

FIRST Impact Award - Team 3197

2025 - Team 3197
Team Number
3197
Team Nickname
HexHounds
Team Location
Cedarburg, WI - USA
Describe the impact of the <i>FIRST</i> program on team participants within the last 3 years. Think about percentages of those graduating high school, attending college, in STEM careers, leadership skills, and serving as mentors/sponsors in <i>FIRST</i> programs.
As of 2022, 97.6% of graduates from the team have either pursued further STEM education or have entered the workforce in STEM careers. Team alumnus Leah R. mentors FRC 2830 and team alumnus Christian D. mentors FRC 8847. Alumni stay involved by assisting the team and volunteering at team-ran events. Over the last three years, 100% of 3197 members graduated from Cedarburg High School (CHS) and 36 students have received varsity letters.
Describe your community along with its unique opportunities and circumstances. Think about your geographic region, diversity of town/school, language barriers, socioeconomic barriers, and cultural expectations.
Cedarburg is a small, tourist-based, town. To promote STEM in Cedarburg, we participate in many local festivals to inform the community and gain awareness for the team. Wine and Harvest Fest and Strawberry Fest are the most popular events, drawing in the biggest crowds. We hand out over 300 buttons each year. We have 1 middle, and 3 elementary schools. This allows us to be more directly and personally involved with our outreach. It may be a smaller number, but the lasting impact is greater.
Describe the team's methods, with emphasis on the past 3 years, for spreading the <i>FIRST</i> Mission in ways that are effective, scalable, sustainable, and creative.
In the past the HexHounds have used festivals, school events, parades, and social media to spread the first message. Sustainability through media outlets allows 3197 to continue posting and hosting school events. Many HexHounds and mentors have helped with the FLL program at Webster Middle School in Cedarburg. Team 3197 volunteers at many festivals in Cedarburg, and does an annual STEM breakfast. Additionally, HexHounds do a demonstration for local children to increase community engagement.
Describe your team's goals and the progress you have made towards them to fulfill <i>FIRST's</i> Vision.
One of our team's main goals is to change the culture in our community. With outreach we have been able to increase awareness in our community. 9,495 voters, 92% of Cedarburg's voting population, came to vote for the referendum. Support is increasing for students that are interested in STEM. Cedarburg

has given students the opportunity to learn about STEM within school, and provides students the skills needed to go into STEM workforces.

What impact has your team seen from your efforts described in the above question? How does your team measure impact?

With the updated facilities, our team is able to focus more on building robots and outreach rather than spending time packing everything back into a closet. Now that the community has a good idea of what we do and what FIRST is, at local events many people come to see us each year to ask what the new season is about. Volunteering for many years at the festivals, 4 year members run into regulars often and it is exciting to the lasting impact awareness can make.

Please provide specific examples of how your team and team members act as role models within the *FIRST* community with emphasis on the past 3 years. How do you share these best practices with other teams?

This year we reached out to teams 1792 and 7900 to help review each other's impact presentations. In addition we were invited to Nicolet FEAR's lab to do a practice match together. With the Wilo grant & town referendum we became the first team in southeastern Wisconsin with a dedicated robotics field. Other teams have since been inspired by our work & have toured our facilities. These teams include Nicolet FEAR 4786 & BEAST 2202.

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

Team 3197 has started five FLL Challenge teams (14541, 26927, 42067, 42068 & 48362) at the local middle school as well as seven FLL Explore teams at the local elementary schools. A scrimmage and judging event is ran by the HexHounds to prepare these teams for competition. Two team alumni have gone on to mentor FRC teams in the Milwaukee area.

What other initiatives have you created, grown, sustained, or participated in (*FIRST* or otherwise) to help inspire young people to be science and technology leaders and innovators? What outcomes have you seen from your efforts in the past 3 years?

3197 partnered with the CHS Coding Club to teach 70 fifth graders about coding. Student volunteers travel to the three elementary schools to teach with the MicroBit Learning Interface. We also work with a lot of girl scouts, reaching over 280 girls. 3197 also holds a STEM breakfast every year to serve outreach within the community. This has become a tradition and helps to fundraise our team. We have seen many elementary students have greater enthusiasm for STEM.

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

In 2016 we created the Cedarburg STEM Advisory Team to advocate for STEM education within our community. They helped secure from Wilo a grant for a robotics field. We maintained the relationship and the president came to visit us from Germany 5 years later. We made partnerships with the town officials and festival officials. This secured our place in our local festivals. We annually go to two of our local festivals and run a food booth, STEM booth, and lemonade stand.

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

3197 has promoted inclusion by welcoming anyone who wants to join and reaching out to all people at school. We make announcements, give presentations to math classes, and make flyers. The team has partnered with the Women in STEM Club at school to show that there is a place for any one who wants to join. 3197 currently has female leads in each subteam and recognizes everyone's potential. 3197 also reaches over 280 young girls through girl scout troops alone.

