

GirlPower

Beauties with the steel. Beast on the field.



Inclusivity Initiative:

We believe that there is little to no female representation in STEM. When asked to name a woman in a STEM field, only a few come to mind. In order to be successful in STEM, we believe it takes hard work and dedication. Our team strives in creating a more inclusive environment that attracts a diverse group of students. We seek to recruit members who have a passion for

STEM and who are hardworking and dedicated; we have a team of students who have an equally vested interest in our competitive robotics team. We open up our team to those who are hardworking and dedicated and aspire to have an environment where all can learn and grow.

Role Play

The field of engineering is no place for stagnation, as can be shown through the various innovations engineers have given the world. If VEX Robotics has done nothing else, it has emphasized the

need for well-rounded individuals in order to be successful in competition. On day one, my teammates and I all started out as builders for the robot, but as time went on

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The moon to the sun
 Girl power is fun
 The ladies of VEX
 We get the job done
 In the day and the night
 Beast XLR8 ladies are nice
 The yin to the yang
 The robots we create
 Girl power is the drive to the world's aspirations
 it's the female motivation for every generation
 VEX robots are part of the ladies' creations
 But we also drive without hesitation
 The batteries to the remote
 The teeth to the gears
 We are girls conquering STEM and facing our fears
 Stacking up towers
 We gain our power
 Building, robotics
 Diversity we're all it
 Girl power is the love to the female race
 In all the competitions, we aim for first place
 the reason we meet at Chicago State University
 the reason that we're all about diversity
 the reason there's *some* female representation in STEM
 the reason there are young Michelle Obamas reading novels
 the reason young girls aspire to be Katherine Goble
 The motors and the cables
 Young women we are able
 The cloud to the sky
 Girl power is the power given to girls who want to fly



we have branched off. As a member, I have worked on putting the robot together from scratch and I know how to program the robot using block-coding. This exchange of roles/tasks has given all of us a new perspective that we then implement into the creation of our robot, strategy, and designs, etc.. “[As a driver, and mechanic for the robot] I have learned that trial and error can be very beneficial because once you see your error, it is easy to change or pivot.” Qamar – driver, builder, and programmer for team 481A – had to say when asked how he felt about switching roles. Exchanging roles allows each team member to view the robot from a different standpoint; these views often lead to identifying errors that otherwise would have slipped by us.

The experiences that we gain from “switching places” causes us to be more fluid and open-minded in the way that we approach new problems. “This experience has been very fun and exciting. I have learned how to spot disadvantages and/or advantages to designs and pieces of code at any given moment,” Raquia, a member of 481A, stated. Overall, these moments of trial and error and discovery gave us more comprehensive problem-solving, collaborative, and engineering skills.

“Diverse Perspectives”

Imagine how the world would be if everyone agreed. For example, what if the creator of the automobile agreed with New York Times when they said that “the price of cars will never be sufficiently low to make them as widely popular as were bicycles”? Can you imagine a country like ours with no cars? Exactly. Having multiple ideas not only inspires creativity and unity, it also allows for an effective team collaboration and

LADIES IN STEM

Our STEM role models, are the ladies who have come before us in the VEX/PREP/ASM program. We look up to our coaches and mentors: Miss Kalene, Miss Dekonti, and Ms. Marnie because they are an everyday representation of successful women in STEM. We look up to all of the other girls who have gone through the program before us, women who had the courage to learn about STEM when diversity was not as prevalent. Since our coaches and mentors are our role models, we decided to ask them who inspire them in STEM. Miss Kalene, one of the VEX coaches stated that her STEM role model was Mary Jackson because she was the first African American female to work at NASA which defined traditional views in the workforce. Miss Dekonti, another one of our coaches stated that Katherine Johnson was one of her STEM role models because not only was she intelligent but she broke both gender and racial barriers at a time where it was not the norm for Black women to be successful in these type of roles. Our mentor Ms. Marnie, stated that her role model was Dr. Mae Jemison, because she was the first African American woman to travel to space and she had a PhD in physics. Our coaches and mentors did not have anyone to personally look up to in STEM, but we our fortunate to have them!



confidence. A difference of perspective has been abundantly evident in our robotics team over these past weeks. We highly value the opinions of all of our team members, because we acknowledge the fact that someone else may have a better idea or concept. For this reason, two individuals debating over the mechanics of a robot’s claw is a common occurrence.

Vanessa, a member of 481B, stated, “ It is important to have different ideas, especially in robotics, because it is essential to be able to pivot from old ideas after every competition”. After every competition, each of us comes out with a new design idea and discuss how we can implement it in our current robot. As a team, we build each other up and ultimately make a better, more creative robot in the end. The more that individual members collaborate makes for a more strategically-effective team. Innocentia, a team member of 481B, said it best, “it can be tedious trying to agree on one idea, however, at the same time, if a group can possibly incorporate most of the presented ideas into one single project, then the project may have a high chance of being unique and advanced”.



Credits:

Innocentia Eweyeju, Mariyah Allen, Nneamaka Okolo

Team 481B

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