GIRL - POWERED

"Spinning" into the minds of women in STEM

"Rolling" In the Right Direction

In fields related to STEM, you don't typically see a lot of women standing out as a leader. Even in VEX Robotics, there are few girls who can truly shine as they might be dominated by the male students. We need to change this and we can through inclusion and unity. Although the rate of girls applying has increased, it was never a lot, so each year, 750R looks to recruiting more girls and each year we were never disappointed with the outcome. The new ideas, perspectives, and opportunities that come with these girls are invaluable and we want to make it our mission to help as many girls who haven't joined yet realize this.

Meet Us!

Esha Vigneswaran is currently the Vice Captain of 750R. She has been on this team for three years and uses the knowledge that she has learned to lead in the building process of the robot.

Rakshna Ravishankar is build, CAD, and head documenter on 750R. This is her 2nd year on the team and she is excited to help out more and learn new things throughout the season!

Anika Thakur is a builder, programmer, CADder, and documenter of 750R. This is her first year on this team, and she is eager to gain more experience!

Yegna Bodepudi is a builder and documenter of 750R.This is her first year on this team, and she wants to learn more build knowledge and become a better builder.

We are 750R!

This is Mayank's second-year. He mainly CADs and programs.

This is Vihaan's first-year. He wants to be a programmer.

This is Mohit's third-year. He is our Lead CAD.

This is Abhaya's third-year. He mainly builds.

This is Tejas's first year. He helps us build and program.

This is Dilan's second-year. He is our Lead Programmer.

This is Adithiya's fourth year. He is the captain of the team and he mainly builds.

This is Vivek's first-year. He wants to be a builder

This is Vignesh's first year. He mainly programs and builds.

We're not the only members,. Our success also depends on our other team members too! They encourage us to try new things and support us all the way!

We don't stick to one role...

Throughout the year, everyone in our team **explores different fields** of VEX to see what they're most passionate about. Coming in, everyone feels as if they have a set idea of what they want to do, but of course, it never turns out the way they imagined.

For example, Esha and Anika were really sure they wanted to become programmers before they joined. They never thought they had the potential to **contribute** to build, but nevertheless, here they are now. What truly happened was they were **introduced** to the concept of building when they were invited to try it out on their own. They immediately found that this was as engaging and fun, and continued it since. Rakshna, by trying out different areas, found her **passion** in notebook, building, and CAD while Yegna, as she is a freshman, is still exploring, but finds that she is most interested in building.

Just like us, everyone else in our team explores and finds their true passion. Because we explore different areas, we're able to contribute from all aspects and are **not only limited to one**. For example, if Mohit, our Lead CAD, is not able to CAD something, Anika and Mayank help him CAD as they found passion in this area as well.

The Equation of Success

Team Chemistry

Our team strives for **diversity**. Having a diverse team with different mindsets, and experience allows for a broader range of **viewpoints**, which allows us to come up with creative and innovative designs for our robot.

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In our team, we usually ask everyone for their **opinion** before we make a decision. This can decrease the chances of design flaws, because someone can point out imperfection that the rest of the team may have failed to acknowledge.

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Diversity also builds an **inclusive** and **respectful** team, which improves our team chemistry. This also makes everyone confident enough to speak up and participate in group discussions.

Diversity

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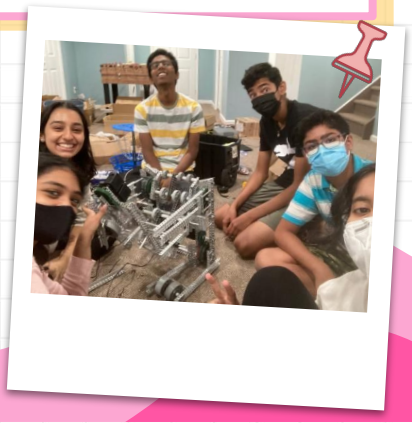
Diversity and varying viewpoints have allowed us to work towards success. We haven't attended any competitions recently, but so far this process has proved us well during scrimmages. We were able to become tournament finalists in both scrimmages that we have attended. We believe it's due to the process we follow in our team. Just like this, hopefully, our process will help us get similar results in actual competitions!

