

FIRST Impact Award - Team 2976

2025 - Team 2976
Team Number
2976
Team Nickname
The Spartabots
Team Location
Sammamish, WA - 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.
With a 100% graduation rate among our team and 94.6% of our students planning to pursue degrees at four-year colleges/universities/trade schools, the FIRST program has consistently propelled Spartabots members to pursue STEM after high school. Beyond this, students have continued to push their limits in STEM, with 91% of our club pursuing an IB science or math class. Alumni return as mentors, demonstrating members' commitment and providing current members with an enhanced learning experience.
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.
As a Spartabots team member from the Greater Seattle Area, we've leveraged our location to build strong partnerships with tech giants including Microsoft, Amazon, Nvidia, SpaceX, and Boeing. While FIRST programs are well-established, we identified persistent gaps in STEM accessibility and responded by establishing FLL and FTC teams and creating immersive STEM programs locally. We actively mentor other teams across our district, working to strengthen STEM education throughout our community.
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.
Our dual outreach approach maximizes FIRST impact through strategic community engagement. At high-traffic events (Farmers Markets, Salmon Days, Pride Parade), we reach diverse groups via robot demos. Through focused STEM events (science fairs, summer camps, Tech Fest, scrimmages) and mentorship, we create deeper connections via hands-on experiences tailored to different age groups. This scalable strategy has grown FIRST participation across our district through meaningful community relationships.
Describe your team's goals and the progress you have made towards them to fulfill <i>FIRST's</i> Vision.
The Spartabots focus on hands-on learning, making STEM accessible, and expanding community impact. Every meeting and outreach event reflects these goals. We set new objectives as we achieve

past ones and learn from our experiences. We're proud to have sent 483 pounds of Legos to Ghana, including 21 submerged sets, Spike Prime, and EV3 kits, helping start new FLL teams and supporting existing ones. Our mentorship program and outreach are creating lasting growth and expanding FIRST participation.

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

Our team made a profound impact by increasing STEM participation and fostering global community engagement. We support 21 FLL teams in Ghana. Our STEM clubs in remote Indian villages brought new technology and excitement to students. Our efforts also helped increase 2 FLL clubs to 20 in Libya. We measure impact by tracking mentorship growth, outreach event outcomes, and feedback from mentee teams, continually assessing team progress and inspiring new students to join FIRST.

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 embodies FIRST values through impactful leadership globally. We've mentored 21 FLL teams locally while establishing 21 FLL teams in Ghana, expanding STEM access across continents. Through student-led workshops reaching 500+ students, we demonstrate how true leadership means elevating others. We founded the IRA alliance with 3 FRC teams, fostering regional collaboration. Our comprehensive online resources, including CAD libraries and programming guides, have helped many teams.

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

In the past three years, we have started 3 FLL Explore, 14 local and 37 global FLL Challenge, and 2 FTC teams. We mentored 42 local and 37 global FLL, 6 FTC teams, and assisted 4 local FLL and 1 FRC team. With 70%+ member participation, our outreach included camps, Sammamish Tech Fest, scrimmages, science fairs, and mentorship. To support our growing teams, we introduced mentor training and Google Classroom, plus in-person, Zoom, and video training, ensuring strong team development.

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?

The Spartabots inspire leadership and innovation through events like summer camp, Sammamish Tech Fest, and scrimmage with 42 teams. Our work with FIRST and VT Seva brought 6 visually impaired students and mentors to the 2024 Worlds. These students toured and presented, spreading the message of FIRST. This initiative demonstrated that one disability shouldn't limit anyone from thinking beyond and pursuing their passions in STEM, showing that accessibility unlocks endless possibilities in 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.

We actively built global partnerships growing STEM access worldwide. With FIRST WA and FIRST, we collected EV3s and challenge sets for international teams. With VT Seva, we brought visually impaired youth from India to Worlds and started 2 clubs helping 60+ visually impaired and tribal students learn

