

Girl Empowerment

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Society shapes the expectation of women to be submissive and unable to handle rigorous work. These expectations are also relevant in STEM fields, however our robotics team has proven them wrong. We know that we can do anything a man can do, if not better! In our robotics team, the Girl Powered Initiative has special meaning to us as an all-girls high school. We value each member for the incredible woman she is and this has shaped us into the strong team that we are. We take pride in representing young women in STEM and are excited to share our story.

Girl Powered to us means supporting other girls, no matter their race, economic background, or beliefs. It allows us girls, who at times feel stereotyped, to advocate for ourselves. Being Girl Powered allows us to embrace the fact that we are women, and that we need to support each other to help change STEM fields. In an all-girls robotics team, we're able to be Girl Powered because of the energy that we create wherever we are. We bring an inclusive environment everywhere we go. Whether we're right or wrong, we can comfortably exchange ideas and opinions because we aren't worried about being judged or mocked. Therefore, we're much more productive and creative in both our workspace and final product.

Another awesome aspect of our all-girl team is that all of our captains are women. This may not seem like a huge deal, but having another woman to look up to is inspiring, especially for the younger girls who join. By having this female role model, we set the norm right from the start that girls are more than capable of having leadership positions in STEM. We've had peers share how empowering it is to have an all-girl team led by a female captain. That's what makes our team unique. Every leadership role is filled by a girl, from captain to coach to driver. It's truly special because there's no added stigma around this leadership. Our teammates are genuinely supportive of our leaders, whereas this might not be the case for a girl captain in a co-ed school. That's why our team makes a strong effort to uplift one another, no matter what mistakes they might make. We know the importance of creating a positive environment which will encourage all our team members to work to the best of their abilities, without any added pressure just because of her sex.

Going into robotics, it's typically a male dominated environment. Being a girl automatically makes you stick out and paints you in a different light. Especially walking in as a team of only girls, it's fair to say we've gone through some belittling experiences. However we don't let those define us. We know walking into competitions that we will get some looks, but we have learned to not let them affect us. Instead we use that energy as motivation to prove our strength. Additionally, if we see other all-girl teams or even just other girls, we make an effort to

show our support for them because we know how intimidating it feels to be a girl at competitions. We want them to know that while we may be competitors on the field, outside of it we are there to encourage one another. Our team tries to create an uplifting atmosphere everywhere we go and we want this to be a norm in the future. Walking into competitions should feel the same for everyone - nervous and excited for the day ahead. There shouldn't be an extra burden on girls to perform perfectly, since anything less would be seen as perpetuating the stereotype that girls don't belong in a rigorous STEM environment. One of our goals as a team is to inspire others around us, to make the STEM community accepting of all genders and races who participate in it. This is important to us because we want to make a change against the current stereotypes, and we know this means starting small by setting an example for others to follow wherever we go.

Besides the fact that all our members are girls, the diversity of our team is one of our strongest qualities. We create this diversity by first opening the robotics team to anyone interested. There is no need for prior experience or any special criteria for joining. Our program is student run which means the upperclasswomen are teaching the new members. This facilitates the open environment that our team values and allows everyone to grow and learn together. It also allows for genuine connections beyond grade levels. For example, our current team is made up of sophomores, juniors, and seniors. This diversity of age groups helps us see things from multiple points of view. A senior, with more experience, might look at a problem a certain way. However a newer sophomore will have a different perspective on the issue and might find another solution. Our team uses these different viewpoints to discuss various ways of going about any obstacles we might encounter.

Another aspect to our diversity is how we come together as unique individuals. We try to create safe and equitable spaces for students of all backgrounds. Our team is made up of different racial and economic backgrounds. As part of our open and welcoming environment, we accept every member for who she is. We make sure everyone's voices are heard and that their ideas are considered. Every member sees things differently, but we use that to our advantage. One girl might think of something that nobody else even thought of, or blending multiple ideas could create a solution that wouldn't be possible by anyone alone. We make sure that every girl knows she has a role on the team and that we are here to help one another.

Our team works so well together and we have formed friendships beyond robotics. Having these strong bonds with one another makes us such a productive team. We can collaborate easily because we know each other so well. We are able to function like a well oiled machine, but still have a ton of fun while we're at it.

We have shown our effectiveness as a team with the challenges brought on by coronavirus. Building our robot this year was a challenge. Our team had to remotely collaborate and support our captain who did much of the building at her home. We would host Zoom calls where she would walk us through her building process and we could help her out with any issues

she came across. While this experience was definitely not normal for us, our team made it work and we learned that we can adapt to any situations thrown our way. Throughout the process, we still maintained our core values of including everyone and working towards our goals. While the coronavirus pandemic has tested us in many ways, our team has proven that we can overcome anything if we work together.

Our captain Nikky has been part of the program since freshman year and her experience inspired her to pursue an engineering major in college. Nikky's favorite part of the program is the strong support system fostered by our all-girls team.

Ciara is a new member this year and she wanted to share her experience so far, "It's very nice that the more experienced girls are so helpful to those of us who are newer to the team, and this type of community has certainly helped the team grow in numbers and in ability. I have definitely already learned a lot in just a few months on the team. We have a lot of fun, but we're all hardworking, and as a result, I think we will continue to do well and improve over time."

Of the many science and engineering leaders, our team looks up to Resma Saujani. She founded the 'Girls Who Code' initiative in 2012. Almost 200,000 girls were helped by this initiative with coding clubs, advanced workshops, and a whole network of people to support us. She served as a solicitor at the beginning of her career and became the first Indian American woman to run for congress in 2010. She helped so many girls find and spark their love for STEM after launching this initiative, which started for just 20 girls. This inspires us to build a more inclusive team and shows that if we put in the effort, we can not only immerse ourselves in STEM, but also help other girls out there who want to as well.

One of our favorite parts about the Girl Powered Initiative is that it inspires and empowers girls to take charge, even in the male dominated field. For our team, the Girl Powered Initiative has special meaning and we want to inspire others around us to help create a more inclusive environment for all.



Supporting our teammates in competition!



Friends inside and outside of robotics!