

***FIRST* Impact Award - Team 1730**

2024 - Team 1730
Team Number
1730
Team Nickname
Team Driven
Team Location
Lees Summit, MO - USA
Describe the impact of the <i>FIRST</i> program on team participants within the last 3 years. This can include but is not limited to percentages of those graduating high school, attending college, in STEM careers, and in <i>FIRST</i> programs as mentors/sponsors.
Over the last 3 years, 100% of Team Driven's students graduated high school; 94% of those students are enrolled in higher education, and 65% are pursuing a college degree in STEM. Team Driven alumni are equipped with tools to help build and manage their jobs and personal lives due to the collaborative and complex nature of the FIRST program. Students learn skills in presenting, designing, programming, and machining, which help with classes, interviews, and internships, in all fields.
Describe your community along with how your team addresses its unique opportunities and circumstances.
Our community has shown a growing interest in STEM, which Team Driven has helped cultivate. Since 2022, we've helped assemble kits with supplies for science experiments, allowing 6,725 more elementary students to have a hands-on STEM education. Another opportunity we've had is starting an FTC team in Holden, Missouri. Their small town didn't have any other FIRST programs in that area. To help aid them, we have sent adult and student mentors to work with the team.
Describe the team's methods, with emphasis on the past 3 years, for spreading the FIRST message in ways that are effective, scalable, sustainable, and creative. How does your team measure results?
Team Driven uses outreach programs to spread FIRST's message and core values. We mentor and sponsor 6 FTC teams, 3 of which were created in 2022 due to increased interest at middle schools in our area. A creative way we spread FIRST's message is through our unique competition for K-8th grade students, Junior Robotics League. This is a program that began in 2008 and has remained sustainable and popular amongst students throughout the KC Metro area.
Please provide specific examples of how your team members act as role models within the FIRST community with emphasis on the past 3 years.
Team Driven leads by example; we reflect this in our actions at FIRST events. At each regional, we bring over \$1,000 worth of parts to give out. We invite teams to use the machines in our pit, and we send members out to help other teams as part of "Miracle Thursdays". We host a pre-season event, Week

Zero, that allows teams extra drive time and alliance practice. This year, we are starting a new event to allow Impact presenters to practice in front of other teams and receive feedback.

Describe your team's initiatives to Assist, Mentor, and/or Start other *FIRST* teams with emphasis on activities within the past 3 years.

Due to growing interest, Team Driven started our 4th, 5th, and 6th FTC teams, two at a new middle school in our own district. The other team is outside our school district and had no previous FIRST programs. We continue to mentor and sponsor all six of our FTC teams. We also assist FRC team Robonáticos (7565), who are based in Brazil. Additionally, we participated in a conference call with over 25 teams in Latin America where we discussed our design process, build season, and team strategy.

Beyond starting teams, what initiatives have you done to help inspire young people to be science and technology leaders and innovators? What results have you seen from your efforts in the past 3 years?

In 2008, we started our Robotics summer camp program consisting of various levels for students 4th-8th. In 2016, we began our Bricks to Bots summer camp for K-3rd. Since 2021 the attendance has increased 135% to 248 attendees. Our goal for the camps is to give kids hands-on experience that teaches them skills like problem-solving, teamwork, rational thinking, and gracious professionalism outside of the classroom. We have seen positive results as our team has learned how to mentor as well.

Describe the partnerships you've created with other organizations (teams, sponsors, educational institutions, philanthropic entities, etc.) and what you have accomplished together with emphasis on the past 3 years

Team Driven is part of the R-7 alliance with the other FRC teams in our school district. Every year, the R-7 alliance works together to collect donations for a local domestic violence shelter. We also collaborate with the R-7 alliance to put on Week Zero, a practice event for robots, and Impact Award presenters before the competition season starts. This year, we also participated in the KC Robotics Conference where mentors from teams in the KC area presented on various topics to aid other teams.

Describe your team's efforts in the past 3 years to promote equity, diversity, and inclusion within your team, *FIRST*, and your communities.

Team Driven is an organization in which everyone can participate; there are no applications, tryouts, or grade-level requirements to be on the team. We invite all students at our school to our open house after club rush. We have an open-door policy where everyone is welcome. Team Driven's demographics of 43% women or non-binary is similar to that of our school. 19% of people on Team Driven are people of color.

Explain how you ensure your team and the initiatives you have created will continue to run effectively for the foreseeable future

Team Driven is built on the sustainability of our team and outreach programs. Veteran team members teach newer team members how to guide the subteams and outreach programs that they are associated with so that in future years, the team will continue to flourish. Our outreach programs are self-sustainable and continuous. Junior Robotics League (JRL), summer camps, Fall Lawn Rescue, and Cow Town Throwdown all fund themselves while creating a profit for our season.

