

## Engaging communities with action-orientated strategies

The Center for Gender Equity in Science and Technology at Arizona State University was established in 2016 as a one-of-a-kind research unit to address the lack of women and girls, especially those belonging to diverse racial, ethnic, and social class groups, among science, technology, engineering, and math fields. We strive to address this gap by owning, generating, and critiquing the collective body of research and offering culturally responsive STEM education programs. We actively engage in discourse with and about the real experiences of underanticipated girls of color to gain clarity on the effectiveness of our program offerings and continuously re-assess and adapt our approach.

### It takes a village

An excellent team comprised of faculty, researchers, staff, and students are the foundation of the center and in partnership with various community organizations and school districts we are able to advance our mission through a vast array of programs that include:

- Co-Robotics for CompuGirls
- CompuGirls Hawai'i
- Cybersecurity Warriors
- Digital Storytelling
- Virtual worlds for social change
- Learning in Libraries
- CompuPower
- And many more!

## Help engage girls of color in STEM

When you give to our center you assist in actively driving discourse and experiences of underrepresented women and girls in STEM. We are immersed in our community and together we can change the STEM pipeline and pursue solutions to the challenge of equitable access to education.

“It is more than simply filling the STEM pipeline with more girls and women of color. It's creating an environment in which that happens naturally”

- Dr. Kimberly Scott  
Founding Executive Director



# Center for Gender Equity in Science and Technology

## At a glance

[cgest.asu.edu](http://cgest.asu.edu)

 [cgest\\_asu](https://twitter.com/cgest_asu)

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Community Services Building  
200 E. Curry Road  
Tempe, AZ 85281

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 **Center for Gender Equity  
in Science and Technology**  
Arizona State University



## Preparing girls to thrive in STEM fields

As developing technosocial change agents, girls move through three stages in the CompuGirls programming: analyzing media representations, analyzing technical design features, and finally, designing technical solutions to community problems. Girls find the culturally relevant and social justice aspects of the program key to their sustained participation and interest in STEM courses.

# Capacity Building

This arm of the center serves to increase the participation of women and girls of color in STEM fields by providing evidence-based, research-driven programs that engage participants in socially relevant technology experiences. Through programs such as CompuGirls, CompuPower, and Learning in Libraries, the center provides one of the few technology programs that intertwines culturally relevant practices with project-based technology activities encouraging girls of color to develop socially relevant, researched products in areas such as digital media, coding, and robotics.



“I know some girls who want to go into technology, but they don’t think they can do it because of their skin color or because they’re girls. And I think that this program was really beneficial.”

- former CompuGirl

**700+**  
CompuGirls participants

**76%**  
Black, Latina, & Native American

**44**  
CompuGirls teachers

**8**  
participating states

## The CompuPower Impact

**4**  
school years

**13**  
rural schools

**544**  
high-school students

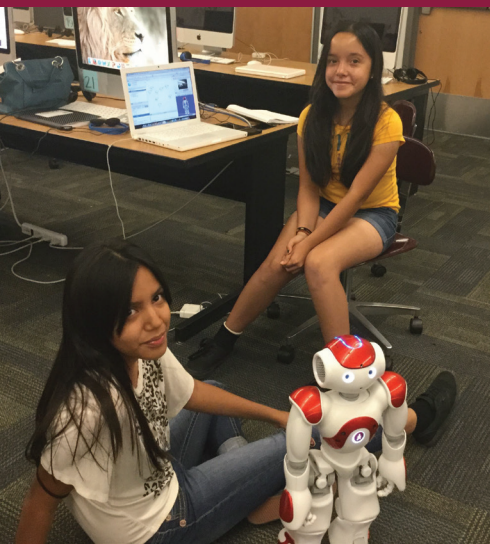
**5**  
Arizona counties

**15**  
mentor teachers

## Grant-funded research

Over \$5.4 million in grant funding has been provided by the National Science Foundation for various CompuGirls programming throughout the United States over the last decade. This funding allows our team to study, implement, and adjust our programs to ensure we have high-impact practices that result in long-term engagement of girls of color in STEM.