Explain how you ensure your team and the initiatives you have created will be sustainable.

3197 has made it our mission to continue to run effectively with long term partnerships made through sponsors. The CSD has made sure the HexHounds will have a dedicated space for FRC. With the community choosing to contribute \$16 million dollars with the referendum going to the STEM department, it shows how FIRST has changed the minds of our community. CHS's principal has taken interest in robotics at school. With their support, FRC and FLL remain a permanent feature of the school district.

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

As a team, 3197 needs to improve its social media presence. The HexHounds have come up with many ideas for social media that are restricted by our school policies. It takes a while to be approved due to current school board policies. The main posts are about our outreach events. It is hard to gain a following without having some fun posts. The Cedarburg STEM Advisory Team created by our team is working with admin to work on a solution. We want to advocate for our team to reach a larger audience.

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, particularly noteworthy, or had a large impact.

HexHounds have been focused on growing and working with the middle school FLL challenge program. Students volunteer to work with younger students to give feedback for competition. The referendum in Cedarburg got 92% of the community's voting population for funding for STEM education. 3197 additionally makes time for an important core value: fun! The HexHounds in the past have hosted dodgeball tournaments, and this year we have fun days like the movie day and bacon and brownies day.

Judge Feedback

Have you seen First change the culture of your community and how?

An area the team has an opportunity to improve.

Something that really impressed the judges.

Essay

In a sea of fish a true school has been formed. Team 3197 has become a home for many over the years. The HexHounds, founded in 2009, began in a closet with only the desire of 6 kids to build a robot. Eventually this group of fish decided on an orange bowtie to represent their team & STEAM in Cedarburg, Wisconsin. Our team of 27 continues this tradition & has added team events such as movie

night. Over 16 seasons, maintaining a close knit culture & sticking with the bowtie, team 3197 builds off of our history & strives to make an impact.

Advocating For STEM Education The message of 3197 & FIRST is evident at CHS (Cedarburg High School). The HexHounds often use a t-shirt cannon but they created at community parades, at school assemblies, & sporting events. T-shirts are launched into crowds averaging 300+ people. Everyone is happy to see our team. Robotics is also considered a varsity sport, & varsity letters are given to members who are active within the team & outreach. Robotics is considered a sport at our school due to our advocating with the athletic director & administration at school. Our orange bowtie of change is changing our school culture. People do not realize how sport-like robotics is until they have a greater understanding of what we do.

One of the most exciting parts of STEAM is it is constantly changing. Our team meets this demand by bringing our community into the world of robotics. Noticing the need for a new STEM curriculum, the Cedarburg STEM Advisory Team was created in 2016, & consists of HexHound students, mentors, & alumni working alongside teachers & local industry leaders. Together, the group works to advocate for up-to-date STEM facilities & curriculum in all CSD schools through school board presentations, & meetings with the CSD superintendent. One of the greatest achievements is passing a referendum in 2018, valued at \$59.8 million, securing \$16 million for funding focused on “equipping students with experiences in...advanced manufacturing, robotics, artificial intelligence, & coding, which are critical for future employability” (CSD Identified Needs). Team outreach was the driving factor to initialize the referendum. 3197 promoted STEAM & FIRST to inform 9,495 total voters, allowing it to pass in fall of 2018. German manufacturing company Wilo also provided a grant for a full size robotics field.

While this achievement is now older, it has had a ripple effect on Cedarburg schools & surrounding communities. The funding established a permanent Project Lead the Way curriculum & incorporated VEX IQ robotics to all Cedarburg schools. With the Wilo grant & town referendum we became the first team in southeastern Wisconsin with a dedicated robotics field. Other teams have since been inspired by our work & have toured our facilities. These teams include Nicolet FEAR 4786 & BEAST 2202.

Growth Through Media Media allows a wider audience. Within the past 3 years, 3197 have reached Ozaukee county through: 5 different articles featuring FIRST; a FOX6 news segment about 3197's STEM Breakfast, and FOX6 and CBS12 for Strawberry Fest. An estimate of total viewership is 300,000. On all social media sites (Instagram, FaceBook, X) we have 1434 followers. The average post on FaceBook reaches around 5000 views through sharing. Expanding FIRST and Youth Outreach To spark passion for discovery in young minds, 3197 outreaches to as many children as possible. Cedarburg School District (CSD) has started 2 divisions in the FLL progression & 12 total teams. 7 of these teams are FLL Explore teams across 2 Cedarburg schools (Westlawn Elementary School: Dolphins & Thorson Elementary School: HexPups). 5 are FLL Challenge teams at Webster Middle School (14541, 26927, 42067, 42068, 48362). We have assisted all 5 FLL Challenge teams in obtaining grants & sponsorships. Members consistently assist all 5 FLL Challenge teams & volunteer as judges at the HexHound-ran scrimmage event.

