About SciGirls

SciGirls is a groundbreaking project designed to engage girls ages 8-13 in science, technology, engineering, and math, or STEM. At the heart of SciGirls is an Emmy Award-winning PBS television series, website and outreach initiative produced by Twin Cities Public Television in St. Paul, Minnesota. Each half-hour SciGirls episode follows the science and engineering adventures of real-life middle school girls mentored by female STEM professionals. SciGirls episodes have been broadcast over 44,500 times on 481 PBS channels garnering an estimated 25 million gross viewer impressions.

The SciGirls Seven: Strategies for Engaging Girls in STEM

National studies show that the number of women (especially minority women) studying and going into the STEM workforce is low. SciGirls is founded in academic research on gender equity and STEM. A quarter of a century of studies have converged on a set of common strategies that work, and these have become the SciGirls’ foundation. We call the strategies The SciGirls Seven.

1. Girls benefit from collaboration, especially when they can participate and communicate fairly.
2. Girls are motivated by projects they find personally relevant and meaningful.
3. Girls enjoy hands-on, open-ended projects and investigations.
4. Girls are motivated when they can approach projects in their own way, applying their creativity, unique talents and preferred learning styles.
5. Girls’ confidence and performance improves in response to specific, positive feedback on things they can control - such as effort, strategies and behaviors.
6. Girls gain confidence and trust in their own reasoning when encouraged to think critically.
7. Girls benefit from relationships with role models and mentors.

Evaluation Results of SciGirls CONNECT

Knight-Williams, Inc.’s summative evaluation of SciGirls outreach showed that informal educators believe SciGirls resources are reliable tools that build confidence, deepen STEM skills and spark a passion for science. “...grantees were overwhelmingly positive about their experiences with the SciGirls program...they found valuable ways to use the SciGirls materials, [and] agreed that they had a good understanding of the goals of the SciGirls grants program, that their project advanced these goals and that their departments benefited from SciGirls.”

SciGirls CONNECT Goals

1. To foster a greater interest in science and engineering among girls ages 8-13, making a dedicated effort to reach girls of color.
2. To provide informal STEM educators with training, video resources and complementary print materials modeling authentic explorations that all girls can do; and
3. To increase both the quantity and quality of girls’ STEM encouragement programs nationwide, through partnerships with diverse girl-serving organizations.

SciGirls CONNECT is a broad national outreach effort funded by the National Science Foundation for five years, through 2016, to encourage girls in STEM. SciGirls CONNECT draws together leaders from 115 girl-serving STEM educational organizations at science centers, community organizations, schools and universities across the United States and provides them with training and resources to implement SciGirls programs in their communities.

Professional Development and Outreach

To date, over 1,850 educators have received training from over 600 affiliated organizations. Reporting partners have implemented over 500 SciGirls programs reaching over 25,000 youth participants.

Through our partner the National Girls Collaborative Project, SciGirls programs have been connected with dozens of female STEM role models. The SciGirls CONNECT website hosts monthly webinars, a quarterly newsletter, gender equity resources, SciGirls videos and hands-on activities.

SciGirls is made possible by generous funding from the National Science Foundation.