

Here at Texas Torque, we are a team. A team that has evolved over the years to fit the needs of our students and our community. A team that is in a constant state of progress and expansion. A team that undergoes internal growth with the aim of increasing our impact on others. A team that strives to improve the world around us.

As we have developed, our community has recognized and responded to our growing impact. As such, we advocated for the creation of new robotics centers throughout our district. Our team actively worked alongside our Superintendent in order to get these new facilities on the 2015 county education bond. Texas Torque team members then drew up renderings of the new facilities and advocated for the addition of new machinery such as HAAS mills, table routers, computer labs, and lathes. We then campaigned for the bond by going out to polling locations in order to promote our cause. The bond passed with 63% of the vote and allocated not one, but three new robotics labs for our district. The largest of these is a 2.5 million dollar central robotics center. These new facilities ensure a future not only for our team, but also for robotics as a whole within our district.

In line with this trend of educational improvement, Texas Torque has worked within our district to promote STEM education. Team members inspired our school district to create the position of District Robotics Coach, a position that is currently held by our lead mentor, Scott Rippetoe. This position has helped him to facilitate robotics participation throughout our area, particularly to younger elementary school students who have yet to experience FIRST. Additionally, our lead mentor has created a comprehensive robotics curriculum that is taught at a district high school, allowing older students a chance to develop their technical skills. Our team also integrated FIRST into the advanced curriculum of our local charter high school, The Academy of Science and Technology. Students here are able to earn high school local credit in recognition of their participation in the FRC program. These efforts have allowed us to develop and improve STEM and robotics education within local schools.

Our team further expands our influence by creating new avenues for ourselves in government. In 2013, we were recognized by Texas Senate and House resolutions (Senate 44 and House 13R3581) and by Governor Rick Perry. The next year, we made an even bigger impact by having State Senator Steve Toth in our lab. We toured the statesman around our facility and were able to speak to him about our Texas State Robotics Day proposal. We also

saw an expansion of our government partnership in 2014 when we created The Woodlands Robotics Day with our township. Later that year, our lead mentor took to the state capitol to advocate for the inclusion of all FIRST teams within Texas Robotics UIL, a program that will launch later this year. We continued our upward momentum when our U.S. Congressman Kevin Brady attended and spoke at our offseason competition, The Remix. Through our government advocacy and involvement, Texas Torque has been able to bring robotics and STEM into the spotlight of local, state, and national politics.

Beyond working to improve our voice in government, we strive to Make it Loud through our demonstrations. On the national scene, we made FIRST loud to 21 million people by opening the 2013 Macy's Day Parade, and were featured on the Fox and Friends morning show, reaching an additional 1.6 million people. Furthermore, in 2015 Digital Kitchen chose us to represent FIRST in their documentary, RoboLeague, which has reached AT&T U-Verse's 4.3 million subscribers. More locally, we have formed a sports initiative that has partnered us with two major league sports teams, the Houston Astros and the Houston Rockets. We have worked with the Astros to create an annual event, FIRST Pitch, that showcases FRC teams right alongside professional athletes. In a similar fashion, we held a joint demonstration with NBA player James "The Beard" Harden of the Houston Rockets. Additionally, we have reached over 700,000 people in the past 5 years through community outreach efforts such as Comicpalooza, Mini Maker Faire, school demonstrations, Sci//Tech Exposition, Boy Scout Merit Badge camps, local news, and more. These outreach endeavors have allowed us to further spread the message of FIRST.

Beyond growing FIRST throughout our nation, we have also been committed to spreading FIRST abroad. This brought us all the way to Norway, where we have been tirelessly working to spread both FLL and FRC. The chair of the Kongsberg FLL committee, a Texas Torque alumnus, has implemented FLL programs throughout the Buskerud region. With the help of this alumnus we have worked with a Norwegian pre-rookie FRC team to help them build a copy of our 2014 robot. To do this we had students Skyping the developing team in order to help them with their code, electronics, and gearbox assembly. In addition, we sent shipments of aluminum tube, sheet metal, and electrical components to Norway. This completed robot was then presented to the Norwegian Minister of Technology at Norway's national technology conference, driving FRC into Norway's national spotlight.

More locally, Texas Torque has grown into a team dedicated to inspiring and helping other FRC teams grow. We were one of the 76 teams selected to test the roboRIO control system in the 2015 and 2016 seasons. Last season, Texas Torque worked towards strengthening the bond of teams in our state by creating and providing FRC trading cards for all 22 Texas teams that went to the World Championship. We also release our code, scouting data, and safety program to the community through our website. Furthermore, we created Torque Tutorials, a series of online video tutorials on various FRC topics like tapping and gearbox assembly. On top of these efforts, our team also runs and hosts The Remix, our annual FRC offseason competition. This event has allowed us to host workshops on awards, UIL in Texas, and roboRIO beta testing. As one of the largest offseason events in our state, The Remix has attracted teams from Hawaii, Illinois, Louisiana, Mexico, and all across Texas. By supporting other teams, Texas Torque is able to embrace the spirit of coopertition and help improve FRC across the board.

Our team's impact reaches far beyond the limits of FIRST. We unified the reach and generosity of FIRST teams when we collected toiletries at The Remix for the Products for Peyton project. Furthermore, we set up a booth for students to create yarn hearts with encouraging messages as a part of the Peyton Heart Project. In addition to these drives, our team has also volunteered monthly at the Women's Shelter and has donated all profits from The Remix to this organization. In both 2014 and 2015 we have held bedding and blanket drives for Angel Reach, a nonprofit organization dedicated to supporting foster children. We also helped this organization in 2014 with a home renovation in order to create a home for a foster family. Finally, we held a LEGO drive for the Texas Children's Hospital, collecting over 60 sets for hospitalized children in our community. All of this has helped us to improve our community one organization at a time.

Beyond all else, we are dedicated to growing the next generation of scientists and engineers. This commitment is why we invest so much of our time and energy into starting and supporting FIRST Lego League teams. Our investment began in 2014 when we started 13 FLL teams across the district. With guidance and support, we have increased this number to a total of 46 teams in 2016, expanding the robotics program to over 24 campuses in our school district. Of these 46 teams, 21 have been directly mentored by members of Texas Torque. In addition,

we host the largest FLL qualifier in Texas, with over 40 teams in attendance, as well as one of the only FLL offseason events in Texas, Spring FLLing. We also host EV3-based STEM summer camps to give 3rd through 6th graders a fun introduction to FIRST and STEM. Beyond this, our school district requires middle schoolers to complete a STEM project as a part of the Pre-AP science curriculum. In the past this has included Science Fair and the Engineering Design Competition, but we have since added FLL as an option in order to reflect the growing influence of robotics in our community. Through our development of FLL programs, Texas Torque is able to set the foundation for future growth within FIRST.

We are a team. By creating a supportive environment, we allow our students to see that engineering can be both enjoyable and rewarding. We are leaders. Our students take the initiative to make a lasting impact on the world around them. We are engineers. Through our efforts to make robotics more accessible, we transform how STEM is perceived by those around us. We are Texas Torque. This is our mission. Close impact, far reach. By shaping the students of today, we transform the future of tomorrow.