

You Can't do that, You're a Girl

Goals, and challenges, and achievements. Oh my! From ingenious ideas to creative constructions to forbidding failures; accomplishment is an attractive aim. Whilst we may face many obstacles, as a team we will conquer any mountain. Nobody can tell us that it's bad luck to have a woman on board this ship.

Being the only female citizen of our robotics village of twelve, I often feel like a Smurfette in a world full of Gargamels, and it is very easy to end up feeling blue. Rather than this being frustrating though, I do have the opportunity to note social differences between our genders. Whether it is shown in the way I talk, think, and behave, or by the way I clean up after myself, I am unlike the remainder of the club. Although this isn't all bad, because 'thinking robot' is all a girl needs to do to survive; a glorified technical version of 'be the ball', if you will. Not everybody knows the whole truth to robotics, as teams are still exploring and discovering new ways and possibilities. Anyone can pick up a book and read about robotics, but the depth of learning you receive when you attend the meetings, put yourself out there, and really give it a go is incomparable. As a girl, I feel like it is so important to not let your fears of being different stop you from hitting the ground running.

Robotics includes many fields, such as programming - mathematics, digital technology and performance; engineering - problem solving and building; driving or controlling the robot - hand-eye coordination; designing - the arts; and finally science. To perform all of the above, it is compulsory for each and every team member to communicate and cooperate with one another. Social skills are an important aspect to robotics life, in a rather ironic contrast to the stigma surrounding us Nerds. The need to constant interact with your peers, mentors, teachers, fellow competitors, and many others means that you cannot allow a divide of gender to get in the way. By 'thinking robot', anyone - male or female - can engineer, programme, design and/or control a robot.

With female representation in an IQ or EDR team, another viewpoint is brought to the table. We see everything differently compared to the opposite gender, and present solutions to problems in different ways. Girls tend to be more patient and contemplative, whereas boys excitedly rush in with a tendency to ignore the obvious. I am not saying every male robotics participant is ignorant and useless, as they actually have a larger attraction to robotics, but it is well known that we are wired differently. This understanding has been complemented by our teams' experiences in the last few months. A lot of preparation, thought, and stress goes into the final product and making it to the competitions. So if anyone, of either gender 'thinks robot', I am certain they would be capable of succeeding in the robotics field.

Our club believes success comes from recognising the significance of the three I's – involved, included and important. Each member ought to be involved in discussions, activities, events and competitions. Every person in the club is included and is treated equally - even me, the singular girl. Would you say a programmer was important? What about an engineer? A designer perhaps? Or even a driver? In any case, my opinion is everyone is equal and important. A captain is someone ready to lead her (or his) comrades into battle, with careful and calculated understanding of possible outcomes. I look up to and respect past captains, mentors, and teachers, and I feel comfortable going to them and asking them questions. The nature of the room and team is critical and infectious. The senses of friendship and team bonds are strong and explicit. It is essential to have a happy and exciting environment for a team, especially when it affects the members'

attitudes. Before I involved myself in robotics, I was not aware of the positions everyone had. Not a single person missed out on the opportunity to receive a duty. Whether your role is to sort the pieces or drive the robot, I know every team or club member is included, involved and important, no matter what gender they are.

Competitive and social aspects are both located in The Robotics Room. Some members of the club are in the room to talk about bionic arms, Queen the singer, or even to 3D Print a mini Kermit the Frog. Others are in there to build a robot, plot future ideas to enrich the robot, or just to be with the team. When you walk into the room, conversation is what you hear, comfort is what you feel, brewing philosophies is what you smell, and passion is what you see. The typically antisocial aspect of robotics doesn't normally apply to girls, as we almost always have a compliment ready to spark up a conversation. It is a shame so few females feel confident enough to be involved in robotics, because we are perfectly capable and have the brains to do it. The amount of choices, options, and career pathways that robotics underlines is incredible. From building planes, living under the hood of a Volkswagon, designing sky-scrapers, to programming coffee machines, the robotics programme offers the whole package to you, regardless of your gender.

So why do the girls hide in shadows? How come they are not involved? How can I further my own robotics experience 'as a girl'? Robotics is the way the world is heading, and it would be amazing to have an inclusive understanding of the topic. I am still inspired and awed by the little plastic IQ pieces, and the long and plentiful EDR parts that have the potential to transform into an extraordinary work of art, and I am sure many more girls could be inspired and left speechless too.

Jessica Welch
Team 5606 A
New Zealand

