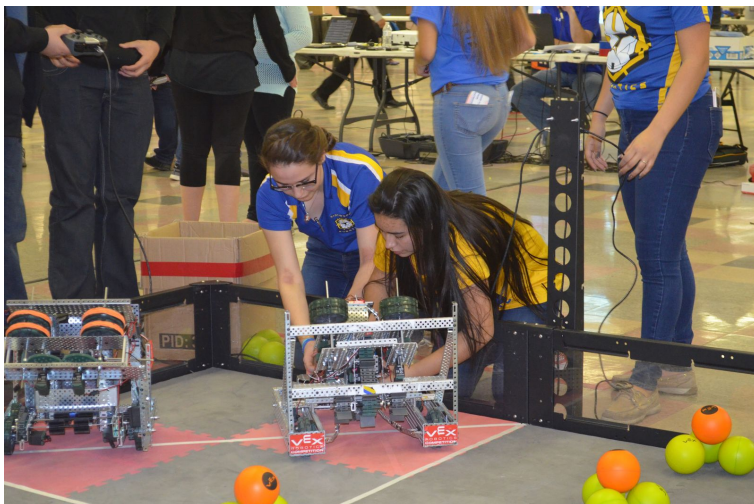


“Don't move your robot during the match. Stay where you are and don't get in our way. We can't afford to lose.” These were the words from our alliance, a foreign boys team, before a match at Worlds. This unsettling event ultimately inspired us to host the largest Girl Powered conference of all time. In our team, 8787C, Girl Powered is a lifestyle that represents our ideals and hopes to see the world unite and become unbiased towards gender. As a girl in robotics and STEM, you not only have to worry about your robot's performance or about your opponents strategy, but also the prejudice that already exists on the field. Because of this, our team strives to create diversity in the STEM field by hosting annual Girl Powered conferences to empower the minds of our future engineers.



In the West Texas Region, 8787C was the first all girls team to arise. In



2015 “Nothing but Net”, our robotics coach and mentor decided to create an all girls team to build a more varied robotics and STEM program. We faced many struggles our first year, yet the greatest one was discrimination. Our region

had never seen an all girls team and it was noticeable. We often got smirks and plenty of scoffs. Many didn't believe we had potential, yet we did not allow this bias to dissuade us. We proved all our critics wrong. 8787C won the West Texas Regional Championship receiving Tournament Champions and the Excellence Award, and we secured the coveted ticket to



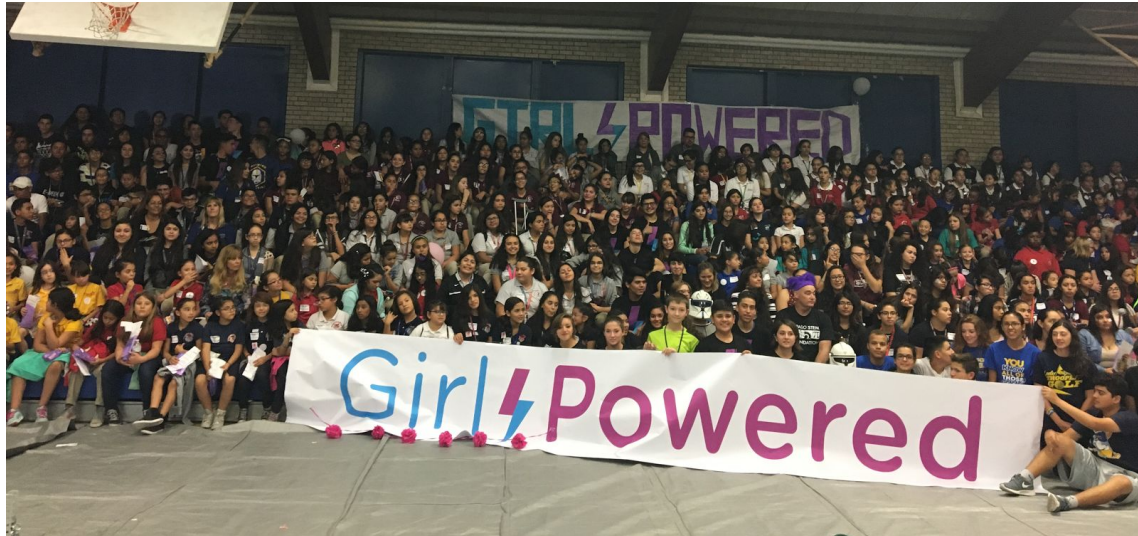
- Regional Championship -
Excellence Award and Tournament Champion

