

Together We Go Higher



When we hear the phrase, “Girl Powered”, we think girls have the power to do anything. We are brave to take risks, we can be leaders to others by empowering others and having grit to solve challenging problems. The idea of “Girl Powered”, is reflected in our team approach to robotics because we were inspired by women that are in a field that men usually work in, which is robotics, engineering and math. Grit means trying your hardest even when you feel like giving up. Girls need grit because we often get underestimated by other people and we have to work harder to prove ourselves.



As a team, we tried all the different roles on the team. We all are able to do designing, building, driving and some of us are a little stronger in other areas. For example, Sloane and Liana are great programmers, drivers, builders, engineering loggers, and Maile and Paige are also drivers, builders, and engineering loggers but they are stronger with creating strategies to complete our tasks successfully. The programmers of the team have a lot of grit to keep on trying even if the programming was inaccurate. They have a very hard task to do, but it helps them get better at persevering. When all of us are together, we always work to help one another when they are down so we are in a better mindset to continue with robotics. We also try to make it comfortable so we can feel safe around each other when we need to correct something we may have done wrong. We all have learned that all the jobs are important if we want a successful robot. The drivers learned that we need to make different



strategies. Our strategies are getting the low green cube in front of us, then hang the middle cube. After that, put the low green cube on the platform. Next, we get one colored cube on the front lift then we get the same color cube on the back lift. Following that, we take it to the other side and set the back lift's cube first. Finally, we set the front lift cube in the corner goal. Sometimes (since now we have a faster drive base), we don't pick up two cubes at once. We pick up one at

a time, then race it across and pick up another colored cube and race it back.

Robotics is very exciting because it gives students the chance to learn more about engineering, the chance to design and build something and make it work. Plus it gives them the chance to compete that is not in a sport like way, and maybe even travel. Most youths would love to do robotics because it gives them a chance to be creative and build interesting robots. Teams are able to win different kinds of awards and travel far away to compete. There is a chance to work with boys and/or girls and you can make friends from all kinds of different cultural and ethnic backgrounds that are really nice people. We think it is a great opportunity to be part of a team if you are lonely.

We all have very different individual interests such as dancing, acting, reading, art, and design. Plus we come from different backgrounds. So, when we come together, we had lots of different ideas on how to make our robot. We spent a lot of time with the Engineering Design Process, designing and redesigning and we came up with a very unique robot. Because we all have very different interests, this actually helped us to get along very well. We can work together to solve problems, we listen to each other and have each others' backs and having this kind of team attitude, we believe will help us to succeed.



When we go to tournaments and leagues, we mostly see boys on the teams. We need to be brave because we don't want to feel discouraged about not winning

anything. We try to not think of those things, but sometimes it is hard to do it on your own. So, we have each others backs when someone is depressed, we make them feel better by saying calming things. We all try to help when someone is sad, anxious, or depressed. We know in a fixed mindset, a lot of people think that girls are limited of doing things, but in a growth mindset we think there are more possibilities and more power for girls.

There are many women and girls that have inspired us, from mathematicians and scientists in the film *Hidden Figures*, Katherine Johnson, Dorothy Vaughn and Mary Jackson to young girls who show grit such as Malala and Greta Thurnberg. But, our



teacher Mrs. Mitsuda is our biggest role model. She works hard, and she teaches her own class all day. Then she is here every day after school for robotics practice. She even volunteers on weekends and holidays so that we can build our robot. She started VEX IQ robotics for the whole school. She's been a VEX IQ robotics coach since 2013. She teaches us to think deeper and use our brains to solve problems and to always have an open mindset. Mrs. Mitsuda encourages

us to be our best, to work hard, and teaches us to have GRIT. She teaches us science and engineering. We appreciate all the hard work she does for us to learn robotics. She inspires us to work hard on our different roles like programming and building. If we were on a team that had boys and girls, boys would most likely do all the programming and building. She makes us feel more confident about being an all girl team and having jobs that girls don't usually get on a mixed robotics team.

We can be leaders by having the passion and perseverance to go to the World Championship and always having each others back on the way. When being a leader, you must show empathy to your team and they will show empathy back. When you are a leader, you must be a role model; you encourage and always work together to solve problems and your team will follow.

We try to understand each other better because we have been through the same things like being underestimated only because we are all girls. What girl power means to us is to have faith, believe, and have the power that other people think we don't have. We believe that passion and perseverance can lead the way to success.

Entrants: Maile, Sloane, Liana, and Paige

Team: 10142W

Title: Together We Go Higher