

Cougars Gone Wired, FRC Team 2996, promotes a fun and educational learning environment through student leadership and encourages team members to grow from success and learn from failures in the spirit of Gracious Professionalism and Coopertition. By furthering FIRST recognition, improving productivity, and working with sponsors, we prepare students to take on the challenges of the future and strengthen the team for years to come.

In order to spread the FIRST ideals, we establish our presence by hosting and participating in numerous volunteering opportunities. One such event involves our annual scrimmage where midwestern FRC teams are invited to practice on a full-scale, functional field that we construct out of wood, blood, sweat, and tears. Team 2996's event creates opportunities for different teams to collaborate and experiment with their robots, their strategies, their teamwork, and their interactions with other teams. At our 2019 scrimmage, we hosted 16 teams with hundreds of participants, as well as hundreds of family members and community members in our school gymnasium. After the event, we receive numerous letters thanking us for creating an opportunity to practice before regionals. Every year, we also transport and maintain this field for practice use at the Denver Regional and off-season events, such as Energy Day in 2018.

For the past 2 years, we organized and ran the FLL Southern Colorado Qualifier; our team puts in over 500 hours of work, approximately 10 hours per student, over 2 days to ensure that the event runs as efficiently as possible. The competition utilized the school's entire main floor and gym to accommodate the 47 teams in attendance in 2019. Our head coach, Bryce McLean, invested an estimated 50 hours of preparation for this qualifier. We received countless compliments from both coaches and students; a student from Manitou Springs Middle School in Colorado even told us, "I didn't know robotics was going to be this great!" This is the impact we strive to achieve in our community: excitement for robotics in younger generations.

In order to spread FIRST awareness outside of the program, we participate in and host other events. One of the ways we do this is by hosting our Making A Difference (M.A.D.) Summer Camp. We welcome middle school students into our workspace to build and compete with an FLL-level robot. During this camp, we encourage teamwork, develop problem solving skills, and foster a spirit of Coopertition. In 2019, 18 participants attended our camp. which has

historically established a strong interest in FIRST. In the 4 years since we founded the camp, 12 campers have joined the team.

We extend our outreach to elementary-school students through an FLL Jr. Expo. This event allows teams to present their projects to reviewers, parents, and other teams. Students also participate in a team-building exercise led by our members and a demo of our team's robot. We love to share what we have done with the children, as they interact with our robot; recently, we had the kids play catch with our robot, using cargo balls from Destination: Deep Space.

According to a study by The National Girls Collaborative Project, women make up 50% of the workforce, but only 28% of those in STEM fields are female. As a push towards challenging this, we reached out to FRC Team 1902, Exploding Bacon, and we worked with them to become ambassadors of the #FIRSTLikeAGirl movement. This campaign is designed to inspire girls to join FIRST and develop the STEM field into something for everyone. At several of our events, we set up a stand for the movement where we hand out buttons and pamphlets to encourage young women to become involved in STEM and FIRST activities. Another way we inspire girls to join FIRST is through Tiara Friday. This is a team tradition where we wear tiaras and crowns to school every Friday. When people ask why we are wearing them, and they do ask, we can promote not only our team as well as FIRST, but also the inclusion of women in STEM fields.

Our team has many traditions such as our team dance, competition cheers, and team building activities that we use to grow closer together. We constantly seek new ways to increase productivity within the team, and we find that preseason offers a great chance to grow closer with our teammates through these activities. Learning the team dance and team cheers connects both new and returning members. These traditions give us the chance to support our drive team and broaden our impact at competition. At the Oklahoma Regional in 2019, we changed the atmosphere of the competition with our spirit; we always go down by the field to cheer our drivers on, but were one of the few who stood up to cheer. As one of the loudest teams present, we encouraged everyone in the arena to come dance with us. By the final rounds, the majority of teams in the stands were up and having fun in the arena, and the MC came up to us and thanked us for boosting the energy.

During the preseason, we train our new members for both build season and competition season. Running a mock game, a 3-day training process in which our mentors recreate kickoff with a previous FRC game, helps new members to understand the process of build season. After our mentors reveal the chosen game, we strategize and create a theoretical robot to complete the game. At the end of the mock game, we compare our end product with top-scoring teams.

Due to our commitment to STEM and FIRST, students can earn a varsity letter in robotics by completing 25 hours of volunteer work and participating in 85% of build season. As of January 2020, our team has a total of 1,691 volunteer hours, and 40 of our students have surpassed the minimum volunteer hours to receive their letter. This gives an incentive for members of the team to volunteer more and participate in STEM activities.

The process through which we decide our student leadership resembles that of a professional job interview with our mentors, complete with a resume and cover letter. This not only gives the students experience in applying for a job, but it also gives new members something for which to strive. It is important for our leadership to pass on their knowledge by teaching new members which preserves stability in the team, even after they graduate.

At the end of the year, it is important to us to have a sustainable team that will continue to grow and maintain relationships with sponsors. We secure finances and student leadership for future seasons by building strong relationships with our sponsors and maintaining a formal business team structure. In years past, we have held a business exchange at the Denver Regional, and we are currently expanding it outside of our state. This is an opportunity for FRC teams to discuss and brainstorm business structures. This has impacted teams that have struggled with their business positions because they have the chance to receive advice from other teams on ways to increase the efficiency of their business structure. This year, we are co-hosting a meeting equivalent to our Business Exchange at the Idaho Regional, which we have never attended in years past.

Our school district allows us to use their facilities to do all of our work, but we need fundraisers to afford the materials for the robot. One of our longest-supporting sponsors, BPO Elks Lodge #309, provides their facility for us to host our annual fundraiser dinner which is our biggest fundraiser of the season. As a team, we serve food, bus tables, and demonstrate our robot

for our guests which makes it a favorite event of parents, so much so that alumni parents still attend. The earnings from this dinner go towards the entry fee for regional competitions and material resources for the team.

For the past 4 years our sponsor, L3Harris, has invited our team to a luncheon where their employees discuss their jobs, and we present the basics of FIRST and that year's game, so they can better understand what we do and why we do it. This is an excellent way to give our students a chance to network with potential employers and learn about opportunities in STEM-based fields.

In order to honor our supporters, we host an annual dinner for sponsors and parents following the build season where we offer a special thanks for all of the help we have received and showcase what we have accomplished during the season.

Throughout the year, our team is constantly searching for new ways to improve our culture, and foster a spirit of Gracious Professionalism and Coopertition. Through our sponsorships, we can help our team to continue impacting future generations of STEM and FIRST. We seek to inspire students through our outreach, while encouraging the idea that everyone should learn from failure and rise together.