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ABSTRACT

Changes in the U.S. economy have increased the number of 25 to 54 year old women in the work force to about 74 percent. However, most of these women are segregated in low-wage jobs. Women often fall into those jobs because of sex-stereotyped vocational education enrollment and gender-related barriers in education and in their family and socioeconomic lives. Vocational education can make a difference in helping women to achieve better-paying jobs by supplying support for nontraditional enrollees, such as role models, job placement services, information on dealing with discrimination and harassment, staff training on gender bias, screening for health concerns that conflict with occupation, and encouragement to continue training and upgrading skills. The 1990 Perkins Act provides that states must use 7 percent of their basic state grant to do the following for single parents, displaced homemakers, and single pregnant women: (1) provide, subsidize, reimburse, or pay for preparatory services, including basic academic and occupational skills and materials in preparation for vocational education and training that will furnish them with marketable skills; (2) make grants to eligible recipients for expanding preparatory services and vocational education services to increase their marketable skills; (3) make grants to community-based organizations for providing preparatory and vocational education services to them; (4) make preparatory services and vocational education and training more accessible to them by assisting with dependent care, transportation, supplies, and more flexible scheduling; and (5) provide information to inform them of vocational education programs, related support services, and career counseling. Three percent of the 1990 Perkins state grants must be used to promote sex equity by providing programs, services, and comprehensive career guidance, support services, and preparatory services for girls and women. (Contains 42 references.) (KC)

THE 1990 PERKINS: RAISING THE ACADEMIC AND OCCUPATIONAL ACHIEVEMENT OF WOMEN AND GIRLS

by Maureen Coyle-Williams and Carolyn Maddy-Bernstein

Educational barriers to female academic and occupational achievement have endured despite legislation prohibiting sex discrimination and research and development activities designed to combat sex bias, stereotyping, and discrimination in education. Moreover, years of trying with too little progress have contributed to cynicism and ambivalence toward these efforts (Muraskin, 1989). Still, researchers and policymakers maintain that gender, in addition to other learner characteristics, must be an important consideration in efforts to raise educational and occupational achievement (AAUW, 1992; Council of Chief State School Officers, 1990; Earle, Roach, & Fraser, 1987). This BRIEF focuses on vocational education's role in breaking down the barriers to academic and occupational achievement for women and girls.

What's Changing?

Very little has escaped the impact of the social and economic changes of the past 30 years. For women however, the changes have been particularly dramatic. While most women used to work full-time as homemakers, today, the majority work outside of the home (U.S. Department of Labor, Bureau of Labor Statistics [U.S. DOL BLS], 1991).

- In 1962, 43% of 25 to 54 year old women were working or looking for work outside their homes.
- In 1990, about 74% of women 25 to 54 years old were in the labor force.

The Bureau of Labor Statistics (1991) reports that women comprise 45% of today's workforce. A startling 60% of the increase in overall employment over the past 30 years is due to women. Women with children account for much of this increase (Johnston & Packer, 1989). From now until the year 2000, women are expected to comprise three fifths of the new entrants to the workforce (Reis & Stone, 1992).

Changes in the American economy have played a major role in drawing more women into the workforce. The number of low-paying jobs has been rising. At the same time, middle-level earnings have been falling (Mishel & Simon, 1988). As a result, many Americans have experienced an erosion of their standard of living. A second income has become a necessity for the growing number of families trying to maintain a middle class lifestyle (Johnston & Packer, 1989). Young single and two parent families have been especially hard hit (Johnson, Sum, & Weill, 1988; Levitan, Mangum, & Pines, 1989). Consequently, one American child in five lives in a family with an income below the federal poverty level. Nearly half of these families have incomes that are less than half the federal poverty level (National Commission on Children, 1991).

The increase in the proportion of mother-only families accounted for about half of the overall increase in child poverty from 1979 through 1987. Higher poverty rates among married-couple families, primarily because of the declining value of the father's wages, were largely responsible for the other half of the increase. (National Center for Children in Poverty, 1990, p. 27)

Families at risk of poverty include some with at least one full-time, full-year wage earner (Mishel & Simon, 1988).

