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 Emmy Award-winning 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 for 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 48 million viewer impressions on TV to date!

**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 STEM monthly challenges and activities. The PBS Kids’ video app has garnered over 33 million views of episodes!

**OUTREACH**

The *SciGirls CONNECT* educational outreach network includes 204 partner organizations in 35 states and the territory of Puerto Rico. *SciGirls* has trained over 3,600 educators, working with 100,000+ diverse, young people in urban and rural areas nationwide.

**SCIGIRLS STRATEGIES**

With the support of the National Science Foundation, the *SciGirls Strategies* guide was updated and debuted in 2019 based on a literature review of 120+ research publications from the past five years on what practices have an enduring impact on girls’ STEM identity. Building a robust and positive STEM identity can help girls persevere in the STEM disciplines throughout middle and high school. *SciGirls Strategies* forms the foundation of all *SciGirls* media and activities.
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 204 partner organizations and 97 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.
The SciGirls CONNECT network has 204 partner organizations across 35 states.

97 SciGirls certified trainers have completed 246 trainings.

3,597 educators have been trained in SciGirls' gender equitable strategies.

1,589 SciGirls programs created reaching 101,270 youth participants.
2018-2019
FACTS & FIGURES

Each year, SciGirls partner organizations and trained educators complete a yearly report reflecting on all SciGirls programs implemented throughout the year. This report presents findings from 33 surveys from October 10, 2018 - December 10, 2019, with approximately 14% reporting.

In All Communities

SciGirls programming takes place in diverse geographic settings. In fact, 43% of reporting educational organizations serve youth in suburban communities, 35% in urban communities, and 21% in rural communities.

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.

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Percent of Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-12</td>
<td>12</td>
</tr>
<tr>
<td>7-8</td>
<td>42</td>
</tr>
<tr>
<td>4-6</td>
<td>41</td>
</tr>
<tr>
<td>K-3</td>
<td>21</td>
</tr>
</tbody>
</table>
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.

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.

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 Latinx 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 Strategies* state 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 2018-2019, *SciGirls* partners recruited 220 female STEM professionals to serve as role models for youth.

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)
Stay Tuned

The SciGirls’ network continues to grow! In 2020, SciGirls projects will help children explore coding and computer science, soar into the science of outerspace and investigate the engineering and technology that makes space travel possible. Together, with our nationwide partners and women STEM role models, SciGirls continues to inspire children, families and educators in STEM learning.

Code: SciGirls!

Season Five

Launched in 2019, this new season features girls and women mentors coding: digital art to visualize music; NASA-inspired urban wildlife cameras; an app for an original board game; a marine life tracking program; and digital animation. Code: SciGirls! also includes Code Quest! the newest SciGirls digital game helping young gamers learn to code. Outreach programs and a research study will help us learn how girls relate to the stories and characters in the game and episodes and what inspires them to seek out more coding experiences!

SCIGIRLS IN SPACE

Season Six

With NASA funding, SciGirls’ sixth season will include episodes filmed at NASA centers in Texas, Virginia, California, Alabama and Maryland! New profiles of girls who participated in NASA spaceflight challenges will join our collection of SciGirls in Space motivational role model videos. New media will be partnered with space-themed STEM activities and visits from in-person women STEM role models at 16 SciGirls partner organizations around the country, engaging more than 300 girls in NASA-inspired SciGirls activities. Ad Astra, SciGirls!

SCIGIRLS STRATEGIES

This project helps Minnesota high school teachers use the SciGirls Strategies to recruit and retain more girls in STEM and Career and Technical Education (CTE) courses. In 2019, with funding from the National Science Foundation, SciGirls utilized the SciGirls CONNECT Train-the-Trainer model to scale the project. Ten trainers from school districts in Minnesota and Wisconsin attended a week-long class. Each trainer is currently teaching a cohort of educators in gender equitable teaching strategies (GETS) to recruit and retain more girls in CTE and STEM pathways.

The SciGirls’ Network Continues to Grow!

New Partner Organizations

SciGirls Works!

“In addition to hosting a SciGirls summer camp, we also use SciGirls materials all year round and in all of our camps and programs.”
- spectrUM Discovery Area

“This program is really making a difference with the girls in our area. We produced a short video with the girl’s feedback on what SciGirls mean to them, and it was WONDERFUL!”
- WSKG Public Media (New York)

“83% of parents report their daughter seems more motivated to pursue a STEM education after Project Scientist. 89% of parents reported their daughter’s STEM knowledge increased after Project Scientist. 89% of parents report their daughter made new friends.”
- Project Scientist

Reporting Partners and Organizations:

SciGirls

This material is based on the work supported by the National Science Foundation under Grant No. #1612605. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.
Media and education that change how girls see STEM and how the world sees girls!

Parents
pbs.org/parents SciGirls

Educators
SciGirls-connect.org
pbslearningmedia.org/collection/SciGirls

Kids
pbskids.org/SciGirls