

Many girls interested in engineering have stared into their classroom, pulling their books close. “*Maybe there’s another girl out sick?*” they think to themselves. But deep inside they know that they are going to be the only girl in the class—again, sometimes.



This is what they get for being interested in STEM. On our team, Paola’s mom too was the only girl in college classes a lot, and in her careers as well. But her coworkers told her that she played an important role as the only female—and not only that, but that her opinion was the most important! Her “team” managed to be Girl Powered, even if they only had one girl.

But what does that phrase even mean? What does it mean to be Girl Powered? To be Girl Powered is to be someone doing something that isn’t always thought of as something they can do. Like a girl in STEM, or a stay-at-home dad.



Our team is all girls, working on robotics in a world where that is thought of as a thing boys do.

When our team formed, only Addison and Paela knew each other. But the way the first of us started must have let the others know we would be an efficient team—we were organizing the kit so that we would find parts later.



Our team has a routine—we switch turns working on the engineering notebook, building, programming, etcetera. We learned that Addie is good at idea-making, Paela is good at programming, Elizabeth is good at driving, Ava is good at building, and Mina is good at the engineering notebook.



(Left to right: Mina Vendt, Paela Madsen, Addison Kring, Ava Middleton. Not shown: Elizabeth Matthews.)

Even though our team is all girls, only an eighth of our school's robotics club is made up of girls. We have had to work with the male teams a lot because of that. On any given practice day, we work together with these teams of boys when we have to borrow parts from each other, bounce ideas off one another, and practice our driving and programming. At competitions, we have to work together with many different teams, and these teams include boys. At a robotics competition, we had to work with a group of all boys multiple times. For example, in finals. Together, we got a lot of points. Even though there are not very many girls in robotics, we can still do anything that the boys can do.

We have worked on two online challenges—this and Make It Real (also 2020). We found, while working on Make It Real, that our differing opinions led us to an even better finale. We also saw this when building the robot. Addison had an idea for the robot. She started building it, but she couldn't figure out how to make it work. When someone else tried finishing the robot, Addison found that her ideas had sparked something even better than she had envisioned.

Addison's STEM role model is Mrs. DuBois. When Addie was in 5th grade Mrs. DuBois (technology teacher) approached Addie about helping her and some other kids, such as Paela, create a robotics team when the school started doing it. After a while of learning to build and drive Addie started to really enjoy building and driving. She started to really admire Mrs. DuBois and the way she ran the team. With Addie's team in middle school now, she tries to keep the team similar to the way Mrs. DuBois had—inclusive and organized.

Paela's STEM role model is her mom. This is because her love of programming is why Paela started programming and led to her being on robotics. Paela's mom helps out as a coach in Paela's middle school and her sister's elementary school. She has to make sure often that the students are including each other and on task, so Paela tries to do the same on her own team.

Ava's STEM role model is her dad. Her dad would always help her if she needed help building. He also has a deep passion for coding and programming. This caused Ava to go into robotics for the first time this year. She has really enjoyed being in robotics. She is very thankful for her dad and the fact that he introduced her to robotics. Ava's dad also helped her learn that programming is fun to do.

Mina's STEM role model is Marie Curie because at the time Ms. Curie was making her amazing discoveries, she was discriminated against because she was a woman. But she didn't let this discrimination stop her and she went on to be one of the most amazing scientists ever. She inspires Mina to never let discrimination stop her. Ms. Curie inspires Mina to have a more inclusive team because Ms. Curie was not included in lots of things that she deserved to be included in, so Mina believes everyone should be included, because everyone has something to contribute.

Our STEM role models encourage us to follow our hearts and help others along the way. Indiana State robotics did this in their goal for elementary students to have equal genders. Now, there are more girls than boys! We wish there were equal genders in middle schools too. We are looking forward to welcoming all girls interested in robotics! We will invite them into our team, cheer them on no matter which team they are on, and invite those who would enjoy it to join robotics.

CREDITS:

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Girl Powered: Follow Your Heart