Most Women Work Outside the Home

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In 1967, 1973, and 1979 a full-time, year-round job at minimum wage was more or less sufficient to support a family of three above the poverty level. Today, its value is 26.4% below the poverty line for a family of three, and even below the income necessary to keep a family of two out of poverty. (p. 43)

Women's Earnings Have Offset the Declining Value of Wages

As Americans have struggled with the falling value of wages over the past several years, more and more women have joined the workforce. Additional hours or weeks of work by women have prevented many families from slipping into—or further into—poverty (Johnson, Miranda, Sherman, & Weill, 1991; Levitan et al., 1989; Mishel & Simon, 1988). However, even though more Americans are in the workforce than ever before, income inequality has grown. A recent congressional study reported that between 1979 and 1989, incomes for two-parent families in the top 40% have increased while the bottom 60% experienced a decline (U.S. Senate, Joint Economic Committee, 1992). This study also found that increases in income inequality would have been even greater had they not been off-set by the earnings generated by wives.

Income Inequality Has Increased

For the past several years, expansions in the American workforce have supported the country's productivity growth. This observation, coupled with concern over the widening gap between the rich and poor and projections of a shrinking labor force, has sparked both concern and warnings. Analysts question how much longer these trends can be endured (The Commission on the Skills of the American Workforce, 1990).

America is headed toward an economic cliff. We will no longer be able to put a higher proportion of our people to work to generate economic growth. If basic changes are not made, real wages will continue to fall, especially for the majority who do not graduate from four-year colleges. The gap between economic 'haves' and 'have nots' will widen still further and social tensions will deepen. (p. 8)

Fundamental changes in our approach to work and education have been recommended as necessary responses to America's economic and social problems. The need to develop our human capital is widely acknowledged (The Commission on the Skills of the American Workforce, 1990; Johnston & Packer, 1987; The Secretary's Commission on Achieving Necessary Skills, 1992; U.S. Department of Education, 1991). However, while many education reform activities focus on populations with special needs, most efforts fail to acknowledge and respond to the impact of gender on educational and occupational outcomes. The extent to which such reforms can succeed is under question (AAUW, 1992).

What's Not Changing?

Low Wages

While females comprise a growing segment of our current and future workforce whose earnings are often vital to family well-being, their wages have remained low. Women comprise a disproportionate share of low wage earners. In 1986, two-thirds of the minimum wage workforce was female (Mishel & Simon, 1988). An estimated 43% of the women in the labor force earn wages below the poverty level as compared to 27% of the men (Wider Opportunities for Women, 1990). According to the National Commission on Working Women (1988):

In 1986, four and one-half million women were in the work force yet living in poverty. More than half of those women had children. (p. 4)

Fifty-one percent of all poor American families are headed by women; forty percent of these female heads of household are working. (p. 4)

Sole responsibility for supporting children compounds the impact of low earning-power and keeps millions of American women and their children in poverty. Teen parents, single parents, and displaced homemakers are among the most vulnerable to poverty (Displaced Homemakers Network, 1987).

- There are over 11 million women in the United States who have lost their main source of income because of divorce, separation, widowhood, disability, long-term unemployment of a spouse, or loss of eligibility for public assistance. Of these, approximately 40% were living below the U.S. Department of Labor poverty level and 21% were above the poverty level, but below the Bureau of Labor Statistics lower living standard (an income at which DOL estimates one can meet day-to-day expenses).

- Approximately 3 million American women are raising minor children without a spouse. More than three quarters of them are below the level at which DOL estimates one can meet day-to-day expenses.

Occupational Segregation

Occupational segregation accounts for the greatest differences between the incomes of women and men (Adelman, 1991; AAUW, 1992; Beck, 1989; National Commission on Working Women, 1988; U.S. DOL, BLS, 1991). Female-dominated occupations generally pay less than those held mostly by men. Moreover, both the likelihood and the impact of occupational segregation tends to be stronger for women from minorities and those who have disabilities (Lewis, 1985; National Commission on Working Women, 1988; Reis & Stone, 1992; Women and Disability Awareness Project, 1984).

