The Role of Women in Vocational Education and Development: A Literature Review.

A literature review was conducted to determine how women's role was seen in vocational education and development. The study reviewed the historical background of occupational gender segregation related to vocational education, reviewed and described the role of women and division of labor, and summarized labor market statistics concerning females in nontraditional vocational areas. Some of the conclusions drawn from the literature review are as follows: (1) vocational education grew out of the necessity to train workers in smokestack industries, but it has expanded its mission and clientele since the late 19th century; (2) sex equity would be socially useful in U.S. society; (3) more women in all age categories will enter the work force full time in a wider variety of occupations; (4) development has been viewed as the panacea for the economic ills of less-developed countries, yet in all countries women have lost ground relative to men as development has progressed; (5) public policy supports but does not ensure the entrance of women into nontraditional employment and training; (6) barriers inhibiting entry of women into nontraditional training and employment are complex and interrelated; and (7) strategies to overcome barriers must focus on changing institutions and providing individual support to women. (23 references) (KC)
The Role of Women
In Vocational Education and Development:
A Literature Review

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INTRODUCTION

Development planners once assumed that development efforts aimed at people in general would automatically benefit everyone, male and female. For a variety of reasons, such as their relative invisibility in national economic planning, and their traditionally absence in decision making, women have been virtually left out of the development process in many countries.

Various studies have shown that women's lives have worsened because of development. Deforestation, poor land management and an emphasis on cash crops (known in East Africa as "men's crops") have shrunk the arable land available to the developing world's food producers, most of whom are women. At the same time, the decay of the environment has forced women to spend more hours each day, often walking greater distances, to find water and firewood for their families (Helmore, 1985).

Vocational education is a particularly useful field to examine because its framework has tended to be, and is presently, more responsive to political and economic factors than to philosophical positions (Ray, 1968). As many writers have suggested, inequalities exist or are prolonged for economic and work place reasons. Economic factors have been used as reliable indicators of whether and in what areas equity has been achieved (Harvey and Noble, 1985).

PURPOSE AND OBJECTIVES

The primary purpose of this study was to review the literature concerning the role of women in vocational education and development.

The specific objectives of the study were:

1. To review the historical background of occupational gender segregation as related to vocational education.
2. To review and describe the role of women and division of labor.
3. To summarize labor market statistics concerning females in non-traditional vocational areas.
VOCATIONAL EDUCATION AS RELATED TO WORK ROLES AND OCCUPATIONAL CHOICE

In Germany, France and England during the 1800's, manual training was a central part of the curriculum for the lower and middle classes (Culver, 1986).

In the early part of the nineteenth century, thousands of women first became part of the labor force in textile factories (Foner, 1987), or by selling or trading fruits and vegetables (Marshall & Paulin, 1987).

Despite their growing numbers in the work force, women were perceived as "better" if they stayed home, tending the family and the house. Women during this time were trained in Domestic Instruction and Ornamental Instruction. It was seen as the duty of females to "regulate the concerns of very family" and so instruction geared toward making women good mothers or good "mistresses of families" was appropriate (Willard, 1987, p. 22). Ornamental instruction for the economically advantaged focused on drawing, painting, and "elegant penmanship, music, and the grace of motion". Such instruction was important because it was not nice to allow female youth "to seek amusements for themselves" (Willard, p. 24).

During the Civil War, women were employed as government clerks for the first time. As well as being trained differently from men, women would now be paid differently. Congress appropriated funds for the salaries of these women in 1864, but the appropriation set a cap of $600 a year for female government clerks, less than half the salary paid to male clerks (Baker, 1977, pp. 83 - 85).

In 1870, 88% of women gainfully employed were in 10 occupations, among them, domestic servant, seamstress, teacher, milliner, and nurse. By 1900, of 252 occupations listed by the U. S. Department of Labor, over 90% of women were in 25 of them (Marshall & Paulin, 1987). However, it was not until after the equal opportunities legislation of the 1950's, did it become illegal for employers to specify sex of applicants for job openings listed in the newspaper (Shaw & Shaw, 1987).

