Should your gender affect how you view yourself amongst other peers? No. But does it? In some cases, yes. If you're the only girl on your robotics team, it affects you. If you're the only girl in your whole school who does VEX robotics team, it affects you. If you're a girl who has been in robotics since fourth grade and continues to compete with mostly males, it affects you. But how does it affect you?

That's the question I've been asking since middle school. And the answer isn't just black and white like the words on this page. You have to grow a thicker skin. You have to deal with sexist comments from immature sixth graders. You have to work twice as hard to prove yourself worthy. You have to learn how to defend yourself against those who judge your work ethic based on your gender. You have to learn to understand your teammates. You have to understand that they might not understand you. But that's not it.

My last year in middle school, eighth grade, contains some of my fondest memories and some of my worst. After experiencing three years in FLL and one year in VEX, I felt ready to take on the new season. I had one teammate from last year who I used to work well with, and four new team members who, prior to that year, had no experience in VEX. We started out the season rough. Really rough. Our robot could do little to nothing at the time, and as I was waiting for my team to compete, I started talking to one of my new teammates. I don't quite remember what we were talking about but I do remember it ended with him saying, "You're only worth \$20."

What he said hit me hard. I could feel myself tearing up, but I told myself to not show any emotion. Once we competed I quickly left the rest of my team because I knew that if they saw me crying, they would think of me as weak. I knew one of them would think I was just being sensitive just because "all girls are". I did end up confronting that person about what he had said, and he apologized, but now I knew he didn't respect me. I kept this in mind, and it gave me the motivation to prove him wrong. I was worth more than he previously thought.

December was a happier time. We rebuilt our robot and finally won our first competition, securing us a spot at state. I started programing the new robot with different functions to make it easier on the driver and also started to develop a 15 second autonomous strategy. Not only did I program, but I also driving the robot a lot during practice. This is when the new team members started respecting me more. Not only did I get more respect from my teammates, I also got compliments on my program during competitions.

February was when I felt the most proud of myself. My team and I developed a skills strategy for driving and programming. We perfected our loading techniques, and I perfected our programming skills. We successfully ran a perfect score on programming skills that month, and

no one could be more ecstatic than me. We scored 340 points, which made us first in the world for programming skills. It was so good that we even ended up making our programming skills into a function to press on the remote for driver skills. What I had programmed gave us a ticket to Worlds. What I did helped to loosen the stress our team would face at state. This gave me more respect in the robotics community, but most of all, more respect in my team.

Then came April, VEX Worlds Competition. We gave ourselves a good reputation in our state by winning multiple excellence awards, tournament champions, and programming and driving skills consistently during state competitions. But it was also our first year at Worlds. The stress from competing was taking its toll on my team. All of us were constantly worried about our robot, and autonomous was very important in securing a win and putting less stress on the driver.

Because of this, I spent a majority of the time fixing any flaws in the program that we saw in the fields. Everything had to be perfect. But it wasn't my team giving me pressure to perfect our autonomous, it was me. I told myself that if the autonomous ever failed due to a problem in our program, then it would all be on me. Along with that we had our programming skills reputation to live up to. Luckily, we ended up scoring 347 and won programming skills.

Although everything seemed to be working out well for my team, I remember during a speech given by the creator of Goldieblox, one teammate said, "Wow, a toy aimed just at girls? That's sexist." And I remember when he said that, he did not sound sarcastic, he did not sound like he was joking around. He sounded serious. I told him, "The reason someone made this was because all other building toys are aimed at boys. We **shouldn't** need to have this, but we **do** need it."

He just brushed off what I said like it was nothing, but I could tell he knew that he made a mistake. He never really thought about how it would feel to be a gender minority. And the fact that I had to compete and meet with my male dominated team so often never really occurred to him. He didn't understand that what we are given to play with as kids can affect what we do later on. And by the way he brushed off what I had said, I could tell he still did not respect me. He wasn't even making an effort to try and understand what I constantly go through. I decided I didn't need that type of person in my life, and the following year I no longer wanted to be on his team.

Looking back, Worlds was fun, but in that period of time from then and now, I've had time to reflect on what happened. If I could change one thing from that season, one event, one quote said from a team member, I wouldn't change anything. Any bad things that have happened

to me just made me stronger and gave me motivation to work harder. I wouldn't be who I am today without robotics.

This year, I'm in ninth grade. New school, new peers, new team members. I've been the primary driver, primary programmer, and the team leader. My new team members designated me to be team leader because of my accomplishments last year. They respect me as an individual and respect what I have to offer to the team.

Besides my fondest memory of being top in programming skills, my fondest accomplishment is getting my sister into robotics. She and I have a close bond and this year she is in sixth grade. She decided to do robotics after some convincing on my part, and she loves it. When I graduate high school, I know she will carry my legacy well. Maybe do even better than me. She can always come to me if she has a problem with programming or even if she has a problem with a particular team member. I will always help her not just because she's my sister, but also because girls need to stick together.

When I was younger I always aimed high with my goals. At the age of seven I wanted to be a doctor. I never changed my mind until I started doing VEX. I fell in love with the sport and dedicate all that I can to it. Now I have decided to be a biomedical engineer. This way I can experience everything I love to do. I can continue to engineer and help others who have been born with no limbs, or I could create a machine that allows surgery to be executed flawlessly and limits the probability of mistakes.

Already having to experience a male dominated competition has allowed me to prep myself for male dominated college courses and a male dominated field. But we can change that. If we inspire enough girls to pursue their passion and to not worry about what others might think or say about them based on gender, then we can get more girls into technology, more girls into science, more girls into engineering. More girls that have the self motivation to push themselves, and more girls who inspire others to go against the status quo and chase their dreams.

So how does being a female in a male dominated competition affect you? Yes, there are bad things that may come from it. But there are so many good things too. You learn how to be more self motivated. You learn how to take criticism and improve off of it. You learn how to flourish. You learn how to inspire. But best of all, you get to prove those who doubted you wrong, and see the look on close-minded boys when they find out they were beaten by a girl.

Author: Sophia Tran

Team: 1961 E

Title: What \$20 Can Do

Special Thanks To: Our sponsor, RoboSource, our school, SFHS, and my sister, Emilee.