

Hi! We are team 2501B The Hive, we are excited to share our experiences on GIRL POWERED with you! Team members include Chase and Alysa. We have both driven and programmed for the team, after looking at our scores and how we felt about it, we decided that Chase is the better driver and Alysa is the better programmer. We both build, design, and notebook. Chase still helps program and Alysa drives for strategy and practice. We both excel at speaking with judges and mentoring younger students. We recognize each others strengths for the competitions, while practicing all the skills in the lab. We think that it is silly to limit our opportunities and to put parameters around what we do as an individual. Who knows what skills we will build if we keep trying!



This is our team! We are Girl Powered! This means we have an equal number of girls to boys on our team. We know this is important because both genders bring different perspectives and when they are brought together, they are able to find better solutions. For both of us, this year is our fourth year in robotics. We have been on the same team for 3 of the 4 years.

This was our team for our first two years. This picture is from the first year we started. Alysa was the only girl on the team but added a lot to it.



When we started doing robotics, we really thought that focusing on “Girl Powered” wasn’t needed, and that girls just would just join if they were interested and that it wasn’t a big deal, but after seeing our friends who started out very stem oriented dropping science and math activities, giving up on their interests in STEM. We now think it is more important than ever to encourage young women to keep participating and growing in STEM.. This is happening much more often with our friends that are girls than boys. In our school it is around a 3:1 guy to girl ratio of students that do robotics. This is why Girl Powered events are so necessary, we need to keep girls interested and to make sure they know they are smart, capable, and needed to participate in STEM related fields. Girls need to know that there are many opportunities for occupations in which they would excel.



When we were mentoring young girls in elementary/middle schools we have found that they start pulling away from the STEM related roles as early as 5th grade. This has shown us that Girl Powered events are very important as they show girls that they are capable! Having community support can help combat the apathy that some young women face in the STEM field.

We have had the opportunity to have a diverse team our whole robotic experience. Having one another on the team has really improved our capabilities with everything robotics is asking, from building and programming, to notebooking and time management. Being balanced on the team has really improved our team productivity and idea outlook because, if you were to have a team with only guys most of them will have around the same ideas, but if you add diversity to the mix(girls, the girls come up with different ideas, code, and mechanisms that take our team to the next level.

We want to share what we think of when we hear the phrase “Girl Powered” .

Chase’s view:

What does Girl Powered mean to me? It means bettering our team and hearing other ideas, not just male perspective. I think robotics is really good at keeping girls interested and trying to keep them in robotics. That girls who do robotics or are in STEM are the only cool girls and that it is important for girls to feel capable and smart while doing robotics. Also, I have a younger sister in IQ robotics and I hope that the Girl Powered events will keep her involved in robotics and make her love it just as much as I do.

Alysa’s view:

When I think of Girl Powered, I think of all the women before me, the ones who stood out and accomplished amazing things. Amelia Earhart, Ada Lovelace, Marie Curie, Rosalind Franklin. They are all people I can read about, when I feel like I can't do something because I can look to their example to persevere. When 3 of them made their biggest accomplishments they couldn't even vote!

Looking closer to home I have an amazing mentor that I can look up to, right in my school. She was in the military, which shows me that women can be strong of mind and body. After this she became a teacher, she teaches computer science and different programming languages. This is really cool for me to see because I know that I can have a job out of stem and that I can get very far. She has won many stem awards in the past few years in



This lady is Mrs. Hoag! She always tries to give us different STEM opportunities. She also brings in girls that are not as involved in STEM for fun activities and points out the math, science and computer programming opportunities for them.

I (Alysa), would also like to put in that having guys on your team is just as important as girls. When the tension is very high Chase can make jokes that calm me down and that girls, the same as guys, a lot of the times, think the same. So surrounding your team with only girls might be limiting your thought pool. Having both genders is like having a checks and balance system, everything is covered and it makes sure that all ideas are thought through.



When we started there were only 3 of us on a kitchen counter working on introducing IQ to Iowa. While we have grown up and moved to High School and are participating in VRC we couldn't be prouder of the Girl Powered example we have left. Today there are over 70 boys and girls participating in IQ in our community. Every single one of those teams fit the criteria of "Girl Powered" we are so excited for what the future of Robotics Competitions hold!

CREDITS

Team:

2501B - The Hive (Thomas Jefferson High School Robotics)

Entrants:

Alysa Arthur

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Title of Submission:

VRC Girl Powered Online Submission