Role Models for the Next Generation

As I sit down to write this column on the first day of Engineers Week in the United States, I am inspired to highlight both the Society’s role in engineering outreach and the unique and special value and voice our members bring to the world of engineering outreach.

According to the National Academy of Engineering (NAE), hundreds of millions of dollars are spent every year, in the United States alone, on engineering outreach.

Clearly, SWE is not the only organization working to encourage young people to pursue engineering careers. So what value does the Society bring to this crowded world of outreach? The value we bring is our ability to help young girls see themselves as engineers.

Through the stories our members share about their life-changing work, girls see how a passion for innovation, solving grand challenges, and helping others can be fulfilled through an engineering career.

THE VALUE OF ONE INTERACTION

SWE members serve as role models and mentors both locally and at the Society level through a variety of programs. For example, at the Society annual conference we host “Invent It. Build It.” Now in its ninth year, this daylong event shows girls and their parents what engineers do, the positive impact they have on people everywhere, and how they make a world of difference. And, most importantly, the girls participate in hands-on learning experiences with SWE members.

Survey results from the event tell us that four out of five girls have strengthened their confidence in engineering-related skills; 96 percent of girls believe engineers make the world a better place; 90 percent said their interactions with the role models inspired them to consider careers in engineering or technology; and 93 percent said it was a good career choice for women. Wow! If one interaction like this can have such an impact, imagine what a sustained connection with an organization like SWE can do to increase the number of women in engineering.

At last year’s inaugural WE Local conferences, SWE launched SWENext DesignLab. The half-day event takes place on the second day of each WE Local conference and is designed to encourage girls to choose a career in engineering. And, like “Invent It. Build It.,” participants engage in hands-on engineering experiences with SWE members. Expanding from two host cities in 2017 to five in 2018, the events allow us to reach more girls and adult influencers such as parents and teachers.

Supporting a SWENext club is also a great way to be a role model. A club can be any size with precollege students. Students work on projects that use engineering to help people in the community, or compete in a competition such as Future City® or FIRST® Robotics. The club can
be all about engineering outreach for younger students. The direction of the club is up to the students, but each club must have a SWE member advisor.

Let’s not forget the importance of role models engaging with adult influencers. A parent and educator program (PEP) is held during SWE’s hands-on events. While the girls are having fun building and inventing, parents and educators learn about engineering careers, scholarships, college admission, and resources — from SWE members and other subject matter experts. SWE members share with parents the opportunities that await their girls in the engineering profession, along with best practices for sustaining girls’ interest in engineering after the event.

To all women in engineering, I issue a plea: Share your passion for the profession with our girls! Volunteer at a SWE event; reach out to a teacher in your local community and offer to speak to their class or provide them with resources that promote engineering as a career for all (http://societyofwomenengineers.swe.org/swe-members); or just encourage the young girls you know to join SWENext, SWE’s precollege program (http://societyofwomenengineers.swe.org/swenext).

When girls engage with women studying engineering or working in engineering, it has a huge, positive impact. Let’s share our unique voice and be visible role models and mentors for the next generation of women in engineering!

Karen Horting, CAE
Executive Director & CEO

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