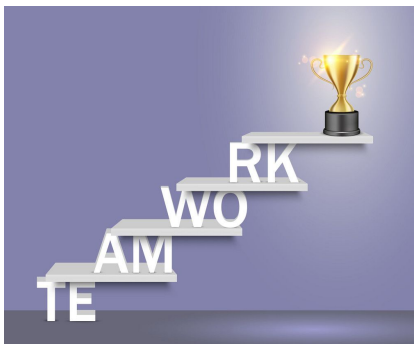
Girl Powered Essay

Sara Khattak & Reese Miguel
Comet Crew, Team 11108A

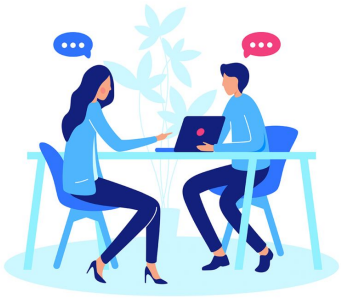
Robotics is a great field and pathway that leads to great careers for many people. Sadly, there is a huge gap between the ratio of boys to girls in the field, as it comes to 4:1 (1). We took the chance to go down the road of robotics and STEM. It has opened our eyes to the brilliant world of robotics and taught us so many valuable skills. We never really thought robotics would be so much fun while teaching so many great lessons. We believe that it can be a great field for many girls who have a passion for engineering. Unfortunately, many people still assume that we won't work well in this field, but we are determined to prove them wrong. We ultimately want to inspire girls everywhere and give the message that they have the ability to be incredibly successful at robotics.

When hearing the words Girl Powered, a few ideas can come to my mind. Being girl-powered to us means a group or organization run or led by strong, smart, and powerful women. One of our favorite role models in STEM is Katherine Johnson, who made an abundant amount of calculations to get the first people to the moon (2) even when people doubted her because she was female. Another idea that comes to mind is a team made of girls that collaborate when building a robot, working around, and incorporating each other's ideas to create the best robot in their ability. Our team tries our best to exceed everyone's expectations. We want to prove that women can be extremely successful when they put their minds to the tasks. We want to abolish the idea that women are presented as weaker than men in the robotics field, so we work hard to try to make our dreams of being a successful team come true. We want to rise above to show the next generation that we are powerful and inspire others.

These ideas inspire us to always improve in many fields, whether that be our robot design, our building, driving skills, and the way we manage our team. Our ultimate goal leads to winning worlds, inspiring other young girls to join robotics, and proving people who don't agree with us wrong. Keeping persistence by our side when developing our robot is mandatory to making our robot the best it can possibly be. We try to come up with at least three brainstorm ideas for each function we want in our robot. With many tasks, we have to manage and organize our schedules, as well as make priorities. Our team meets once or twice a week to see how everyone has progressed in their tasks and then sets goals for the upcoming weeks. Goals are very important and we believe in setting them to help us get closer to what we ultimately want in the end. As one once said, “If you don’t stand for anything, you will fall for anything.” We want to stand up for what we want, we want to try to make the best robot of our abilities, and master our skills to the best of our extent.



There are a variety of tasks to do when in a VEX robotics team, to organize these duties, roles are established. Most of the time, these roles need an introduction. If there are new team members, they try different positions to see which ones they are naturally good at and comfortable with. In this process, they are supervised by older members to teach them how to take on the role. When trying to take on driving, they get to try being the first or second driver. Once they try both positions, they see which one(s) they are comfortable doing. This process applies to the remainder of the roles in the team.



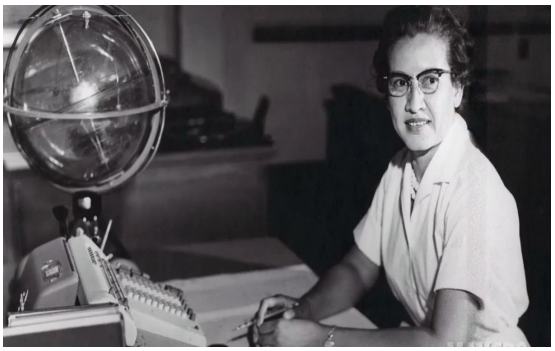
Trying out all the roles on the team lets a teammate see how one of their actions involving the robot impacts the rest of the team members and how they collaborate. When an engineer needs to test a prototype when the driver is not present, they can do it themselves because they know how to drive. Without the diversity of perspective, the robot would take more time to make because of the lack of empathy towards each role. With almost the whole team having at least three ideas for each component, we have to

see which ideas seem more efficient by weighing out the pros and cons. This also helps our brainstorms go by quickly so we can get to the building and design of the robot as soon as possible.

Another roll that is affected is the programmer. If the programmer wasn't there and:

If we didn't try their role	**If we did try their role**
Our programming has to be put on hold until they come back.	Programming would continue and move on to the next step for coding.

There is an iconic and successful person in the STEM field that influences us. This person is Katherine Johnson. She has helped make key events in history happen. Johnson made almost all of the calculations needed to send the first man to the moon (2). On top of that, she also helped make the calculations to have the first person to orbit the Earth an astonishing three times (2). There were many times that she was doubted and told she couldn't do it, but she rose above and proved everyone wrong with her hard work and intelligent mind. If Katherine Johnson can have a brilliant mind, another girl definitely can, which is why we want to have a more inclusive program, we want all the brainpower we can get to help many more people realize that robotics is a great field and pathway for them.



Being a girl-powered team means a lot to us. There are a variety of definitions that define being girl-powered, but we like to be the best version of us. We are constantly looking for and making improvements to the way we run our team. We want to rise up and be role models. There are many activities to do in a robotics team that needs to be known in order for us to get where we want to. How we manage these activities can teach a thing or two about teamwork. All of these actions are ultimately fueled by inspiration from a role model. We are always giving our all when it comes to robotics. The future is robotics!

Girl Powered Essay

Written by:
Sara Khattak & Reese Miguel
Comet Crew, Team 11108A

Mulholland Middle School
Lake Balboa, CA 91406

Bibliography:

(1) The ratio of boys to girls

https://www.builtbyme.com/statistics-facts-women-in-stem/

(2) Katherine Johnson information

https://www.nasa.gov/content/katherine-johnson-biography

Images by:

https://www.kindpng.com/imgv/TwoJJbR_logo-women-in-stem-wikipedia-wikipedia-hd-png/

https://www.vectorstock.com/royalty-free-vector/teamwork-word-ladder-with-trophy-cup-vector-22832440

https://www.britannica.com/biography/Katherine-Johnson-mathematician

https://www.google.com/search?q=conversation+between+two+person&tbm=isch&ved=2ahUKEwjsjJqlzpnrAhXXnZ4KHUVGCQMQ2-cCegQIABAA&oq=conve&gs_lcp=CgNpbWcQARgBMgQIIxAnMgQIABBDMgcIABCxAxBDMgQIABBDMgQIABBDMgQIABBDMgIIADIHCAAQsQMQQzIFCAAQsQM6BwgjEOoCECdQ25EBWMKvAWCOwQFoAXAAeAKAAYcBiAHbF5IBBDI0LjmYAQCgAQGqAQtnd3Mtd2l6LWltZ7ABCsABAQ&sclient=img&ei=DPI1X-zWO9e7-gTFjKUY&bih=977&biw=1918&rlz=1C1CHBF_enUS897US897#imgrc=kq3GYJ8u0DIa0M&imgdii=gLBZ7beGS_skIM