HexHounds partner with CHS Coding Club to work with over 70 fifth graders at 3 local elementary schools each year. 3 days a week for 6 weeks, students travel to the schools. Students teach lessons revolving around MicroBits & MicroBit Let's Code interface. This year alone 3197 put in over 100 hours teaching others to code.

3197 invites girl scout troops to our lab each year. We averaged 4 troops a year for the past 4 years & this year already we have welcomed 7 troops. The Girl Scout boom so to speak can be contributed to how much fun they have with us. We give them a quick presentation about FIRST & of course give them buttons. We give a tour of the lab. Then we bring everyone together & play human robots. We hope to inspire the next generation of women in STEAM in our community. We have inspired over 280 girls in the past few years.

Additionally our team was invited to visit a local elementary school's Girls in STEAM club. We gave a demonstration of our robot & answered questions. We even allowed a few girls to drive the robot. Then we led an activity of building spaghetti bridges, reaching over 35 girls.

With a lasting partnership with the German company Wilo, the HexHounds reach a more global scale. We maintained a relationship after receiving a grant from them & in 2024 the president of the company & others came from Germany to see our bot & the field. We were able to reach international audiences.

Through FIRST, HexHounds alumni leave the team & enter academia or professional settings with skills needed to take on real-world challenges. 2 team alumni have gone on to mentor FRC teams in the Milwaukee area & many others come back to assist us when they come home.

Community Engagement The HexHounds strive to make a sustainable team. In order to be sustainable, lasting sponsorships & partnerships must be fostered. The HexHounds utilize Gracious Professionalism into outreach to maintain successful relationships.

Connections make outreach more impactful, which is why FLL Challenge plays an integral role in combined team outreach. From 2018 to 2023, the 5 FLL Challenge teams & 3197 demonstrate FIRST values by giving demonstrations to the community during Eats & Expo at Wayne's Drive-in. The event reached 350+ community members each & provided funding for both programs. The Challenge teams also walk alongside 3197 every year in Cedarburg's homecoming parade, an event annually reaching 2500+ attendees. We bring our t-shirt cannon robot & drive it during the parade along with our trailer & a motorized shopping cart promotes a local food bank: Family Sharing. To create new connections, team 3197 presented to the local Rotary club. The Rotary club consists of most of the business owners around Cedarburg. We gave a presentation with our robot of who we are & what FIRST, is reaching 40 business leaders. Similarly, we went to the local Lion's Club & gave a presentation to inform the members of who we are. We reached 32 veterans.

Festivals are an integral part of Cedarburg's culture. They bring increased tourism with people coming from around the world. The HexHounds have created a partnership with the Cedarburg council that runs the festivals. We run a food booth for them & get an adjoining one to demonstrate robots & share about FIRST. We interact with audiences by bringing out past robots & game pieces. We help at both Strawberry Fest & Wine & Harvest Fest. These are 2 day events & we set up beforehand on Friday. Our members' combined hours of volunteering over the past 4 years is greater than 900 hours. At the festivals each year we hand out over 300 buttons. The festivals are also a great fundraiser for our team. We also run the school parking lots for parking & offer a shuttle service to downtown. Through the sale of concessions, 3197 provides funding for both FRC & FLL Challenge teams, & expands the message beyond the Cedarburg community.

The HexHounds partnered with CHS coding club to participate in a winter lights competition organized by Ozaukee Nonprofit Center. We built a display & used our social media connections to push this fundraiser to a wider audience. Ozaukee Nonprofit Center distributed all of the profits from people driving through the lights to other nonprofits in Ozaukee County. It was very rewarding to see a tangible impact of our efforts going to incredible nonprofits in our community. Through the efforts of everyone involved, over 2,000 families were able to see the show, & over \$43,000 was raised for charity. 3197 hosts at the high school an annual STEAM Breakfast in spring. We advertise this as a children's event with many activities to do. We of course cook a breakfast consisting of pancakes for sale. The kids can drive small robots built in the robotics & automation class at school to pick up an egg. We also lead tours of our facilities for the community & have robot demonstrations. This is the main event in the year where anyone in our community can come in & learn & see what we are doing. This is completely free to our community & we ask for donations to cover the cost of materials. Last year we partnered with Family Sharing. We provided donation spots around the school to collect non-perishable food & advertised throughout the school. It was asked of those coming to our STEAM Breakfast to bring in more cans. Afterwards we delivered 3 donation bins of food to Family Sharing. More than showing robots we aim to make positive change within our community.

What Does the Bowtie Mean Today? While the orange bowtie is seen on competition fields, it is not just a symbol of competition. Throughout the past 16 seasons, 3197 has taken what is considered to be a piece of fabric, & transformed it into a symbol of change reaching beyond just our pond. Through advocating for STEM education, expanding FIRST, & engaging communities with outreach, 3197 embodies the message of FIRST. We have impacted 20,585+. As a team, the HexHounds change culture in communities & create lasting ripples. ;

