FIRST Impact Award - Team 1071

2025 - Team 1071

Team Number

1071

Team Nickname

Team MAX

Team Location

Wolcott, CT - USA

Describe the impact of the *FIRST* 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 *FIRST* programs.

In the past three years (2022-25), every student who has graduated from the team has attended college, with all but one going into a STEM field. Of the individuals who have been students on the team during this time, 14 mentor FIRST teams this season. Additionally, many volunteer at events each season. Our team inherently encourages independent leadership, empowering students to grow and take charge of initiatives with mentor support.

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.

Wolcott has historically lacked opportunities for individuals of diverse backgrounds. This has been challenged by Team MAX as we connect with all people through social media, local schools, and word of mouth. By offering Let's Make Stuff for free and charging a small, waivable fee for FLL Explore, FLL Challenge, and FTC, we ensure our initiatives are available to all. Despite Wolcott's challenges, Team MAX is consistent in our efforts to equitably spread both STEM and FIRST within our community.

Describe the team's methods, with emphasis on the past 3 years, for spreading the *FIRST* Mission in ways that are effective, scalable, sustainable, and creative.

We partner with the Wolcott Robotics Foundation (WRF) to spread life-changing robotics programs. They operate 14 robotics teams (13 FLL, 1 FTC), all of which are mentored by Team MAX members. Our teams serve more than 100 students annually, and many will one day advance to Team MAX. Several of our current students, in fact, participated in FIRST teams that were mentored by Team MAX before joining FRC. Our team also hosts and runs FIRST events at every level, including 7 events this season.

Describe your team's goals and the progress you have made towards them to fulfill *FIRST's* Vision.

Team MAX's mission is "to promote the learning of STEM topics, apply that knowledge to assist and educate the community, and help students understand their potential". Through all of our programs, we strive to change our town to one focused on STEM excellence. While Wolcott has always been a

traditional sports town, we have been making strides to offer high-quality STEM programs. Robotics has become an important activity in our town, with enrollment comparable to youth sports like soccer.

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

In Wolcott, we have seen an increase in the number of new students (kids who have not participated in FIRST before) registering for our teams. For example, in our FLL Explore, 2/3 of registrants had not participated on a WRF team for 2023-24. The 128 students participating in FIRST in Wolcott for 2024-25 is another strong metric of success for the overall robotics program here. Team members also benefit from mentoring the students and seeing their faces light up when they experience STEM.

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?

Our team encourages FIRST members and alumni to give back to the FIRST community, ultimately improving kids through STEM. We consistently promote volunteerism, supporting many FIRST events each year; this season, we are supporting more than 5. Our invitational is an opportunity for students to try new volunteer roles. As Guest Game Announcer, kids fulfill childhood dreams of being on the call at a sports match. Students shadow key volunteers so that they can grow into assets for FIRST.

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

This season, Team MAX is mentoring 14 FIRST teams. Last season, we mentored 15, and in 2022-23, we mentored 12. Each of these years have included a large portion of our team serving as student mentors, including more than ten this season. We have a strong relationship with the Wolcott Robotics Foundation. We have a student liaison that organizes FIRST Teams in collaboration with WRF, helping them to start several teams this year.

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?

Let's Make Stuff is a recurring STEM program that our team runs at our high school. We walk elementary and middle school-aged kids through a building project that they get to take home. Some projects we have made include terrariums, jiggly robots, elastic band cars, projectors, etc. This program gets students interested in STEM, and is a gateway into our FIRST programs. Students enjoy collaborating with others on these projects while also having memorable experiences with Team MAX members.

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 the last 3 years, more than 100 students participated in FIRST Robotics programs at Wolcott Public Library (WPL), all of which were aided by Team MAX students. At this community hub, our town's FLL Discover program is operated; this program is free for all, and open to any child of age. Here, children as young as 3 are captivated by STEM and FIRST through LEGOs. When we work with the WPL to ignite young minds with STEM, we ensure they will one day improve the world with leadership in STEM.

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

In the past 3 years, we have made a large increase in members that have been alienated from STEM. Currently, 43% of our team is female, compared to 20% three years ago. This can be largely attributed to the team environment, putting an emphasis on everyone being involved. Our outreach is largely led by female individuals, empowering young girls to believe they can take on key roles. We have furthered our efforts by planning a STEM day with local Girl Scouts to excite young female minds.

