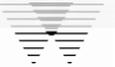


Improve Girls' and Women's Opportunities in Science, Technology, Engineering, and Math

The American Association of University Women supports promoting and strengthening science, technology, engineering, and mathematics (STEM) education, especially for girls and other underrepresented populations. The lack of women and girls in STEM fields has significant implications for women's economic security as well as the overall economy and America's global competitiveness. Fortunately, the U.S. has an untapped pool of potential workers. If women and members of other traditionally underrepresented groups joined the STEM workforce in proportion to their representation in the overall labor force, the shortage of STEM professionals would disappear.¹ AAUW supports the following efforts to improve girls' achievement in math and science and increase the number of women who choose STEM careers.

- **Enact Recommendations from “Beyond Bias and Barriers”:** The National Academies' report, *Beyond Bias and Barriers*, found that women face a lifetime of subtle biases that discourage them from STEM careers. To overcome these challenges, AAUW supports enactment of the report's recommendations, which would require agencies that fund scientific research to conduct anti-gender bias workshops, enforce existing federal anti-discrimination laws (including Title IX), publish demographic and funding data for grant applications, and extend grant support for researchers on caregiving leave. AAUW strongly supports the report's recommendation that colleges form an NCAA-like inter-institutional monitoring organization that shares data, evaluates progress, and works to eliminate gender bias in faculty recruitment, retention, and promotion in the STEM fields.
- **Ask For a Report Responding to “Rising Above the Gathering Storm”:** The report, commissioned by Congress from the National Academies on Science, Engineering and Medicine and published in 2007, states that the United States' advantages in science and technology are eroding and discusses the need to improve math and science education. Unfortunately, the report largely ignores the issue of women and underrepresented minorities in STEM fields. AAUW recommends a follow-up report on methods to increase the number of women in STEM fields and what effect this would have on enabling the United States to remain a leader in the global marketplace.
- **Use Title IX to Improve the Climate for Women in STEM Fields:** AAUW recommends requiring agencies to proactively conduct Title IX compliance reviews at grantee institutions. All agencies are required to ensure they are not violating Title IX, however very few Title IX reviews are conducted outside of the Department of Education. Agencies should ensure that universities that receive agency funding are complying with Title IX.
- **Measure Student Achievement in Science:** AAUW supports measuring student achievement in science. This will provide schools with necessary information on how well students are progressing and the improvements that still need to be made. The data gathered from such testing programs should always be disaggregated by sex, race and socioeconomic status and cross-tabulated. While testing is an important measure of success, high stakes testing should not be the sole indicator of student competency or a school's progress. Additional flexibility in Adequate Yearly Progress (AYP) measures required by the No Child Left Behind Act should be explored.
- **Teacher Training:** AAUW supports efforts that create more STEM teachers and train teachers to encourage girls and other underrepresented groups to pursue math and science careers in the face of gender-based differences, peer pressure, and parental expectations. This is particularly important because while studies show that all students start to lose interest in science and math by junior high, the loss is particularly steep for girls at puberty and results from gender-based social expectations and peer pressure.²
- **Encourage the Inclusion of STEM Subjects and Activities in Co-curricular Programs:** Incorporating STEM subjects and activities in after-school and summer programs enables students to explore the field in a supportive atmosphere. Research suggests that information about the usefulness of engineering to everyday life and hands-on experiences with science, math, and technology help girls develop a sustained interest in these fields.

For more information, call Lisa Maatz, Director of Public Policy and Government Relations, 202/785-7793 or Tracy Sherman, Government Relations Manager, 202/785-7730.



¹ Congressional Commission on the Advancement of Women and Minorities in Science, Engineering and Technology Development. (2000). *Land of Plenty: Diversity as America's Competitive Edge in Science, Engineering and Technology*. Retrieved December 10, 2007, from http://www.nsf.gov/pubs/2000/cawmset0409/cawmset_0409.pdf.

² Ibid.