SciGirls
CONNECT
Annual Report 2016-2017
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 games 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 a dynamic female STEM professional. Over 40 million viewer impressions to date!

**WEB**

With 300,000+ visitors per month, the SciGirls website is the first safe social network for children on PBS and includes videos, games and opportunities for youth to engage in STEM monthly challenges and activities. PBS Kids’ video app garners 2 million views per month!

**OUTREACH**

The SciGirls CONNECT educational outreach network includes 187 partner organizations in 35 states and the territory of Puerto Rico. SciGirls has trained over 3,000 educators, working with 73,500 diverse, young people in urban and rural areas nationwide.

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**SCIGIRLS SEVEN**

Strategies for Engaging Girls in STEM

Our approach is grounded in culturally-responsive, 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. With the support of the National Science Foundation, TPT is updating these strategies with the latest research. The new strategies will debut in 2019.
How It Works

Since 2011, SciGirls CONNECT 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.

Train-the-Trainer

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!
The SciGirls CONNECT Network includes 187 partner organizations and 82 SciGirls Certified Trainers across 35 states and the territory of Puerto Rico. SciGirls CONNECT partners include 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.
### SciGirls by the Numbers

#### 2016-2017

<table>
<thead>
<tr>
<th>Organizations</th>
<th>11</th>
<th>spanning 9 states</th>
<th>became SciGirls CONNECT partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>SciGirls certified trainers</td>
<td>10</td>
<td>provided 15 trainings</td>
<td>in 9 states</td>
</tr>
<tr>
<td>Educators attended a SciGirls training</td>
<td>245</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational organizations implemented SciGirls programs</td>
<td>230</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth participated in a SciGirls program</td>
<td>14,184</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### since 2011

- The SciGirls CONNECT network has 187 partner organizations across 35 states.
- 82 SciGirls certified trainers have completed 221 trainings.
- 3,157 educators have been trained in SciGirls' gender equitable strategies.
- 1400+ SciGirls programs created.
- SciGirls has reached a total of 73,507 youth participants.
FACTS & FIGURES

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 27 PYRs* and 22 EPRRs from September 1, 2016 through August 31, 2017.

In All Communities

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 50% also serve rural youth.

Grade Level

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.

* 14% of all partners reporting
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 content 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 2016-17, 12,460 girls and 811 boys participated in a SciGirls program.

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.
Role Models

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 2016-2017, SciGirls partners recruited 326 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 a series of 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. This series highlights female STEM professionals filmed in Spanish and English across the U.S.

National Girls Collaborative & FabFems

SciGirls is excited to continue our partnership with the National Girls Collaborative (NGC). 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.

(Pictured right: Alma Stephanie, SciGirls, and Astronaut Dr. Ellen Ochoa)
SciGirls CONNECT continues to grow in 2018. New projects will help children explore coding and computer science, celebrate their heritage and culture and soar into the science of outer space. Together with our nationwide partners, SciGirls continues to inspire children, families and educators in STEM learning!

SciGirls CONNECT: Twin Cities
With support from multiple foundations and corporations, SciGirls continues to expand its outreach model by introducing great STEM programming into both formal and informal education sites. The SciGirls team trains Minnesota educators to do fun, standards-based STEM activities with their learners. TPT also hosts family STEM nights, inviting everyone to experience hands-on science. These initiatives are geared for local and regional scale-up, encouraging even more young STEM superstars!

Latina SciGirls
SciGirls' fourth season, premiering in February 2018, celebrates the language and culture of Hispanic learners! The six new half-hour episodes are primarily in Spanish with English subtitles, feature bilingual girls and their Latina STEM mentors, and are broadcast on PBS stations nationwide. Season Four’s bilingual STEM outreach program also reaches girls across the country with culturally responsive and fun STEM activities, and the SciGirls PBSKids.org website features mobile-friendly games, episodes and more!

SciGirls Code
SciGirls Code is a two-year pilot program that utilizes the principles of connected learning programs at 16 STEM education organizations nationwide. Together, these partners 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 empowers girls to be tech-savvy innovators.

SciGirls: New Productions!
In partnership with the International Space Station, SciGirls is excited to create out-of-this-world media and on-the-ground activities that provide children with role models and inspiration they need to explore space science! And thanks to support from the National Science Foundation, the SciGirls team also kicks off the production of Season Five, which will focus on computational thinking. New episodes and state-of-the-art online games will offer children an inside look at how coding influences everyday life...and future studies and career paths.
Reporting Partners:
Baylor University Center for Reservoir and Aquatic Systems Research, Challenger Learning Center, Curious Minds LLC, Discover Your World STEM-Basic Enhancements, Inc., Girls Inc. At YWCA Minneapolis, Green Girls STEM Foundation and Green Girls Robotics, LEAP Academy University School, Marion P. Thomas Charter School, Minnesota Zoo, miSci – Museum of Innovation and Science, Mote Marine Laboratory & Aquarium, North Dakota Space Grant Consortium, Nova Blanche Forman Elementary, PBS SoCal, Pisgah Astronomical Research Institute, Project Exploration, Project Scientist, Roper Mountain Science Center, Science Quest, Sliding Doors STEM & Dyslexia Learning Center, spectrUM Discovery Area, The GLOBE Program, Town of Ramapo Challenger Center, Women in Engineering Program at The University of Texas at Austin, Women in Science and Engineering Program UIC, YouthCARE, YWCA Bristol TechGYRLS

Reporting Educator Organizations:

Produced By: Made Possible By:

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