

Excerpts from

AAUW “Why So Few? Women in Science, Technology, Engineering and Mathematics” (STEM), 2010:

Recommendations

CULTIVATING GIRLS’ ACHIEVEMENT AND INTEREST IN STEM

- **Spread the word about girls’ and women’s achievements in math and science. Help eliminate stereotypes by:**
 - Exposing girls and boys to female role models in STEM careers
 - Talking about the greater numbers of girls and women who are achieving at higher levels in STEM subjects and fields than ever before
 - Pointing out the lack of gender difference in performance in nearly every STEM subject
- **Teach girls that intellectual skills, including spatial skills, are acquired**
- **Teach students about stereotype threat and promote a growth-mindset environment**
- **Talented and gifted programs should send the message that they value growth and learning**
- **Encourage children to develop their spatial skills**
 - Spatial skills developed in elementary and middle school can promote student interest in mathematics, physics, and other areas
 - Encourage children to play with construction toys, take things apart and put them back together again
- **Help girls recognize their career-relevant skills**
- **Encourage high school girls to take calculus, physics, chemistry, computer science, and engineering classes when available**
 - Girls who take calculus in high school are three times more likely than girls who do not to major in a scientific or engineering field in college
 - Taking higher-level science and math classes keeps career options open

CREATING COLLEGE ENVIRONMENTS THAT SUPPORT WOMEN IN STEM

- **Actively recruit women into STEM majors**
- **Send an inclusive message about who makes a good science or engineering student**
- **Emphasize real-life applications in early STEM courses**
- **Teach professors about stereotype threat/benefits of a growth mindset**
- **Make performance standards and expectations clear in STEM courses**
- **Take proactive steps to support women in STEM majors**
 - Sponsor seminars, lunches, and social events to help integrate women into the department
- **Enforce Title IX in STEM**
- **Attract and retain female faculty**
 - Conduct departmental reviews to assess the climate for female faculty
 - Ensure mentoring for all faculty
 - Support faculty work-life balance