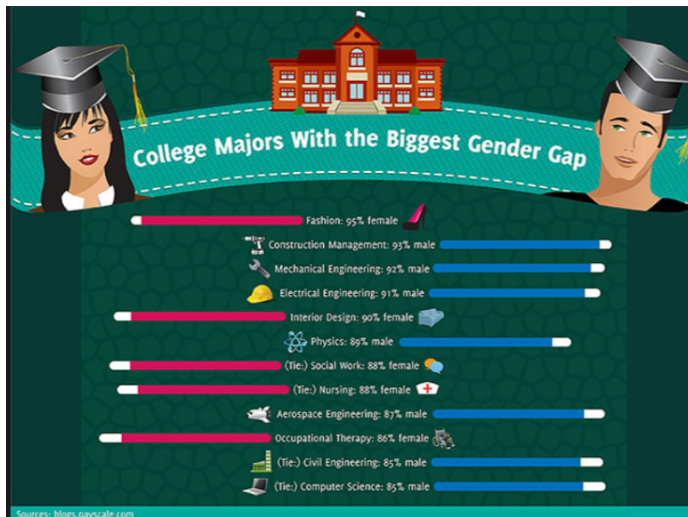


Civil, Aerospace, Mechanical, and Electrical Engineering all have a gender gap of 85%-95% in favor of males. This needs to change. This is why I believe that it is important for Vex Robotics to be “girl powered”, If we can get girls interested in Vex Robotics at a young age then they will be far more likely to choose a career in engineering. While my team does not have a girl on our team, we have never rejected having a girl on our team. At Mankato East the students did not choose the teams. Instead the two head coaches, Mr. Stahl and Mrs. Machado, chose the teams for the students. While, I and my team members respect them, I also realize a girl being a member of our team, could give us a better perspective.



My team tries to be inclusive by treating other teams with respect. We included everyone in our team. We are welcoming to people of different backgrounds, gender, and sexual orientation. Our team is a team, we are the total of our parts. One member of the team equal to any other. I was a teammate with a girl on a previous team. She provided great commitment to our team. She ended up quitting Vex Robotics. I cannot help but think that maybe she felt marginalized. That there were not enough other girls in the program or that she was not being taken as seriously as we believed that we were taking her. The truth is that she offered a valuable perspective that I miss.

Our team also included a person of different sexual orientation. That person was a builder of great skill. He left our school. Our team does have a member whose family is from a different background. He provided us with one of our greatest builders, designers, and he is the only one of the three that has been with us through to this year. This year he has been one of our three main builders, a large part of our design process, and has kept amazing track of our engineering notebook.

The roles of our team have never revolved around if you are a girl or if you are of a different sexual orientation. Our team chooses who would be best for the job. That is the best

way for our robot to perform at its highest level. What I wonder, is if that is best for our team. Could we be better if we were more diverse, listened to different ideas coming from different voices, from someone who has not just looked at the problem from the same perspective they always have. Maybe a girl would have a different way to a cap on a post, maybe it would be better, maybe not, but it would be fun to try.

A team made up of all females, a team made of all males, and a diverse team should be only judged on their skill and their attitude. Everyone should be treated the same, but it is clear from the statistics that something is being missed in the message. Vex Robotics is a great opportunity. It is fun and engaging yet girls do not try out in equal numbers is that because they feel excluded.

In our first year of robotics our team was all male. At Prairie Winds Middle School there was another team that was made up of entirely of girls. When we competed at tournaments and placed higher than them, and were able to pick teams for alliances, we chose them. We decided since their bot was constructed well it would work well with our bot. Their team had great sportsmanship and even helped us when our bot messed up. When their bot failed, did not work we did not say they were bad because they were girls, but instead concluded that there bot had difficulties.

All of the members of our team have come from different backgrounds and have different stories. While we are not as diverse as other teams may seem, all of our different backgrounds have changed the robot drastically. Many of our members have had classes in coding so they are better at programming the robot while our other team members love to write and have amazing penmanship so they take care of our engineering notebook. Our team chemistry has changed depending on our team composition at the moment. When we have had a lot of diversity on our team has had different opinions on decisions based on different backgrounds. Our ability to succeed has only been altered by the ability of the members of our team.

Our teams STEM role model is our program instructor Mr. Stahl. Mr. Stahl has dedicated his life to teaching classes on engineering and organising East high schools Vex program. He has taught my team how to be better coders, builders, and people. Mr. Stahl has inspired us to have a more inclusive program by choosing our teams randomly so nobody will be excluded. All of the teams in our program have a group of people with diverse backgrounds that influence their team structure. Diversity affects all teams, but does not control them. Our team was inclusive and gained some great people with diverse backgrounds because of it. Our team has been improved by the diverse group of people that have affected it. However, while I am glad to have Ms. Stahl as a role model, when I was writing this essay I realized that I could not name any female enigneers that I look up. This must be discouraging for girls who only have male role model to show them the way.