

FIRST Impact Award - Team 2412

2025 - Team 2412
Team Number
2412
Team Nickname
Robototes
Team Location
Bellevue, 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.
Since 2021, 80% of our Alumni have entered STEM fields with 52% receiving internships/job opportunities because of their FIRST experience. 3 members got internships at Intellectual Ventures through mentor connections and one started FRC Team 9036. In our dedication to FIRST, 50% of 2021+ alum intend to mentor a FIRST team, 28% of our mentors are returning alum, and 2021 - 2024 alum have volunteered 1072+ hours with FIRST since graduating through mentoring and event roles at FIRST programs.
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.
At Sammamish, 41% of students do not speak English at home and 39% qualify for free/reduced lunch - a rate nearly double our district average. The team fee is completely waived for those in need, and we offer scholarships to aid in the cost of travel. As a historically Title I school, we recognize the importance of accessibility, so we host free STEM camps and programs for our Title I feeder schools. Our POC percentage has grown to 69%, reflective of Sammamish's 64% minority enrollment.
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.
We started 2 programs at a Title 1 elementary school sharing STEM with 80 students, hosted 6 FREE robotics camps introducing over 240 students to FIRST, and hosted a fundraiser camp (20 kids), raising \$2500 to start FLL teams. Then, we directed them to the FLL Alliance of Bellevue: a 100+ member group we founded to connect interested families to start/join FLL teams. We doubled the number of teams we mentored to 8 FLL teams and have hosted 4 FLL events attended by a total of 64 teams.
Describe your team's goals and the progress you have made towards them to fulfill <i>FIRST's</i> Vision.
Through Bi-monthly public comments at school board meetings, shop and event tours to local/state elected officials, and hosting FREE STEM camps and programs, we transformed our district to prioritize

robotics with our superintendent saying, "I would do anything for these Robotics Kids". To inspire leaders and facilitate FIRST in our district, we helped secure the STEAMnasium, a closed school turned Robotics Facility, and passed Law C407-L23 to grant high school credit for FIRST Robotics!

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

We secured permanent shop space, paid coaches and varsity letters for the 6 FRC teams in our district. We won the STEAMnasium and 10k for the field, providing all 32 schools and 19,000+ students in our district with shared FLL and FTC practice spaces, and a full sized FRC practice field. In granting high school credit Law C407-L23 pushes WA state to include FIRST in their CTE pathways for EVERY school based FRC/FTC team, adding legitimacy and pushing the culture to respect Robotics.

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?

Across FLL, Offseason and District comps, we hosted 10 FIRST events with 264 total registrations, helping us amass 5000+ FIRST volunteer hours. We hosted 6 advocacy workshops at comps attended by ~10 teams each. Using methods from our digital National Advocacy Workshop, Team 8717 (Nevada) doubled their FRC shop space and increased funding to buy 12 robots for their school's robotics class. To model Coopertition, we published our 2023 Impact submission and coached 4+ other FRC teams.

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

We started FRC team 9036 and 2022 State Champion FTC team 16750. We mentored FTC teams 11970 and 20345 in programming when they became FRC team 9450, as well as 8 FLL teams (with one state championship qualifier) since 2024. We also started the Robotics Stem Advocacy Alliance (RSAA) to assist/educate teams on protecting FIRST through advocacy. We host webinars, offer mentorship and provide templates to our 196 members, who span 40 teams and 17 states and one province!

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?

We started the Credit Where Credit's Due (CWCD) campaign, where we use the RSAA and Law C407-L23 to educate teams on passing STEM laws. Oregon has a bill in committee that would provide CTE credit to FIRST teams. We are also currently working with a team in Colorado to pass legislation to provide extra funding support for struggling teams. Additionally, our REEL Robotics Project, where we post videos online entertaining and educating people about FRC has reached over 38 million viewers.

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.

As the first and only FRC team to partner with the Girl Scouts of Western WA, we hosted a camp to provide 3 STEM badges to 6 Girl Scout Troops. We've met with 6 teams from Brazil, the Netherlands, Taiwan and Japan online as part of our International FIRST exchange. Finally, as members of the Student Association for STEM Advocacy, we advocated at a national conference since 2023 to increase

