1504.M6 M553  
Minnesota. Coun - Vocational education in Minnesota



3 0307 00041 8122

# **Vocational Education in Minnesota:**

## **Sex Equity Progress Report**

---

LC  
1504  
.M6  
M553

**COUNCIL ON THE ECONOMIC STATUS OF WOMEN**

## **Vocational Education in Minnesota: Sex Equity Progress Report**

Prepared for the Minnesota Department of Education  
under Contract No. 94-482/3-SB-MN82/130 by:

COUNCIL ON THE ECONOMIC STATUS OF WOMEN  
400 SW, State Office Building  
St. Paul, Minnesota 55155

July 1982

# Table of Contents

INTRODUCTION . . . . .	3
CHANGING LIFE PATTERNS FOR WOMEN . . . . .	5
STATE LAWS & POLICIES . . . . .	9
FEDERAL LAWS . . . . .	10
ACTIVITIES OF THE EQUITY SPECIALIST . . . . .	12
DO EFFORTS MAKE A DIFFERENCE? . . . . .	15
National Studies . . . . .	15
Minnesota Studies . . . . .	18
SUMMARY . . . . .	22
APPENDIX . . . . .	23

# Introduction

---

Equal educational opportunity has always been an important part of the American dream, and access to vocational training has meant increased economic opportunity for millions of citizens. However, educational systems, including vocational education, have often been burdened by out-dated assumptions about women's lives.

Historically, schools have reflected and reinforced societal stereotypes about appropriate roles for women, through a dual educational system which provides differing expectations for boys and girls. Instructional materials and methods, counseling, and staff assignments have been based on the assumption that women will not seek employment for a significant portion of their lives, that women will not need to support themselves and their families, and that women's employment will be limited to certain kinds of jobs.

As a result, many young women are unprepared for the necessity of employment, and unable to make choices appropriate to their individual abilities and needs. The economic and human costs of neglecting career education and training for women are very high.

In the past decade, vocational educators have become aware of the need for sex equity. And just as the vocational system adapted to the new demand for skilled workers during the Industrial Revolution, so has the system begun to adapt to the demands of a labor force comprised almost equally of men and women.

These concerns about sex equity were strengthened by public policy decisions in the early 1970s, in Minnesota as well as at the national level. However, it was not until passage of Title II of the federal Vocational Amendments of 1976 that sex equity was explicitly identified as a priority for the vocational education system.

Title II provided a focus and a set of objectives for sex equity efforts. The overall goal of sex equity embodied in the law is to expand career options for women and men, and to eliminate sex bias and sex-role stereotyping which limit these options. The law emphasizes positive action to overcome historical patterns of sex discrimination, bias, and stereotyping -- a step far beyond any previous commitment to equal opportunity in education.

Sex equity efforts in Minnesota received a new impetus when the position of state sex equity specialist was created in 1978, and when funding was provided for this specific purpose, both requirements of the



federal law. This statewide coordination and funding has led to a wide variety of activities: state and local planning, data gathering, project development, and the sharing of information about sex equity throughout the state.

Vocational education can take the lead in assuring full utilization of the resource that women represent and that society cannot afford to waste. Four years have passed since the Minnesota began coordinated sex equity efforts -- an appropriate length of time for preliminary evaluation. This report reviews sex equity efforts from 1978 to the present, and examines how the state vocational education system has changed as a result.

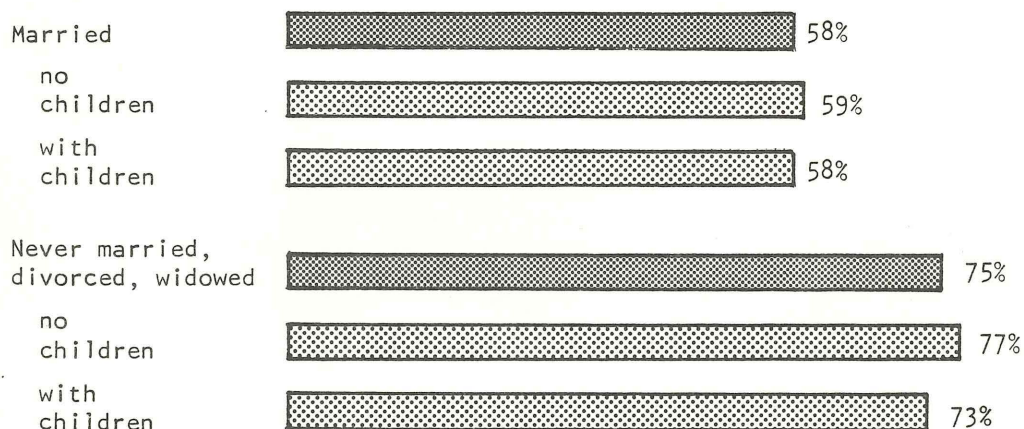
# Changing Life Patterns for Women

---

The commitment to sex equity in vocational education can be traced to dramatic changes in women's employment patterns, beginning about 20 years ago. Since 1960, the labor force participation rate of Minnesota women age 16 to 64 almost doubled, and today almost two-thirds of adult women are employed or actively seeking employment. Women now account for 43 percent of the workforce.

While expanding their employment roles, women have maintained their traditional commitments to marriage and child-rearing. In Minnesota, the highest labor forces rates for women are among those age 25 to 34, with 70 percent of these women now in the labor force. The majority of women in this age group are married and have children at home, factors which in the past have tended to prevent women from seeking employment. Today, more than two-thirds of mothers with school-age children, and more than half of mothers with pre-school children, are employed away from home.

## Labor Force Participation Rates of Minnesota Women, Age 16 to 64, by Family Status: 1977



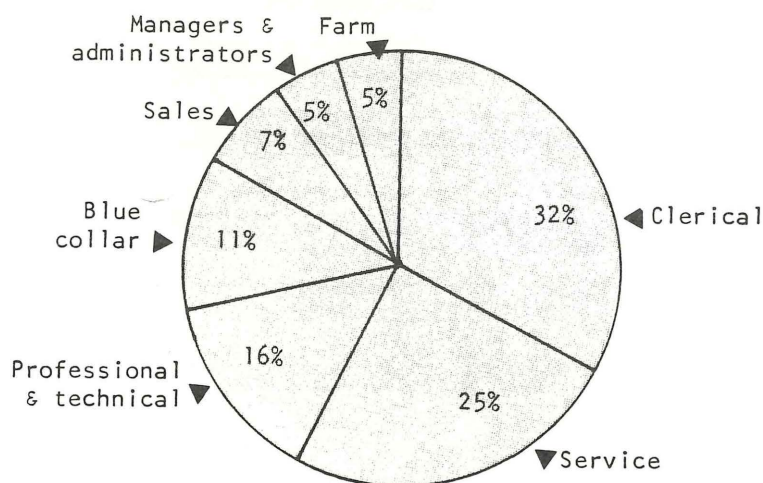
Women are entering the labor force for a variety of reasons, but primarily out of economic necessity. The number of two-earner couples has grown substantially as inflation has eroded income for one-earner families. Rising divorce rates have led to larger numbers of single-parent families, almost always headed by women who must support themselves and their children.