In 1980, females nationally represented 91% of students training as nursing assistants, 87% of those training for community health workers and 92% of students in cosmetology and secretarial sciences.

Similarly, 95% of students enrolled in electrical technology, 90% in electronics, 94% in appliance repair, 96% in carpentry, 95% in welding, and 96% in small engine repair, were males (Wells, 1983).
ROLE OF WOMEN AND DIVISION OF LABOR

Women in Africa, especially in the rural areas, are fully involved in all aspects of social and economic life. They do most of the seeding and harvesting and often do the cleaning, preparation of the fields and planting. In addition, they look after children and old people, clean, wash, cook and preserve food for the family and frequently help with the storing and marketing of the produce of the farm (Ahmed, 1985, p. 117).

The time spent on these activities varies according to season. In one survey in Kenya, it was found that women spend an average of 4.5 hours a day on the farm during low labor demand times and 6 - 9 hours a day in peak seasons, especially during the first and second weedings (Pala, 1976).

Studies in Lesotho (Development Alternatives, Inc., 1974), Zambia (UNECA/FAO/Netherlands Government, 1973), Swaziland and the Gambia (Caos, 1976) all revealed that women spend 9 - 10 hours a day in the fields during the busiest agricultural seasons.

By comparison, men in rural areas spend relatively little time at work in the fields and at home. This can be seen in Table 1.

TABLE 1
Division of Labor Between Men and Women

<table>
<thead>
<tr>
<th>Task</th>
<th>% of Total Labor</th>
<th>Men*</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land clearing</td>
<td></td>
<td>95</td>
<td>5</td>
</tr>
<tr>
<td>Turning the soil</td>
<td></td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>Planting</td>
<td></td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Hoeing &amp; weeding</td>
<td></td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>Harvesting</td>
<td></td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Transporting crops</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>from farm to home</td>
<td></td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Storing crops</td>
<td></td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Processing food crops</td>
<td></td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>Marketing excess crops</td>
<td></td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Trimming tree crops</td>
<td></td>
<td>90</td>
<td>10</td>
</tr>
<tr>
<td>Carrying water &amp; fuel</td>
<td></td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>Caring for domestic animals</td>
<td></td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Hunting</td>
<td></td>
<td>90</td>
<td>10</td>
</tr>
<tr>
<td>Feeding &amp; caring for children, men &amp; aged</td>
<td></td>
<td>5</td>
<td>95</td>
</tr>
</tbody>
</table>

* May be with or without some help from children.


(3)
Apart from the question of unequal work burden reflected by the prevailing sexual division of labor, the division of labor between men and women is seen to be class specific in that, where as women in landless households are those with small holdings assists in almost all stages of agricultural production, women in middle peasant strata and above consider agricultural production as exclusively men's work (often that of tenants) (Tadesse, 1982).

**WOMEN AND NONTRADITIONAL WORK**

Nontraditional jobs for women are defined as those jobs in which 75% or more of those employed are men (NCWW, 1989). Nontraditional students are those students, both males and females, who enroll in areas of study traditionally considered as appropriate for the opposite sex (Culver & Burge, 1985).

In 1988, 51.7 million women were employed; 4.7 million women (9%) of all working women were employed in nontraditional occupations as revealed in Table 2 (NCWW, 1989).

<table>
<thead>
<tr>
<th>Occupational Categories</th>
<th># of women in nontraditional jobs</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial, Professional</td>
<td>600,000</td>
<td>architect, lawyer</td>
</tr>
<tr>
<td>Technical, Sales,</td>
<td>600,000</td>
<td>pilots, electronic</td>
</tr>
<tr>
<td>Administration</td>
<td>300,000</td>
<td>technicians</td>
</tr>
<tr>
<td>Service</td>
<td></td>
<td>barbers, detectives</td>
</tr>
<tr>
<td>Craft, Production,</td>
<td>1,200,000</td>
<td>auto mechanic,</td>
</tr>
<tr>
<td>Repair</td>
<td></td>
<td>butcher, plumber</td>
</tr>
<tr>
<td>Operators, Fabricators</td>
<td>1,500,000</td>
<td>typesetter, truck</td>
</tr>
<tr>
<td>Laborers</td>
<td>500,000</td>
<td>driver</td>
</tr>
<tr>
<td>Farm, Forestry, Fishing</td>
<td></td>
<td>farmer, logger</td>
</tr>
</tbody>
</table>