Worlds where we won the Teamwork Award. Our joy was not only because we had competed at Worlds, but for the opportunity and privilege of representing all



the young girls who felt their voices were not heard. Overall, 8787C contributed to a movement that was focused on making STEM a diverse field with no discrimination or intimidation. We knew we had to do more the following year to share and contribute to our motto: Girl Powered. So we did.

The next year, 2016 “Starstruck,” we hosted the largest Girl Powered event in the world. In our very first Girl Powered event, over 350 girls ranging from ages 7-18 were in attendance from local schools all eager to learn more about STEM



and all it had to offer. We invited these girls because we were eager to pass forward information and resources they longed for. We taught them computer and graphical programming, binary language, and much more.



We invited an array of professionals to speak and, most importantly, we invited women who worked in the STEM field to come share their experiences. It was an inspiration to see these young girls feel more confident in themselves within the

STEM field and a little less intimidated by its rigor. Because of all of our hard work, our coach, Mr. Torres, received the “Volunteer of the Year” award at Worlds for revolutionizing the way robotics is perceived by society and making it a diverse field for everyone.



Working towards the Girl Powered movement significantly improved our team’s work ethic as it taught us to be open to challenges and not be intimidated



by them. Therefore, new members try different jobs such as CAD-ing, programming, building, scouting, engineering notebook, to determine what they like best and where they are most helpful to the team. Through trial and error we recognize our strengths and shortcomings as well as realize that all jobs are equally important; we are all relevant in the STEM field which has been one of the lessons learned through Girl Powered. Even though each team member has different personalities and comes from diverse backgrounds, we

work exceptionally well since we find our strength in our differences; we learn to listen and appreciate the unfamiliar, embracing insightful ideas that generate success.

Working together, with the success of last year's Girl Powered event we knew instantly that it was the beginning of a lifelong Eastwood tradition. This year, 2017 "In the Zone", we hosted our second annual Girl Powered event, but this time was much more challenging than last year because our school is undergoing extensive construction; access to certain facilities are limited.



The entire school body was shuffled into a restricted area on campus that is now called "Fort Eastwood," This soon became a problem as our working space in a portable is significantly smaller than the working space we were accustomed to in our former classroom. Also, the possibility of our portable being taken away existed as our school downsized; the future of our robotics team at Eastwood High School looked bleak. With all of the uncertainty in the future for the Eastwood Robotics Club, we hoped for the best and adapted quickly. With buildings being torn down daily, we didn't know what the future of our Girl Powered event would look like.



With all the uncertainty looming, we knew one thing for sure: Girl Powered had to take place. We quickly reviewed our options for the venue, but renting a locale for the evening was unrealistic due to our club's lack of funds. So we were left with the final choice: use the gym in shambles which still remained in the middle of havoc. Everyone knew it would be a challenge, but we had our minds and hearts dedicated to this movement. So it began. We fundraised tirelessly for two months by selling Girl Powered shirts that

our club designed, selling chocolates around school and throughout the community, and by asking local businesses for donations. After two months, our club was able to fundraise enough money to pay for the conference's expenses and for a Girl Powered shirt for **every single**



girl and volunteer in our event. After countless hours of planning, our gym was

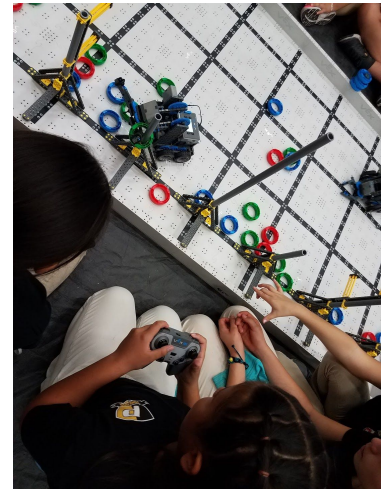


finally ready for our second annual Girl Powered conference. This conference was bigger than the previous year with **over 550 girls** in attendance. Three booths were solely dedicated to teaching how to build a VEX IQ Clawbot, how to program graphical programming for VEX IQ on