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

The Wolcott Robotics Foundation (WRF) is a key sponsor and partner for the team. In the past few years, students have joined a sponsorship committee of the WRF to recruit and retain sponsors that will allow us to continue the initiatives from a monetary perspective. Additionally, the WRF has built a robust pipeline of FIRST teams (of which there are more than 10 PreK-12) that will allow us to have the students necessary to persist with these initiatives for many years into the future.

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

We need to improve in the area of personal student excitement over our outreach programs. To address this, we have recently focused on outreach programs that students are particularly passionate about. For example, as we have a student who has been in Scouting for many years, we are making our Cub Scout and Girl Scout programs the best they can be. Other students have been on Team MAX FLL and FTC teams, recognizing their importance. Thus, we continue our effort to mentor many teams.

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.

Our team participated in a town-wide anti-substance abuse event called One Clean Day of Fun. We showed the children of Wolcott that they can have fun without the use of drugs or alcohol. The event was an overwhelming success, and we reached dozens of kids. Team members guided them through the process of building catapults that they could take home with them. They also had the opportunity to use our 2023 robot. We taught engineering and construction skills while the kids were having fun.

Judge Feedback

Based on all of the outreach initiatives that you've seen judging the FIRST Impact Award, what key aspect(s) of our outreach are we missing that would improve the impact that we have?

An area the team has an opportunity to improve.

Something that really impressed the judges.

Essay

The devotion for STEM in Team MAX 1071 parallels the vast riches that can be found through a treasure hunt. Sailing from island to island, we find various outreach initiatives. We first travel from Inspiration Island to Collaboration Island, where FIRST initiatives are fostered for the next generation and then are

developed upon by our partnership with local organizations. Our next stops are Education and Community Island, where we introduce students to vital STEM skills while also improving our locale. Our journey through this archipelago emphasizes our team values, showing how we make a difference in the world. This trip ultimately leads to Discovery Island, where we encounter a treasure chest full of resources, ideas, and future outreach opportunities that can improve our community. In our mission to help kids reach their full potential, we aim to leave a resonating impact on everyone we sail by.

Inspiration Island

The first island we reach on the map is Inspiration Island, where we make it our goal to inspire the next generation of STEM leaders. FIRST Outreach has long been a cornerstone of Team MAX's outreach efforts. The island can be separated into two main beaches: Events Coast, and Teams Shore.

The Events Coast is quite large-it has to be! This season, we're running events for every FIRST program-including all three divisions of FLL-and we're the only team in New England that we're aware of to do so. On top of those, we host an FTC qualifier and are supporting 6 official events across FIRST in multiple states. We are a key support for the New England FTC Invitational, which ran for the first time last year. It will be the first ever premier event in the history of FIRST Tech Challenge this April! We serve as a role model for other teams to emulate in this space, consistently encouraging volunteerism everywhere we go. At our Where is Wolcott Invitational FRC offseason, we allow guest game announcers and emcees to get on the mic and try out a new role. This has helped multiple individuals start as a voice at official competitions.

We also draw from our school for volunteers at our FLL Challenge Qualifier, resulting in a few students joining Team MAX of the 15 non-members we typically draw to volunteer. Moreover, on our own team, a large portion of our students are committed to helping the FIRST community and ultimately benefit youth. In the 2023-24 season, 92% of then-students volunteered for at least one FIRST event. Due to the actions of our members, hundreds of students have accessed STEM opportunities through FIRST.

On Teams Shore, Team MAX members are littered amongst the sands. This season, 12 team members are mentoring 14 teams across all three FLL divisions and FTC, dedicating hundreds of hours and impacting more than 100 students. Additionally, the committee that organizes these teams is composed in majority by Team MAX members. Team MAX also inspires its own students to continue with FIRST by mentoring teams. This season, at least 27 past or present team students are mentoring with FIRST, giving hundreds, if not thousands, of students the ability to succeed in the science and technology field.

On Inspiration Island, Team MAX gives hundreds of students access to FIRST, setting them up for future success in becoming leaders in their communities and in the world of STEM. This island is just the first in our journey; many more await. Next destination: Collaboration Island!

Collaboration Island

Having ridden the waves and the winds from Inspiration Island, we've arrived at Collaboration Island. On these sandy shores, we walk amidst various partner organizations to deliver on our mission. The Wolcott Public Schools (WPS) is a long term partner for the team, backing us from day one. They provide crucial financial support-$15,000 for supplies across FRC, FTC, and FLL, plus 6 stipends for mentors of these programs, as well as a workshop and space to hold outreach events and mentor teams. In 2022, team

students advocated to the Wolcott Board of Education for 5 of these stipends and $3,500 in funding, which has led to critical new resources being available to youth in the town for STEM. We have improved upon our marketing by using WPS's unique position as the school district by sending messages to all district parents. Every time we do this (many times yearly), we reach 2900 individuals, most of whom are not otherwise in touch with us.

