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In 2005, Twin Cities PBS (TPT) created SciGirls®, a multiplatform science, technology, engineering and math (STEM) education program that is changing how millions of girls (and boys!) think about, engage in and pursue STEM studies and career paths. This innovative program integrates television, online media and hands-on activities to drive STEM curiosity and learning.

**TELEVISION**

At the heart of SciGirls is a national PBS television series targeting girls between the ages of 8 and 13. Each half-hour episode follows a different group of real girls mentored by dynamic female STEM professionals.

**WEB**

The SciGirls website is the first safe social network for children on PBS and includes videos, games and opportunities for youth to engage in monthly citizen science challenges and fun STEM activities.

**OUTREACH**

Starting in 2010, the SciGirls CONNECT educational outreach network now includes 176 partner organizations in 35 states and the territory of Puerto Rico, and has trained 3,000 educators. These educators have used SciGirls methods in their work with 60,000 young people of multiple ethnicities and cultures in urban and rural areas nationwide.

**SCIGIRLS SEVEN**

Our approach is grounded in research-based strategies that motivate girls around STEM engagement, including collaboration, creativity, the development of intellectual tenacity, role modeling and more. This quarter-century of research, called the *SciGirls Seven*, forms the foundation of all SciGirls media content and activities.
SciGirls CONNECT is an outreach initiative that has built a network of empowered professionals dedicated to inspiring more girls to pursue STEM study and careers.

Girl-serving organizations nationwide apply to become a SciGirls partner organization.

A certified SciGirls Trainer provides a face-to-face training in media-enhanced STEM education and role modeling strategies at the partner site. Partner organizations receive a $200 stipend to support staff and programming at their site. Partner organizations invite internal staff as well as other educators in their communities to participate in the training.

Trained staff and educators develop and implement SciGirls programs to inspire the next generation of STEM innovators.

All partner organizations have full access to SciGirls resources, including videos, activity guides, webinars, and ongoing support.

All trained educators are eligible to apply to the SciGirls Train-the-Trainer program, where they become certified to empower other educators with gender equitable strategies.

Trainers lead SciGirls workshops for educators in their region. This model creates a robust and growing network of SciGirls practitioners. The impact is exponential!
### SciGirls by the Numbers

#### in 2015-2016

- **31** organizations spanning **13** states became SciGirls CONNECT partners.
- **33** SciGirls certified trainers provided **37** trainings in **19** states.
- **603** educators attended a SciGirls training.
- **333** educational organizations implemented **SciGirls programs**.
- **22,323** youth participated in a SciGirls program.

#### since 2011

- The SciGirls CONNECT network has **176** partner organizations across **35** states.
- **66** SciGirls certified trainers have completed **206** trainings.
- **2,906** educators have been trained in SciGirls’ gender equitable strategies.
- **1,100+** SciGirls programs created.
- SciGirls has reached a total of **59,323** youth participants.
Each year, SciGirls partner organizations complete a Partner Yearly Report (PYR) reflecting on all SciGirls programs implemented throughout the year. Additional trained educators who provide SciGirls programming complete an Educator Program Report & Reflection (EPRR) after each SciGirls program. This report presents findings from 31 PYRs and 17 EPRRs from September 1, 2015 through August 31, 2016.

SciGirls programming takes place in diverse geographic settings. In fact, 75% of reporting educational organizations serve youth in both urban and suburban communities, and over half also serve rural youth.

SciGirls program participants include a variety of cultural, racial and ethnic backgrounds. As such, cultural responsiveness is a cornerstone of SciGirls’ vision. By recruiting diverse girls, role models and consultants, SciGirls aims to make STEM an engaging and relevant space for all girls, especially girls of color.

*Hispanic is NOT a race. There are many races within the Latino community, including White, Black, Native Indian, and even Asian. “Hispanic or Latino” refers to a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.
SciGirls programming is designed for youth in grades 3 through 8. SciGirls content resonates best with middle school students, a critical stage for STEM identity development. With support from SciGirls staff, educators and leaders can customize their programs to serve their students of all ages, from kindergarten through high school.

SciGirls programs take place in a variety of settings. All educators are encouraged to weave SciGirls content into current program models to best leverage their existing assets. The majority took place afterschool, with significant programming during summer months. Organizations offered a range of program formats, including weekend, overnight and evening programs.