Robot-C and how to drive the robots they built and programmed. The attendees also learned about this year's VEX IQ competition and VEX VRC Challenge, how electronics circuits worked, computer science cyber security, and many other branches of STEM. In addition, we had a Hypertext Markup Language booth

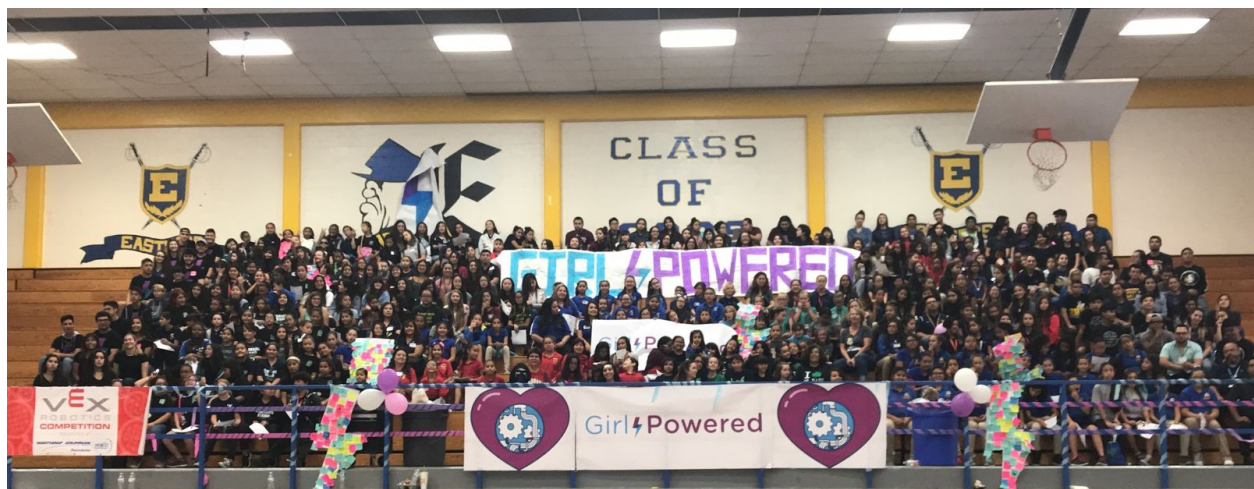


ran by one of our team members from



8787C. This was the station after the photobooth where we would get the pictures taken and teach the attendees how to embed them on to our own website. The girls learned and watched

their own picture become a part of a website. In truth, they became more than a picture or part of a website-- they became a voice that resonated loud and clear that gender was irrelevant. This is why we are Girl Powered. To make change and become the role models we were never exposed to when growing up.



Not only do we host annual Girl Powered events to generate diversity in the STEM field, but we also participate in wide-ranging events throughout our community to raise awareness of this prevalent problem and to expose kids to the different aspects of the STEM field. We begin the year by hosting our annual robotics summer camp for incoming freshmen and middle schoolers focusing on building, programming and driving VEX IQ. Throughout the school year, Eastwood Robotics joins different organizations and local schools in engaging our young community in the STEM field. Eastwood's Robotic team strives to reach out to our community of young learners as we promote the beauty and importance of STEM.



One such person who believed in promoting and advocating for STEM is I



Stephanie Kwolek, which is our team's role model. Ms. Kwolek, an American chemist, was known for being a pioneer for women in science when she invented a synthetic fiber called Kevlar that is used in bulletproof vests, helmets, etc. She was hired at DuPont only because there was a shortage of workers as most men were overseas fighting in the war. She herself experienced discrimination in the STEM field throughout her life. Yet, she proved worthy of her job and there she created Kevlar, a material that still saves lives every day.

Women like Kwolek are revolutionizing the way STEM is perceived and its preconceived notion that it is a field for men. Girl Powered is redefining this prejudice and is encouraging young girls to take part in engineering. This movement created diversity which our society longs for and desperately needs. 8787C is Girl Powered because we believe in change. We believe that hosting these annual Girl Powered conventions can shift the statistics from 24% of women take part in STEM careers to 50%. Diversity is what's going to change the world-- Girl Powered is the perfect place to start.