FLL. In Ghana, with the non-profit Coderina, we started and mentored 21 FLL teams in public schools and expanded STEM Access at training centers. With Lybotics, we launched 2 FLL Clubs in Libya.	
Describe your team's efforts in the past 3 years to promote equity, diversity, and inclusion within your team, <i>FIRST</i>, and your communities.	
In collaboration with the Society of Women Engineers(SWE) Next, we participate in online seminars about STEM accessibility, reaching audiences of thousands and supporting women in STEM. We marched at Seattle's Pride Parade alongside FIRST WA, with 300k people in attendance, a testament to the team's commitment to equality and inclusivity. Internally, our club strives to include and represent students of all racial, gender, and cultural backgrounds, creating a shared love for robotics and STEM.	
Explain how you ensure your team and the initiatives you have created will be sustainable.	
We ensure sustainability through mentorship, engagement, and funding. Our FLL and FTC mentorship programs inspire future Spartabots, while preseason workshops retain knowledge. A large team actively supports outreach, ensuring growth. We secure funding through grants, fundraisers, and sponsors, maintaining uninterrupted support. Sponsors are honored at events and on materials, strengthening partnerships. Together, we create a lasting impact in STEM and FIRST, ensuring long-term success.	
Highlight one area in which your team needs to improve and describe the steps actively being taken to make those improvements.	
We're improving communication to build trust and transparency. This year, we're implementing a tracking system for year-end sponsor reports on funding, team status, outreach, and achievements. To support mentee teams better, we're addressing responsiveness issues by offering regular guidance. We've launched Google Classroom for teams in Ghana and India and plan to expand it locally, ensuring accessible mentorship, stronger connections, and long-term engagement with those we support.	
Briefly describe other matters of interest to the <i>FIRST</i> 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 is entirely student-led, as we emphasize producing well-rounded students who are empowered to take charge and pursue STEM initiatives of their own. We cultivate global partnerships to make STEM accessible to all. We are working with FIRST to receive two pallets of challenge sets to expand our support to additional teams with Coderina in Ghana, VT Seva in India, and Libya to introduce, start, and mentor teams and cubs from small villages across the world or with unique challenges.	
Judge Feedback	
	What section of our presentation should we focus on emphasizing when we have multiple outreach activities to share? An area the team has an opportunity to improve. Something that really impressed the judges.
Essay	

Nine of us set out one summer morning on a four-hour drive across Washington, unaware that our destination would forever change us. We arrived in Touchet, a small town of 485 people, and were immediately greeted by the sweet scent of Italian sodas and the welcoming smiles of the students from the Touchet School District. Undeterred by limited resources, each student overflowed with creativity, determination, and curiosity for STEM. They proudly shared their music editing projects and dreams of building robots like the ones we brought. We came to teach with LEGO robotics kits but left with invaluable lessons on passion, perseverance, and innovation. To top it all off, the students gave us an amazing handcrafted chocolate LEGO structure; a heartfelt symbol of their gratitude. It was a reminder that innovation isn't defined by resources but by imagination and an unyielding drive to learn. We came to inspire but left deeply inspired as we worked to start 6 FLL teams and an FTC team in Touchet, donating a full FTC field, and continued mentorship virtually throughout the season. Our mission is to break barriers in STEM, making it accessible to all, regardless of location, ability, or resources. We are dedicated to creating sustainable education pathways that empower individuals and transform lives globally.

GLOBAL OUTREACH: Sammamish boasts a robust robotics ecosystem with over 30 FLL teams, 15 FTC teams, and 4 FRC teams. Ghana, with a population over 400 times larger, supports fewer than 50 FLL teams across its 500+ public schools. This stark inequality prompted us to take action.

GHANA: Two years ago, we took our first steps in Ghana—sponsoring an FLL team by covering their team registration fee. Inspired by the team's extraordinary promise and determination despite resource constraints, we expanded our efforts. Last year, we collaborated with Makerspace and Coderina, starting 9 new teams, donating 3 Spike Prime and expansion kits, and 3 FLL challenge sets. One of these teams won the Champion's Award and earned a spot at the Premier WPI Invitational.

This year, partnering with Ben Amoakoh, the Head of Coderina, and the Ghana Education Ministry, we dramatically increased our support in Ghana. Faced with the threat of teams dissolving due to lost sponsorships, we worked with FIRST WA to provide 10 Spike Prime and EV3 kits, 20 Submerged Challenge sets, past materials, and virtual mentoring sustaining nearly 30 teams across Ghana. What started as a small act of support transformed into a movement, ensuring that youth, who once had little access to STEM education of any kind, now have the tools to innovate, explore, and grow into leaders in STEM. Our collaboration with Coderina is more than just sending kits—it's about bridging gaps, and expanding the accessibility of robotics.

INDIA: Parallel to our Ghana initiative, and equally critical, we tackled the systemic exclusion of visually impaired students in India. Two summers ago, we had the opportunity to visit the Nethra Vidyalaya School for the blind. During our time, the students' passion for and excellence in sports, like cricket, stood out. This spurred us with a pivotal question: - If visually impaired students can excel in international sports, why not in robotics? This question became the catalyst for our journey into adaptive robotics. We soon found the vast interest in robotics from teachers and students alike, inspiring us to establish ongoing connections.

We donated an EV3 set to the Nethra Vidyalaya School for visually impaired students. Through mentorship and teacher collaboration, we watched them master the FLL innovation project and core values. Their hard work culminated in winning the Championship Award at the FLL Scrimmage in Goa, proving that blindness is no barrier to achievement. We advocated for their participation at the 2024 FIRST Houston World Championship, working with FIRST and VT Seva to secure visas and funding.

Witnessing these students present on a global stage, meeting Dean Kamen, and inspiring the community was profound.