SciGirls is primarily focused on eliminating the barriers that prevent girls from pursuing STEM study and careers. However, SciGirls content and activities are accessible to all youth independent of gender and have proven engaging for girls and boys alike. In 2015-16, 19,319 girls and 3,004 boys participated in a SciGirls program.
The SciGirls CONNECT Network includes 176 partner organizations and 66 SciGirls certified Trainers across 35 states and the territory of Puerto Rico. SciGirls CONNECT partners meet youth where they are — through community-based programs like YMCA and Girls, Inc., museums and science centers, organizations that serve primarily Spanish-speaking youth, universities, schools and more. The network is a robust community of practice which supports collaboration and sharing of best practices within diverse informal and formal STEM learning environments.
The *SciGirls Seven* states that girls benefit from relationships with role models and mentors. SciGirls provides role modeling opportunities—in-person and virtually—to reach girls through as many avenues as possible. In 2015-2016, SciGirls partners recruited 435 female STEM professionals to serve as role models for their participants.

**If she can *see* it, she can *be* it.**

*Geena Davis Institute on Gender in Media*

**Role Model Videos**

Combining the power of media and the impact of role models, SciGirls has produced *Real Women, Real Jobs*, a new series of 12 Regional Emmy Award-winning role model videos. These short-form videos feature female professionals from diverse cultural and STEM professional backgrounds sharing their STEM stories. Role models delve into both the challenges and triumphs of “a day in the life” in the STEM workforce.

The new series highlights female STEM professionals filmed in Spanish and English across the U.S., many in highly non-traditional professions.

**National Girls Collaborative**

SciGirls is excited to continue our partnership with the National Girls Collaborative (NGC). In 2015, nine NGC trainers participated in SciGirls’ Train-the-Trainer program, and disseminated thousands of SciGirls resources to girl-serving STEM programs across the U.S.

A cornerstone of NGC’s girl-centric model is role modeling. As such, NGC developed FabFems, a national role model database that connects female STEM professional role models with girl-serving organizations. This open-access database allows programs to easily find role models in their geographic and content area. FabFems has been a critical resource for SciGirls’ partner organizations as we encourage all role models to register and continue inspiring young women to pursue STEM study and careers.
RESOURCES

FOR EDUCATORS

SciGirls Activity Guides feature standards-based, hands-on STEM activities aligned with each episode.

SciGirls Role Model Strategies: Encouraging Girls to Consider STEM Careers provide STEM professionals, educators and other caring adults with the best practices they need to engage and inspire young learners.

Engaging Latino Families: Key Ingredients for Successful STEM Programs features culturally responsive strategies to help educators build trust, communicate with and create great STEM initiatives for Latino learners.

FOR KIDS

Dare to Be a SciGirl! is packed with hands-on STEM activities, and great information about STEM careers that will inspire kids to prepare for and dream about their STEM future.

The Nature Nurture Journal will get kids outdoors, ready to identify, describe and collect data about the observable world.

FOR FAMILIES

When it comes to STEM learning, encouragement from parents and other caregivers matters. SciGirls Family Guide for Engaging Girls in STEM helps parents support their children as they explore STEM education and career pathways.

SciGirls Activity Sheets provide simple, step-by-step STEM fun for youth and parents to enjoy at home.

*All resources are bilingual English/Spanish.
SciGirls Works!

SciGirls CONNECT Outreach Evaluation

Third-party evaluations of SciGirls’ outreach programming consistently show that educators believe SciGirls’ resources are reliable tools that build confidence, deepen STEM skills and spark a passion for STEM. The five-year SciGirls CONNECT Evaluation of 1,000+ SciGirls CONNECT educators showed that educators found the gender equity training and the SciGirls Seven strategies “extremely valuable.” Educators consistently indicated they gained new skills and knowledge from their training, that the training changed their thinking about girls in STEM, and that they felt ready to use and apply what they had learned.

Additionally, SciGirls Certified Trainers reported that their involvement with SciGirls helped create or reinforce their passion for inspiring girls’ interest in STEM and STEM careers, and the majority said sharing SciGirls was their main accomplishment in the program.