The Wolcott Public Library (WPL) has supported the team's initiatives in various ways, having served as a host for STEM outreach and our FLL Discover and Explore programs. They are critical in serving students who do not attend WPS. The library is another crucial part of reaching every child in town; we display LEGO creations, advertising participation in STEM.

The Wolcott Robotics Foundation (WRF) serves as a source of funding and organization for the team. The nonprofit, set up in 2018, has delivered tens of thousands of dollars in new funding for Team MAX in recent years. Team students serve on the WRF Sponsorships Committee, allowing our students to learn critical fundraising and communication skills. Last year, 11 students were members. The WRF also serves as the organization that oversees the FIRST teams that we mentor; 75% of its board is team mentors or alumni.

Without these collaborations, we would drift away from our archipelago, unable to provide crucial programming for hundreds of youth. It is their support on which our success stands. We're making progress in our treasure map-it's time to sail to Education Island!

Education Island

After our journey from Collaboration Island, we find ourselves on the coast of Education Island, where Team MAX's multitude of STEM initiatives educate younger students. In 2011, Science Splash began with the goal of bringing science experiments to students in just one local school. Since, the initiative has grown tremendously. Our activities range from density columns to a lesson on freezing points through ice cream to making circuits out of cardboard, plus so much more across all 3 elementary schools and our middle school. In the 2023-24 school year, more than 115 students participated in these experiments. The program has become a staple for local elementary schoolers, with several hundred participating in the now iconic program over the years.

We also bring fun STEM projects to our community with another initiative called Let's Make Stuff (LMS). This program connects K-7 students with team members to complete take-home engineering projects while also getting them introduced to the concept of FIRST. Creative projects like terrariums, rubber band helicopters, and propeller cars foster innovation and problem solving skills while also being fun for students. In the past three years, we've made more than 200 projects at LMS. In 2024, we made the program free to all, enabling more students than ever to have access to the program. Through planned fundraising and a WRF partnership, LMS will continue to be free forever.

On Education Island, Team MAX works endlessly to promote STEM to future generations whilst emphasizing crucial skills such as communication and teamwork. This is an island that we truly bask in. Our journey's next stop will be Community Island, where the focus is on community outreach.

Community Island

Having voyaged from Education Island, we have arrived on Community Island! As we travel, we carry initiatives to the shore of the town that has allowed us to prosper, representing our care for community outreach. We prioritize our engagement with Wolcott, believing we must give back to our community to reinforce the values of FIRST.

We created a room at Wolcott's summer school program to house LEGO robotics equipment for students to expose them to STEM and cultivate creativity. Recognizing the importance of inclusivity, we created a space for Unified students with materials more suited to their needs. This initiative furthered our engagement with young students in our community, granting them the opportunity to experience STEM.

Team MAX has participated in the Wolcott Fair for many years, as it is a vital part of connecting with our community. Reaching more than 1000 people, we bring our robot to the fair for demos, allowing community members to drive our robot while promoting FIRST. Additionally, we brought LEGO Spike Essentials kits, consisting of basic coding tools for children. The fair allows us to engage young kids in STEM activities, while displaying our team's activities and sharing their potential as members of FIRST. One of our more recent initiatives is in collaboration with local scouting units. This past year, we had local scouts come to our high school to participate in a day that promoted STEM. We created activities such as penny boats, balloon rockets, and circuits for the kids to take part in. The team also held a robot demonstration, explaining to the children how our robot operates as well as letting them operate it themselves.

On Community Island, Team MAX strives to put our town first, ensuring every member of the community can be touched by STEM. We assure that the vision of FIRST is fulfilled on this island.

Discovery Island

Our adventure through this archipelago of islands has been one that has spanned more than 22 years. We've arrived on Discovery Island, where a treasure trove of new opportunities to improve the world awaits. On this island, our map tells us to institute new programs, like robot demonstrations at local schools and river cleanups to improve the environment. In everything we do, we work to make kids more prepared for life, especially in STEM. We do this to realize our mission of helping students understand their potential. They must be set up for success in every aspect of their lives-they must be able to travel through life's islands and take on all of the challenges life throws at them.;