

Name: Maggie Lindhurst

Team: 295 N

Title: Girl Powered



I was 11 years old when I went to my first VEX robotics meeting. That was over four years ago, but I remember it like it was yesterday. I walked into a room of twenty middle schoolers and searched for someone to sit with. I found three other girls in the sea of boys and their dads, and I watched their faces as we all realized at the same time that we were four girls surrounded by twenty boys. So we grouped together. Later, that group was called “Girl Powered” and “\$1000 in grant money”, but at that moment all we were, was scared. My first year in robotics, I joined because I wanted to learn. I had no lofty dreams of winning competitions or earning state championships; doing my best always felt good enough. Back then, I didn’t know how much that would change.



The next two years were not exactly what I had hoped for. My team’s student mentor quit, so we felt lost and confused. All we knew was that our robot was bad, and therefore we were bad. At the time, we didn’t notice how those standards didn’t seem to apply to the other teams. When their robots didn’t work, it was a mechanical error instead of a personal flaw. When they asked for help, they got help instead of a condescending repeat of the problem they had just explained. When they did well, they were talented instead of lucky. When they didn’t understand something, it was fine because at their core, they were still intelligent. We never got to be

intelligent. We never got to be “Maggie, Claire, and Elyse”. We never got to be “team B”. We were only ever called “girls”. Whenever they called us over, “girls”. Whenever we lost a match, “girls”. Whenever we were just trying to make something work, “girls”. We were never smart, never talented, never capable, never successful, never future engineers, only “girls”.



Very often, I would look around our workspace and see twenty identical faces. Twenty boys from the same nerdy cliques with the same nerdy interests sitting in one garage. No one bothered to look for anyone who would break the mold, so my misfit team was always missing a couple members. That was how I learned that when three people can't

build as well as six, it is in fact their fault. Our organization always claimed to be welcoming, but they also segregated us from the rest of the group. They pretended our team was together because our choice to collaborate was made out of something other than necessity. I wish that I could say “Girl Powered” means strength or opportunity or feminism. But the truth is, to me, it will only ever be an excuse. It is an excuse for our mentors to pretend they were giving us some amazing opportunity when really we got less than everyone else. It is an excuse for them to pretend they care about diversity for its own sake instead of because it gets them money. It is an excuse for our teammates to look at us and say “that’s why they’re here” even when we were working harder than them. It is an excuse for the VEX organization to pretend to care about girls while doing nothing to improve our treatment within robotics. Sometimes it is an excuse for me too. Sometimes it is the reason I do not quit even when I want nothing more than to leave and never look back. Because despite all this, I still don’t want my organization to lose grant money.

Despite everything, it is an excuse for me to keep fighting when everything feels so unfair because one day I want to win something they can't take away from me.



I am reminded of Maria Winkelmann, an astronomer I read about in history class. She was the first woman to discover a comet, but she was never recognized on her own merits. The only way she was ever allowed in an observatory was as an assistant to her husband and later her son. When she discovered a new comet, her husband took the credit. After he died, no observatory trusted her to work for them. Despite all her talent and hard work, she could never prove herself to all the people who doubted her. Her story is one of success because now she gets credit for all the work she did, but what else could she have achieved if everything she did wasn't tied to a man? I wish I could say that my scientific role model was Albert Einstein or Issac Newton or even Marie Curie. I wish I could look up to someone who is known for their accomplishments instead of the barriers laid in front of them, but that just doesn't describe my experiences in VEX. Instead, I look up to Maria Winkelmann. Some days, I have to remember that although I am sure she thought about it, she never quit astronomy because it was her passion. She knew not to prove her opponents right. Even though her husband took credit for her discovery, today we know better. One day, maybe, just maybe, someone will notice my successes too. Perhaps my team won't be permanent failures purely because the other teams haven't learned that they can still change their minds about us.

As the weeks passed and our list of grievances grew, my team's motivation became stronger. In my second year, we wanted to win, to prove people wrong. We were going to win, and we were prepared to do whatever it took to make that happen. We doubled down on our



research and building efforts, and we all tried new roles. My new teammate, Ria, replaced me as the programmer. We switched drivers so many times that year that I genuinely can't remember whose job that was originally supposed to be. All of us tried to keep up with the notebook, and all of us failed. Our design process changed slowly as we learned to prevent mistakes before we made them. That year and the next, we all found our strengths. I learned that while I am not the best programmer, I am a reliable and organized builder. Ria found out that she enjoys coding and it makes far more sense to her than it ever did to me. This season, she is also doing our engineering notebook, which looks far better than any notebook we've done before. Our other teammate, Arya, is an amazing driver when we actually provide her with enough time to practice, and she is great at problem solving. Although we were on different teams last year, all three of us achieved great things while learning our own strengths. Knowing what we are good at and developing the confidence to believe in ourselves, let us build much more capable robots. Now, all three of us are motivated to show that we can succeed. We are determined to compete and win this year, no matter how difficult it seems, especially in the midst of a pandemic. Although it's been tough, the three of us have united around our common struggle against sexism. Being the only girls has brought us together and encouraged us to do better than we ever have before. My motivation has grown from nearly non-existent to overpowering. This year, we will win



something. This year, we will have some success that cannot be called luck. This year, nothing will stop us.

My years in robotics haven't exactly been easy, but I'm still here because I genuinely love it. I know it can sound like I'm just here out of spite, and while that is sometimes true, I also keep rejoining the team every year because VEX is fun. I originally joined to learn new things,



and I have certainly done that, even if the lesson was sometimes how to deal with sexism instead of how to code an X-drive. I'm grateful to Girl Powered because it has given me opportunities I wouldn't have had otherwise, but it's hard to feel like anyone actually cares about the struggles we face as girls in robotics. No matter what though, I don't regret coming back year after year. It's worth putting up with sexism to be able to compete over and over, and learn more and more. And I don't know if that's a good thing.