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## ABSTRACT

The two two-page briefs in this packet focus on nontraditional careers and nontraditional students and how to recruit and teach nontraditional students. "What Do We Know about Nontraditional Careers?" notes that men and women still tend to work in careers that are traditional for their sex, although the numbers of men and women choosing nontraditional jobs are increasing. Women in nontraditional jobs earn 20 percent more than women in traditional jobs, and both men and women need to learn skills for all types of careers, including nontraditional occupations. "How Can We Effectively Recruit and Teach Nontraditional Students?" provides suggestions for both these activities. Suggestions for recruiting nontraditional students include creating career-technical programs to reach all students, presenting career clusters in a way that shows how career pathways can align with interests, giving students multiple opportunities to explore both traditional and nontraditional careers, and helping students overcome stereotypes of appropriate jobs for their gender. Strategies suggested for teaching nontraditional students include improving curriculum and program design, supporting students in working with unfamiliar equipment, bringing in nontraditional role models, avoiding verbal gender bias, and creating contextual learning experiences. References and resources are listed. (KC)

# EQUITY

- WHAT DO WE KNOW ABOUT NONTRADITIONAL CAREERS?
- HOW CAN WE EFFECTIVELY RECRUIT AND TEACH NONTRADITIONAL STUDENTS?

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# What Do We Know About Nontraditional Careers?

## Research

Men and women still tend to choose traditional jobs for their gender. Males still choose jobs requiring physical strength, mathematical ability, and analytical skills while females tend to choose jobs that are nurturing, service-oriented, and involve relationships. The fact is males and females have all of these characteristics (some more than others), but these traits are not necessarily based on gender. Girls typically explore careers from a narrower set of career options than do boys (Farmer, 1995).

Women still tend to work in only 20 of the more than 400 job categories (AAUW, 1998).

In 1992, only 6.6 percent of all working women were employed in nontraditional occupations (WOW, 1990).

In 1997 a larger proportion of female than male SAT takers intended to major in visual and performing arts, biological sciences, education, foreign or classical languages, health and allied services, language and literature, and the social sciences. A larger proportion of male than female SAT takers intended to major in agriculture and natural resources, business and commerce, engineering, mathematics, physical sciences, and other areas (AAUW, 1998).

The numbers of men and women choosing nontraditional jobs are increasing. Nationally, 6.5 percent of registered nurses and 10.6 percent of nursing aides, orderlies, and attendants in 1997 were males (U.S. DOL, 1997a). In Ohio's vocational programs, males comprised 8.1 percent of the secondary students and 7.2 percent of the adult students enrolled in practical nursing during FY97 (ODE, 1998). Females comprised 3.4 percent of the secondary students and 13.6 percent

of the adult students enrolled in carpentry in FY97 (ODE, 1998), while nationally, females comprised 2.7 percent of workers in construction trades in 1997 (U.S. DOL, 1997b).

Women in nontraditional jobs earn 20 percent to 30 percent more than women in traditional occupations (WOW, 1993).

Although females are choosing nontraditional professional careers, they are still not considering nontraditional technical careers such as precision metal, craft, and specialized repair. Even though these occupations offer high earnings, only 0.4 percent of females expected to be working in precision metal/crafts/specialized repair occupations, and only 3.7 percent expected to be working as technicians (Gray & Herr, 1995).

In 1997, 26 percent of physicians were females and 27 percent of lawyers were females (U.S. DOL, 1997c).

Boys can no longer afford to shun the communication skills needed to function in an information-driven economy any more than girls can afford to bypass managerial and technical skills important to the professional fields projected to boom in the 21<sup>st</sup> century (AAUW, 1998).

The vast majority of job requirements are unrelated to gender (WOW, 1998).

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Nontraditional occupations are those occupations in which one gender represents 25 percent or less of the individuals employed in that occupation. Cosmetology is a nontraditional occupation for males; drafting is a nontraditional occupation for females.

Highest Paying Nontraditional Jobs for Each Gender and Their Respective Percentage of Total Employment			
	Nontraditional Occupations	Annual Salaries	Percent of Nontraditional Workers in these Occupations
Females	Mechanical Engineers	\$35,051	6.9
	Electrical and Electronic Engineers	34,840	8.0
	Bus, Truck, and Stationary Engine Mechanics (Diesel)	30,389	0.3
	Electricians	29,848	2.2
	Industrial Machinery Repairers	27,560	2.9
	Males	Teachers, Elementary School	\$36,400
	Registered Nurses	35,464	6.7
	Licensed Practical Nurses	23,400	4.7
	Investigators and Adjusters, Except Insurance	21,736	23.7
	Bookkeepers, Accounting and Auditing Clerks	19,500	8.1

Source: 1990 Census Report, Bureau of the Census, U.S. Department of Commerce; 1996-97 Occupational Outlook Handbook, Bureau of Labor Statistics, U.S. Department of Labor.

## Recommendations

- Present career clusters in a way that equitably showcases possible pathways and future entry, technical, and professional careers within each career cluster.
- Prepare students for postsecondary education and careers, not just those careers traditionally acceptable for their gender.
- Have *all* students participate in rigorous academics and career-focused education.
- Instruct all students in the availability and future growth of jobs, including nontraditional occupations.
- Counsel students to select careers according to interests, skills, and abilities and not according to traditional stereotypes.
- Educate *all* students to be technologically literate.