In 1979, nearly three-quarters of all employed women in the United States were single, separated, divorced, widowed, or had husbands earning less than \$15,000 a year.

Despite these realities, stereotyped assumptions about women's work persist. Among these myths are: the notion that women's income is only secondary, providing "pin money" for personal luxuries; the idea that most women will stay home and care for children during most of their adult years; and the belief that women are only interested in or only capable of performing certain kinds of work.

Although women are more likely than ever before to be employed, they continue to be economically disadvantaged. The average woman employed full-time and year-round continues to earn only 60 cents for each dollar earned by her male counterpart. The average female college graduate, also employed full-time year-round, continues to earn less than the average male high school dropout. And despite recent attention to women entering previously all-male occupations, 80 percent of women are still concentrated in virtually all-female occupations.

### Occupation of Employed Women in Minnesota, 1977



"Women's work" still consists of a small number of occupations, jobs which tend to parallel women's traditional labor in the household. Women





take care of children, the sick, and the elderly, in the workplace as well as in the home. Women provide for basic human needs as homemakers and in jobs such as waitress or child care worker. Women manage schedules and budgets in secretarial positions, just as homemakers perform managerial functions for the family. Even in education and health, the "women's professions," female teachers and nurses are supervised by male administrators.

"Women's work" is accompanied not only by lack of recognition and authority, but also by low pay. Although women's occupations require considerable skill, training, and responsibility, these occupations rarely have wages equal to those for "men's work" with comparable qualifications.

Low earnings and limited employment opportunities combine with other factors contributing to the increasing poverty of women. The National Advisory Council on Economic Opportunity recently made a startling projection: that if current trends continue, women and children will represent 100 percent of the poverty population by the year 2000.

The number of female-headed households has increased dramatically in the past 10 years, and in 1980 one-third of such households had poverty-level incomes. The realities are that only one in three women who are single parents receive any child support from the absent father, and less than 4 percent of divorced women receive alimony payments.

### Median Household Income, U.S. 1980

Husband-wife family, wife in labor force		\$ 26,879
Husband-wife family, wife not in labor force		\$ 18,972
Female householder family		\$ 10,408
Female unrelated individuals		\$ 6,803

The consequences of limited opportunity and inadequate protection are also apparent among older women. Nineteen percent of all women age 65 and over are living in poverty, and the poverty rate for older women living in



non-family households is 30 percent. Only one-fifth of women in this age group receive any pension benefits, whether based on their own or their husbands' earnings, and average benefit amounts are low. Although a large proportion of older women receive Social Security benefits, women account for fully three-fourths of those receiving the minimum Social Security benefit.

Based on current trends, it is highly unlikely that women's participation in the labor force will decrease in future years. Both economic and social changes show that women's employment will continue to be important in the American economy, and that women's work roles will continue to expand.

What has been the response of government, employers and educational systems to these new realities for women? How is the vocational education system, in particular, addressing these changing patterns?

# State Laws & Policies

---

The State of Minnesota has maintained a commitment to sex equity in vocational education for more than a decade. Two general laws address sex equity in education, including vocational education. The Minnesota Human Rights Act (Minnesota Statutes Chapter 363) prohibits discrimination against students or employees on the basis of sex at all levels of public and private educational institutions in the state. Another law (Minnesota Statutes 124.15) provides for a reduction in the amount of special state financial aids when a school district violates state anti-discrimination laws.

The Minnesota State Board of Education adopted a policy statement on eliminating sex bias in education in 1972. A task force was appointed to make recommendations on implementing the policy and the state board has maintained the Sex Bias Advisory Committee to advise it on sex equity issues.

In 1979 the state board adopted a policy for evaluating sex equity in post-secondary vocational institutions. This policy requires each area vocational-technical institute (AVTI) to develop a plan of action for achieving sex equity at that institution. Under the policy the evaluation of sex equity is a consideration for state board renewal of the accreditation of AVTIs.

Within the Department of Education, the division of vocational-technical education has been directly involved in sex equity efforts. In 1975, an advisory committee on women in nontraditional vocational education identified problems and suggested the development of three pilot projects. These projects were funded by the Division and implemented at local vocational schools.

At Red Wing AVTI, a project was conducted to identify the difficulties encountered by women in nontraditional programs, and to prescribe ways to overcome such difficulties. In the Anoka-Hennepin school district, a secondary-level project was developed to increase awareness of expanding career opportunities in nontraditional fields. A third special project, located at the Minnesota Valley Cooperative Center in Granite Falls, developed a model for reducing sex bias and sex stereotyping which could be used in other rural areas.

These early projects demonstrated that planning and coordinating efforts to eliminate sex bias in vocational training programs could make a difference. The state received additional impetus for sex equity efforts with the passage of three significant federal laws in the 1970s.

# Federal Laws

---

Federal funds have helped to support vocational education since 1917. Initially, most of this funding was provided for agriculture and home economics. As the system expanded to meet the demands of industrialism, subsequent federal laws increased both the allocation of federal dollars and the number of recipient categories.

A number of these laws have recognized the special role of vocational education in serving the needs of economically disadvantaged groups. However, it was not until 1972 that federal legislation required specific attention to sex equity.

In that year, Title IX of the Education Amendments of 1972 was passed. Title IX contains a broad prohibition of sex discrimination at all levels of all federally funded education programs and institutions including elementary, secondary, and post-secondary schools as well as all vocational education programs.

This law was closely followed in 1974 by the Women's Educational Equity Act, which authorized federal grants for research, development, and other educational activities to increase awareness of bias and stereotyping in education.

Finally, Title II of the Vocational Amendments of 1976 established the elimination of sex bias, sex stereotyping, and sex discrimination as a major priority for vocational education. The law provides definitions for these terms as follows:

- *Sex bias* means behaviors resulting from the assumption that one sex is superior to the other.
- *Sex-role stereotyping* means attributing behaviors, abilities, interests, values, and roles to a person or group of persons on the basis of their sex.
- *Sex discrimination* means any action which limits or denies a person or a group of persons opportunities, privileges, roles, or rewards on the basis of their sex.

By using definitions which refer to attitudes and assumptions as well as behaviors and actions, the law clearly aims to eliminate the underlying causes of discrimination. The law also goes beyond requiring passive assurance that equal opportunities are made available, to requiring

positive action leading to equity.

Title II requires each state to undertake the following specific activities:

- Designate full-time personnel to undertake specific activities to eliminate sex discrimination and sex stereotyping.
- Spend \$50,000 for full-time sex equity personnel and additional funds for displaced homemakers.
- Include representatives who are knowledgeable about sex discrimination on state and local advisory councils.
- Include policies to eradicate sex discrimination in annual and five-year plans.
- Include information about the results of services to women in each state board evaluation.

The functions and activities of the Minnesota sex equity specialist are outlined in the following section of this report. More detailed information about Title II and functions of the sex equity specialist is contained in the appendix.



