# Girls Inc. Operation SMART® (Science, Math, and Relevant Technology)



"I'm proud of what we built. Usually, you see men at a construction site, not women. This [program] proves that we can get along and get the job done."

- Megan, age 13

### Why This Program?

Over the past 30 years in the United States and Canada, women have vastly increased their proportion of bachelor's, master's, and doctoral degrees earned in science, technology, engineering, and math (STEM). At the same time, however, substantial gaps remain. Girls continue to lag behind boys in course enrollment and advance placement exam participation, and in specific STEM subjects such as computer science, physics, and math. Of greater concern is the fact that gains in education have not translated into equality in the workplace. Women still represent approximately one in five faculty members employed in computer science, mathematics, engineering, and the physical sciences collectively.

Contributing to the underrepresentation of women in these fields are persistent stereotypes that girls are not good at or aren't interested in STEM. It is critically important that these stereotypes are dispelled and other obstacles that get in girls' way are removed. Simply opening the doors will not work.

Girls deserve supportive, experiential, all-girl environments where they feel invited and encouraged to join the fun of discovering the world around them and where they can prove to themselves that they do like and can be good at STEM. Such a foundation will be key to girls persisting in STEM education and preparing for lucrative STEM careers that most of them would otherwise never consider. It will also be important to girls discovering that they can excel in STEM courses and careers.

### About the Program: Girls Inc. Operation SMART®

Girls Inc. Operation SMART® develops girls' enthusiasm for and skills in science, technology, engineering, and mathematics (STEM). Through hands-on activities, girls explore, ask questions, persist, and solve problems. By interacting with women and men pursuing STEM careers, girls come to view these careers as exciting and realistic options for themselves.

Girls Inc. Operation SMART® is an approach that each organization can apply to its own programming. Girls Inc. organizations may also implement one or more of the following components that have been built around the SMART philosophy.

• Eureka!®: Beginning with rising 8th graders, this multi-year effort combines sports and personal development activities with an intensive experience on a college campus for four weeks, follows up with educational and experiential opportunities during the school year, and looks to provide paid internships focused on math, science, and technology for the participants.

- Girls Dig It<sup>sm</sup>: Girls ages 12 to 14 build their analytical and interpretive skills while they work alongside archaeologists, making exciting discoveries that unveil the past and present of their communities and their culture.
- Thinking SMART: This program links girls ages 12 to 14 with professionals (particularly women) in the STEM fields. These "SMART Partners" help plan and deliver the program, encouraging girls to think like scientists by thinking with scientists.

Girls Inc. has published several other documents and resources to explain how to build and support an equity-based science program in a community agency, school, or science museum by applying a well-conceived philosophy and formula for success.

## The Girls Inc. Operation SMART® Formula for Success

What is the Girls Inc. Operation SMART® "Formula for Success"?

- Assume girls are interested in STEM. Too many girls still get the message that math and science aren't for them. At Girls Inc. sites, however, girls jump at the opportunity to dismantle machines, observe plants and animals, and build robots.
- Let them make big, interesting mistakes. Girls who are overly protected in the lab or on the playground have few chances to assess risks and solve problems on their own. Let girls learn to embrace their intellectual curiosity and trust their own judgment.
- Help them get past the "yuck" factor. Girls who are afraid of getting dirty aren't born that way—they're made. Girls Inc. encourages girls to put concerns about their "femininity" aside. Girls learn that they have a right to be themselves and to resist pressure to behave in gender-stereotyped ways.
- Expect them to succeed. Girls Inc. programs reflect our belief and expectation that girls are capable of excelling at STEM now, and of continuing to do so throughout high school, college, and beyond.

#### About Girls Inc.

Girls Inc. delivers life-changing programs that inspire girls to be strong, smart, and bold. Research-based curricula, delivered by

trained professionals, equip girls to achieve academically; lead healthy and physically active lives; manage money; navigate media messages; and discover an interest in science, technology, engineering, and math. The network of local Girls Inc. nonprofit organizations serves 150,000 girls annually at over 1,400 sites in 350 cities across the United States and Canada. Learn more about our programs and advocacy at:

www.girlsinc.org.