In 1990, close to half (46%) of all women workers were employed in relatively low-paying service and administrative support occupations such as secretaries, waitresses, and health aides, and black females were more likely than white females to work in these occupations. (Reis & Stone, 1992, p. 307)

Sex-Stereotyped Vocational Enrollment Patterns

Not surprisingly, vocational enrollment patterns mirror occupational segregation. In spite of efforts over the last 20 years, women of all racial and ethnic groups remain underrepresented in vocational training programs that lead to higher paying jobs (Wirt, Muraskin, & Goodwin, 1989). The influence of gender on enrollment patterns is strongest for females with other risk factors. The following findings from the National Assessment of Vocational Education (Wirt et al., 1989) indicate that sex-stereotyped enrollment patterns are especially persistent for females with disabilities, those who are economically or academically disadvantaged, and teen parents.

- *Males who are disabled or who are academically disadvantaged* have enrollment patterns that resemble their nondisabled and academically advantaged counterparts.
- *Sex stereotyped enrollment patterns* are more common among people with disabilities and those with low socio-economic status.
- *Females with disabilities* earn considerably fewer credits in occupationally specific courses than any other group of students, lack access to business and office occupations, and are disproportionately enrolled in training for service occupations as well as nonoccupational vocational education.
- *Nearly half of all vocational credits earned by disabled and academically disadvantaged females* are in service occupation courses or consumer and home economics.
- *Programs for displaced homemakers* tend to be short term and in traditionally female fields.
- *Education programs for teen parents* tend to lack vocational components.

Gender-Related Barriers in Education

Practices that help to channel females into low-wage occupations permeate education. It is still true that girls do not receive equitable amounts of teacher attention, are less likely than boys to see themselves in the materials they study, and are frequently not expected or encouraged to pursue higher level math and science (AAUW, 1992). Other practices that can block achievement for women and girls include (Beck, 1989):

- failure to provide complete and accurate career information.
- inadequate counseling on nontraditional options.
- inequitable treatment by teachers and administrators of nontraditional enrollees.
- lack of sex equity in-service staff training.
- no strict policy against sexual harassment.
- no targeted recruitment of nontraditional students.
- gender-biased course materials, and
- failure to publicize sex equity activities.

These and other school-related inequities compound the odds that girls with other known risk factors (e.g., low socioeconomic status, minority status, and low parental education levels) will drop out of school (Earle et al., 1987).

The factors that particularly impact girls are early socialization experiences that teach girls to be less assertive, cognitive differences in the ways that many girls and boys learn,

teacher interaction patterns that favor boys' response patterns and learning styles, and curricular selections that often leave girls without the prerequisites for higher-paying jobs and careers. When these factors combine with the background characteristics mentioned above, girls who are only marginally involved in school may opt out completely. (p. vii)

Gender-Related Barriers Outside Education

Additional barriers confront women pursuing higher-wage occupations. Occupational segregation; wage discrimination; lack of affordable, quality child care; and limited education and training opportunities impede the progress of low-income women seeking better jobs (National Commission on Working Women, 1988). Barriers to male-dominated occupations are especially formidable. Warner (1989) identified the following barriers to women trainees in the machining trade:

- sex bias in assessment, testing, and counseling;
- lack of information about the range of career options available;
- math or technical anxiety;
- lack of affordable, quality child care;
- lack of access to local "networks" (ie. contacts with people working in the field);
- sexual harassment and discrimination;
- opposition or little support from family and friends;
- lack of transportation to get to work;
- financial hardship while in training; and
- language and cultural bias.

How Can Vocational Education Make a Difference?

Break Down Barriers to School Success

Efforts to improve academic and economic achievement for girls and women must address multiple barriers head-on. It is critical that educational policy and practice address gender-related inequities and the special needs of those women and girls at greatest risk (e.g., females who are educationally disadvantaged, economically disadvantaged, members of minorities, displaced homemakers, single parents, teen parents, and/or those who have a disability). The AAUW (1992) has called for a variety of reforms designed to create "gender-equitable education environments." Others have identified and called for specific strategies to support achievement in women and girls at-risk (Earle et al., 1987; Ekstrom & Marvel, 1985; Gordon & Addison, 1985; Hershey, 1988; Lewis, 1985; Partee, 1988; Quiroz & Tosca, 1992; Rosenfeld, 1985; Traustadottir, 1990; U.S. Department of Labor, Women's Bureau, 1987).