# Activities of the Equity Specialist

---

In 1978, the Minnesota Department of Education established the full-time position of sex equity specialist, as required by Title II.

Minnesota's approach has been one of "infusion" of sex equity principles into all vocational program areas. Funds have also been made available through the vocational-technical division to develop and support a wide variety of innovative programs. However, the intention is not merely to create new programs but to raise awareness about sex equity throughout the system, and to provide practical methods which can be used in existing programs.

Specific functions of the sex equity specialist have included:

Development of a state plan to eliminate sex bias. The first five-year plan for Minnesota vocational education was completed in 1977. This plan included a statement of actions which would be taken to overcome sex discrimination and stereotyping in all state and local vocational education programs, and a description of incentives to encourage enrollment by students in courses which are nontraditional for their sex. The plan also addressed the needs of displaced homemakers -- homemakers who must seek employment after separation, divorce or widowhood -- and single heads of households who lack adequate job skills. As this plan was reviewed annually, the sex equity specialist provided information regarding implementation of the sex equity provisions. She also provided technical assistance to other state specialists and supervisors in taking action on the goals and objectives of the five-year plan.

Evaluation of vocational programs. A series of six statistical reports on students and staff in vocational programs has been published over the past four years, under contract with the Council on the Economic Status of Women. Additional data on enrollment and termination patterns is gathered through the Minnesota Vocational Follow-Up System. The sex equity specialist has developed a review method for all proposed state grant awards, which includes an evaluation checklist for use in preparing sex-fair grant proposals at the local level. In addition to these efforts, an extensive process for evaluating all programs with respect to sex equity was developed and incorporated into the state five-year on-site evaluation process. Sex equity team members are included in both secondary and post-secondary on-site visits.

Assistance in developing local sex equity action plans. As a result of the state board policy adopted in 1979, each of the 33 AVTIs in Minnesota

has designed a five-year plan of action to achieve sex equity in their vocational programs. In 1980, the specialist prepared a handbook to assist in developing such plans, and provided technical assistance to local institutions in preparing plans. All plans must address eight sex equity factors described by the state board. In addition, each AVTI has developed its own objectives and activities to match its unique situation.

Creation of a state sex equity advisory committee. The state Equity in Vocational Education (EVE) Advisory Committee, established in 1979, is the successor to the former Women in Nontraditional Vocational Education Advisory Committee. The EVE committee, composed of business/industry representatives as well as vocational educators, provides guidance to the sex equity specialist. A subcommittee on minority women has recently been designated to keep the committee and the specialist informed about the needs of this group.

Development of a statewide sex equity network. The sex equity specialist has developed a network of contact persons within each AVTI who are sensitive to and informed about equity issues. The AVTIs have established local sex equity committees to work with the contact person and with the sex equity specialist in carrying out the activities identified in local plans.

Presentation of statewide workshops and local inservice training. The sex equity specialist has conducted and assisted with workshops which have reached all levels of the Minnesota vocational system. Inservice training and the dissemination of sex equity materials have been significant in creating awareness of the needs of women in vocational education. Some of the topics covered in workshops and seminars have been sexual harassment, recruiting nontraditional students, serving the needs of displaced homemakers, and eliminating sexist language from classroom materials. Information has also been made available to legislative committees and commissions, to women's membership organizations, and to national organizations concerned with sex equity and vocational education.

Assistance in developing local projects. As a result of the provisions of Title II, more than 30 local projects were initiated over the past four years. Many projects have focused on expanding career choices and career education for male and female secondary-level students. Others have concentrated on the special needs of minority women, displaced homemakers, and women enrolled in nontraditional training programs. Other kinds of activities in the last four years have included: an assessment of vocational

students' need for child care services; a project to examine counseling practices and to promote sex-fair counseling techniques; and the development of many instructional packets, posters, films, and other materials. Many programs have been successful in identifying and eliminating sources of sex bias and stereotyping which had been inadvertently incorporated into the system.

State-level coordination provides the needed support for a variety of local activities. Local activities generally serve individual students, and such projects often lead to measurable improvements in such areas as increased enrollment and retention of nontraditional students. There may also be longer-term effects. For example, a program called GATE, Growth in Agriculture Through Equality, at Canby AVTI led to the development of resource materials which will be used for years to come.

Statewide coordination also enables the sharing of knowledge gained through local projects. GATE project workers, for example, learned that there was a need for general resources on nontraditional courses in other areas, as well as resources specific to agriculture. A project for older female students at Granite Falls AVTI showed that pre-career counseling, such as assertiveness training and improving self-image, was the most urgent need for this group seeking to become employable.



# Do Efforts Make A Difference?

---

Two national studies and a series of Minnesota studies show that there is a direct relationship between sex equity efforts and positive change in the vocational education system. The studies also indicate which efforts are most critical in achieving success and which remaining needs are most significant.

## National Studies

Title II required that a study be conducted by the U.S. Commissioner of Education to determine the effectiveness of mandated sex equity efforts. That study was performed under contract with the American Institutes for Research (AIR) and published in April 1979. The AIR study included visits to 49 states and detailed analysis of a random sampling of 100 schools across the country.

The most significant finding was that time and money spent on sex equity do, in fact, have an impact. Factors found to be especially critical to success were:

- The extent of interaction between state agencies, local education agencies, and individual schools. Local efforts were more visible and more effective when state efforts were more active.
- The presence of competent, dedicated sex equity staff. In particular, the state-level sex equity coordinator position was essential to progress. The study noted that staffing and funding of such positions is minimal and often inadequate, but that even limited resources have made a significant difference.
- The existence of concrete goals, timetables, and careful planning. The greatest increases in nontraditional enrollments occurred in states where detailed plans were formulated and where efforts extended beyond mere rehashing of legal and regulatory language.
- Continued pressure through state monitoring of local sex equity efforts. This was the most significant indicator of sex equity activity at the local level. The more closely the state agency reviewed and collected data about local efforts, the more likely those efforts were to exist and to be successful.



The study distinguished between more passive and more active sex equity efforts. In "passive" schools which merely posted notices or stated in other ways that all classes were open to both female and male students, virtually no change occurred. Successful schools were more active, finding ways to provide exposure to various programs, to provide support to students entering or considering nontraditional careers, and to develop creative strategies for change.

According to the AIR study, even the best-designed and implemented efforts are just beginning to make inroads on historical patterns of discrimination and negative attitudes toward women. In order to overcome decades of discrimination and stereotyping, active and on-going support are crucial.

In December 1980, a second national study was published by the National Advisory Council on Vocational Education (NACVE) and the National Advisory Council on Women's Educational Programs (NACWEP). This two-year study included an analysis of state enrollment data, a review of research studies, and testimony presented at two public hearings.

The NACVE-NACWEP study documented improvements in a number of areas:

- In the period from 1972 through 1978, the overall enrollment of women increased by 60 percent. In 1978, women accounted for 46 percent of all vocational students.
- The proportion of women in integrated classes had risen by 5 percent, and the proportion of women in nontraditional classes had risen by 4 percent.
- The most dramatic gains were in agriculture, where women's enrollment increased from 4 percent to 13 percent, and in technical fields, where women's enrollment increased from 9 percent to 17 percent.

