

GIRL POWERED

Team 15C-Robo-cougars
Anaheim, CA

Allison K., Avery P., Isabella A., Zeal P.,
Dhevan S., Nayra S., David F., Theodore K.



When we hear the phrase “Girl Powered,” what comes to mind? How is it reflected in your team’s approach to robotics?



When we hear the phrase “Girl Powered,” we think that it means something is powered by girls; to be more specific, we think that this project will be only powered by girls. We think this for the wording sounding like, powered by girls. Although, we knew this wasn’t true because everyone is equal in VEX Robotics.

“Girl Powered” is reflected in our team’s approach to robotics since we have multiple girls on our team. Us girls sometimes have better talents, such as neatness or organization, but that doesn’t make us better. Us girls have no separate role than the boys; we do robotics no matter boy or girl.

During the start, we were in groups that were mostly by gender, but it worked out horribly. There wasn’t as much creativity and enthusiasm, so we switched to a diversity, which worked out perfectly.

So, we concluded that Girl Powered can mean girls should be confident in everything they do, but that can also send the message that other people should also be confident. Everything should have a diversity. For example, the picture on the right shows how two women and one guy is going up into space together for a space suit fit check.



NASA astronaut Anne McClain assists fellow NASA astronauts Christina Koch and Nick Hague during a space suit fit check on March 18, 2019. (Image credit: NASA)

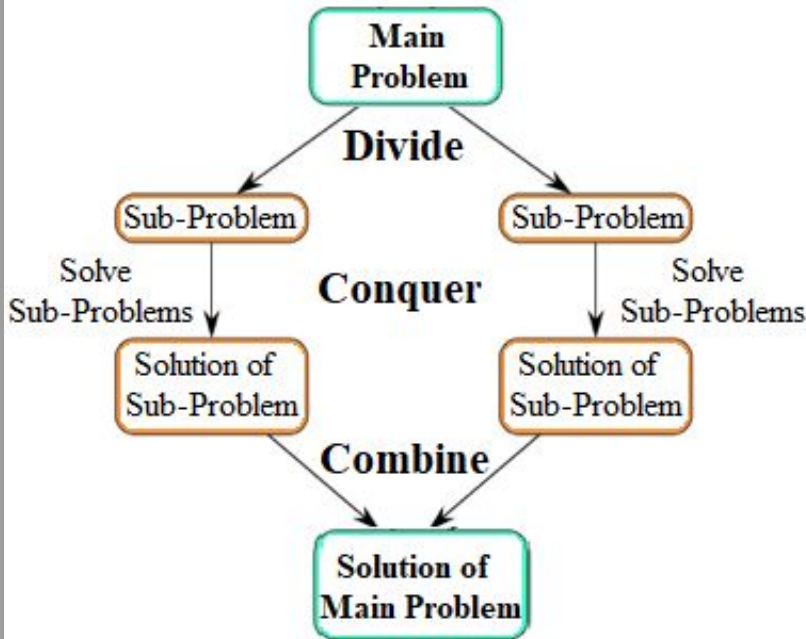
How does your team take initiative to create a more inclusive environment that attracts a diverse group of students?

Especially in an abundant robotics community, inclusivity is an important factor in creating a diverse group of students in robotics.

To create a more inclusive environment among a team with eight students, we make sure everybody has a part in building the robot. Our team captain, Nayra Sharma, who is also a student, splits us into diverse groups where everyone can work together.

Once, there was a controversy on how we would work together, but our team captain came up with the strategy to divide and conquer. This worked spectacularly. (Picture on left)

With this strategy, separation is not made between gender, but rather by roles made when designing, building, and strategizing for our robot. This strategy attracts a diverse group of students, for example, the 2 other teams. We exchange ideas and find the best solution, which benefits all of our teams.



Do team members try various roles on the team (designing, building, driving, programming, strategy, awards, etc.), and what do they learn from this experience?

Our team members try various roles on our team. We learned how to program, build, design, drive, etc. The programmers—David and Theodore—learned how to create more advanced trains of code. With this knowledge, they are now currently teaching Avery how to code. Nayra is our team captain and she has learned how to improve on her leadership skills. Each member of the team supports her and helps her with ideas of design, code, and so on. To decide our drivers, each member on the team practices driving so that everybody could have a chance.

In the beginning, we made a chart that showed what jobs each member wanted to do. Later, each member tried their best in each job, and whoever was best got the job. The chart next to us shows the current jobs each member has.

	Nayra	Isabella	Avery	Allison	Zeal	Dhevan	Theodore	David
Team Captain	✘							
Drivers	✘	✘			✘	✘		
Builders / Designers	✘	✘	✘	✘	✘	✘	✘	✘
Programmers			✘				✘	✘
Notebook Manager				✘		✘		

How do you believe diversity of perspective changes your robot design, your team chemistry, and even your ability to succeed?

