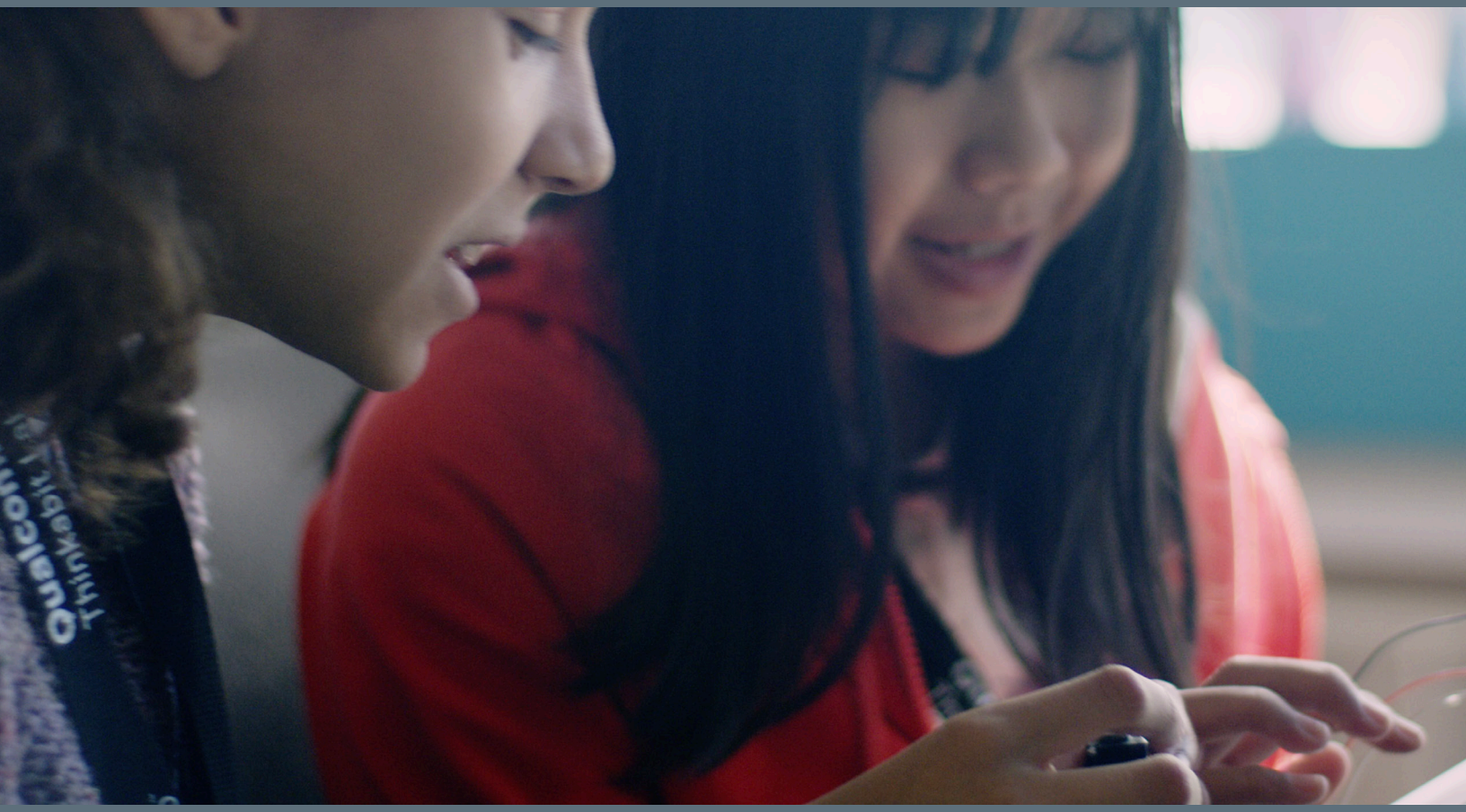
# Women Enhancing Technology: Engineering the Future for Girls and Women Across the Globe



Qualcomm collaborates with the Institute of International Education (IIE) on the Women Enhancing Technology (WeTech) program, which helps women and girls across Asia and the United States enter and succeed in high-paying technology careers. WeTech inspires females in 5th grade and beyond to connect with each other; pursue science, technology, engineering and math (STEM) education; and enhance their technology skills, with which they will fuel technological and economic growth and build a better tomorrow.