Success



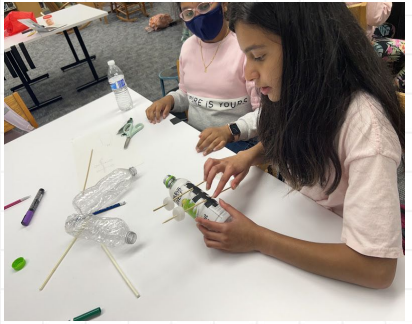
"Expanding" Towards "Girl Power"

In our team, we are able to contribute with our efforts, but other girls might not have the support to even start. To help with this, we hosted various **Girl Powered events** throughout the school year in our local middle school along with girls from teams, 750S, 750C, and 750W.

This is how we make our teams more **inclusive**. Every year, we realize that with each event, we influence at least one more girl to start their courageous journey towards achieving success in the field of STEM. We love to see their eyes spark up with excitement when they realize they are not limited at all.

For each event, we had over 30 girls attend.In our events, we would introduce them to the basics of **building and programming** in VEX Robotics. This year, to introduce the parts we use while building, we held a small scavenger hunt. Also, for programming, we introduced them to Python, where we taught them how to create a chatbot.

Out of all this, we would say the highlights of these events would be the **design challenges**. For example, in our previous event, we challenged each team of girls to design the fastest balloon car. During the race, we noticed every single girl cheering every other team on. They felt more confident and supported and that's the type of impact we're trying to make.



Our Female "Driver" in STEM : Ms. Robles

When we think of someone who inspires girls, we think of our club advisor, Ms. Robles. She is the only female computer science teacher at our school and she teaches advanced courses such as AP Computer Science A and Mobile App Development. As well as this, she is the advisor of three different clubs: Girls Who Code, Computer Science Club, and Robotics. In every course she teaches and every club she is a part of, her main goal is to empower young girls to pursue the field of STEM. She is our role model because she perseveres despite being undermined as a woman in STEM. We strive to be like her, and bring more "Girl Power" into this field.

Mrs. Robles' Story

We asked her what got her interested in the field of STEM. This is what she had to say:

"I really enjoyed web development when I was in high school. There was a social media website called Myspace that used to allow you to code your page and I became obsessed with it. I even asked my counselor about [web development classes] during Freshman year, and she said, 'Don't take those classes, they're for boys' (Queue Inner Scream). Although I continued small projects here and there, I didn't really start coding again until I got my teaching position at South Brunswick High School, for which they needed a CS teacher. I didn't know Java at the time, so I had to learn and teach at the same time. While this has not been an easy feat, I can't deny that I love coding and I love spreading my knowledge of the topic with my students. This is partially why I continue taking the challenge of learning about new courses so that I can hopefully be a role model and recruit more ladies into the field. You're basically melding math, art and puzzles all into one. Where else can you find something like that?"

The Meaning of "Girl Powered"

When we hear the phrase, "Girl Powered," we think of a future with brilliant women taking on the field of STEM heads–on with nothing holding them back. We think of **confident, skillful, and supported** young girls who are ready to face any challenges that they come across. We think of girls who are aware that with each step they take, they have everyone behind them to guide them and lift them to heights they never thought they could reach.

"Girl Powered" is not a light term to be tossed away. The concept **embodies our collective strength as women** and our will to overcome any obstacles that stand in the way of realizing our greatest potential. In our team, robotics is so much more fun when we are all united, have a say, and support each other with every step of the way. We come together to **influence** many other young girls to have the courage to move forward on the STEM path which might seem to be mainly dominated by males. We believe we can change that. We can influence, lead, and persevere. **We are "Girl Powered."**

Credits!

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