For more information contact Gender Equity, Ohio Career-Technical and Adult Education, Ohio Department of Education, 65 S. Front St., Columbus, OH 43215-4183; (614) 644-6238.

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# How Can We Effectively Recruit and Teach Nontraditional Students?

Educators face many challenges recruiting and teaching nontraditional students. The key practices below can help educators create learning situations that are conducive for *all* students to learn, especially those nontraditional students in career clusters. The practices are founded on research studies and practical experiences of educators working with nontraditional students. For further information, investigate the resources listed.

## Recruiting Nontraditional Students

**Market career-technical programs to reach *all* students.** Make a concerted effort to attract nontraditional students. Use photos and graphics that show both genders and various races in careers at the technical and professional levels. Communicate the potential earnings of different careers. Indicate the types of academic and technical courses available for students interested in a specific career cluster. Capitalize on the interests and abilities needed for the careers and not on traditional stereotypes of people in those careers.

**Present career clusters in a way that equitably showcases possible pathways and future entry, technical and professional careers within each career cluster.** When students are encouraged to align their interests and abilities with a career cluster area, then they do not tend to target a specific career. Instead, they see a range of career options within a cluster area. They also experience heterogeneous work groups rather than same-sex classes.

**Give students multiple opportunities to explore traditional and nontraditional careers.** In order for students to make informed decisions about a career major or cluster area they need to spend several weeks exploring entry-, technical-, and professional-level careers, including nontraditional career options, within

each cluster. This ensures that *all* students are introduced to all cluster areas and that students explore both traditional and nontraditional options.

**Challenge students' beliefs about traditional occupations for their gender.** Encourage students to identify underlying attitudes regarding appropriate career choices and to dispel stereotypical myths. Give students opportunities to explore the realities of nontraditional occupations—abilities required, job satisfaction, physical and social work environment, and earnings.

**Identify and address barriers for students in nontraditional careers.** Acknowledge and address influences such as cultural expectations and gender-role stereotypes, mathematics and science stereotypes, self-concept, self-esteem, fear of success, family and life planning, the role of parents and peers, and support systems. Females who avoid nontraditional occupations are often reluctant to take courses where they would be one of few females, have difficulty picturing themselves in nontraditional jobs, lack confidence in their abilities, and worry about the reactions of friends and family. They may lack knowledge about nontraditional careers and have little contact with nontraditional female role models.

**Help students overcome stereotypes of appropriate jobs for their gender.** Even after enrolling in a career cluster area, students choosing nontraditional careers must overcome stereotypes of appropriate jobs for their gender, lack of support by peers and coworkers, potential harassment issues, and questions regarding strength, abilities, and personal characteristics perceived as needed for the job.

*continued*

## Teaching Nontraditional Students

**Assess curricula and program design.** Make sure academic and technical courses attract a variety of students and do not become self-segregating. Courses need to be organized and scheduled throughout the day to meet the needs of as many students as possible. Align curricula with academic models or proficiency test outcomes at the grade levels where the courses are taught. Make sure courses cover a broad range of concepts and skill development for a variety of careers, and not just careers targeted through previous vocational programs. Create educational experiences that expose students to a variety of careers and not just a narrow field or those found at a certain educational level.

**Give students support and time in working with unfamiliar equipment and understanding traditionally gender-oriented academic concepts and skills.** Make sure all students have equal access to and use of equipment. When safety is not an issue, encourage students to explore using unfamiliar equipment, rather than use unfamiliar equipment for specific purposes or tasks. Know that some students may not have practical previous experiences with some of the foundational concepts and may need individual and small group tutoring.

**Actively bring in nontraditional role models to work with students.** Students need to see a variety of individuals working in their career cluster area. Employees and employers of various races, both genders, and with disabilities can encourage students to continue persevering if they are disheartened. In addition, role models communicate the importance of all workers to a business or organization.

**Monitor teacher-student interactions for communication of subtle gender biases.** Watch for verbal and nonverbal expressions of attitudes and actions that might interfere with student learning and retention. Be cognizant of students' perceptions regarding potential harassment and hostile learning environments. Use gender-neutral language.

**Create contextual learning experiences for students.** Students become more motivated to learn when they learn in context of what they would think and do on the job. In addition, students use higher-level thinking skills and learn to solve problems effectively when learning in context. Help students understand the potential earnings of a variety of careers and relate those earnings to economic needs for self-sufficiency.

## Resources

Research studies, videos, and teaching resources are available through the Sex Equity Resource Library at the Center on Education and Training for Employment, 1900 Kenny Road, Columbus, Ohio 43210-1090; (614) 292-4353 or (800) 848-4815.

Organizations such as those listed below provide information and resources on nontraditional occupations and students.

American Association of University Women  
(AAUW)  
800-326-AAUW  
<http://www.aauw.org>

Department of Labor (DOL)  
(202) 693-4650  
<http://www.dol.gov/dol>

Wider Opportunities for Women (WOW)  
(202) 638-3143  
<http://www.w-o-w.org>

Women's Educational Equity Act Resource Center  
(WEEA)  
(800) 225-3088  
<http://www.edc.org/WomensEquity>

For more information contact Gender Equity, Ohio Career-Technical and Adult Education, Ohio Department of Education, 65 S. Front St., Columbus, OH 43215-4183; (614) 644-6238.



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