SciGirls Reflect, a one-day convening in 2016, brought together 25 SciGirls Trainers and Educators to reflect on their experiences with SciGirls. Participants were overwhelmingly positive about the SciGirls resources and strategies and have a wealth of experience incorporating SciGirls in their programs and organizations. It is clear that, in addition to specific outcomes for educators and students, SciGirls has the potential to impact teaching practice and the bigger picture of STEM education.

All SciGirls’ evaluation reports are collected online at scigirlsconnect.org/evaluations.
SciGirls Speak!

“SciGirls is such a driving force and gateway of engaging both adults and girls in having conversations around STEM gender equity. Thank you for providing resources to share in our local communities. This work is so important and making differences in the girl’s lives who participate. Girls are more confident in trying and pushing themselves during hands on experiments. They grow both individually and as a group through these types of programs. Thank you for all that you do.”

WSKG Public Media

“We look forward to continuing to use the SciGirls resources and will look at expanding them in 2017-2018 and beyond. Thank you!”

Roper Mountain Science Center

Reporting Partners:
Science Center of Iowa, SELF International, Girl Scouts of Montana & Wyoming, Challenger Learning Center of Maine, spectrUM Discovery Area, Englewood Public Schools, Center for Reservoir and Aquatic Systems Research (Baylor University), Roper Mountain Science Center, PBS SoCal, KOCE-TV, South Knoxville Elementary, WSKG Public Media, Cornell Cooperative Extension of Chenango County, South Florida Museum, Women in Engineering Program at UT Austin & Texas Girls Collaborative Projects, PA STEM Girls Collaborative Project, Great Lakes Aquarium, University of Maine, North Dakota Space Grant Consortium, Twin Cities Environmental Education Consulting, LLC, Park Forest- Chicago Heights 163 X-STEAM Program, Science Club for Girls, Town of Ramapo Challenger Center, Science Center of Iowa, Louisiana Public Broadcasting, Challenger Learning Center, YouthCARE, SciGirls Tallahassee, Women in Engineering Program & Texas Girls Collaborative Project, Adler Planetarium, Mad Science of NE Central FL

Reporting Educator Program Sites:
SciGirls CONNECT continues to grow in 2017 with several new and exciting initiatives. New projects with the National Science Foundation, The International Space Station and the Beacons Clubs feature coding, space science and Spanish-language content. SciGirls continues to inspire and encourage even more girls in STEM nationwide!

**SCIGIRLS CONNECT: Twin Cities**

With support from the Cargill Foundation and the Donaldson Foundation, SciGirls will continue to expand our outreach model locally by integrating SciGirls programming into local middle schools sites. TPT will train program staff to design and implement fun, engaging STEM activities. Hosted by TPT, Family STEM Nights will get the whole family involved in hands-on STEM learning. These partnerships have potential for both local and regional scale-up, empowering even more young STEM superstars!

**SCIGIRLS CODE**

SciGirls Code is a two-year pilot program funded by the National Science Foundation that will use the principles of connected learning with 16 STEM outreach partners to provide 160 girls and their 32 leaders with coding and computational thinking skills. Combining a curriculum centering on e-textiles and wearable tech, robotics, and mobile app development; role model training for female technology professionals; and professional development for STEM educators, SciGirls Code will empower girls to be tech-savvy innovators.

**Latina SCIGIRLS**

TPT is producing six new Spanish-language episodes, filmed in diverse Hispanic communities throughout the U.S. The TPT team will also produce a series of online videos portraying the everyday life of inspirational Latina STEM professionals, and will provide girls and their families with opportunities to connect in-person with relatable Latina role models. The SciGirls team will provide fun Spanish language STEM programming to diverse Hispanic communities nationwide.

**SCIGIRLS: Blast off!**

In partnership with the International Space Station Explorers (SSE) STEM education program, SciGirls is excited to work on new initiatives that engage girls in space activities, including; sharing SSE opportunities with our CONNECT network of educators, providing opportunities for girls to connect with female role models (talking to an astronaut, learning about women whose experiments have flown in space) and sharing the stories of middle school girls who have flown their own experiments into space and back.
Stay Connected

Parents
pbs.org/parents/SciGirls

Educators
SciGirlsconnect.org
pbslearningmedia.org/collection/SciGirls

Kids
pbskids.org/SciGirls

Changing how millions of girls think about STEM!