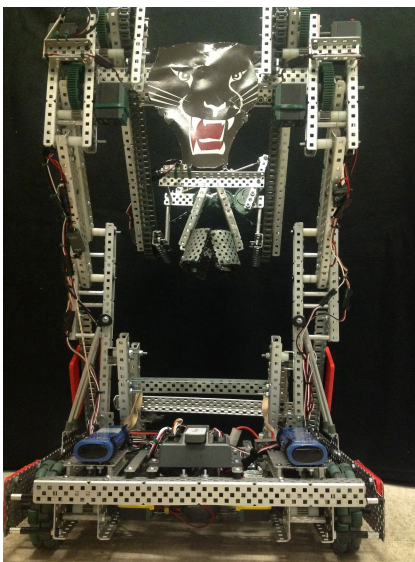
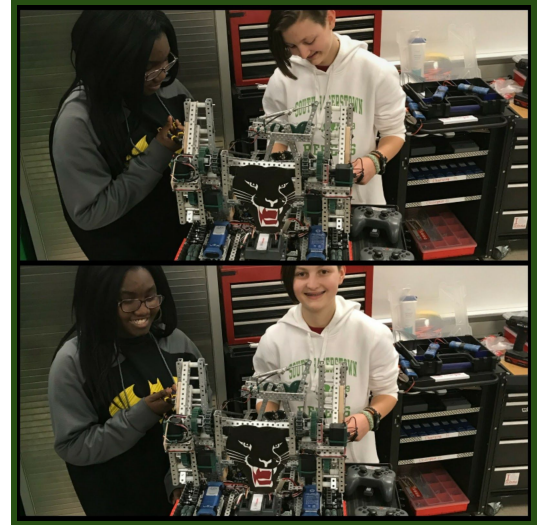


When I first joined a robotics team it was freshman year at Western School of Technology and Environmental Science. I'd joined because my best friend Mallory wanted to join, and didn't want to be the only girl in the club. Well, the only girl who didn't know anything about robotics. We were complete novices. I had watched a couple of episodes of Battlebots, if you could even count that as 'experience'. There were two other girls on the team at the time, veterans who had been on the robotics team since their freshmen years.

It sounds naive now, but I'd always imagined robotics as a 'guy' club. Especially since it was completely male dominated at my old school. Then when I joined the club I realized I wasn't completely wrong. When Mallory and I were put on the teams we almost became accessories. We were offering help but no one ever wanted or needed any from the two new girls on the team. Since neither of us wanted to be lazy we found ourselves taking 'odd jobs' around the club. These were things like errand running for the coach, cleaning, organizing parts, and checking the books. It wasn't that bad, I was still having fun with the guys and girls on the team of course, but I wasn't learning anything about robotics, and I *wanted* to.

I went to Western for almost 2 years before my dad moved to Hagerstown Maryland. I then became a South Hagerstown High School Student. I joined during the final quarter of my sophomore year. My honors physics teacher, Mr.Custer, turned out to be the Robotics advisor for the school team. The team had just come back from the Worlds competition, and weren't at the moment accepting any new members, however he told me to join the team next year. I did.

I could tell from the start that this team was different. This was a team that I could be an actual part of. It made me feel not just useful but powerful. I was able to learn a bunch of new things about robots from two veteran members, Katie and Xianvieve. I was still pretty novice, but on this team I learned more about building. Also on this team there was active discussion to solve the different problems and issues that we ran into while the robot was being built. We gave and accepted all constructive criticism and ideas. No idea was shut down just because it came from a girl. I learned so many different things; like how static on the field could affect the bot, and why different screws (something I honestly didn't even notice on robots) could be more or less effective based on what you wanted the robot to do. I learned a lot from a girl named Sammy too. She helped me learn the names of all the different parts, and bolts, and screws, that were honestly all nameless pieces to me before the club



Tater and Katie also designed the current bot our team is using for the in the zone competition. They knew what they wanted the bot to do from the very beginning, and how it would pick up cones and mobile goals. They had an idea, confidence in their idea, and then our team put it together. Learning from them was probably the best part of the club. I was able to ask them questions, which was something I always found annoying to do at my old school. This was because everyone seemed to already

know what was going on. Katie and Tater weren't just patient, but also detailed. All of the gaps in my knowledge of robots were slowly, and still are, being filled. It was what I wanted robotics to be. It wasn't just me standing around and cleaning the scrap bins. It was me feeling comfortable with not knowing everything, because I knew that I'd have the opportunity to learn more. Robotics felt less closed off or, as I so immaturely thought in the 9th grade, less "boys only".

It wasn't just the three girls I learned from either. The team coach Mr. Custer gave me things to research so I was able to contribute. I'd never heard of the word pneumatic before joining this club, and I didn't even know that there was an alternative power source to motors. Mr. Custer gave advice, not just instructions to follow, but reasonings and explanations that made sense. He told me things that should be done and should not be done. I was gaining knowledge, both in mechanics and in the real world. On our team I was learning about teamwork, communication, and efficiency between all members. No one was excluded.



My stem role model Katherine G. Johnson was like me when it came to wanting to learn more. She was a "human computer" for NASA in 1952, and was able to perform and check calculations before rockets were sent to space. Unlike the other girls working for the facility, Katherine asked questions and took the tasks she was given a step further. Her inquisitiveness earned herself access into meetings and additional responsibilities that were not given to other females during that time.

Like me she wasn't satisfied with just being given tasks and sent away, she wanted to be involved.

This is what being "Girl Powered" would mean to me if I had to describe it. It's not about having a perfect 50/50 girl-boy ratio, because that's not necessary to build a good bot. It's not about painting a room pink and playing Katy Perry in the background while we build, because that's stereotypical and weird. Being "Girl Powered" doesn't mean that girls have to dominate the club. My robotics club is nothing if not fair. I feel powered by having the opportunity to learn from all members of the team, whether they're boys or girls. I feel powered by being included, and having my opinion count, even if I'm not a boy. It isn't about separate sexes, but coming together. Robots don't wear skirts, but everybody on my team wears a jersey, because in robotics we can all come together, and *that*, is what makes my team, powerful.



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