



## The Impact of Girl Power

5509G is a Girl Powered team made up of 4 members; Cassie B. (17, 12th grade), Dalton G. (17, 11th grade), Mikaela N. (15, 9th grade), and Abby T. (15, 10th grade). Mikaela and Cassie are both returning for their second year in robotics and on 5509G, Dalton is coming to the team for his third year in robotics, and Abby is starting her first year with us.

The phrase Girl Powered has a unique meaning to each member on our team, as it does to everyone in robotics. But, they all lead to the same things: girls and boys being equal in the STEM fields and doing something great.

"Girl Powered" to me means a group of girls, leading a situation, like robotics, just as well as a group of guys. Throughout a Girl Powered team, there is an abundance of caring and happiness, that might not be as strong in a male dominated group. Girl Powered draws to my mind how girls can be just as good at mechanics and coding as their male counterparts are." -Abby

"When I hear the phrase "Girl Powered" the first thing that comes to mind is obviously VEX Robotics. More specifically, I think of how girls can do things that guys can do and do it just as well as they can even within robotics. One other thing that comes to mind is how energetic girls can be and how they can lighten the mood when things are getting tough." -Cassie

"One of the things that come to my mind when I hear GirlPowered is that it shows that girls can do things guys can do, and sometimes even more. It gives girls the courage to challenge themselves." -Dalton

"A lot of things come to mind when I hear the phrase "Girl Powered." My first thought is, of course, VEX. But within robotics, Girl Powered makes me think of girls coming together, supporting each other, and doing something amazing." -Mikaela

A year ago, VHS Robotics was very male dominated. Our organization only had 4 girls throughout five VRC and VIQ teams. About three months into the season we had two girls who wanted to join the organization, and so 5509G was formed as a three person, all girl team. Since then, more girls have joined, making it eight girls throughout the organization. We now have at least one girl on five out of seven teams, and there are two GirlPowered teams within the VHS Robotics program.

We try to create a more diverse and inclusive environment throughout our team like our STEM role model, Sally Ride, did. When you think about it, our team's history is very similar to Sally Ride's experiences and impacts. Dr. Ride was the first American woman in space, and

was the first woman to create her own line of educational programs, so that not only men but women could pursue interests in science and mathematics. Similarly, our team was the first Girl Powered team in our robotics program, and we try to reach out to as many younger girls as we can, hoping to inspire and show them that robotics isn't just for men. Rather, we include anyone who wants to learn or see what robotics is about, and try to answer any questions they have. We even inspire each other within our team to try new things within STEM! We create a more inclusive environment within our team by not limiting our Girl Power team to only young women. We sought out a boy to join our team so we would have a variety of interests and ideas, as girls and boys often see things in different ways.

To get us all to try new aspects of robotics, three out of the four of us took an Autodesk Inventor design workshop so we could learn how to craft our robot digitally in case our CAD lead is not available. We have "drive-offs" every so often against other robots or a teammate who moves at the same pace as a robot. We have these, before competitions especially, to see which of us would be the best fit to be the driver or drivers for that competition. This also allows us to see who needs more driver practice, and what we can do to improve their driving and our robot's functionality on the field. We all work on hardware, which makes completing tasks quicker, easier, and more efficient. When determining the design of our robot or brainstorming a solution to a problem, we all pitch in ideas, and everyone's ideas are considered. We then make a list of all the ideas with pros and cons, and vote on which ones we find would benefit us in competitions.

One of our biggest advantages is that all of us were friends before we became teammates, so we all can easily understand what each other are talking about just by reading into each other's body language. Because of this, we are able to react and calm each other down during a stressful competition, or to put in the right code and start an autonomous run before anyone is able to mention it. This helps us to succeed because since we worked together so often as friends; we now have little to no fights that hold us back from completing our designated jobs during our meetings.

In conclusion, 5509G is a well-rounded team that strives for equality in the STEM fields. We all participate in all aspects of building a successful robotics team. We are very inclusive to any who want to learn, and we are amazing friends. Girl Power is an especially important part of our team, because it is what brought us together to build robots, learn things we never would have before, and make amazing friendships.





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Team 5509G, VHS Cavaliers  
(Left to right)  
Mikaela N.  
Dalton G.  
Abby T.  
Cassie B.