4,700,000

Between 1983 and 1988, the number of women in nontraditional jobs remained relatively unchanged at 4% of the total workforce. Women in nontraditional jobs earn 20% to 30% more than women in traditional occupations (NCWW, 1989).

### Table 3
**Distribution of Women's Median Weekly Pay in Traditional Female and Traditional Male Jobs**

<table>
<thead>
<tr>
<th>Traditional Female Jobs</th>
<th>Women's Median Weekly Pay</th>
<th>Traditional Male Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretary</td>
<td>$312</td>
<td>$392</td>
</tr>
<tr>
<td>Child Care Worker</td>
<td>$179</td>
<td>$281</td>
</tr>
<tr>
<td>Textile Sewing</td>
<td>$191</td>
<td>$440</td>
</tr>
<tr>
<td>Machine Operator</td>
<td>$191</td>
<td>$440</td>
</tr>
<tr>
<td>Data Entry Keyer</td>
<td>$298</td>
<td>$335</td>
</tr>
</tbody>
</table>


When women work in the same occupations as men they still do not earn equal pay as indicated in Table 4.

### Table 4
**Distribution of Men's and Women's Wage in the Same Occupations**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Women's Wage</th>
<th>Men's Wage</th>
<th>Wage Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanic/Repairer</td>
<td>$392</td>
<td>$441</td>
<td>11%</td>
</tr>
<tr>
<td>Motor Vehicle Operator</td>
<td>$289</td>
<td>$383</td>
<td>27%</td>
</tr>
<tr>
<td>Mail Carrier</td>
<td>$440</td>
<td>$505</td>
<td>13%</td>
</tr>
<tr>
<td>Construction Worker</td>
<td>$335</td>
<td>$423</td>
<td>21%</td>
</tr>
</tbody>
</table>


During the period between 1983 - 1988, the greatest increase of women entering nontraditional jobs has been in the professional occupations, (see Table 5).

### Table 5
**Distribution of Females Entering Professional Occupations**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percent Female 1983</th>
<th>Percent Female 1988</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lawyer</td>
<td>15.3%</td>
<td>19.4%</td>
</tr>
<tr>
<td>Physician</td>
<td>15.8%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Photographer</td>
<td>20.7%</td>
<td>30.7%</td>
</tr>
<tr>
<td>Mgr., Marketing/Advertising</td>
<td>21.8%</td>
<td>32.0%</td>
</tr>
</tbody>
</table>

Even though most working women (74%) are in nonprofessional occupations, gains in those nontraditional jobs have been slight over, as revealed by Table 6.

**TABLE 6**

Percent Female in Nontraditional Jobs
During 1983 - 1988

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percent Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1983</td>
</tr>
<tr>
<td>Electrician</td>
<td>1.5%</td>
</tr>
<tr>
<td>Upholsterer</td>
<td>26.2%</td>
</tr>
<tr>
<td>Machinist</td>
<td>4.1%</td>
</tr>
<tr>
<td>Telephone Installer</td>
<td>9.9%</td>
</tr>
</tbody>
</table>


Differences in race, age and marital status are minimal between women working in traditional jobs and women working in nontraditional jobs as indicated in Table 7.