The NACVE-NACWEP study also identified areas where future sex equity efforts should be focused:

- Greater attention to high school and junior high programs.
- More emphasis on careers in the trade and industrial area.
- Additional staff training to eliminate negative attitudes, to increase the numbers of female administrators, and to increase the number of male and female instructors in nontraditional courses.
- Attention to special needs in the areas of adequate and affordable child care, transportation for low-income women in rural areas, and the elimination of sexual harassment of women in nontraditional classes.

- Greater attention to the special needs of minority women, older women, and displaced homemakers.
- Distribution of more sex-fair textbooks and other instructional materials.
- "Broad legislative coordination" with other youth, education, and employment programs.

Both national studies emphasize the need for specific activities to overcome sex bias as well as the need for monitoring progress. The sex equity specialist position is critical, but additional support is needed. States, local agencies, and schools need examples of successful approaches in addition to continued incentives for change. Adequate staffing and accountability procedures, and a system-wide commitment, are needed to ensure the full implementation of the law.

National hearings have generated statements of support for continued sex equity efforts from vocational educators and community organizations:

*"Progress has been made, but the goal is far from being achieved, and the Council (NACWEP) is not convinced that progress will continue at the same pace if the federal focus on sex equity is dropped or severely curtailed."*

*"All these initial energies have been spent cracking the wall. The same amount of energy applied now will produce even greater results. If we stop now, the effect will be to seal up that initial crack and thus waste all that initial effort."*

*"Sex equity coordinators are able to provide the additional small push that is often needed to establish a nontraditional occupations program in a school. They are an invaluable, important and extremely cost-effective group."*

*"Failure to reaffirm a strong commitment to sex equity in vocational education would represent an unthinkable betrayal of our achievements to date and of all the women and girls who are in or will enter the labor market to earn their livings."*

*"Success will not be measured by a statistical numbers game, but by real increases in the earning power of working women, and ultimately the impact that will have on our economy."*

*"When the needs become acute, American business and industry will hire the persons trained to do the job with little regard for gender, color, or other non-relevant factors. Vocational education must act affirmatively now to provide the training for such a workforce."*

*"Elimination of sex stereotyping is not a 'luxury item.' It should be viewed as part of an on-going strategy to prevent shortages of vital skilled workers in the future."*

## Minnesota Studies

State and federal commitments to sex equity in vocational education are results-oriented, realistic and flexible. Although federal legislation has acted as a catalyst, vocational education is primarily a state and local system. What difference have sex equity efforts made in the Minnesota vocational system?

There are a number of ways to examine whether change has occurred. This report examines statistical information about the vocational education system at the secondary and post-secondary levels, and summarizes additional information made available through activities of the sex equity specialist.

### Secondary Data

Data for secondary vocational programs were first available for the 1980-81 school year, and additional data are now available for the 1981-82 school year. The 1981-82 information was made available through an improved data collection system which will provide an excellent baseline for future years. However, some changes in data collection make it difficult to assess changes with a high degree of confidence. Despite the lack of strict comparability of the data, and the time span of only one year, it appears that positive change is occurring in secondary vocational programs.

- The percentage of eleventh and twelfth grade agriculture students who are female increased from 16.6 percent to 18.0 percent.
- At the same grade levels, the number of female technical students more than doubled, with a percentage increase from 4.2 percent to 8.2 percent.
- The percentage of trade-industrial students at these grade levels who are female increased from 8.7 percent to 13.2 percent.
- The percentage of teachers in technical courses who are women increased from 4.8 percent to 6.9 percent.

### Post-Secondary Data

At the post-secondary level, comprehensive and reliable data have been available for four years. Baseline data was collected for the 1977-78 school year and published in July 1979, in the first report prepared by the Council on the Economic Status of Women. Since that time, individual AVTIs have



assessed their status and set goals for the future, and the results can now be summarized in statistical terms.

Between 1977-78 and 1980-81, steady progress has occurred in many areas. Although these changes have not always been dramatic, they represent an on-going process moving in an encouraging direction.

Overall enrollments of women in AVTIs have increased by 17 percent, compared with a 10 percent increase in male enrollments. Other data show that:

- Women's representation in technical courses increased from 9 percent of all students to 13 percent of all students.
- Women's representation in trade-industrial courses increased from 13 percent to 16 percent.
- Men's representation in health courses increased from 7 percent to 10 percent.
- Enrollments in integrated courses have increased by 37 percent, and nontraditional enrollments have increased by 18 percent, compared to an increase of only 5 percent in traditional enrollments.

Similar steady gains have occurred in the numbers of female AVTI staff. The proportion of all teachers who are women increased from 25 percent to 27 percent, while female administrators increased from 11 percent to 14 percent.

## Other Indicators

Some results of the intensive efforts related to sex equity remain intangible. Activities to heighten awareness of the changing roles of women, for example, may improve the learning environment for female students in ways which are not directly measurable. In order to provide some sense of a changing environment in the state vocational system, this report summarizes trends in on-site evaluations, a survey of nontraditional students, and a brief summary of local projects. More information is in the appendix.

Over the past four years, 26 of the 33 AVTIs have participated in on-site sex equity evaluations. In 1980-81, a similar process was developed for conducting on-site sex equity evaluations at secondary vocational cooperative centers, and 15 of the 59 centers were evaluated in 1981-82.

Although evaluations do not contain statistical information, narrative comments from the AVTI visits show a pattern of improvement over the five-year period in which evaluations have been conducted.



Evaluator comments for 1977-78 showed that sex equity efforts had hardly begun. Almost no attention was given to recruitment or retention of nontraditional students. Catalogs and curriculum materials were almost universally stereotyped, community advisory committees were all-male or mostly-male, and almost all staff were employed in traditional areas.

In contrast, almost every evaluation conducted since 1978 shows that successful efforts have been undertaken to address these concerns. Of the three schools evaluated to date in fiscal year 1982, all have received some favorable comments in each of eight areas of effort. The majority of the six schools evaluated in fiscal year 1981 received mostly-favorable ratings on their efforts in community relations. In general, the most successful efforts appear to be in community relations, awareness of the law, curriculum, orientation and counseling procedures, instructional programs, and support services.

In the spring of 1979, the Council on the Economic Status of Women conducted a survey of female students enrolled in nontraditional AVTI courses, with 176 students responding. The survey provided helpful information about obstacles to the enrollment and retention of nontraditional students, and generated recommendations for improvement. Perhaps most dramatically, the survey showed that female nontraditional students are overwhelmingly satisfied with their training choices:

*"I was pleasantly surprised by the fact that my fear was silly and unnecessary."*

*"One little bit of encouragement makes me able to keep going for weeks."*

*"The male students seem to respect me a lot for having the nerve to join them."*

*"My kids think I'm the greatest, and I am more confident than ever. I wasn't sure I'd be able to keep up with the guys, but I found I could even do better with a little extra work."*

Clearly these women were able to find some sources of support and encouragement, though they are very much aware of their status as pioneers in previously all-male fields. Similar comments were made by students served by various local projects.

