

Girl Powered

Finding Our Voice

A team on the (sky)rise.

My team's journey in VEX started freshman year. We were three girls with a rising passion for STEM who had heard about the robotics club on our campus. We went to the information meeting and knew that we wanted to form a team to take on the VEX challenge that year: Skyrise. Elli and Meghan had known each other since elementary school, and I worked well with them when we met in junior high, so it only seemed fit. However, due to our unfamiliarity with VRC, we felt overwhelmed in this new environment. We only made it to one competition that year, the First Annual All Girls VEX Showcase at La Reina High School in Thousand Oaks, CA. However, seeing girls just like us in this new setting gave us the affirmation we needed to continue in the robotics program.



Nothing but **confused?**

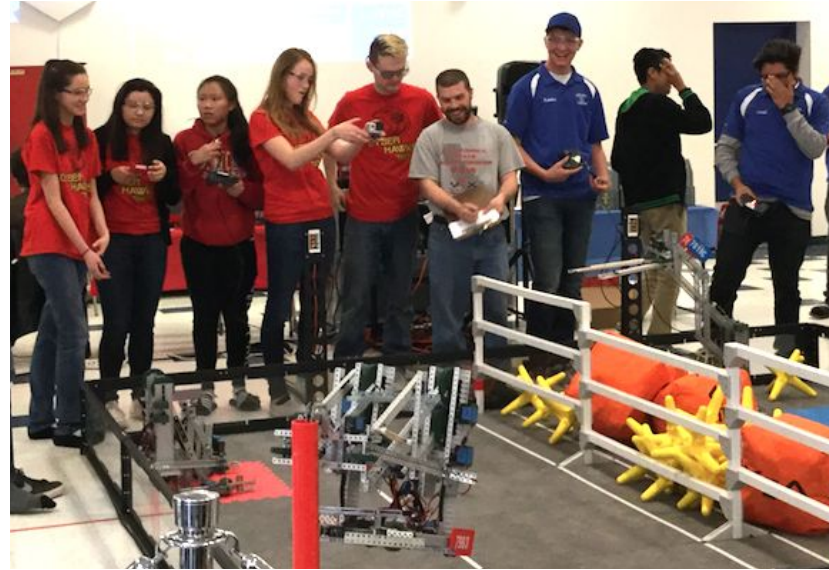
Being females in STEM never struck us as a strange concept until we went through our first few interviews during the Nothing But Net season. We had the opportunity to compete in the Kern Robotics League and a few tournaments where we endured our first interviews. Judges asked us, “How does it feel to be girls in STEM?”, “Do the guys and/or your teacher ever help you with your build?”, or “Do you feel intimidated by the male superiority in these competitions?” We were confused and frustrated. Why were other teams being asked about their robot design and mechanics while we had to answer to our gender?



(Star)struck with realization.

Coming out of our second year of robotics, we started to realize how underrepresented women are in STEM, not only in our PLTW engineering classes but also in our college math courses and in the real world altogether. There was a stigma about women not being built for STEM that became the societal norm, and we were lucky to have avoided those gender constructs for long enough to get involved in an otherwise great robotics program. Still, we knew something had to be done about the representation of women and girls in these fields.

Lucky for us, in 2016, the REC Foundation started a movement called Girl Powered, which encourages young girls to consider a future in STEM. We knew right away that to us Girl Powered was about empowering women to break those societal standards of men being more suited for STEM roles, so we joined the movement and for the past two years we have hosted a Girl Powered event of our own to empower future females of STEM within our own community.



A new era of confidence.

The Girl Powered movement provided us with an outlet to be heard. With it, we found our voice, and we felt more confident in our ability to be a successful team in robotics. As a small team of three, we used our numbers as an advantage to get accustomed to every role on the team, whether it be designing, building, programming, or driving. This gave us a strong sense of mutual respect for our more defined roles as main builders or programmer. In addition, we all helped contribute to our design notebook, which helped show our dedication to VRC. We were a small but well oiled machine throughout the rest of the Starstruck season. These factors contributed into our successes at multiple competitions as we received the Design Award, Build Award, and finally, an Excellence Award.



The female Cyberhawks.

Since Girl Powered has been introduced to our campus, there has been a notable shift in our own robotics club. There were only two other girls in the program when we first started in robotics freshmen year. Our first Girl Powered event last year brought a new all girls team of four to the club, and this year there are 14 girls spread out over six out of our eight teams. In terms of Cyberhawk leadership, Elli and I currently serve as co-presidents of the robotics club and Meghan is the vice president. Another girl in the club is the secretary, meaning that four out of the six leadership positions we have are held by female Cyberhawks.



In the zone.

Now more than ever, we are in the zone. So far this year, we have dedicated a lot of our time to not only creating a robot that performs well in all aspects of the game but also recording a thorough documentation of the design process in our design notebook, which we pride ourselves on. With two major lift modifications, three different mobile goal lift designs, and many other trials and errors, our robot is currently able to stack up to five cones on the stationary goal and move mobile goals quickly into the 10 point zone. So far this season, we have won the Design Award at a local tournament, but we are looking forward to and hopeful to qualify for state in the tournaments to come.



A future in STEM.

In addition to our continuation in robotics, this year we started a Society of Women Engineer's Next (SWE-Next) club to create a centralized network of girls interested in STEM at our school. Through SWE-Next we were able to talk to female engineering students at Cal Poly San Luis Obispo who shared their experiences with us about female representation in STEM in college. We learned that the imbalance will most likely continue in college, but we admire and look to them as females in STEM who haven't given up in spite of the statistics. In fact, they have inspired us to continue on this STEM path even as we leave high school and VRC.



STEMming out.

Currently, girls account for just 25% of all participants in VRC and women account for just under 25% of all STEM occupations. The Girl Powered movement wants to change that, and we want to be a part of that change. Our hope is that one day the gender gap will close and women will be seen as equals to men in VRC and STEM. We are extremely thankful and thrilled to be a part of this movement that means so much to us not only in robotics but on our paths in STEM as well.

*Thanks to Girl Powered, we are
here, and we are heard.*





The End

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