**TABLE 7**

Distribution of Race, Age and Marital Status Between Women Working in Traditional Jobs and Women in Nontraditional Jobs

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>% of All Women Working in:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Traditional</td>
</tr>
<tr>
<td>Race</td>
<td>85%</td>
</tr>
<tr>
<td></td>
<td>15%</td>
</tr>
<tr>
<td>Age</td>
<td>48%</td>
</tr>
<tr>
<td></td>
<td>52%</td>
</tr>
<tr>
<td>Marital Status</td>
<td>58%</td>
</tr>
<tr>
<td></td>
<td>42%</td>
</tr>
</tbody>
</table>


A. Public Policy

1. **JOB TRAINING PARTNERSHIP ACT**
   - Provides federal resources for employment and training.
   - Authorizes funding for basic skills and job training in nontraditional areas.
   - Aims to reduce welfare dependency and increase employment earnings.
   - Targets services to special populations including women, minorities, handicapped persons and welfare recipients.
- JTPA serves only 5% of its eligible population.
- 70% of those successfully completing JTPA programs are placed in jobs at less than $5 an hour.
- In 1986 little more than 9% of all females who were enrolled in classroom training were trained for non-traditional jobs.

2. CARL PERKINS ACT
- Provides federal resources for vocational education.
- Focuses on sex equity in vocational education and encourages nontraditional enrollments.
- Targets single parents and homemakers through sex equity programs.
- Sex segregation in vocational enrollments has changed little in 20 years.
- In 1988 only 7.2% of school districts requested and spend sex equity funds.
- In 1988 only 5.4% of school districts received awards under single parent set asides.
- Without strong placement assistance, many female students have difficulty finding nontraditional employment after completing training.

3. TITLE VII OF THE CIVIL RIGHTS ACT OF 1964
- Prohibits discrimination on the basis of sex, race, color, religion or national origin in determining wages.

4. EQUAL EMPLOYMENT OPPORTUNITY COMMISSION GUIDELINES OF 1980
- Interpret Title VII as prohibiting sexual harassment.
- Define two forms of sexual harassment:
  - Quid Pro Quo - submission as a condition of employment; and
  - Hostile Environment - unwanted behavior that interferes with job performance.

5. TITLE IX OF THE EDUCATIONAL ACT AMENDMENT OF 1972
- Prohibits discrimination on the basis of sex by educational institutions receiving federal funds.

6. EQUAL PAY ACT OF 1973
- Requires an employer to pay equal wages for men and women who work in the same establishment and whose jobs require the same skill, responsibility and work conditions.
- Exempts pay differences based on seniority, merit system, production or a factor other than sex.
7. **EXECUTIVE ORDER 11246**
   - Prohibits discrimination by federal contractors and requires them to undertake affirmative action for women and minorities.
   - Enforced by Department of Labor's Office of Federal Contract Compliance Programs.


**B. Barriers**

1. **SOCIAL/CULTURAL**
   - Socialization to traditional female roles
   - Unsupportive family and friends
   - Negative attitudes of classmates and co-workers
   - Lack of self-confidence and assertiveness
   - Lack of female role models
   - Limited experience with tools and mechanical operations

2. **EDUCATION AND TRAINING**
   - Limited information provided about nontraditional options
   - Females directed toward traditional classes
   - Lack of support for sex equity efforts by instructors and other personnel
   - Lack of prerequisite classes such as math and science
   - Limited access to on-the-job training and apprenticeships
   - Lack of support services—child care, transportation, counseling, etc.
   - Sexual harassment in classrooms
   - Isolation in classrooms

3. **ON-THE-JOB**
   - Discrimination in hiring, firing, promotion or layoffs on basis of sex, race, age, physical build/ability
   - Sexual harassment on-site
   - Isolation on the work-site
   - Lack of support from unions
   - Lack of support services

4. **SEXUAL HARASSMENT**
   Women in nontraditional jobs or training are at greater risk of sexual harassment.
   - Unwelcome behaviors can include teasing, jokes, remarks and questions, deliberate touching; letters, telephone calls or materials of a sexual nature; pressure for sexual favors; sexual assault.
a. Sexual harassment is against the law.
   - Title VII of the 1964 Civil Rights Act has been interpreted through the Equal Employment Opportunity Commission Guidelines of 1980 as prohibiting sexual harassment.

