

12/1/2023



“Girl Powered CHALLENGE”

Autores:

Leticia Siller

Genesis Vazquez

ITESM 2

Tecnológico de Monterrey

Saltillo, Coahuila, Mexico.

When I hear the term Girl Powered, I understand it as a puzzle where each member of the community is a piece, therefore, it integrates and recognizes people with the ability to achieve what is proposed, thus recognizing the areas of opportunity in each of them. Thus identifying the value, capabilities and potential of individuals. In other words, it is to provide the tools and resources necessary to achieve the maximum development of skills in the people around us.

In this way, we understand Girl Powered as a work philosophy that the team used without even knowing it, by believing in the individual abilities of its members, giving them the necessary confidence to achieve incredible things that they did not know they were capable of achieving, regardless of the existing prejudices in engineering.

In the experience of the women on the team, they personally say that they were afraid to try things related to STEM for fear of being judged or singled out more harshly than the other team members, which made me doubt themselves and their abilities. By joining VEX thanks to the help of various third parties, we all found a support network, where people are willing to support us and where it is not scary to fail again and again, because the creation of an optimal robot is based on trial and error, allowing us to experiment and try in areas that we had never done before, and that has helped us to cope with the career.

In the particular case of the team, most of us are new, both in the university and in the type of competition that VEX represents, which allows us to have a dynamic with group members who have more experience, where both parties learn from each other, generating a symbiotic type of knowledge between individuals, thus creating an environment where respect for others prevails, where everyone is important and contributes to the team in one way or another. Likewise, each team member has different knowledge and tastes, and instead of being a disadvantage, it is an area of advantage where we enrich ourselves and develop our learning.

The fact that you can join the team without any experience in STEM, is quite beneficial for those girls who would like to experience the world of robotics but are afraid of not having the knowledge that involves building a robot, because we teach each other the necessary courses so that everyone can contribute, adding that our student group is open to students of any age or career, beyond those related to engineering or science, promotes create a space suitable for all people interested in robotics.

From the moment we join the student group, more experienced members have encouraged us to believe in ourselves, encouraging us to learn robotics while ignoring the prejudices that exist about women in engineering, helping us to participate in the roles that we are genuinely interested and like, rather than what we think we would do better, in order to get out of our comfort zone and challenge ourselves. They have also promoted a safe environment where we do not feel obliged to do activities we do not want to do, encouraging us to talk and make decisions as a team, because individual opinion matters in the collective one.

Thus, by being able to work in different roles we can create a collective knowledge, where we exchange ideas and improvements that we believe are relevant for the robot, achieving that in addition to expanding our knowledge in a certain role, we also generate solutions in our progress that we could not achieve if only one member played a role completely. Seeing a problem from a different perspective by playing a different role.

We consider the diversity of opinions fundamental in our team, because if we do not listen to the criteria of each partner, we believe that our decisions could not be the most accurate, so we try that each one expresses how he/she considers the designs, strategies, development and execution of each part of the robot. Likewise, we believe that in this way we can visualize different perspectives and reach a point where we all agree and are satisfied with the result. We firmly believe that being a united and open team we will have more chances of success in competitions, so we must ensure that we count and contribute to generate this environment where we all get along well and take into consideration each of our colleagues.

As an inclusive team with all kinds of ideas and opinions, we would not like to pigeonhole any one person into my role model in STEM, it is each and every woman in science, technology, engineering and mathematics who has inspired us to be a team open to all kinds of ideas, we consider that the world of science for women is very tough and they are involved through challenges that most men do not have to face due to existing prejudices.

There are great women in the field of science and technology who inspire us to fight for a world without prejudice towards women, having been brave to their passion and having dared to be resilient, to make their way and facilitate little this path for women, young women and girls of science of the future. Such are women like Katya Echazarreta, Roseli Ocampo-Friedmann, Sau Lan Wu, Yoky Matsuoka, Emmy Noether, Mae C. Jemison, Rosalind Franklin and of course, Marie Curie, to mention a few among the hundreds of women who have made history and generated advances in these areas.

Knowing what women face in science helps us to realize that we are all capable of being able to venture into whatever we like, not make someone less because of stereotypes or prejudices that exist, either around a specific person or a certain group of people.