Local projects have included: courses to expand career choices and provide career education; an assessment of the child care needs of vocational students; development of special projects to address the needs of displaced homemakers; development of instructional materials, posters, films, and other instructional aids; target programs for minority women; and an examination of counseling practices.

Although it is rarely possible to measure the impact of such projects, local staff frequently comment that "the direct effectiveness of this project will continue for a number of years." Local staff also believe that continuing such projects in the future is essential. After funding cuts eliminated staff support for one program, a local coordinator reported that "We have heard very little about sex equity at our school this year ... The loss of these people from our staff accounts for much of our drop in enrollment of displaced homemakers."

Comments from students who had been involved in various special sex equity programs included:

*"It's gratifying to know that there are intelligent people concerned about women, their education and advancement in the job market and careers."*

*"Happy to learn more jobs are open to women, that they may try to learn nontraditional skills in better paying jobs."*

*"Today helped me realize how much help and advisement there is in all areas -- financial aid, training, support groups, etc. for women today."*

*"Gave me good ideas of careers to pick from. I am interested in two, so I will be deciding which I feel I will enjoy working at."*

# Summary

---

The goal of achieving sex equity is a challenge to the vocational system to demonstrate commitment, leadership, and responsiveness. When educational institutions are actively addressing the needs of female students, the institutions will be providing a better learning environment for all students and a vital resource for the larger community.

The federal law requiring sex equity efforts has been a breakthrough for women in education. The law has provided a mechanism for attacking sex stereotyping and sex discrimination in the schools, and it has led to significant change. Yet much remains to be done to eliminate all forms of sex bias at all levels of vocational education.

Schools need continued assistance to overcome years of inequity in education and in the labor market. More research is needed about sex-role development, understanding stereotypes and finding ways to combat them. Innovative programs must be developed and reviewed, and the results shared throughout the education community. Vocational staff must be representative of the labor force. Each teacher, counselor, and administrator must be knowledgeable about sex equity and prepared to work with other school and community leaders to provide equal opportunity for all students.

The intellectual and creative potential of this country's women is our most neglected resource. It will be tragic if another generation of women is excluded from the full range of job opportunities at the same time that new opportunities are being created in an increasingly technological society.

With adequate training, thousands of women now considered unskilled and unemployable can be removed from welfare caseloads, and their children can be given a fresh start as well. For low income two-earner families, vocational preparation for women can make all the difference in moving into more stable middle income levels.

Clearly, the task of achieving sex equity is immense. Efforts to date show that change is possible, but that the elimination of sex bias, sex stereotyping, and sex discrimination cannot be achieved overnight. Further efforts will require a significant commitment of time and money, and the full force of leadership on the part of the educational community.

# Appendix

SEX EQUITY PROVISIONS OF TITLE II . . . . .	24
Basic Components . . . . .	24
Functions of the Sex Equity Specialist . . . . .	25
Required Use of Funds for Sex Equity . . . . .	26
Optional Use of Funds for Sex Equity . . . . .	27
SEX EQUITY ACTIVITIES IN MINNESOTA . . . . .	28
Activities & Budget of the Sex Equity Specialist . . . . .	28
Programs & Projects Developed with Sex Equity Grants . . . . .	29
Publications . . . . .	31
Sex Equity Evaluations . . . . .	33
BIBLIOGRAPHY . . . . .	36



## SEX EQUITY PROVISIONS

of

### PUBLIC LAW 94-482, AS AMENDED BY TITLE II, 1976 EDUCATION AMENDMENTS

The basic components of this law are outlined below. The following pages outline the functions of the sex equity coordinator, and outline the required and allowed services as specified by the law.

1. Requirements for administration of state and local vocational education programs.
  - (a) States must designate full-time personnel to eliminate sex discrimination and sex stereotyping, and expend at least \$50,000 to support the personnel in carrying out specified functions (see page 25).
  - (b) State and local advisory councils for vocational education must have representation reflecting women's concerns.
  - (c) Each state must include policies to eradicate sex discrimination, and a program to meet the needs of four special groups, in its five-year plan for vocational education. (see page 26)
  - (d) Each state must review annual program plans for compliance with policies stated in the five-year program plan.
  - (e) Each state must evaluate programs and projects with respect to the services provided to women.
2. Provisions related to state use of federal vocational funds (see pages 26, 27).
  - (a) States are required to expend basic grants for certain services, and to use funds allotted to them in separate authorization for other services.
  - (b) States may expend funds for other specified services under basic grants, and for other specified services under the program improvement and supportive services section of their block grant.
3. Requirements for national vocational education programs.
  - (a) The U.S. Commissioner of Education was required to complete a national study of sex bias in vocational education by October 1978.
  - (b) A national system for reporting information on students was to be in operation by October 1978, and states are required to submit data for this system on a yearly basis.
  - (c) The National Advisory Council on Vocational Education must include in its membership minority and non-minority men and women with knowledge of women's issues and concerns.
  - (d) Five percent of federal vocational education funds are reserved for programs of national significance, some of which may be programs to overcome sex bias in vocational education.

## FUNCTIONS OF THE SEX EQUITY SPECIALIST

as required by

### TITLE II, 1976 EDUCATION AMENDMENTS

Title II requires each state to provide "full-time personnel and functions to eliminate sex discrimination and sex stereotyping." The law also says that "Each state shall expend not less than \$50,000 in each fiscal year from funds available under basic grants to support the personnel working full time to carry out the functions set forth ..."

The following functions are specified:

- (1) "Take action necessary to create awareness of programs and activities in vocational education designed to reduce sex bias and sex stereotyping in all vocational education programs, including assisting the State board in publicizing the public hearings on the State plan ..."
- (2) "Gather, analyze, and disseminate data on the status of men and women students and employees in vocational education programs of the State."
- (3) "Develop and support actions to correct problems brought to the attention of this personnel through activities carried out ... including creating awareness of the Title IX complaint process."
- (4) "Review the distribution of grants and contracts by the State board to assure that the interests and needs of women are addressed in all projects assisted under this Act."
- (5) "Review all vocational education programs (including work-study programs, cooperative vocational education programs, apprenticeship programs, and the placement of students who have successfully completed vocational education programs) in the State for sex bias."
- (6) "Monitor the implementation of laws prohibiting sex discrimination in all hiring, firing, and promotion procedures within the State relating to vocational education."
- (7) "Assist local education agencies and other interested parties in the State in improving vocational education opportunities for women."
- (8) "Make available to the State board, the State advisory council, the National Advisory Council on Vocational Education, the State Commission on the Status of Women, the Commissioner, and the general public, including individuals and organizations in the State concerned about sex bias in vocational education, information developed under this section."
- (9) "Review the self-evaluations required by Title IX."
- (10) "Review and submit recommendations with respect to overcoming sex bias and sex stereotyping in vocational education programs for the five-year State plan and its annual program plan prior to their submission to the Commissioner for approval."