NATIONWIDE STEM funding by \$14.6 BILLION under the Every Student Succeeds and CHIPS and Science Acts.	
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 the past 2 years, we have hosted 4 FLL camps at a nearby Spanish immersion school. We have also marched in Seattle PRIDE for the past 3 years, reaching over 300,000 people each year. We also participate in the m.e. FIRST initiative providing menstrual products at our offseason and district events. At the National Advocacy Conference in Washington DC, we pushed for the full funding of the IDEA Act to further secure, fund and establish consistent special education support.	
Explain how you ensure your team and the initiatives you have created will be sustainable.	
To create a pipeline for FIRST we mentor 4 FLL teams at Cherry Crest, one of our feeder schools. We visit our feeder middle schools each spring to introduce them to FRC and advertise our annual FREE Java programming bootcamp (75% of those attendees joined the team)! We also use our Under My Wing training program: which pairs rookies with veterans to ensure that the skills and knowledge veterans develop is passed down to new members. We also partner with Green Club to compost at team events.	
Highlight one area in which your team needs to improve and describe the steps actively being taken to make those improvements.	
Starting FLL teams without financial sources is shaky, so we proposed an FLL endowment system to the National PTA. This system would use the Nat'l PTA's targeted connections with local districts/schools to distribute funds to start and support FLL teams across the country. The Nat. PTA was supportive, and we've had 2 meetings with them to develop this proposal. After more meetings with the Nat'l. PTA and FIRSTWA, we decided to pilot this initiative in WA state in collaboration with the WSPTA.	
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 has developed distinctive branding, centered around red pom-pom birds called Bordies that we give out at events. Bordies represent our team spirit, and Bordie making parties are used as team bonding opportunities as well. We give them out to our elementary-school campers, people at recruitment events, legislators; anyone interested in learning more about FIRST. We also give custom Bordies to teams at competition in the spirit of Coopertition and fun—which is what FIRST is all about!	
Judge Feedback	
	Is there something more we can do to improve our presentation? An area the team has an opportunity to improve. Something that really impressed the judges.
Essay	

Here at the Robototes, we build a better tomorrow by spreading FIRST today. For the past 18 years, we have acted as the RISING TIDES of change throughout our community, developing STEM opportunities on local and distant shores. To directly assist FIRST in fostering Coopertition, the Robototes have become pillars of support by hosting 8 FRC events and 2 FLL events over the last 4 years. In response to the sudden cancelation of an off-season competition in 2021, we stepped up and planned our inaugural offseason event in just four weeks! Since then, we have hosted both a district and offseason event every season, reaching a total of 200 team registrations with no plans to stop. We sent official Robototes volunteers to every district event we attended in the last 6 years and have cohosted 2 FLL events. Furthermore, we will host our second FLL Explore event at our District competition. In our dedication to FIRST, we have amassed over 5000 FIRST volunteer hours since 2021, helping FIRST RISE LIKE THE TIDE into our community. Our TIDE RAISES all ships by starting, mentoring, and assisting other FIRST teams. After starting 3-time state qualifier and 2022 state champion FTC Team 16750, we continue to collaborate with them and the team they started, FTC Team 20403, on advocacy, recruitment, and outreach. To place FIRST in every high school in our district, we started FRC Team 9036, Ramen Robotics, Rookie All-Stars in 2023 at Glacier Peak and District Champs qualifiers in 2024! Outside our school district, we met weekly to teach FRC-level Java programming to FTC teams 11970 and 20345 at Woodinville High School, and support their transition to FRC team 9450 by providing mentorship, logistics assistance, and advocacy guidance. And the Robototes TIDE just keeps RISING! Since last year, we DOUBLED the number of FLL teams we mentored to 8 teams, with one qualifying for the Washington State champs the past 2 years. Following our 2023 Impact win, we published our submission to assist teams everywhere in the awards process – directly coaching teams 4859, 4131, 3786, and others online. Through the above efforts and our advocacy workshops, we have started, mentored, or assisted over 66 FIRST teams. On the technical side, we are an Open Alliance team, sharing our design process and weekly team updates on Chief Delphi to help as many other teams as possible. The Robototes RISE LIKE THE TIDE reaching Oceans around the world with our Reel Robotics project, an initiative started just last year to share shorts on social media showcasing FRC fun, destigmatizing robotics, and bringing FIRST into the mainstream. The project has been a viral success, totaling 38 MILLION views with 38 videos individually getting 50k+ views, establishing us as the most-followed FRC team in the PNW and top ten in North America! Our 2022-2023 International FIRST exchange spread FIRST's spirit globally through virtual meetings with 6 teams from Brazil, Taiwan, the Netherlands, and Japan. The Robototes RISE LIKE THE TIDE to support those of all backgrounds and prioritize DEI. We participate in the m.e. FIRST initiative (providing menstrual products at competitions), started 2 FLL robotics programs at a Title 1 Spanish Immersion feeder school which introduced 80 kids to STEM, and represented FIRSTWA for the last 3 years in the Seattle Pride parade attended by 300,000 people. Furthermore, we are the first robotics team to officially partner with the Girl Scouts of Western Washington! Through this partnership, we hosted a camp to introduce six troops to LEGO Mindstorms and will host three more workshops with them in May! Additionally, our POC percentage has grown to 69%, our nonmale percentage to 55%, with 50% female leadership and an 83% non-male drive team. We help FIRST's future RISE LIKE THE TIDE by educating the next generation in six FREE FLL and Arduino camps hosted since 2021, with many attending students coming from underprivileged schools. Our members independently planned, advertised, and executed the camps, dedicating over 630 volunteer hours to gift 208 students STEM education. Then, to foster a long-term connection to FIRST, we direct them to the FIRST Lego League Alliance of Bellevue (FLLAB): an alliance we founded with 100+ members that connects families interested in starting/joining FLL teams. The FLLAB hosts intro sessions, attended by roughly 50 people each, pairing local youth with teams to start their FIRST journey. In 2019, when FRC Team 949 faced collapse, the Robototes ROSE LIKE THE TIDE, meeting the challenge by co-founding the Bellevue Alliance (BA) comprised of seven local FRC teams. We advocated