Describe your team's innovative strategies to recruit, retain, and engage your sponsors within the

past 3 years

Team Driven invites current and potential sponsors to a yearly open house event at our shop to see the impact of Team Driven on its students and community. We use our social media presence to show our current sponsors what we're working on and recruit new sponsors. To further retain and engage sponsors, we display their logos on our t-shirts, robot, and team website, as well as our pit book and posters. This allows us to support and maintain relationships with our current sponsors.

Highlight one area in which your team needs to improve and describe the steps actively being taken to make those improvements.

Team Driven strives to increase our team diversity and ensure we align with the demographics of our school. To do this, we have conducted team meetings to discuss potential events at our school. We have decided which school clubs to reach out to and invite to our shop. Additionally, we have planned to personally speak to organizations in our school during their club meetings. We are going to invite these clubs to come see what we do at our shop.

Describe your team's goals to fulfill the mission of *FIRST* and the progress you have made towards those goals.

Team members work with younger students, both in and out of our immediate community, through programs such as Junior Robotics League, summer camps, and FTC to pass on their knowledge and teach skills to the next generation. By collaborating with mentors, team members take on leadership roles, teaching them presenting and business skills, as well as engineering and programming skills. Team Driven students take on a mentorship role to inspire our FTC students to continue on to FRC.

Briefly describe other matters of interest to the *FIRST* Judges, including items that may not fit into the above topics. The judges are interested in learning about aspects of your team that may be unique or particularly noteworthy.

While our programs impact students who feed directly to our school, more participants feed into other high schools in our area, and even other school districts. 71% of Junior Robotics League and summer camp attendees of the last 3 years will attend other high schools. Additionally, Team Driven is a year-round program with outreach activities in the summer and fall. Because of this, students find themselves feeling like a part of a family.

Judge Feedback**Who/When****Feedback**

Mar 16,
2024
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AM EST

We have received feedback that we need to expand our outreach beyond our community. We were wondering what the best approach to expanding our current outreach programs would be.

An area the team has an opportunity to improve.

Something that really impressed the judges.

Essay

Since 2005, Team Driven has inspired future programmers, engineers, and leaders. We are not just a team, but a community that can rely on and support each other through our shared love of robotics. Our primary goal is to continue inspiring and embracing STEM. To do so, we fine-tune our team, stay on pitch

with FIRST, and harmonize with our community.

Fine-Tuning Our Team At the start of each school year, Team Driven participates in our school's Club Rush. This is an event where every club at Lee's Summit High School (LSHS) introduces the student body to all the activities they can join. Additionally, Team Driven has an open house, this is for new students and our community to see our shop and learn more about our team and its history. Our team is committed to preparing new members before the season starts. We have a basic training program for our newcomers. Our experienced team members train new students in multiple areas including CAD, wiring, operating machinery, and programming. Any new members looking to join the team must go through a separate safety training program before they can operate tools and machinery in the shop. To improve connections with our teammates, Team Driven hosts team-building activities, such as trivia night and our annual holiday party. Trivia night allows our team to connect and learn about our history. Our holiday party allows us to take a break from robotics and build strong bonds with each other in a relaxed environment. One way our team stays organized is through subteams. These subteams allow students to get involved in areas such as design, machining, programming, communications, and strategy. Students are encouraged to join more than one subteam and try out new things. Team Driven has 29 students for the 2024 season, ranging from freshmen to seniors. LSHS puts on a homecoming parade where each after-school activity gets the opportunity to put together a float. This year, Team Driven won first place in the float competition. We spent a total of 3 weeks planning and creating the float, with the theme of, "1730 throughout the years." This was a great way for Team Driven to let our community know about us, and it opened a window for students, parents, and staff to learn more about our team. Another way Team Driven keeps itself in tune is by demonstrating our robot to younger kids. Currently, we do demonstrations at four local elementary schools and 1 middle school. We allow younger students to control and drive the robot to see what it feels like, inspiring an interest in robotics. Team Driven is a diverse team, not only physically, but also in a variety of perspectives. Everyone brings something different to the team, and we ensure each person feels like a respected and appreciated member of the team.

Staying on Pitch with FIRST Since 2007, Team Driven has hosted Cow Town Throwdown (CTTD), a two-day off-season event using the previous year's FRC game. Team Driven invites teams from our community, as well as from other communities across the Midwest. This includes priority invitations to pre-rookie teams in our area. This allows new members of all teams, including our team, to become familiar with how a FIRST event works. This year, we had 40 FRC teams from 5 different states. We also host an FLL scrimmage, as well as an FTC demo, at CTTD. Another way we work to promote the message of FIRST is Miracle Thursdays, which Team Driven created to aid other teams on the Thursday before a competition. During Miracle Thursday, team members go to other teams and offer help in many forms, such as donating spare parts, offering use of our tools and machines, and even helping to work on their robots if needed. Team Driven also works with an FRC team based in Brazil, 7565 Robonáticos. Our connection began with one of Team Driven's members messaging 7565 on social media. Since then, we've participated in video calls with international teams. During one of these calls, we connected with 30+ Latin American teams, where we answered questions about our manufacturing process, programming, and drive team. Our team has ongoing contact with 7565, which has allowed us to continue assisting them through robot design and strategy. Team Driven is part of the R-7 Alliance, which is made up of the three Lee's Summit High School robotics teams, consisting of 1730 Team Driven, 1987 Broncobots, and 1986 Team Titanium. The goal of the R-7 Alliance is to maintain cooperation and partnership between the three teams in Lee's Summit. We work together to plan and host an open house for the community at each team's shop. This last year, the R-7 Alliance also started the KC Robotics