REQUIRED USE OF FUNDS FOR SEX EQUITY  
as specified in  
TITLE II, 1976 EDUCATION AMENDMENTS

In addition to the minimum of \$50,000 which states must expend for the support of full-time sex equity personnel, states must spend basic grant funds for certain services, and must spend additional funds for other services.

BASIC GRANT FUNDS

In accordance with the state's approved five-year and annual program plans, basic grant services must be used to provide vocational education services for four special groups:

- (1) "Persons who had been homemakers but who now, because of dissolution of marriage, must seek employment."
- (2) "Persons who are single heads of households and who lack adequate job skills."
- (3) "Persons who are currently homemakers and part-time workers but who wish to secure a full-time job."
- (4) Women and men who now hold jobs traditional for their sex and who wish to seek employment in nontraditional job areas.

These services must include three components: "organized educational programs necessary to prepare these special groups for employment;" "special courses preparing these individuals in how to seek employment;" and "provision of placement service for the graduates of these programs."

SEPARATE AUTHORIZATION FUNDS

State must use funds allocated for consumer and homemaking education to support specified programs, including programs which:

- (1) "Encourage participation of both males and females to prepare for combining the roles of homemakers and wage earners."
- (2) "Encourage elimination of sex stereotyping by promoting the development of curriculum materials which deal with: increased numbers of women working outside the home; increased numbers of men assuming homemaking responsibilities; changing career patterns of men and women; and ... laws relating to equal opportunity in education and employment."
- (3) "Encourage eligible recipients to operate outreach programs ... giving consideration to special needs" of groups such as single parents and others.
- (4) "Prepare males and females who have entered or are preparing to enter into the work of the home."



## OPTIONAL USE OF FUNDS FOR SEX EQUITY specified in TITLE II

Basic grant funds may be used for a variety of purposes, some of which are:

- (1) "Industrial arts programs which are designed to meet the purposes of this Act (including the elimination of sex stereotyping)"
- (2) "Support services for women who enter vocational education programs designed to prepare individuals for employment in jobs which have been limited to men:"
  - (a) "Counseling women entering and enrolled in non-traditional programs on ... ways of overcoming difficulties ..."
  - (b) "Job development" including "information concerning the world of work," "bringing persons employed in nontraditional fields into the schools, as well as opportunities for women students to visit the work place"
  - (c) "Job follow-up support ... to assist women students in finding employment relevant to their training and interest"
- (3) "Day care services for children of students (both male and female and including single parents)"

Program improvement and supportive services funds. Twenty percent of these funds may be used for any of six purposes, including the four listed below.

- (1) "Support of research programs, exemplary and innovative programs, and curriculum development programs"
  - (a) Research programs which may include "experimental, developmental, and pilot programs designed to test the effectiveness of ... programs to overcome sex bias and sex stereotyping" and "review and revision of curricula to insure that such curricula do not reflect stereotypes"
  - (b) Exemplary and innovative programs which must "give priority to programs and projects designed to reduce sex bias and stereotyping"
  - (c) Curriculum development which may include "materials designed to overcome sex bias and sex stereotyping" and "support services designed to enable teachers to meet the needs of individuals enrolled in programs traditionally limited to members of the opposite sex"
- (2) "Vocational guidance and counseling" which must be used to support one or more of eight activities. One of these activities is "training designed to acquaint counselors with the changing work patterns of women, overcoming sex stereotyping, assisting girls and women in selecting careers, and to develop improved counseling materials."
- (3) "Vocational education personnel training" which may include inservice training "to overcome sex bias and sex stereotyping"
- (4) "Grants to overcome sex bias and sex stereotyping for projects such as:"
  - (a) "Research projects on ways to overcome sex bias and sex stereotyping"
  - (b) "Development of curriculum materials free of sex stereotyping"
  - (c) "Development of criteria for use in determining whether curriculum materials are free from sex stereotyping"
  - (d) "Examination of current curriculum materials to assure that they are free of sex stereotyping" and
  - (e) "Training to acquaint guidance counselors, administrators, and teachers with ways of effectively overcoming sex bias and sex stereotyping, especially in assisting persons in selecting careers according to their interests and occupational needs rather than according to stereotypes."



## ACTIVITIES & BUDGET OF THE MINNESOTA SEX EQUITY SPECIALIST, 1978-1982

The following summary provides quantitative information about activities of the Minnesota sex equity specialist since the position was established in April 1978. A summary of activities is provided on page 12 of this report, and a summary of functions as required by Title II is provided on page 25.

### SERVICES & MATERIALS

Sex equity training for staff and students has been provided through 2 statewide training conferences, 10 regional training workshops, and 3 university credit courses developed through the teacher education service. In addition, workshops and presentations have been provided for:

- 150 groups of post-secondary administrators, counselors, and teachers;
- 85 groups of secondary administrators, counselors, and teachers; and
- 200 groups of students.

Sex equity evaluations have been conducted as part of the on-site evaluation process. Since fiscal year 1979, 26 area vocational-technical institutes and 15 secondary centers have been evaluated. (See pages 33-35.)

Publications have included 4 technical assistance publications prepared by the specialist's office, 9 statewide data analysis publications prepared by the Council on the Economic Status of Women, and 9 publications prepared under contract with local projects. (See pages 31 and 32.)

Funding assistance for local projects and special statewide projects has been provided through 56 grants, with a total dollar amount of \$435,006. (See pages 29 and 30.)

### BUDGET

The table below shows the amount and source of funds in the Minnesota sex equity specialist's budget. For each year, total funding for sex equity represents about one-tenth of 1 percent of all funds allocated for secondary and post-secondary vocational education in Minnesota. (All sex equity funds are federal funds.)

<u>FUNDING SOURCE</u>	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
Basic Grant	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Basic Grant, Special Groups	10,000	10,000	10,000	10,000
Program Improvement & Support	80,000	80,000	105,000	80,000
TOTAL - All Sources	\$ 140,000	\$ 140,000	\$ 165,000	\$ 140,000

PROGRAMS & PROJECTS DEVELOPED WITH SEX EQUITY GRANTS, 1979-1982

FISCAL YEAR 1979 (\$94,069)

- "Expanding Career Choices for Students in Rural Schools," Brainerd schools and Mid-State Cooperative Center. Secondary curriculum project. \$27,644.
- "New Alternatives at Work," St. Paul schools. Materials on career options. \$17,090
- "Minnesota AVTI Child Care Needs Assessment," Duluth AVTI. Survey. \$4,760.
- "Expanded Career Choices Program," Austin AVTI. Re-entry program. \$14,196.
- "Displaced Homemaker Pilot Project," Anoka AVTI. \$2,780.
- "Displaced Homemaker Pilot Project," Minneapolis AVTI. \$3,500.
- "Displaced Homemaker Pilot Project," 916 AVTI. \$3,500.
- "Displaced Homemaker," 916 AVTI. Sound-slide presentation. \$1,755.
- "Phase I - Planning Project to Expand Career Options for Secondary Students," Minnesota Valley Cooperative Center. Statewide plan. \$2,094.
- "Women's Reality." Workshop for AVTI administrators. \$750.
- "Monitoring and Evaluating Sex Discrimination and Sex Stereotyping in Vocational Education in Minnesota," Council on the Economic Status of Women. Report. \$16,000.

