

# COMPUGIRLS

CompuGirls is one of the few programs in the nation introducing adolescent girls to the fields of science, technology, engineering and mathematics (STEM) through innovative teaching techniques, social justice and the latest technologies. By providing access to resources not otherwise available, our program helps girls develop the skills needed to become the next generation of tech innovators and community leaders.

"Thanks to CompuGirls, I have really grown out of my shell and am able to present with a lot more confidence."



## who we are

## Kimberly A. Scott

Founder, Executive Director, and Principal Investigator

Founder, Executive Director and Principal Investigator Associate Professor in Women and Gender Studies Department within the School of Social Transformation at Arizona State University. A scholar-activist, Scott's work focuses on issues of social justice with an emphasis on girls' of color social and academic development. She holds the distinguished honor of being named a STEM Access White House Champion of Change.



### Mentor Teachers and Management Interns

Staff are a mixture of carefully **screened** in-service teachers (Mentor Teachers) and individuals who hold their bachelor's degree (Management Interns). Each individual experiences **multiple training sessions** about **culturally responsive teaching**, social justice, techno-social analysis, and digital media.

# what we're about

The global economy of the 21st century demands an innovative and technologically proficient workforce. CompuGirls prepares girls for future success by providing resources to enhance their current technical skills. Girls become more than gamers or consumers, creating their own unique projects around a social justice theme.

Initiated in 2007, CompuGirls is a culturally responsive multi-site, multi-session technology program for adolescent girls (ages 13-18) who have little exposure to, and representation in the STEM field. Supported by grants from the National Science Foundation and Intel Foundation, CompuGirls provides fun, free programs where girls learn how to manipulate the latest technologies in digital media, game development, and virtual worlds to positively affect their communities. "Our program is not only about technology; it's about identity and transformation for girls."



"This program presents a well-rounded platform. It provides girls with collegial experiences, network opportunities, and creative work time. It broadens their perspective of the STEM field."



Supported by our partners and grants, girls are provided access to laptops, wireless internet, digital cameras, video equipment, and software. At the end of each program, community members are invited to attend a **Closing Ceremony**, **planned by the girls**, in which they present their projects to friends, family and stakeholders.

We value culturally responsive computing, community advancement, computational thinking, sustainable effort, and collective action. We foster girls' abilities to become change agents in the 21st century.

#### **Benefits for Participants:**

- Research skills necessary for college readiness (e.g. database searches, research methodologies, identification and analysis of peer-reviewed articles, presentation skills)
- Enhanced technology skills and engagement in activities that are instrumental to obtaining 21st century skills
- Opportunities to present projects at national and statewide conferences
- Involvement in positive experiences during time in which teens typically engage in anti-social activities
- Increase in critical thinking and better writing skills.
- Opportunity to explore different aspects of social justice and discover a sense of self in a creative environment

#### Benefits for Mentor Teachers and Management Interns

- Low teacher to student ratio to develop meaningful relationships with students
- Opportunity to facilitate discussions with girls on how to become digital innovators
- Increased teaching repetoire through completion of over 40 hours of training in teaching a social justice, technology, and other culturally relevant pedagogy
- Expansion of knowledge of technology
- Serve as ally, advocate and role model for a group of young women

#### **Benefits to Potential Sites**

- Cultivation of individuals who are better equipped to understand teen and community issues.
- Expanded pool of in-service and pre-service teachers with hands-on teaching experiences
- Knowledge of how to revise curricula and modify interactions to increase student engagement
- Professional development in proven pedagogical practices and strategies.
- Greater understanding of community needs and ability to use community space in nontraditional ways



# **Our Impact**

An external evaluation shows that CompuGirls provides an expertly-guided experience that would otherwise not be available to girls in a school or home environment. The data shows that the program increases self-concept through improved technological abilities which leads to the production of meaningful shared digital products. Related findings suggest that girls develop increased clarity of self-purpose through the projects and the investigations of social justice issues, better positioning them to participate, contribute, and grow in the digital learning landscape.

#### Supporters

**American Express** Arizona Community Foundation Arizona Science Foundation Arizona State University Aurora Youth Options Blair Caldwell Library Boys and Girls Club of Sacaton Chandler Public Library Contemporary Leadership Academy Cronkite School of Journalism and Mass Communication Denver School of Science and Technology **Dunn Transportation Florence Crittenton** Girls Athletic Leadership School Girl Scouts Arizona Cactus-Pine Girls Inc. Google Helios Education Foundation Henkel Foundation Kearney Middle School Marquette University Merrill Middle School Morey Middle School Motorola MouseSquad California **Oakland Library Association Oakland Unified School District** Papago School PEPP, Inc. Phoenix Indian Center, Inc Phoenix Union High School District Smith College

STEMWorks Tata Consultancy TechShop Chandler Tempe Union High School District University of Colorado— Denver Vickers Boys and Girls Club in Park Hill Wells Fargo Bank Women Investing In Women Women Who Code

#### **Eligibility Criteria for Potential Sites**

Sufficient space to accommodate large group (10-40) and small group (5-7) interaction

1 : 1 ratio of girls to computers (laptops are preferable to desktops, Macs to PCs)

Internet/wifi connection with a secure server that can support virtual world activity

Moveable furniture that can be grouped

Whiteboard/blackboard or Smart Board with capability to access digital image from "Teaching Station"

Extension cords, power strips/surge protectors and computer chargers

Space where girls and staff can eat lunch/ snack and take breaks

Access to public transportation preferred

Staff willing to commit to program implementation

Staff willing to undergo one of three Training Institutes offered annually by CompuGirls (travel to Phoenix required)

Please note that all curriculum and collateral will be provided by CompuGirls ASU.

#### Investors

National Science Foundation Intel Foundation

For more information or to find out about upcoming sessions, please visit our website at **www.compugirls.org** or Email: compugirls@asu.edu