We donated a Bambu Lab A1 Mini 3D printer, designed custom CAD models embedding SPIKE Prime scratch coding elements, and partnered with FIRST to provide 4 Masterpiece sets. Furthermore, we launched a STEM club at Tribal School in Allampalli, India, engaging 40+ students with 3 SPIKE Prime kits, 3 Submerged and 2 MasterPiece challenge sets to grow both STEM clubs. What started as a simple act of support has become a movement proving that STEM education transcends physical and geographical barriers. These students' resilience reaffirms our commitment to ensuring that robotics is accessible to all—because the true ability is not defined by sight, but by vision.

LIBYA: When Libya's FTC program delivery partner reached out to add FLL education in Libya, we provided two Spike Prime kits plus comprehensive training, accessible video tutorials, and direct mentoring connections, fostering long-term growth.

COMMUNITY ENGAGEMENT AND MENTORSHIP: Over the past 3 years, our commitment to supporting local teams has grown significantly, fostering a strong foundation for STEM engagement in our community. Two years ago, we started 2 FLL and 1 FTC team, mentoring 10 FLL, and 4 FTC, and assisted 1 FRC team. Last year, we started 6 FLL and 1 FTC, and mentored 11 FLL Challenge, 3 FLL Explore, and 2 FTC, while assisting 1 FRC team. In continuation with the previous year's efforts, we started 6 new FLL teams, assisted with registration, and helped secure funding through the booster account and volunteer hour matching. Every year we aim to start new FIRST teams to continue the sustainability of STEM within our communities. We mentored 6 local FLL teams this year, organizing bi-weekly meetings with 35% of our team serving as mentors. As competitions neared, we conducted practice judging sessions to build confident teams. Additionally, we mentored 3 FTC teams, meeting bi-weekly to develop specific skills, particularly rookie teams learning basics, and assisted 4 FLL and FTC teams, maintaining regular contact through Discord. From our mentoring, we realized many were unable to pursue STEM within their schools due to the lack of required teacher advisors in those schools highlighted a critical gap in sustainable support for young robotics teams.

To fill this gap, we actively engage with our community to promote STEM and FIRST through various outreach events. This year we participated in our local Issaquah farmers market, showcasing our robot and sharing information about FIRST, reaching around 350 people annually. We continued our previous efforts at Sammamish Farmers Market and the annual two-day Issaquah Salmon Days introducing FLL to eager children and parents, reaching 500 attendees. For the past three years, we've participated in 6 local elementary and middle school science fairs, inspiring over 250 students to explore STEM. Last year, we partnered with other local FRC teams 1318, 4131, and 9023 and formed the IRA to create a collaborative environment and support each other. To further expand accessibility to robotics, we developed and published online resources, including FRC 101, a website that teaches the basics of FRC, and CAD 101, a series of YouTube tutorials designed to introduce FRC CAD concepts. Through these initiatives, we continue to build a stronger, more inclusive, and more connected robotics community.

STEM EVENTS: Building on our commitment to STEM outreach, we hosted our first-ever free FLL summer camp in July at Skyline High School, reaching 30 students from diverse backgrounds, including those new to FIRST. The camp focused on robot design and gameplay, guiding students through concepts like robot design, attachments, and basic, sensor-based programming. By the end of the week, all 5 groups successfully coded 4 masterpiece missions and presented their work to parents. This camp

provided valuable hands-on experience and led to the creation of 4 new FLL teams in our area. We plan to expand on its success, by making it an annual event, furthering our goal to increase access to robotics education.

For the second year, we ran and hosted the Sammamish Tech Fest collaborating with FTC team 23270 and two FLL teams to introduce FIRST robotics to our community. The event featured sessions on FIRST programs and breakout rooms focused on FLL and FTC concepts. This year, we expanded the event by securing sponsors and inviting new guest speakers, including FIRST WA President Fred Krug, Erin Bonnila from Blue Origin, and Sammamish Deputy Mayor Karen Howe who shared the importance of STEM and the application of robotics in real-life to over 250 attendees. We raised \$750 and helped start 3 new FLL and FTC teams. This event continues to grow and strengthen local robotics engagement.

We hosted the second annual FLL Scrimmage, expanding to 42 teams with 80% rookie teams and no competition experience. We focused on creating a learning environment where teams learned from each other, and gained valuable feedback on judging and strategy while our live stream expanded its impact. This year, we increased volunteer involvement and introduced awards to replicate an official competition. We received overwhelmingly positive feedback from coaches and parents. Notably, 7 teams later qualified for semi-state and 2 teams for state.

SUSTAINABILITY AND CULTURAL IMPACT: Our mission goes beyond robotics competitions—we are dedicated to making STEM education accessible to all, regardless of location, ability, or resources. We've expanded our reach from local communities to international, creating sustainable educational pathways that transform lives. Through powerful global alliances, we're scaling our outreach and achieving significant impact worldwide. With unwavering dedication and a focus on sustainability, we are building a future where robotics and STEM innovation are within reach for everyone, everywhere.;