FISCAL YEAR 1980 (\$132,250)

- "Monitoring and Evaluating Sex Discrimination and Sex Stereotyping in Vocational Education in Minnesota," Council on the Economic Status of Women. Report. \$15,000.
- "Expanding Career Choices," Austin AVTI. Continuation of re-entry program. \$29,000.
- "Expanding Career Choices for Students in Rural Schools," Brainerd schools. Continuation of curriculum project. \$12,850.
- "Expanding Career Choices for Students in Rural Schools," Mid-State Cooperative Center. Continuation of curriculum project. \$11,900.
- "Expanding Career Choices for Women in Agricultural Occupations," Canby AVTI. Recruitment, retention, and placement project. \$23,000.
- "Women in Non-Traditional Trade, Technical, & Industrial Jobs & Training," Willmar AVTI. Sound-slide presentation. \$2,200.
- "Secondary Vocational Sex Equity Coordinators Project," Minnesota Valley Cooperative Center. Technical assistance and resources. \$13,000.
- "Secondary Vocational Sex Equity Coordinators Project," Mid-State Cooperative Center. Technical assistance and resources. \$13,000.
- "Displaced Homemaker Planning Grant," Granite Falls AVTI. \$3,000.
- "Expanding Career Choices," Austin AVTI. Child care component. \$300.
- "Displaced Homemaker Planning Grant," Moorhead AVTI. \$3,000.
- "Displaced Homemaker Planning Grant," Willmar AVTI. \$3,000.
- "Displaced Homemaker Planning Grant," Jackson AVTI. \$3,000.

FISCAL YEAR 1981 (\$124,117)

- "Job-Related Needs of Minnesota Women," Council on the Economic Status of Women. Report. \$2,676.
- "Secondary Vocational Sex Equity Coordinators Project," Minnesota Valley Cooperative Center. Continuation of technical assistance and resources. \$15,000.
- "Secondary Vocational Sex Equity Coordinators Project," Mid-State Cooperative Center. Continuation of technical assistance and resources. \$22,500.
- "Minority Women = Equity in Vocational Education," Minneapolis AVTI. Enrollment, retention and employment. \$16,200.
- "Dissemination for Project GATE," Canby AVTI. Workshops. \$15,502.
- "Sex Equity Data Analysis," Council on the Economic Status of Women. Report. \$10,000.
- "Statewide Vocational Sex Equity Training Conference." Administrators, counselors, and instructors. \$7,572.
- "Expanded Career Choices," Austin AVTI. Continuation of re-entry program. \$5,000.
- "Career Skills for Women," Staples AVTI. Individualized instruction packets. \$5,000.
- "Expanded Career Choices," Austin AVTI. Child care component. \$200.
- "Technical Handbook for Displaced Homemaker Workshops," Jackson AVTI. \$600.
- "Feasibility Study for Services to Displaced Homemakers," Jackson AVTI. Survey. \$400.
- "Career Planning & Information Center," Granite Falls AVTI. \$7,080.
- "Adults in Career Transition," Minneapolis AVTI. Publicity materials. \$5,000.
- "Minnesota Graduate Vocational Education Support Program." Intern. \$4,987.
- "Expanded Career Choices," Faribault AVTI. Child care. \$200.
- "New Alternatives for Work," Mankato AVTI. Publication. \$6,200.

FISCAL YEAR 1982 (\$84,570)

- "State Vocational Conference." Sex equity workshops. \$5,320.
- "Secondary Vocational Equity Project," Minnesota Valley Cooperative Center. Continuation of technical assistance and resources. \$15,000.
- "Sex Equity Data Analysis," Council on the Economic Status of Women. Report. \$12,000.
- "Expanded Career Choices Program," Austin AVTI. Continuation of re-entry program. \$10,000.
- "Expanded Career Choices Program," Albert Lea AVTI. Re-entry program. \$4,500.
- "Minnesota Graduate Vocational Education Support Program." Intern. \$6,896.
- "Minority Women = Equity in Vocational Education," Hennepin Technical Center. Continuation of project. \$11,335.
- "Try Non-Traditional Project," Staples AVTI. Career awareness. \$3,000.
- "Minnesota Graduate Vocational Education Support Program." Intern. \$2,089.
- "Expanded Career Choices Program," Red Wing AVTI. Career awareness. \$4,500.
- "Expanded Career Choices Program," Faribault AVTI. Career awareness. \$4,500.
- "Try Non-Traditional Project," Staples AVTI. Supplemental funding. \$650.
- "Expanded Career Choices," Albert Lea AVTI. Supplemental funding. \$780.
- "Expanded Career Choices," Pine City AVTI. Career awareness. \$2,000.
- "Expanded Career Choices," Faribault AVTI. Child care. \$2,000.



## PUBLICATIONS

The following are publications related to sex equity in Minnesota's vocational education system, developed between 1978 and the present. Additional publications which were used in the preparation of this report are listed in the bibliography on page 36.

### PREPARED BY THE OFFICE OF THE SEX EQUITY SPECIALIST

Handbook to Develop a Plan of Action for Equity in Vocational Education.

Parents Handbook. Vocational Educators and Parents Can Work Together in Preparing Students Today For Tomorrow's World.

Sex Equity in Minnesota Vocational Education Programs: State of the Art 1977-1982.

Vocational Equity Self-Evaluation Guide.

### PREPARED UNDER CONTRACT: STATEWIDE DATA ANALYSIS

The following publications were prepared by the Council on the Economic Status of Women.

Vocational Education: Program & Staff.

Vocational Education: Program & Staff AVTI Statistical Supplement.

A Survey of Female Students in Non-Traditional AVTI Programs.

Vocational Education Summary Report, 1978-79.

Minnesota Women: Jobs & Training.

Vocational Education Sex Equity Report: Secondary 1981.

Vocational Education Sex Equity Report: Post-Secondary 1981.

Vocational Education Sex Equity Report: Secondary 1982.

Vocational Education Sex Equity Report: Post-Secondary 1982.



PUBLICATIONS, continued

PREPARED UNDER CONTRACT: LOCAL PROJECTS

A Training Packet for Career Awareness for Women, St. Cloud AVTI.

A Woman's Place...Vocational Education in Minnesota, Jackson AVTI.

Career Learning Packages, Staples AVTI. Titles in this series include:

- "How Do I Decide?"
- "Setting Goals"
- "Risk Taking"
- "Assertiveness"
- "Stress and Time Management"
- "Resumes"
- "Cover Letters"
- "Interviews - The Fruits of Your Labor"
- "Going Back To Work"
- "Non-Traditional Jobs"
- "Women In The Field of Work"
- "Now That You Have Your Job"
- "Women in Transition"
- "Values"
- "Discrimination"

ENTER: Exploring Non-Traditional Employment Roles, Granite Falls Public Schools.

