STEM Career Programs Lack Female Participants, Study Says

By Caralee Adams on March 22, 2013 12:02 PM

Women and girls are sorely missing from programs that prepare students for lucrative careers in the STEM fields—science, technology, engineering, and mathematics—as well as other high-paying skilled trades.

Female students comprise fewer than one in four students in STEM career and technical education programs, and fewer than one in six students in CTE programs related to manufacturing, architecture, and construction, according to research released today prepared by the Institute for Women’s Policy Research, along with the National Coalition of Women and Girls in Education and others.

The participation of females in these fields of study traditionally dominated by males varies by state.

Seven states had high school enrollment rates for girls in nontraditional programs that were at least 10 percentage points higher than the national average of 28 percent. Another 10 states had postsecondary completion rates for women in nontraditional programs that were at least 10 percentage points higher than the national average of 27 percent, according to data from the U.S. Department of Education.

It’s not that women and girls are opting out of CTE programs. They are just more likely to pursue other occupations, such as child-care workers or hairdressers. The report says 80 percent of students at the postsecondary level enrolled in “human services” CTE programs.

As a result, the wage gap by gender continues. For instance, a hairdresser makes about $10.85 per hour, compared with $18.36 for someone working in an automotive body and related repair field.

"It is important that training for higher-paying occupations includes women and girls, and that girls are introduced to nontraditional careers, particularly in STEM fields, at a young age," said Barbara Gault, vice president and executive director of the Institute for Women’s Policy Research, a member organization of the NCWGE, in a press statement. "To secure strong futures for girls we need to address obstacles to high-paying careers, such as sexual harassment in the classroom or unintentional bias in mentoring or advising."

The report suggests that efforts to diversify CTE programs under the federal Perkins Career and Technical Education Act is making a difference. The law promotes gender equity in training.
programs and holds states accountable for female student participation. The report includes several recommendations to improve the effectiveness of the Perkins Act when it is next reauthorized by Congress.

Tags: CTE, Perkins Career and Technical Education Act, STEM