Diversity of perspectives change our robot design because we all brainstorm our own ideas ourselves for our robot. If someone and another person have the same “base concept” in mind, or sometimes they are thinking different from each other, they would take inspiration from each other in order to create a team robot. For example, one part of the robot would be built from two ideas from person 1 and person 2.

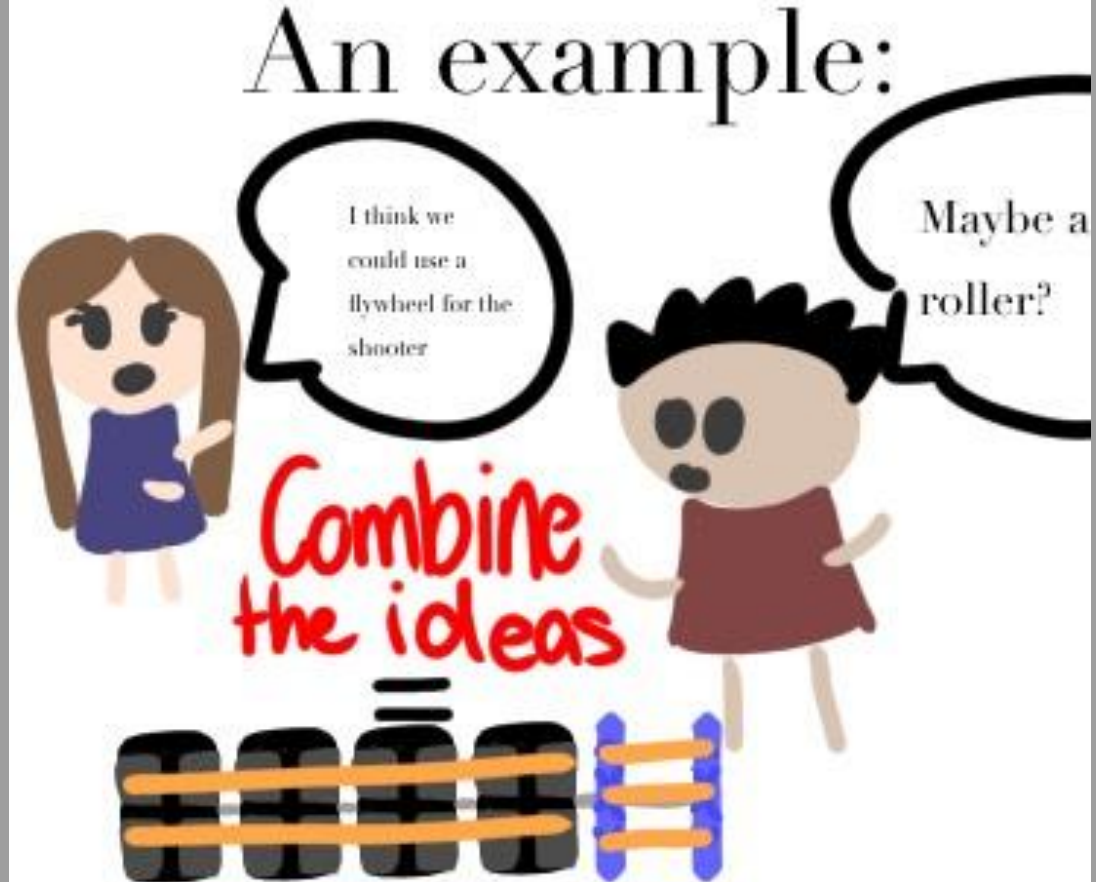
Team chemistry is integrated and diverse with students since different perspectives are discussed on the topic of our robot. Each person should relate to each other to understand each other perspectives. The robot design iterates in a cycle using feedback from each student based on our past experiences.

Our team's ability to share our unique perspectives gives us an enormous advantage compared to others who don't, as it creates insight that is received back and forth to lead up to the improvement of our robot. A consistent diversity of perspective makes us successful, many times, regardless of gender. We believe our ability of success comes from every team member, instead of one.

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Diversity is a very important part we believe in our team. So, when we were deciding parts for our robot, we combined our ideas.

When we were deciding the shooter on our second robot, one person had the idea of a roller, and another person had the idea of a flywheel. So, we all took action and combined the two. Even though we changed the shooter to all wheels later, this action brought us to a better shooter.



Who is your STEM role model, and why? Does this person inspire you to have a more inclusive team/program? How?

Our STEM role model is our teacher, Mr. Ireland. He's a great leader and also wants the teams to have a great robot. He looks for resources we can *all* use to create a more inclusive team/program.

One time, he showed us the online coding VEX activities we could use to practice coding. He made sure every single person knew so that we could have a great robot with great coding. He also taught us that everyone should learn to do everything, rather than sticking to our roles. *Don't be robotic!*

Mr. Ireland also pays attention to every single person to make sure no one is left out. He wants every person to contribute as much as they can to the robotics team. He's an inspiration for us all and he helped us create an amazing team environment.