to the school board and superintendent to successfully attain shop space and paid coaches for every team in the district, and varsity letters for robotics teams! In 2023 the BA met with our superintendent to secure the STEAMnasium: a closed elementary school we turned into a robotics facility, available to every team in the district with a 10K grant to support the facility. Since then, we led construction to build full-sized FRC, FTC, and FLL practice fields, provide shared communal robotics equipment, and make FIRST more accessible to the 32 schools and over 19,000 students in our district. We also regularly present public comments at our school board meetings to advocate for continued support for FIRST robotics, push to provide class credit for Robotics, and amidst unprecedented post COVID budget cuts for continued financial support for STEM education. Following the success of our alliance, we co-authored the BA playbook to instruct other FIRST teams on how to form alliances, inspiring Team 7230 to start the Irvine Alliance in California. Riding this new Wave of advocacy, the Robototes RAISED THE TIDES of FIRST's reach to national levels. In the last two years, we attended the National Advocacy Conference, and last year Teams 2412 and 16750 were the sole Washington State representatives. We lobbied thirteen congressional teams to receive their official support on funding the Every Student Succeeds Act Title 4 Part A which allocated \$1.6 billion to STEM education, especially in underserved communities, and the CHIPS and Science Act which allocates \$13 billion to fund STEM education as workforce development! Additionally, the Robototes capitalized on this opportunity by independently requesting to fully fund the Individuals with Disabilities Education Act (IDEA) up to the promised 40% federal funding per pupil expenditures (~\$36.35 billion total). Students with disabilities would receive equal educational opportunities, including STEM courses, and be better prepared for higher education, employment, and independent living. As a result of losing a third of our shop space, the Robototes ROSE LIKE THE TIDE to win shop security for every school-based robotics team in Washington State! After meeting with dozens of politicians to educate them on the value of robotics and CTE, we collaborated with Senator Lisa Wellman to draft Bill 5617 which would grant high school credit to technology-based STEM extracurriculars like FIRST robotics. WA state would provide state-sponsored security and funding to keep this credit pathway open, adding a new layer of protection for FIRST's ecosystem. In Spring of 2023, we testified for the bill in Washington State Congress, and that summer, Bill 5617 passed UNANIMOUSLY, becoming Law C407-L23 with the Robototes credited in the Official House Bill report! To share this breakthrough in protecting STEM education outside our reef, we founded the Robotics STEM Advocacy Alliance (RSAA). With 197 members from ~100 teams across 22 different states and one Canadian province, we built a community that connects like-minded people and provides resources, templates, and guidance in advocacy endeavors. There, we launched our Credit Where Credit's Due campaign (CWCD), which uses Law C407-L23 as a template to pass similar laws in other states utilizing our playbook and templates as guides. Thanks to our support, a Canadian team is collaborating with a member of Parliament to increase FRC protection, a Team 5538 alum majoring in educational policy is proposing a similar policy in the LAUSD (US's largest democratically elected school board) and Team 2997 in Colorado is drafting and finding sponsors for a similar bill. Furthermore, three Oregon teams we coached met with their House Speaker and now have a bill in session. This bill, if passed, will cause the STEM Investment Council and Department of Education to collaboratively evaluate STEM extracurricular programs to gain CTE credit! Since passing our law in 2023, the Robototes have met with four national Congressional staff from Washington, Maryland, Arizona, and Oregon to discuss how to protect FIRST on a national scale and grant robotics credit nationwide. Our student voices are strong! Two of our leaders spoke at National PTA's Annual Legislative Convention about FIRST's instrumental role in their advocacy success to a panel opened by First Lady Jill Biden and attended by congressional representatives and members of the Department of Education! This year, a Robotote won the National PTA's Outstanding Youth Advocate award, spotlighting FIRST as more than just robots to PTA's nearly 3 million members. In 2024, The National PTA invited the Robototes to their headquarters to discuss how

to equitize STEM nationally. Since then, we met with their Associate Director in Corporate Partnerships, a manager in Programs and Strategic Initiatives, and their National Ambassador to discuss creating a nationwide endowment system to start FLL teams through PTAs, prioritizing underserved communities throughout America. For the past 18 years, we have used FIRST to transform our members into leaders, focusing on building up our students—not just our robots. From advocacy to outreach, we are RISING TIDES of change in our community and nation! ;

