



136 Magazine Street
Cambridge, MA 02139
617-372-4403

Maria Claudia Echavarría
(617) 372-4403
media@scienceclubforgirls.org

STEM Education Fact Sheet

STEM: *The Way of The Future*

In the economy of the 21st century, 40% of jobs will require not only a college education and a high percentage will require some form of expertise in the fields of science, technology, engineering and math, collectively known as STEM. Participation in STEM is crucial for those who hope to succeed in life and to be competitive in the global marketplace.

80% of Future Careers Will Demand Knowledge of Science & Technology

According to the U.S. Department of Labor:

- Between 1998 and 2008 jobs requiring STEM training will increase by 51%. This is 4 times faster than overall job growth.
- By 2008 there would be close to 6 million jobs openings for scientists, engineers and technicians.

Social, Gender & Ethnic Disparity in STEM Education & Workforce

According to the National Assessment of Educational Progress:

- In 2006, among developed nations, the U.S. had the 4th largest gap between high and low-income students.
- In 2000, the percentages of black and Hispanic high school graduates aged 25 to 29 who had completed bachelor's or higher degrees in science and engineering stood at 21% and 15% respectively, compared with 36% for whites.

According to the National Science Foundation

- Women are less likely than men to pursue a science or engineering degree.

According to The National Center For Education Statistics:

- Women constitute almost 50% of the U.S workforce but less than 20% are in science and engineering.
- African American and Hispanic women each comprise nearly 10% of the national workforce, but only 3% work of each group are in science and engineering.

-MORE-

Schools Alone Cannot Create Future Generations of STEM Professionals

American students are lagging behind their international peers when it comes to earning degrees and going into careers in the STEM fields.

According to the National Assessment of Educational Progress:

- In 2005, roughly 29% of 4th and 8th grade students reached or exceeded the proficient level in science. Among 12th graders, only 18% reached or exceeded the proficient.

Children uninterested in science are not likely to pursue a career in the industry. Schools alone cannot generate and support students' interest in science. Afterschool programs allow children to discover and explore the world of STEM.

According to the Public Agenda's Reality Check 2006:

- 45% of students "would be really unhappy if [they] ended up in a job or career that required doing a lot of math and science."
- As students get older they lose interest and self-confidence in their science ability. Children aged 6-12 report a high level of interest and belief in their science abilities but by age 14, interest and self-confidence related to science drops.

According to the Coalition for Science After School:

Afterschool programs are an effective support beyond the academic. They have proven to help young people on a variety of fronts; including fostering healthy lifestyle, preventing dropouts, and boosting self-esteem. They also provide the necessary skills for any career, such as communication, problem solving, leadership and teamwork.

Science Club For Girls (SCFG) Breaks the Barriers to the Limitless Universe of STEM

With a vision of a world where girls and boys, women and men are encouraged and enabled to reach their potential and make the world a better place, SCFG unlocks the door to fun and interactive science explorations and engineering projects through free, hands-on after school science clubs. As adolescent girls realize their potential as mentors and leaders, they see their place in the world and dare to dream.

SCFG is a Cambridge, MA based non-profit organization seeking to reduce the gender and racial inequity in science and technology. Through a range of free out-of-school time programs SCFG opens minds and doors to higher education and careers.

For more information please visit: www.scienceclubforgirls.org

###