Launched as a Clinton Global Initiative (CGI) commitment in 2013, this public-private collaboration aims to provide training, build networks and offer professional opportunities in STEM for girls and women through various innovative activities. CGI highlighted WeTech's success at its annual meeting in 2015, showing a video featuring WeTech activities and the contributions of Qualcomm. In 2016, IIE awarded its Opening Minds Corporate Leadership Award to Qualcomm for the company's leading role in WeTech[1].

INSTITUTE OF INTERNATIONAL EDUCATION | WeTech™

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# PROGRAMS

**Research shows that when more women work, economies grow[2]. Empowering the next generation of women in the technology sector is critical to the global economy. This sector needs the ideas, brain power and skills of more women to fuel innovation, create the technologies of tomorrow and drive social and economic progress. WeTech offers solutions to this global challenge by providing scholarships, mentoring, internships, seed funding, and afterschool and summer STEM education experiences that inspire girls and women to pursue STEM education and careers. Qualcomm contributes to the design and implementation of several WeTech programs.**


## Qcamp for Girls in STEM

More than half of all girls in the United States have said that they would not typically consider a career in STEM[3]. WeTech is working to raise awareness of STEM careers among young girls through Qcamp for Girls in STEM.

Qcamp is a free-of-charge, intensive summer program that aims to spark middle school students' interest in STEM fields, empowering them to choose STEM studies and careers later in their lives. Launched at the Qualcomm® Thinkabit Lab™ in 2014, Qcamp builds upon the lab's model and mission to demystify STEM subjects by engaging students in practical and creative applications of engineering and technology that are both exciting and fun.

**Qcamp Impact**

- In 2014, 30 pre-6th grade girls from the San Diego Unified School District were randomly selected to attend the inaugural Qcamp. The entire cohort willingly and eagerly returned to Qcamp in 2015 and 2016.
- The University of California, Berkeley's Lawrence Hall of Science conducted a multi-year research study on the impact of Qcamp on the first cohort of girls. The initial findings indicate that the unique, all-girl environment, which provides role models, encourages creativity, problem-solving and hands-on engineering activities, enhances girls' success in STEM.
- In summer 2016, Qcamp expanded to include 60 students from the Vista Unified School District: 30 pre-6th grade girls participated in Qcamp for Girls in STEM; and a co-ed group of 30, pre-6th grade girls and boys participated in Qcamp for Kids in STEM.
- The 90 students who have participated in Qcamp to date came from 28 schools in the San Diego area through an open application and randomized selection process. All 90 serve as STEM Ambassadors at their middle schools, thus directly and indirectly influencing approximately 1,000 students through their new skills and ideas about technology.
- In July-August 2016, Qualcomm hosted its first Qcamp in China, bringing together girls from rural areas across China to learn tangible engineering skills and build confidence.

**"Being in Qcamp has made me want to be an engineer and want to change the world for the better."**

- Qcamp participant, San Diego, California

## WeTech Afterschool Program

Research shows that while girls' interest in computer science diminishes over time, the biggest drop occurs between the ages of 13 to 17[4]. Intervention programs for girls at the high school level could have a significant, positive impact on the number of women studying STEM and pursuing STEM-related careers.

In Bangalore, India, the WeTech Afterschool Program helps high school girls gain an interest in tech-based careers by providing them with new digital skills and exposing them to relevant career opportunities and inspirational women role models. The program uses the Technovation curriculum, which prepares the girls to enter the global Technovation entrepreneurship competition. Qualcomm, along with two other technology companies, have participated in the WeTech Afterschool Program since 2014, providing technical and business training for 225 girls with the assistance of more than 100 mentors from the sponsoring companies.