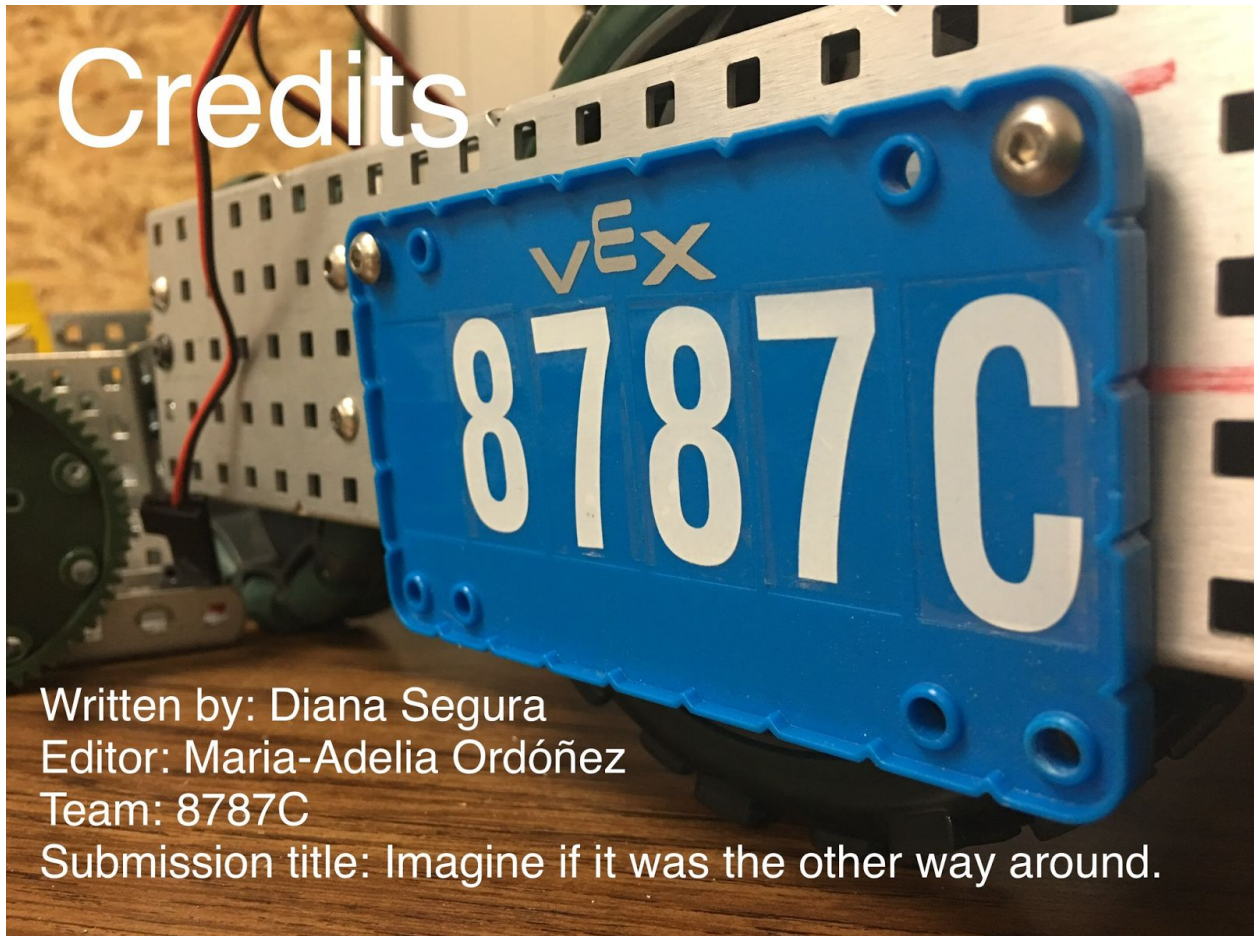


We are Girl Powered

8787C

- Black shirt with 3 color lightning bolt - 2016 Girl Powered
- Blue shirt - 2017 Girl Powered conference
- Black shirt with pink lightning bolt - fundraiser shirt

Credits



Written by: Diana Segura

Editor: Maria-Adelia Ordóñez

Team: 8787C

Submission title: Imagine if it was the other way around.

