

# VIQC Middle School-Girl Powered Challenge

Simran Mathew and Hazel Gibbs

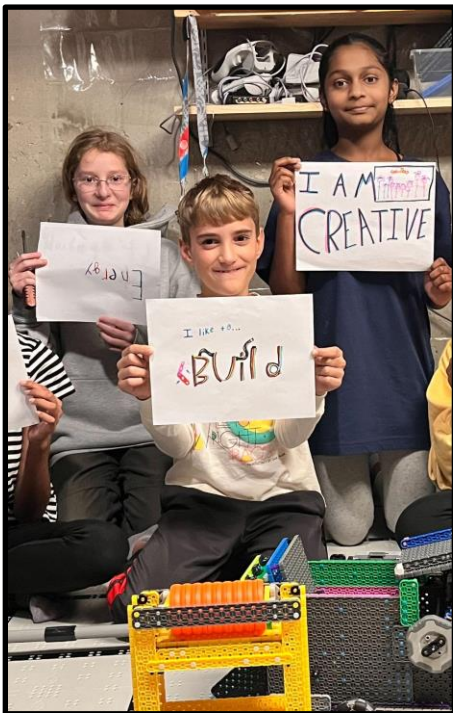
Marshmallow Menagerie 60004Z

Arlington Heights, Illinois

*Girl power*  
*Everyone can do*



There are many things that “girl power(ed)” can mean. The phrase “girl powered” makes us think about girls being encouraged to lead and share their ideas instead of only boys. Girls were not fully acknowledged in the past or encouraged to do STEM activities. Now, we know that girls are equally intelligent and capable as anyone else, but they are still not supported to be in STEM. There are examples of this all around us. In the US only 27% of STEM workers are women [\(1\)](#). Not to mention that women are still underpaid compared to men. In a recent tour to a toolmaking and plastic molding company, our team noticed that there were no women at the machines or making the molds. The only jobs any of the women had were in the office or packing & cleaning jobs.



Most robotics teams are made up of boys, but on the other hand, we have a good representation of girls in our robotics team. In fact  $\frac{4}{5}$  of our team is girls! This also means that girls are in every role. Not only do we have a good representation of girls but we come from various backgrounds and bring different skills to the team. Some of us like to organize and build, others are better at coding and driving the robot. Team members are given the chance to try various roles. They are encouraged to go outside their comfort zone and try new things. Some members of the team are hesitant but with encouragement they try something new. Team members explore new things that they haven't done before. They also get to choose which role they want to do each day.

*Diverse team members bring different skills and perspectives to the team*

We support everyone on the team and create a safe space to share ideas. Everyone gets an opportunity to help and create. Team members research and learn what an individual problem needs them to do. If they're building they may learn how to make different parts of a robot and could use it in future challenges.

*Team members brainstorming together.*



Since we are a diverse team, we can come up with many different ideas and choose the most foolproof ones, combine them and make a plan. Working together makes us better at cooperation with each other. While working together we can learn from one another. Instead of one person telling everyone

“This is the way to solve this problem”, the team finds solutions together. There is a saying that “two heads are better than one”, in this case it's multiple heads and with this we can speculate instead of being tethered to one spot in one way of seeing things. With other people who have a different way of solving problems, and come up with almost foolproof plans and with those ideas we can come up with more solutions.

**Moms**  
Can be  
**S.T.E.M**  
**Role models**  
Too!

This inclusive way of working is also preparing us for our future by making us more accepting of different people and different ideas. Instead of just one specific group doing everything where there can be gaps, different minds with different solutions can make us a better team and world. The

difference in perspective and thoughts leads to counterbalance one person's weakness with others strengths.

Our team has chosen multiple role models. One of my team members chose her mom who is an engineer, an expert in science and math and dedicated to helping our girl powered team. We also chose a historical figure, Ada Lovelace. We picked her because she was the first computer programmer. We think that it must have been hard for her to be in a STEM field when people didn't encourage girls to be a part of it. We also admire her mother for educating her when society probably would have disapproved.

Our STEM role models inspire us to be more inclusive. Ada Lovelace was only acknowledged years after her achievements, her teachers told her that computers can only do computing, and people were not as accepting of her

**Ada Lovelace**



**Ahead of  
her time**

ideas because her ideas were pioneering. Her achievements took us years to catch up to and only then was she recognized. It makes us want to pay more attention to other people's ideas so as not to overlook them. Other people could be right and if we judge too soon or don't listen, we could be missing revolutionary ideas.

In being a girl powered team we want to be an example for our community. We hope that other girls will be encouraged by us and will form their own teams, and eventually be in a STEM field.

Links and Citations:

1. <https://www.census.gov/library/stories/2021/01/women-making-gains-in-stem-occupations-but-still-underrepresented.html>

Credits:

Ada Lovelace image was taken from free images.com