b. Employers can be held liable for sexual harassment.
   - 1986 Supreme Court case (Meritor Savings Bank v. Vinson) established right to seek legal remedy under Title VII.
   - Subsequent decisions define liability, calling for explicit and timely actions by employers to prevent and end harassment.

c. Specific steps to take when faced with sexual harassment.
   - Tell the harasser to stop the offensive behavior.
   - Document all incidents of harassment.
   - Notify your supervisor, union representative or other appropriate person of the harassment.
   - Know your company or school policy on sexual harassment and follow its procedures.
   - Consider filing a formal grievance or complaint if the above steps do not remedy the situation.
   - Stay on the job.
   - Find support from family, friends or other groups to help you through the situation.

Source: NCWW, (1989)

C. Strategies

1. INSTITUTIONAL CHANGE
   - Enforce Title VII, Title IX, Executive Order 11246
   - Use vocational education funds for nontraditional sex equity programs
   - Target women for nontraditional training by JTPA programs
   - Establish and enforce policies against sexual harassment in schools and businesses
   - Train all employees on sexual harassment prevention
   - Provide in-service training on sex equity for school personnel
   - Hire female instructors in nontraditional programs
   - Target recruitment messages; review materials for bias
   - Provide information on nontraditional careers to families
2. **INDIVIDUAL SUPPORT**
   - Provide career exploration activities
   - Require 3 or more women on work crews
   - Assist with child care and other support services
   - Organize support groups for women working in non-traditional jobs
   - Establish support groups for female students in non-traditional co-ed training classes
   - Include assertiveness training for women as part of an overall curriculum
   - Develop mentorship programs
   - Establish scholarship for nontraditional students
   - Recognize the achievements of nontraditional students


**DISCUSSION**

The literature reviewed and presented in the previous sections of this paper lead to the following conclusions, discussion and recommendations.

According to Camp (1983) vocational education grew out of the necessity to train workers in smokestack industries. Just as American economic and social systems have changed since the late nineteenth century, so too has vocational education expanded its mission and clientele.

There is evidence from the literature which suggest the social utility of sex equity in our society. According to Burge & Culver, (1989) women and men could truly aspire to occupations for which they have aptitude, knowledge, and ability, not just those dictated by traditional gender assignments.

Futurists' predictions about the changing make-up of the work force indicate that more women in all age categories, mothers of young children and single mothers, will be working full-time in a wider range of occupations (Johnson, Sum, & Weill, 1988). Men will continue to work outside the home for pay but will likely assume greater responsibilities in home and family roles (Berk, 1985).

Briefly stated, "Development" has been viewed as the panacea for economic ills of all less developed countries. Yet in virtually all countries and among all classes, women have lost ground relative to men. Development, by widening the gap between incomes of men and women, has not helped improve women's biases, but rather has had an adverse effect upon them (Tinker & Bramsen, 1976).
Development planners must begin to recognize women's dual roles and stop using mythical stereotypes as a base for their development plans. The first step is to recognize the actual contributions of women. A United Nations Economic Commission for Africa report shows that in all of Africa, in the traditional system, women perform 70 percent of the work in food production, 50 percent in storage, 100 percent in processing, 50 percent in animal husbandry, 90 percent in water supply, 80 percent in fuel supply, and 60 percent in marketing (United Nations, 1974).

Other conclusive information from the literature included the following:

- Public policy supports but does not ensure the entrance of women into nontraditional employment and training.
- Lack of enforcement weakens the intent of laws and policies supportive of women in nontraditional jobs.
- Barriers inhibiting entry of women into nontraditional training and employment are complex and inter-related.
- Strategies to overcome barriers must focus on changing institutions and providing individual support to women.

More research needs to be conducted to find out what women's role in society is. The need to integrate women into development is an attempt to rectify previous neglect of women by development planners and to fit women into plans where they previously have been left out.
REFERENCES


