Girls Love Robots, Too
These young students defy gender stereotypes about science and math

Marion Brooks recalls the light-bulb moment that began Einstein’s Daughters in 2006. She and her 12-year-old daughter, Katie, had just attended her son’s robotics competition.

“It seems strange,” Katie told her mother. “There were, like, 200 kids there, but only 20 girls. Can’t we do a team that’s just for girls?”

With Marion’s support, Katie started calling her friends and found five other girls interested in science and robotics. Now 16, Katie and her friends make up Einstein’s Daughters—the San Diego-based robotics team coached by Marion Brooks—and they’re not the only girls interested in technology. High school girls’ robotics teams are popping up around the country, defying stereotypes about women and science along the way.

Einstein’s Daughters competes at the annual national robotics competition called FIRST (For Inspiration and Recognition of Science and Technology), started by Segway inventor Dean Kamen in 1989. The teams has won several honors at the competition, including one of FIRST’s highest honors: the FIRST Tech Challenge Inspire Award for performance, collegiality and exemplification of FIRST philosophy. And they’re getting better and better at robotics.

“From when we first started, the biggest difference has been in our ability to actually build the robots,” says team member Caitlin Mackey, 17. “Our first robot was a simple square bot; this year it’s a completely complex robot.”

The team’s efforts go beyond bot-building: They’ve raised money for charities in Rwanda and Haiti and even founded a nonprofit, RISE (Robotics Inspiring Science and Engineering), whose projects include supporting low-income robotics teams in the San Diego area. “They’re a pretty amazing group of girls,” says Coach Brooks. “They have a drive like you can’t believe.”

The girls don’t necessarily plan on going into robotics as a career, but all agree that they’re learning important skills. “I think the lessons that you learn through robotics don’t just apply to science and engineering; they can apply to learning to work together as a team,” says Mackey, who plans to study politics in college.

Other robotics teams around the U.S. are making science and engineering—a field in which men outnumber women in overall employment 73 to 27 percent—a friendlier place for girls. Kell Robotics in Marietta, Ga., is a coed team, but girls comprise at least half the 36-student membership.

“I made it a priority when I started [coaching] five years ago,” says coach Ed Barker. “We can’t afford to waste half the talent on the planet.” Not surprisingly, Barker, an engineer, became interested in coaching high school teams when his daughter asked him to coach her team.

Kell Robotics team member Katy Mix, 14, likes math so much she goes back through old textbooks and completes problems she hasn’t finished. “There are people who think it’s odd for me to like math and science, but for the most part, people think it’s really cool,” she says.

Mix says that Barker makes robotics fun, and that he’s teaching them how to use robots for real-life solutions. For example, the team has designed a trash-collecting robot, and is designing one to remove oil from water. Listen up, BP—you need some girls on your team!

—Kate Whittle