**Afterschool Program Impact**

- Across three years of programming, 45 teams of girls from schools across Bangalore participated in the WeTech Afterschool Program and entered the Technovation entrepreneurship competition.
- Qualcomm-mentored teams have designed, coded and pitched business ideas for 10 mobile applications aimed at solving a social problem, which they entered into the global Technovation competition.
- In addition to learning how to build and code a mobile application, students also developed and pitched their business ideas in front of an audience of judges and technology professionals.
- Each year, students reported a significantly increased interest in studying or pursuing a career in technology after the program. Many Qualcomm employees returned as mentors for multiple years, expressing much pride in helping to build girls' confidence and interest in technology.

**"We learned to cooperate and work as a team. It was a great experience to learn from our mentors and eventually create our app, PsyFi."**

- Vidushi, Afterschool Program participant, Bangalore, India

## WeTech Qualcomm Global Scholars Program

The statistics for young women in engineering and technology studies and jobs are bleak. A mere 12 percent of engineers are women. Females hold just 26 percent of all tech jobs. Despite earning the majority of bachelor's degrees, women earn fewer than 20 percent of computer science degrees[5,6].

The WeTech Qualcomm Global Scholars Program combines financial support with online (virtual) mentorships to give college-level women an important opportunity to gain real-world engineering experience, access to role models and enhanced technical skills. This holistic package of support further ensures that, upon graduation, the women will elect and be poised to succeed in a technical career.

### Global Scholars Program Impact

- In 2015, the WeTech Qualcomm Global Scholars Program launched in China and India. Thirty-six female scholars pursuing STEM degrees at five universities received scholarship funds. They were also matched 1:1 with Qualcomm employees in India, China and Singapore who supported them through a 6-month virtual mentorship.
- In 2016, the program expanded to Korea and Taiwan, awarding 30 scholarships to deserving female college students and matching them with 30 mentors from Qualcomm offices around the globe.
- Content for the virtual mentorship included goal setting, networking, resume building, interviewing and strengths assessment, helping prepare the college women to successfully enter the workforce.
- Through events celebrating the scholars' completion of the program in Bangalore (August 2016) and Beijing (September 2016), the women further inspired one another by sharing their experiences and successes.
- In early 2017, the program expands to Korea and Taiwan, broadening the global network of young women studying and working in STEM fields.

**"The program was indeed a life-transforming experience for me. It helped me realize my strengths and improved my confidence. ... The experience was truly amazing."**

- Anjali, Global Scholar recipient, Kerala, India

## What's Next

WeTech, with Qualcomm as a lead partner, continues to work toward a shared vision of women building the tech pipeline, from entry level to the executive level.

Read more about WeTech's pioneering approach to increasing the number of women in STEM: http://www.iie.org/Programs/WeTech

[1] Institute of International Education. Retrieved from http://www.iie.org/Who-We-Are/News-and-Events/Press-Center/Press-Releases/2016/2016-09-28-IIE-Gala-2016.

[2] UN Women. "Facts and Figures: Economic Empowerment". Retrieved from http://www.unwomen.org/en/what-we-do/economic-empowerment/facts-and-figures; accessed January 8, 2017.

[3] Girl Scout Research Institute. "Generation STEM – What Girls Say about Science, Technology, Engineering , and Math". 2012. Retrieved from http://www.girlscouts.org/content/dam/girlscouts-gsusa/forms-and-documents/about-girl-scouts/research/generation_stem_full_report.pdf; accessed January 8, 2017.

[4] ComputerScience.org. Retrieved from http://www.computerscience.org/resources/women-in-computer-science/; accessed January 8, 2017.

[5] The American Association of University Women. "Why So Few?" 2010. Retrieved from https://www.aauw.org/files/2013/02/Why-So-Few-Women-in-Science-Technology-Engineering-and-Mathematics.pdf; accessed January 8, 2017.

[6] National Girls Collaborative Project. "Statistics". Retrieved from https://ngcproject.org/statistics; accessed January 8, 2017.