Women and girls—especially those with special needs—need more than just good training. They need assistance and support to overcome the multiple barriers to higher-wage occupations. Strategies that encourage and support the success of special-needs females must be comprehensive. In addition to targeted recruitment activities, many women need assessment services; remediation of basic reading, math, and communication skills; job-skill training; job-search training and job placement; child care assistance; counseling; and various other support services (Burghardt & Gordon, 1990).

Ensure the Success of Nontraditional Enrollees

Additional strategies are necessary for nontraditional enrollees. To date, the few girls who do complete nontraditional programs are unlikely to secure training-related employment (Muraskin, 1989). Vocational programs must address this bias against hiring women in nontraditional occupations. *Strategies which support the long-term success of nontraditional enrollees must be incorporated into vocational programs.* Support for nontraditional enrollees can take many forms, including (McGraw, 1991):

- nontraditional role models,
- job placement services,
- information on dealing with discrimination and harassment,
- staff training on gender bias,
- screening for health concerns that conflict with occupation, and
- encouragement to continue training and upgrade skills.

Support Perkins Provisions

Resources for promoting sex equity in vocational education have been available through vocational education legislation since 1976. The 1990 Carl D. Perkins Vocational and Applied

What Are Nontraditional Jobs for Women?

(U.S. Department of Labor, Women's Bureau, 1991)

NONTRADITIONAL JOBS are those in which women comprise 25 percent or less of the workers in a particular occupation, whether in the categories of managerial and professional specialty; technical, craft, and repair; operative, fabricators, and laborers; or farming, forestry, and fishing. (p. 1)

NONTRADITIONAL JOBS are more likely to offer higher wages, greater benefits, a wider variety of work schedules, and better job security and may be more personally rewarding than traditionally female jobs. (p. 2)

Technology Education Act remains the major source of funding for programs and activities to eliminate sex bias, stereotyping, and discrimination in vocational education and to support vocational services to teen parents, single parents, and displaced homemakers. Revisions of the previous legislation are designed to maximize the impact of the relatively few resources channeled into these efforts. Because gender-related barriers to achievement are so pervasive, these provisions are important. However, many provisions have been weakened by the U.S. Department of Education final regulations (American Vocational Association, 1992).

By concentrating funds on large programs serving special populations, the 1990 Perkins Act will make more vocational programs available to low-income females (Sections 231 & 232). Moreover, mandates to integrate academic and vocational education, annually evaluate program effectiveness, and formulate and implement program improvement plans should improve the quality of *some* vocational programs (Sections 117 & 201). Unfortunately, the final regulations have diminished the law's potential to effect improved outcomes for all students by restricting the scope of program evaluation and improvement efforts. They require only those particular projects, services, and activities using Perkins funds to conduct annual evaluations. *Program-wide* evaluation and improvement activities would have been much more likely to change the educational practices stunting achievement for females and special populations.

In order to support the success of nontraditional enrollees, the Perkins Act prioritizes services to individuals enrolled in programs designed to eliminate sex bias. Local programs must make assurances that these students will receive assistance to enter a program; assessment of special needs; and guidance, counseling, and career development activities to facilitate the transition from school to post-school employment and career opportunities [AVA, 1992, 403.190 (b)]. However, the regulations have lessened local accountability for these assurances. "Assured services" are only required *to the extent possible* with Perkins funds. Moreover, these assurances do not apply to the Title III Tech Prep programs. Lack of adequate support to nontraditional enrollees will likely result in continued sex-stereotyped enrollment patterns.

Meaningful program improvement for females may be restricted to the boundaries of those programs receiving funds set aside to promote sex equity and to effectively serve teen parents, single parents, and displaced homemakers. The Perkins Act requires that 10.5% of each state's basic grant be used to fund these activities [Section 102 (a) (2)].

1990 PERKINS: STATE PROGRAMS FOR SINGLE PARENTS, DISPLACED HOMEMAKERS, AND SINGLE PREGNANT WOMEN [Section 221 (a)]

States must use seven percent of their basic state grant to—

Provide, subsidize, reimburse, or pay for preparatory services, including basic academic and occupational skills, necessary educational materials, and career guidance and counseling services, in preparation for vocational education and training that will furnish single parents, displaced homemakers, and single pregnant women with marketable skills;

Make grants to eligible recipients for expanding preparatory services and vocational education services when expansion directly increases the eligible recipients' capacity for providing single parents, displaced homemakers, and single pregnant women with marketable skills;

Make grants to community-based organizations for the provision of preparatory and vocational education services to single parents, displaced homemakers, and single pregnant women...

