Statement Submitted by the American Association of University Women (AAUW)
58th U.N. Commission on the Status of Women

Priority theme: challenges and achievements in the implementation of the Millennium Development Goals for women and girls

Review theme: access and participation of women and girls in education, training, and science and technology, including for the promotion of women’s equal access to full employment and decent work

Statement
The American Association of University Women (AAUW) presents research on a worldwide barrier that women and girls face in education, training, and science, technology, engineering, and mathematics (STEM); the lack of access to STEM opportunities; and a dearth of support for women in their roles as student mothers and caregivers.

The Millennium Development Goals and Beijing Declaration and Platform for Action
Millennium Development Goal 3 seeks to “promote gender equity and empower women,” including “eliminating gender disparity in primary and secondary education, preferably by 2005, and in all levels of education by no later than 2015.”

Strategic objectives resulting from the 1995 Beijing World Conference on Women include to “improve women’s access to vocational training, science and technology, and continuing education” and “develop nondiscriminatory education and training.” Key recommendations include the following:

“By governments, in cooperation with employers, workers and trade unions, international and nongovernmental organizations, including women’s and youth organizations, and educational institutions:

- Diversify vocational and technical training and improve access for and retention of girls and women in education and vocational training in such fields as science, mathematics, engineering, environmental sciences and technology, information technology and high technology, as well as management training
- Remove all barriers to access to formal education for pregnant adolescents and young mothers and support the provision of child care and other support services where necessary.”

The Problem
In the United States, a 2013 study by AAUW on women in community colleges (two-year postsecondary public institutions) found that while these institutions increase women’s access to postsecondary education and training, women face significant barriers in achieving their educational goals.

First, women still provide a disproportionate share of caregiving, which reduces the likelihood that they will complete their degrees. Second, when women earn degrees, they earn the majority in traditionally female fields (fields in which women make up 75 percent or more of workers) and earn far fewer in STEM fields, which limits their options for finding decent paid work that offers family-sustaining wages after graduation.

The AAUW report Women in Community Colleges: Access to Success points out that women at community colleges represent an important pool of talent in science and technology, but they need
better support for their roles as mothers and students and in connecting their education to job opportunities in high-demand fields.

Women enroll in community colleges primarily to improve their job skills. But nearly half (45 percent) of women students do not earn a certificate or associate degree or transfer to a four-year institution within six years after first enrolling in community college. Because the world economy is increasingly knowledge-driven, postsecondary education is becoming a prerequisite for more jobs. Ensuring that women can acquire the skills and competencies they need to be competitive in the workplace is an economic imperative.

For the more than 1 million student mothers in the United States who attend community college, family and caregiving responsibilities can present major obstacles to completing their postsecondary education. AAUW’s study found that limited access to child care adversely affects outcomes for student mothers at community colleges. More than two-thirds (68 percent) of student mothers at these schools reported spending 30 or more hours a week caring for dependents, compared with 42 percent of student fathers. Time spent caregiving can take time away from homework and studying and make scheduling and commuting to class a challenge. Providing affordable child care thus emerges as a critical strategy for helping student mothers succeed at community college. But fewer than half of community colleges in the United States provide on-campus child care — and those that do typically do not provide sufficient child care to meet demand.

Community colleges offer a wide range of options for training and education in science and technology. Students can earn certificates or associate degrees in either vocational or academic programs that typically offer higher wages and better job opportunities than nonscience fields. Although women earn the majority of associate degrees and certificates awarded by community colleges, the credentials are concentrated in lower-wage, lower-skill fields.

Some of the most popular programs for women at community colleges are health care, child care/education, and cosmetology. Men are more likely than women to pursue education and training as welders, electricians, and automotive technicians — jobs that offer hourly wages twice as much, on average, as the wages in fields popular among women (with the exception of health care jobs). Women’s limited participation in (nonhealth) STEM education at community colleges reduces the likelihood that their education will bring the desired benefits of increased job opportunities and wages.

Since women are more likely than men to attend community college at some point on the way toward earning a bachelor’s degree, limited access to math and science education at community colleges also affects women’s representation among STEM bachelor’s degree holders.

The AAUW study identified three major obstacles to women entering science and technology fields: (1) Women are often unaware of opportunities in science and technology fields early in their community college careers; (2) women may lack experience in or exposure to working with computers and cars, which often makes entering a technology or automotive repair program, for instance, very intimidating; and (3) gender stereotypes.

Stereotypes about women’s abilities in math and science can significantly affect their experiences in community colleges. Even women who enter community college with strong science and math backgrounds report receiving little encouragement and support to pursue science and math fields. Studies suggest that vocational programs may inadvertently reinforce these stereotypes by using
assessment tests that are more accurate at predicting men’s educational abilities and interests than women’s. In fields like welding and auto mechanics, for example, these tests may state that individuals should be physically fit and able to lift heavy objects; women may be advised not to select these fields because it is presumed that they do not possess those characteristics.

**Recommendations**

Promoting women’s access to education and training in science and technology at all education levels is critical in achieving Millennium Development Goal 3. The majority of U.S. undergraduate women attend community colleges, but these institutions and their students are often excluded from discussions on how to increase women’s participation in STEM fields. Improving community college women’s representation in STEM education and training around the world will require action on many levels: ensuring that women have the support they need to balance their roles as mothers and students, providing information about opportunities in high-growth STEM sectors, and creating learning environments that are free of gender stereotypes.

Institutions need to become more aware of and responsive to the particular needs of women, who make up the majority of students. Specifically, child care should be a basic student support service similar to academic advising or tutoring services. Government agencies also have a critical role to play by strengthening national and state legislation, improving gendered data collection on educational opportunities and persistence rates at institutions, and investing in programs that help women overcome the obstacles they face in enrolling in community college and persisting through graduation. Existing laws to prevent gender bias and discrimination in education must be enforced consistently across all sectors of tertiary education — in four-year as well as two-year institutions.

**Community colleges should**

- Assess student demand for child care on campus.
- Actively market to female students and recruit them into STEM fields.
- Ensure that institutional practices such as academic and career advising do not reinforce stereotypes or promote discrimination against women.
- Educate staff about occupational segregation, gender bias, and the importance of promoting science and technology careers to women.
- Partner with local employers to connect students with available opportunities. Local employers can share information with community colleges about the skills they need, job openings, and wage information.
- Expose women students pursuing science and technology fields to successful women in these fields who can serve as role models and mentors.

**All institutions should**

- Provide on-campus child care and apply for government funding where and when it exists.
- Develop a referral system with off-campus child care providers to meet student demand if necessary.

**Governments should**

- Prioritize funding of and investment in programs that support on-campus child care facilities.
- Develop and implement policies that link community colleges and four-year institutions to facilitate the process of transferring from a two-year to a four-year institution to earn a bachelor’s degree.
• Strengthen the gender equity provisions in legislation to monitor institutions and hold them accountable for women’s and girls’ participation in and completion of vocational education programs in science and technology.