PBS SCIGINS

Next Generation Learning for All November 9, 2015

Peers, Mentors and Messaging: Broadening Participation in STEM

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The Big Idea

- To change how millions of girls (ages 8-13) think about STEM!
- At the heart of the ten-year SciGirls initiative is an Emmy awardwinning PBS television series, website, and outreach program led by Twin Cities Public Television in St. Paul, Minnesota.
- We aim to support girls' interest, confidence and abilities in STEM subjects *before* they make the critical choices in high school that can impact postsecondary STEM studies and careers.

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SciGirls

Our Approach Every girl can be a SciGirl!

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On TV

SciGirls is a national PBS Kids series that feature diverse girls exploring a scientific question or an engineering challenge, guided by a professional female mentor.

Online

SciGirls hosts a safe, social networking website with interactive projects and games at <u>pbskids.org/scigirls</u>.

On the Ground

Our STEM videos and activities and our strategies for engaging girls for educators and role models are at scigirlsconnect.org



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SciGirls

SciGirls Seven

The *SciGirls* approach is based in the *SciGirls Seven*, a set of research-based strategies that successfully engage girls in STEM. Girls prefer projects that involve:

- 1. Collaboration
- 2. Personal relevance
- 3. Hands-on, open-ended
- 4. Preferred learning styles
- 5. Specific, positive feedback
- 6. Critical thinking
- 7. Role models & mentors





SciGirls Strategies

SciGirls Strategies is an NSF-supported project to help career and technical education educators and counselors in the Twin Cities recruit and retain more girls in technology and engineering pathways in high school. We will provide:

- Training for educators and counselors in the use of gender equitable teaching strategies
- Training for female STEM professionals on how to engage with girls
- A series of 12 video profiles of women in nontraditional fields
- The opportunity for girls to produce their own STEM narrative videos

Overview



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SciGirls

Role Model Strategies for Engaging Girls in STEM

SciGirls Role Model Strategies: Encouraging Girls to Consider STEM Careers offers basic training for role models, introducing them to best practices for their volunteer efforts. They include:

- Make a personal connection to dispel stereotypes.
- Use positive messaging to show how STEM makes the world a better place.
- ★ Share your passion.
- Make it hands-on and keep it interactive.
- Foster a growth mindset and promote perseverance.
- Show the way: offer resources and academic guidance for right here, right now.
- Follow-up and invite feedback.