Make preparatory services and vocational education and training more accessible to single parents, displaced homemakers, and single pregnant women by assisting such individuals with dependent care, transportation services, or special services and supplies, books and materials, or by organizing and scheduling the programs so that such programs are more accessible; or

Provide information to single parents, displaced homemakers, and single pregnant women to inform such individuals of vocational education programs, related support services, and career counseling.

1990 PERKINS: STATE PROGRAMS TO PROMOTE SEX EQUITY (Section 222)

Three percent of each state's basic grant must be used to promote sex equity through:

programs, services, comprehensive career guidance and counseling, and activities to eliminate sex bias and stereotyping in secondary and postsecondary vocational education:

preparatory services and vocational education programs, services, and activities for girls and women, aged 14-25*, designed to enable the participants to support themselves and their families; and

support services for individuals participating in the activities described above including dependent-care services and transportation.

*the sex equity coordinator may waive the age limitations.

As in the past, the current legislation requires each state to designate a full-time sex equity coordinator. At least \$60,000 of state administrative funds must be set aside to support the salary and expenses of this position. State-level sex equity coordinators are of pivotal importance to gender-fair education reform efforts (Schmuck, et al., 1985). However, their effectiveness in the past has been circumvented in states which limited their authority over both sex equity funds and programs (National Coalition for Women and Girls in Vocational Education, 1988). Advocates hailed the 1990 Perkins for expanding and clarifying the coordinator's role. The law assigns them the following responsibilities [Section 111 (b) (1)].

- Administer vocational programs for sex equity, single parents, and displaced homemakers.
- Gather, analyze, and disseminate data on the effectiveness and adequacy of state vocational programs in meeting the education and employment needs of women.
- Make recommendations concerning local plans to ensure that the needs of women and men for training in nontraditional jobs are met.
- Review vocational programs for sex stereotyping and sex bias and make recommendations for local plans to overcome sex bias and stereotyping.
- Assess the state's progress in eliminating sex discrimination and stereotyping.
- Ensure that the needs of women are addressed in the state's administration of Perkins grants, contracts, and policies.
- Recommend outreach activities concerning vocational education and employment opportunities for women (including opportunities in new and emerging occupational fields).
- Provide technical assistance to expand vocational opportunities for women.
- Assist local personnel to increase access for all women to vocational programs and enrollment of men and women in nontraditional programs.
- Manage the distribution of funds set aside for programs for single parents, displaced homemakers, single pregnant women, and sex equity.
- Evaluate the effectiveness of programs supported by set-aside funds.

In spite of these clarifications, state-level restrictions on the sex equity coordinator's role in "managing" set-aside monies are still acceptable. While the final regulations do not change the law's provisions, they affirm that each state board of vocational education has final say over the distribution of set-aside funds [AVA, 1992, 403.13 (a)(11)].

Clearly, barriers to female achievement extend far beyond the boundaries of vocational programs. However, vocational education is in a position to lead the way to educational reforms that are effective for all students. In spite of the opportunity to conduct "business as usual," provided by the rules and regulations, most states remain committed to the goals of effective education reform. Many are requiring that local programs receiving Perkins funds evaluate their entire vocational program, not just funded projects. The program improvement process must be extended beyond the boundaries of "funded projects" as well.

During 1992-93, many local secondary and postsecondary vocational programs complete their first annual program evaluation as prescribed by the 1990 Perkins Act. These programs will then develop and implement plans to increase program access and effectiveness for all students. Gender should be considered throughout this process. Program outcomes should be evaluated for everyone (including special populations) by gender. Strategies for increasing the academic and occupational achievement of females from all populations must be identified and refined. We have the opportunity to contribute to the country's economic well-being by redefining and redirecting vocational education. In order to do so, we must "make it work" for everyone.

Given the increase in the number and percentage of women who are single parents and the growing importance of women's wages to total family income, the education of women is important not only for women as individuals, but also for women as mothers, as family members, and as effective and creative citizens of larger communities. (AAUW, 1992, p. 5)

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