Five Ways to Get Girls into STEM

As a society, we learn about the world and advance our well being through science and engineering. The United States may be known around the world for its higher education, but compared to many other leading and steadily emerging countries, we lack a strong focus on educating scientists and engineers. One significant reason that we have fallen behind is that we do not encourage our female students to pursue career paths in Science, Technology, Engineering and Math (STEM).

This needs to change, as the lack of women in STEM will continue to plague our country until all students, regardless of sex, have adequate opportunities to explore math and science throughout elementary, middle and high school. If we want to attract the best and brightest minds into the fields that will move us forward, we must look to all of the population. More women can contribute to our field, and we can help make that happen. Below are a few strategies for how we can help.

Expose Young Girls to STEM

As a country, we stand to gain a lot by exposing young girls to STEM fields and encouraging those who are interested to follow their hearts and minds. Simply focusing attention on one age group cannot cure all societal issues that influence career choices among females. Correcting the negative perceptions that girls develop at a young age can, however, lead them to embrace math and science when they reach high school, rather than avoid the subjects. Administrators and educators must strive to create environments in high school and college math and science programs that are inviting to females if we want to prevent the likelihood of their choosing a different direction. As long as young boys and girls are exposed to science and technology and are equally encouraged to study those disciplines, those with talent and a genuine interest in those fields will be able to develop that interest. Science and technology are and will continue to be important factors in what we are able to accomplish in our lifetimes.

Encourage Participation in Special Programs

More and more workshops are sprouting up nowadays that encourage young girls to maintain their interest in STEM fields. In-school and out-of-school programs are gaining popularity, and in order for that to continue, those of us in STEM fields have to support both local and national efforts to foster girls. Without understanding the opportunities that are available to students of math and science, young women may think they have made a mistake when facing the challenges of completing a STEM major. The good news is that current programs focused on increasing young girls' interest in those fields are tremendous. But without them, there are potential long-term consequences, even for girls who select a STEM path in college.

Support Learning Opportunities in the Community

Popular national clubs such as Girl Scouts of the USA have started to give added attention to introducing girls to STEM. There has been an improved focus on motivating young girls to explore typically male-dominated fields. This shows an important shift in thinking. Today the organization has really stepped up its programs to help ensure that girls succeed in all areas.

Companies and organizations that offer summer internships provide a chance for girls and women to learn more about different possibilities in the STEM fields. Many firms also now offer job shadowing programs or career days. Job shadowing allows those interested in a specific field to follow an individual already working in that field for a day or a given amount of time. This lets the observer see typical job duties and activities, and get a feel for what that job may entail.

Serve as a Mentor

The value of mentorship is irreplaceable. Finding a mentor early on can do wonders for building confidence and translating it into career satisfaction. The people that are chosen as mentors need to have the capacity and capability to lead young people toward success. A mentor is not only someone who is willing to spend time teaching techniques and processes, but also someone who takes an interest in long-term advancement.

Mentoring is one of the most important confidence builders that can be found day to day on the job or in school. Teaming with a mentor is a career strategy that can bring huge benefits, especially to women in unbalanced work environments like engineering. Time and time again, the majority of successful women credit their participation in some sort of mentorship for dramatically helping them reach their career goals.

Take Charge and Educate

We're an information-rich society, and every one of us has access to vast resources -they're available online for any women interested in the STEM fields. Women can visit
the websites of multiple professional organizations such as the Society of Women
Engineers, Women in Technology International, Association for Women in Mathematics
and Association of Women in Science, to name just a few. These resources present a
tremendous opportunity to learn a great deal about the field, about what it's like to be a
woman in a specific STEM profession, about career opportunities, and so on. While it
might not be as enlightening as face-to-face communication with a professional in the
field, it will certainly give women an informed starting point from which they can grow.

As women become more prevalent in STEM careers, more and more young girls will begin to recognize the additional career opportunities open to them. With more women in the field, it will become more evident to young girls what they can offer the world.