Evaluation Matters: Evaluation of the TechGirls Program



THE EVALUATION

Why: The purpose of this evaluation was to determine how successful TechGirls has been in meeting program goals and to inform programmatic decision-making. The evaluation specifically focused on alumnae from the Middle East and North Africa who participated in the program between its inception in 2012 through 2019.

What: The evaluation addressed the following four questions:

- To what extent is the TechGirls program structured in a way that would contribute to achieving program goals?
- » Continued on next page.

THE PROGRAM

TechGirls is a four-week, U.S.-based international summer exchange program sponsored by the U.S. Department of State's Bureau of Educational and Cultural Affairs (ECA). The program is designed to empower and inspire young women (ages 15-17) from the United States and countries around the world to pursue higher education and careers in science, technology, engineering, and math (STEM) fields through hands-on skills development training with American technologists. Exchange activities include a technology camp with interactive labs, leadership clinics, job shadow experiences, site visits to technology companies, discussions on STEM education and careers, cultural/ recreational events, community service opportunities, and homestays with American families. The program's tech camp component, hosted on a U.S. university campus, provides participants with an in-depth exploration of cutting-edge technologies and various educational and professional paths in STEM fields. The program also includes a follow-on component, where participants plan and implement a peer training or service project in their community to share what they have learned. Program alumnae are expected to form and engage in professional and educational networks related to STEM, with continued collaboration on STEM projects, competitions, grants, and other opportunities. Initially focused on countries of the Middle East and North Africa, the TechGirls program expanded into Central Asia in 2019 and is expanding further in 2022, engaging a cadre of technology-minded young women from the United States and countries in all six regions of the world.

KEY FINDINGS AND CONCLUSIONS

- » Overall Reception & STEM Relevance Overall, the program is achieving the stated goals and objectives and participants are happy with their program experience. Participants reported gains in STEM skills as well as soft skills, and, importantly, they have continued to apply the skills learned once they return home. The program has inspired and empowered young women to pursue STEM and it has helped to increase their interest in, and awareness of, STEM educational and professional opportunities. It also has helped to provide clarity on the application of STEM to a wide variety of fields as well as what studying or working in STEM looks like in practice. The majority of alumnae report studying STEM in university and/or pursuing a career in STEM fields.
- » Most Impactful/Least Impactful Elements It appears the tech camp and job shadow components are the most impactful for foreign participants' educational and professional trajectories. Conversely, interaction with Americans, the community service activity, and follow-on project components were deemed to be least impactful. Between 2012-2019, the program also was deemed to have a limited impact on the U.S. TechGirls in all areas, who made up a small percentage of participants (approximately 10 percent of total).
- » Interactions with Americans The influence of Americans on participants varied from quite impactful to relatively unimpactful. Of the various opportunities for interactions







Contact Us: ECAevaluation@state.gov

THE EVALUATION

- 2. To what extent has the interaction with Americans influenced the educational and professional trajectory of TechGirls alumnae?
- 3. How are TechWomen and TechGirls alumnae establishing and maintaining networks with other TechGirls alumnae? By country? By region?
- 4. What challenges have
 TechGirls alumnae
 experienced in sustaining
 these networks?

Who: The ECA's MELI Unit contracted Dexis Consulting Group to conduct the evaluation

When: May 2020 -September 2021

How: Dexis utilized a mixedmethods approach for the evaluation, which included document review, surveys (247 respondents), key informant interviews (56 respondents), and focus group discussions (40 respondents). Specific evaluation techniques utilized include ripple effect mapping and social network analysis.

How Much: \$566,796

- with Americans, the alumnae generally enjoyed the host family stay and many wished for more time with the host families; however, the ultimate impact of this experience also varied by participant. The addition of the U.S. TechGirls component was expected to deepen interaction between foreign TechGirls and American peers, but that does not seem to have occurred in a meaningful way so far. When it comes to influence on educational and professional trajectories, the exposure the program provides to the U.S. education model, which emphasizes a practical hands-on approach to learning in STEM, was particularly influential for participants. In terms of networks, many alumnae are still in contact with their host families, but only some are still in contact with their job shadow hosts, despite rating the job shadow day as highly impactful.
- » TechGirl/TechWomen Networking TechGirls are in touch with each other, with the network clustering by cohort year across countries. All countries are well represented across the network, although individual country networks vary in density. Social media is mainly utilized for communication, and structured activities, events, and projects provide the best opportunities for facilitating continued engagement and networking. The TechWomen are widely regarded as mentors and role models; however, they are not yet well-integrated into the TechGirls network, with a few exceptions.
- » Challenges to Sustained Networks Participants cited the intensity of the program as a barrier to establishing enduring relationships with contacts outside of their immediate peer group, such job shadow hosts. They also noted the program schedule left them with too little time to reflect on everything they had learned. When participants returned to their home country, they struggled to translate what they learned to realistic follow-on projects, and challenges in implementation of projects left some alumnae feeling frustrated and disappointed. While there are venues for continued network engagement, such as TechWomen-TechGirls Clubs, respondents noted that geographical dispersion, competing priorities, and cultural barriers can make it difficult to remain plugged in.

INTEGRATING RECOMMENDATIONS

ECA's TechGirls program team has already made adjustments to procedures and practices stemming from this evaluation's recommendations, including:

- » ECA should consider expanding the program's career development components.
 For the 2022 program, TechGirls added 12 hours of workshops on career-focused topics including the admissions process for higher education, resume-writing, and how to identify job opportunities. The job shadow component of the program was also lengthened.
- » ECA should consider increasing engagement with Americans. The role of Americans in the TechGirls programs has been expanded considerably over the last year. The U.S. TechGirls participants now join their foreign participant peers during each phase of the program, from pre-program orientations to post-exchange program follow-on activities (the Americans used to be involved only in the tech camp portion). In addition, the program has lengthened the stay with host families.
- » ECA should consider increasing support for follow-on projects to help facilitate successful implementation. The TechGirls implementing partner provides small grants to participants for follow-on projects. These grants offer financial support appropriate to participants in this stage of professional development and extend to as many TechGirls as possible.