Rising Above The Glass Ceiling

1+1=2

.5x2≓10

By Jeanelle Reyna of Team 99808A



Barriers are made to be broken. In the past, a metaphorical glass ceiling has prevented women from progressing in their careers. Over the years, they have chipped away at it time and time again through perseverance, hard work, and determination. Their ambition has helped weaken the barriers for girls today. The girls of my generation are here to reach heights that no one has ever dreamed of.





Our Team

My name is Jeanelle Reyna, and I am a part of NOVA IQ Robotics, Team 99808A. I am 11 years old and this is my 4th season of VEX IQ. My other teammate is Jesse Reyna, who is in the 8th grade and in his 5th season. We have competed in Oahu, Hawaii, Northern Virginia, and are now in Southern California.

What is Girl Powered?

When I hear the phrase, Girl Powered, I think of successful women in STEM fields. I think of all of the incredible things that they have accomplished, and how they shaped the future for new generations.

The women currently working in STEM fields have done great things that empower me and the girls my age. They have proved that girls are capable of doing the same things that a boy can do, and they also established more inclusive roles for girls in all careers. They have paved the way for younger girls to change the world and create new solutions to the problems they face.



Inclusivity on our Team

On our team, Girl Powered is reflected by being inclusive to both girls and boys. We give equal opportunities to everyone, regardless of gender. Girls are given the chance to develop leadership skills, and are encouraged every step of the way. When we are making a big decision, a girl's opinion is given the same amount of value that a boy's opinion would have. Everyone, whether they are a girl or boy, feels included and important on our team.



Diversity on our Team

We always take initiative to attract a diverse group of students to our teams by being open to everyone of every race and gender. Our past teams have reflected this diversity. Our commitment to diversity and inclusion extends to our communication with other teams. We love interacting with different cultures at tournaments, especially at Worlds. We strive to form cultural connections everywhere we compete, making it easier for us to collaborate with a team during a match. We move around a lot, and this has formed strong friendships and connections through the language of robotics, even if we are miles apart.



Our various teams throughout the years reflects our commitment to diversity.

Our Team Roles

The roles we have on our team is a key to our success. We believe it is important for everyone to experience each role on a team at least once. This way, we can know our strengths and weaknesses, and develop our personal preferences. Sometimes girls are stereotyped and are given roles, rather than being able to choose them on their own. Letting a girl have the freedom of choice is empowering because we are not confined to a stereotype.



We worked together as a team to animate our Promote Video, and we learned that working together yields better results than working independently.





We all have specialties, and we are happiest when we work on what we are best at. Here our drivetrain specialist, Jesse, is building, while I am logging his progress in the notebook.

Our Team Roles

Without trying a role, you might not even know if you like it. You might be pleasantly surprised by your aptitude for that subject. Some roles, like driving, can be determined objectively through testing and data. For example, Jesse is often the lead driver because he scores the highest amount of points during our practice matches, but I also enjoy driving. Some roles are shared. For example, we each program half of our autonomous routines. The both of us also work on the engineering notebook, but I am the lead because I like to draw, plan things out, and analyze things on paper. Since we choose our roles based on skill, experience, and personal preference, we are always happy because our work is well matched for us.



Diversity of Perspective

When someone comes from a different background, they are able to come up with different ideas and approaches. Their perspective changes based on their age, gender, personality, and experience. Diversity of perspective can drastically change a team because everyone is unique, and with that we all have different ideas. A different view is vital to a team's success because one idea can change your robot completely. For example, someone could suggest that a 4-bar lift would be more effective than a 2-bar lift. They might be drawing from experience with the design from a previous season, and they can share how effective it is in a competition.

Another important reason to encourage different perspectives is because it could be dangerous to only have one opinion. If one person dominates other voices, there might be a stronger option available that you haven't discovered yet.



Having multiple contributing voices leads to success because it strengthens our team. We find strength in diversity of perspective, and we welcome everyone's unique voice.

STEM ROLE MODEL

My STEM role model is Dr. Mary Edwards Walker. She is a very accomplished surgeon, and the only woman to be awarded the Army Medal of Honor. She was a supporter of the belief that all women and all races could take part in any activity. She has inspired a lot of women to fight for what they believe, and to never give up, because she was an abolitionist and a woman's rights advocate.



Surgeon Dr. Mary Edwards ____ Walker



During the Civil War, she had tried to join the Union as a surgeon in the Army, but she was turned away because she was a woman. Despite this, she decided to join the Army as a volunteer surgeon. I think it is fantastic that even though they turned her away for being a woman, she still did her best to save lives, with or without pay. Since I would like to become a surgeon, I think that Dr. Mary Edwards Walker is a very inspiring person, who has overcome many stereotypes in pursuit of a better future.

Dr. Mary Edwards Walker broke gender stereotypes because she wore "men's clothes," and created an outfit composed almost entirely of men's clothing that she wore every time she treated a patient. I found this inspiring because she created a new "norm," where women had the right to wear whatever they desired.

She was a suffragist and campaigned for the U.S. Senate in 1881. She also ran for Congress in 1890. Even though she lost, she still testified in front of the U.S House of Representatives, in support of a women's right to vote. Dr. Mary Edwards Walker is truly a monumental figure that has inspired me to pursue a career in STEM.



There have been many women who came before us and changed the world. They have done incredible things, but have been held back by a glass ceiling. Despite this, they still fought for a world where both men and women can do whatever they put their mind to. With all of their help and preparation, girls today can rise above the glass ceiling, bringing the past and future with them. I hope I can shatter the glass ceiling too. I know that I can change the world in a way that no-one has ever dreamed of.



Rising Above the Glass Ceiling

1+1=2

5x2 = 10

Author: Jeanelle Reyna Team: 99808A, NOVA IQ Robotics

Presentation template: Slidesgo & Freepik Girl Powered Assets: VEX Robotics & RECF

Bibliography:

https://history.howstuffworks.com/historical-figures/ mary-edwards-walker.htm

CREDITS