Conferences, where teams could attend sessions on a variety of robotics and FIRST-related topics. The R-7 Alliance also works together to raise funds and donations for Hope House, a sanctuary for victims of domestic violence. This annual event is a friendly competition between the teams to see who can collect the most donations. This is a great way for the teams to bond and is also a chance to help our community. Last year, our team alone collected 494 donations. Team Driven strives to promote the message of FIRST. One of the many ways we do this is by mentoring and sponsoring 6 FTC teams, 3 of which were started in the last 3 years. One of the teams we mentor is Holden Middle School, which is 35 minutes away from our school. The other 5 FTC teams we mentor are at 2 different middle schools in our district. Almost every day during the FTC season, members of our team help these middle school students with robot design, programming, building, and communications.

Harmonizing within our Community Team Driven also hosts Junior Robotics League (JRL), a K-8th grade program. Each year, Team Driven designs and builds a new game to replicate an FRC season. The kids get 6-8 weeks to design, build, and program a robot using VEX parts. Throughout the season, we host workshop nights to aid teams. At the end of the season, there is a 2-day competition where FIRST-inspired awards are given out. This year, we had 107 kids participate, making 31 teams from multiple cities and school districts in the area. During our annual JRL competition, we collect canned goods. In 2023, we donated over 700 canned goods. For another donation drive, members of Team Driven collect supplies including towels and old clothes to make dog toys. We donate these to Lee's Summit Animal Control annually. In the fall, our team has a small business called Fall Lawn Rescue. Team members aerate lawns in Lee's Summit 4-5 days a week for 2 months. Not only has this business raised funds for our team, but it has also taught our team entrepreneurship and finance skills through scheduling appointments and customer service. In partnership with our school district, Team Driven volunteers to assemble STEM kits so that elementary students can have access to hands-on science activities. Last year, the STEM kits impacted 6,725 kids at 18 elementary schools. With these kits, Team Driven aims to inspire local students. During the 2022 Arkansas Regional, Team Driven was allowed to participate in Tinkerfest. This was a carnival-type community event focused on the ways kids could be introduced to STEM, with several booths and games. For our booth, we used Lego WeDo kits from our Bricks to Bots camp. This allowed kids to stop by to build and program small robots. As a team, we work to spread the principles of FIRST in our community. We have worked with media outlets, done interviews, spoken on a local radio station, and been featured in local newspapers, spreading information about our team and FIRST. The media outlets we've worked with cover 14 Missouri and Kansas counties. Last season, we were also asked by the KC STEM Alliance to participate in a demo match for a local news station. In 2023, Team Driven presented at the Warrensburg Veterans Home. Several students took the robot from the 2022 season and presented it to the residents of the home, educating them about FIRST and STEM. Thirty-five local veterans were present during this event and were able to learn about Team Driven and FIRST. One of Team Driven's favorite festive community outreach events is the annual tree lighting. Due to COVID-19, the Lee's Summit Mayor's 2020 annual tree lighting was canceled. To replace this event, the Mayor asked Team Driven to create an animated holiday light display for City Hall. Since then, we've done the light display each year, even being featured on the local news and covered by our district's media team. We design and build the light display, and program it to music. Each year, the display has grown bigger than the last. Our light count this year was up to 12,151 lights. One of Team Driven's biggest community events is our summer camps, Bricks to Bots and Robotics Camp. Bricks to Bots is a camp for K-3rd grade students. During the camp, students build and program robots using WeDo Lego kits and perform daily science experiments. This past summer, we had 120 kids who attended. The Robotics Camp is designed for 4th-8th graders. Team Driven designs a new game each year for the camp. Students can participate in up to two weeks of camps, which are divided into two levels. In level 1,

students gain the ability to design and build a robot, whereas in level 2, programming is added, as an autonomous portion is added to the game. This year during our summer camps, 130 students from our community and surrounding areas participated. Throughout the past 19 years, Team Driven has influenced a multitude of people in our shop, in our community, and around the world. Team Driven uses and will continue to use STEM to inspire, encourage, and evolve the next generation into future leaders. We are Driven To Succeed.;