Expanded Career Choices: An Exemplary Program, Austin AVTI.

GATE: Growth in Agriculture Through Equality, Canby AVTI.

Minority Women: Let Vocational-Technical Education Take You 1 Step Beyond In Your Career, Minority Women=Equity in Vocational Education Project, Minneapolis AVTI and Hennepin Technical Center.

Sex-Fair Counseling: Policy and Process, St. Cloud AVTI.

So You Have Decided to Go Back to School? A guide for students seeking information about nontraditional careers, child care, community services, support groups. St. Cloud AVTI.

## POST-SECONDARY SEX EQUITY EVALUATIONS

Over the four-year period from fiscal year 1979 (FY79) to the present, 26 of the 33 AVTIs have received on-site sex equity evaluations. In 1979, a standardized format was developed for evaluations, which has enabled some comparison among schools and some comparison over time.

Although no standard format was available prior to 1979, a review of comments from earlier evaluations demonstrates dramatic improvement in these early years of sex equity efforts. Four schools were evaluated in FY78. At that time, only one of these schools had undertaken active sex equity efforts, and one school showed open hostility to sex equity in refusing to develop a grievance procedure as required by the law. All four schools have now been re-evaluated, and the more recent evaluations show that three of the four schools had taken action in accordance with the recommendations made in FY78.

In FY78, virtually no career information was provided to students; recruitment of displaced homemakers, minority women, and nontraditional students was extremely limited or non-existent; there were no support groups for nontraditional students, and no services such as transportation, child care, or referral to these services; frequent negative remarks were made to female nontraditional students by instructors and male students; catalogs and curriculum materials were almost universally stereotyped; almost no staff were employed in teaching areas nontraditional for their sex, and virtually no efforts were being made to improve this situation.

In contrast, almost every evaluation conducted since 1978 shows a general pattern of improvement. Although evaluations do not contain statistical information, narrative comments can be summarized as "mostly positive," "both positive and negative remarks," and "mostly negative remarks" for each of seven areas. These areas of effort are summarized below.

Awareness of Title IX and sex equity generally. In fiscal year 1979 only one of the six schools evaluated received mostly-positive ratings in this area, while three of the schools showed little or no awareness of the law. In the following year, six of the seven schools demonstrated some awareness. In FY81, each of the six schools evaluated showed some awareness, and two schools received almost all positive comments for their awareness of the law. In each of the three schools evaluated to date in FY82, each received mostly-positive comments in this area.

Community and Public Awareness. This factor refers to outreach activities to the community, including the representation of women on local advisory committees. In FY79, half of the schools evaluated in this area had made minimal efforts in this area, and half apparently had done almost nothing. In FY80, each of the seven schools evaluated had made some efforts to increase community awareness. Four of the six schools evaluated in FY81, and two of the three schools evaluated in FY82, received mostly positive comments in this area.

Orientation and Counseling. Questions in this area focused on efforts to recruit non-traditional students and to provide career information and support to potential students. Half of the schools evaluated in FY79 received mostly positive comments in this area. Although the number of schools receiving mostly-favorable ratings dropped in the next year, comments have improved steadily since that time. Of the three schools evaluated to date in FY82, two received mostly-positive comments while the third received both positive and negative comments.

Instructional Programs and Services. This factor refers to retention efforts for non-traditional students and supportive services to other special groups. In FY79, four of the six schools evaluated could not be rated favorably in this area. In both FY81 and FY82, all schools received at least some positive comments on the efforts at each AVTI to provide supportive services or referral to community resources.

Staff Development. Evaluators questioned teachers and administrators to determine whether they had received information about sex equity, and whether they were aware of resources to ensure sex-fairness. In FY79, four of the five schools evaluated in this area could not be rated favorably. Dramatic improvement was evident the following year, with four of the seven schools receiving mostly positive ratings and the other three receiving some favorable comments on their efforts. However, ratings have been less favorable in FY81 and FY82 -- possibly because evaluators expect a higher level of awareness after five years of effort. In FY81, two of the six schools evaluated received mostly negative comments in this area. In FY82, all three schools evaluated have received a mix of positive and negative comments on staff development efforts.

Curriculum. Steady improvement is evident in efforts to screen curriculum materials for sex bias. In FY79, only one of the five schools evaluated in this area received any positive comments. Half of the schools evaluated in FY80, and two-thirds of those evaluated in FY81, received some favorable ratings. In FY82, all three schools evaluated received favorable ratings in this area.



Employment. Prior to FY81, most comments in this area refer to student employment opportunities and efforts to make employers aware of sex equity. Considerable improvement was evident between FY79 and FY80, with all but one school receiving favorable comments on their efforts in FY80. In FY81 and FY82 this factor relates primarily to staff employment issues, and a significant obstacle is the low turnover rate of AVTI staff. However, improvement is evident. In FY81, three schools appear to have done almost nothing to balance staff assignments by sex. All three schools evaluated to date in FY82 received favorable ratings in this area.

In summary, on-site evaluations show improvement in every area of sex equity efforts at AVTIs. There is also evidence that the evaluation process is helpful in indicating specific steps schools can take for further improvement. For example, in earlier years curriculum efforts focused on screening of new materials prior to purchase. In more recent years, added efforts have been made to continue screening and also to train staff in development of new materials and in ways to use biased materials in a more appropriate way.

The most successful efforts overall appear to be in the areas of awareness of the law, community relations, and curriculum. Evaluators feel that on-going efforts are needed to improve orientation and counseling, services to students, and recruitment of students for non-traditional training. Areas which appear to be most in need of future attention are staff development, with frequent comments to the effect of "Sex equity awareness had not reached all instructors," and employment issues such as representation and earnings of male and female staff.



## BIBLIOGRAPHY

Harrison, Laurie R. and Dahl, Peter R., "Vocational Education Equity Study," American Institutes for Research, April, 1979.

The Institute for Women's Concerns, "Increasing Sex Equity: The Impact of the 1976 Vocational Education Amendments on Sex Equity in Vocational Education," a report of the National Advisory Council on Vocational Education and the National Advisory Council of Women's Educational Programs, December 1980.

Minnesota Council on the Economic Status of Women, "Women in Minnesota," July 1980.

Minnesota Department of Education, Vocational-Technical Division, evaluation summaries, grant distribution reviews, and unpublished materials.

Minnesota State Planning Agency, Human Resources Planning, "The Economic Status of Minnesota's Elderly," March 1981.

U.S. Bureau of the Census, Current Populations Reports, Series P-23, Special Studies No. 112, "Child Support and Alimony: 1978," September 1981.

U.S. Bureau of the Census, Current Population Reports, Special Studies, Series P-23, No. 107, "Families Maintained by Female Householders 1979-79," October 1980.

U.S. Bureau of the Census, "Perspectives on Working Women: A Databook," October 1980.

U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 363, "Population Profile of the United States: 1980," June 1981.

Wider Opportunities for Women, Inc., Women's Work Force, "The Feminization of Poverty," December 1981.