Additional funding has been provided through various community partners that include Intel, Arizona Community Foundation, and Helios.



“This is an amazing program. Other people are intrigued by it because they have never heard of anything like it. It makes our students think outside the box, problem solve, and it’s done in a way that students can express themselves.”

- The Academies of the South CompuPower Teacher



# Advocacy

Through the National STEM Collaborative, a consortium of higher education institutions and non-profit partners, we advocate for girls and women of color in STEM by providing research and evidence-based practices, networking resources, programs, and initiatives that may be seamlessly implemented in p-20 education settings. We equip fellow advocates with the tools to expand opportunities for girls and women of color to enter, persist, and succeed in STEM both academically and professionally.

**3** annual conferences  
**351** conference attendees  
**89** speakers & panelists  
**50+** students sponsored



## Changing the pipeline

We seek to provide institutions, students, leaders, corporations, and organizations with the skills and resources to change the pipeline to be more equitable, inviting, and accepting for women and girls of color.

## Knowledge amplification and building networks

Our Women of Color STEM Entrepreneurship conference highlights the accomplishments of women and girls from diverse communities while building stronger networks and relationships in order to encourage STEM organizations to recruit and retain women and girls of color.



## Developing, testing, and scaling interventions to diversify tech

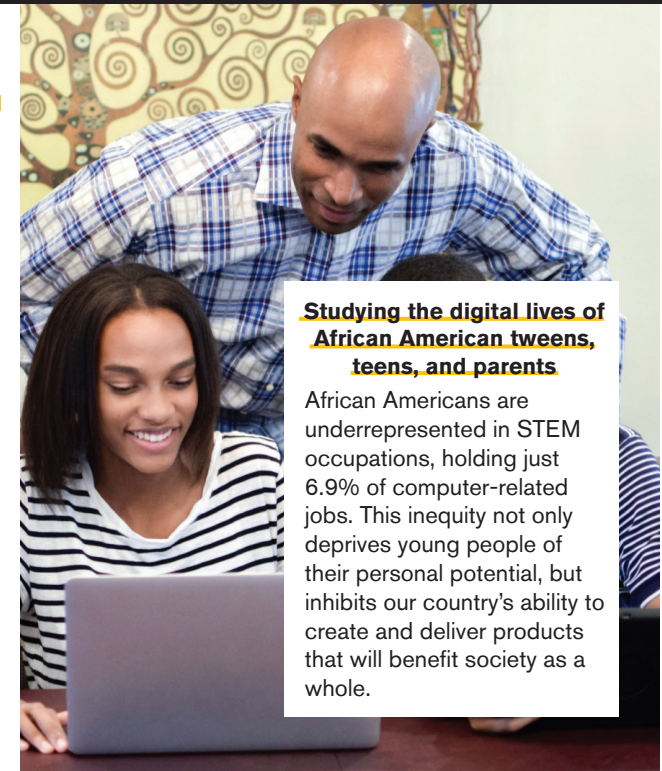
The Women of Color in Computing Researcher/Practitioner Collaborative is a new initiative which aims to develop foundational landscape data on the participation and pathways to success of women of color across the computing pipeline, identify obstacles and barriers unique to women of color in computing, and explore the efficacy of various interventions to improve the outcomes for women of color in computing and technology.

**14** projects funded  
**29** researchers  
**9** advisors



# Knowledge

The knowledge arm of CGEST is committed to advancing girls and women of color in STEM through an intersectional and culturally responsive approach. We promote data-driven advocacy by exploring issues related to digital media learning and the underrepresentation of women and girls of color in STEM. In order to reach multiple stakeholders, we share our findings with scholars, organizations, policymakers, and practitioners through a variety of avenues, including academic articles, conference presentations, poster sessions, and digital stories. Initiatives include the STEM Equity Exchange and STEAM+H Pathways Scholars.



## Studying the digital lives of African American tweens, teens, and parents

African Americans are underrepresented in STEM occupations, holding just 6.9% of computer-related jobs. This inequity not only deprives young people of their personal potential, but inhibits our country's ability to create and deliver products that will benefit society as a whole.