

***FIRST* Impact Award - Team 2869**

2024 - Team 2869
Team Number
2869
Team Nickname
Regal Eagles
Team Location
Bethpage, NY - 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.
100% of our seniors are pursuing STEAM majors: 36% in computer science, 27% in engineering, and 37% in science/math. 88% of our alumni work in STEAM fields and almost all return to enrich our team. Specifically, some alumni virtually mentor our team; others mentor teams near their university. Our team encourages current members to volunteer at FIRST events—providing members with an understanding of FLL and FTC events as well as a sense of the competitive environment.
Describe your community along with how your team addresses its unique opportunities and circumstances.
Many LI schools want to create FIRST programs, but lack the funds and resources to do so. In order to help solve this issue, we have assisted many teams. This year, we provided FTC Team 17384 with a mini-grant to purchase robot parts and expand their outreach. We advised other teams on how our team operates. Specifically, we assisted teams in both mechanical and operational aspects. Additionally, we donated batteries to underfunded teams in NYC through Team 263's FIRST Community Project.
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?
Since 2017 we have held Regal Eagle Roundtables, at which FRC teams from LI share strategies for upcoming seasons. We participate in our district's STEAM Nights to raise awareness of FIRST in our district's young students. We allow children to drive our competition robot and we share our knowledge of STEAM. With our BAC Robotics Summer Camp, we taught young students technical and leadership skills, inspiring them to pursue robotics in the future.
Please provide specific examples of how your team members act as role models within the FIRST community with emphasis on the past 3 years.
Our team has dedicated 1,000 volunteer hours to assist FIRST LI in its FRC, FTC, and FLL events. In our third year of FIRST Together, we lead FRC teams on LI in community service activities. FIRST Together allows teams to collaborate and fosters a positive environment among us. In the past year, we hosted the

2023 FTC LI Championship, and 2023 FLL Challenge Practice Event in our district. As ambassadors for Team 1868's M.E. FIRST Program, we promote menstrual equity during our regional events.

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

We inspired our district to start four FLL Challenge teams. We provided support for each team by helping with programming, strategy, and engineering. We advised schools in Valley Stream and West Islip in starting their own FRC teams. We mentored FTC Team 16145 and FRC Team 4567—both from Seaford, LI. We also gave FRC Team 9016 a CNC machine for their lab. Through Open Alliance on Chief Delphi, we communicated with other teams and updated them on our robot design and outreach efforts.

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?

Since 2021, we have inspired young leaders and increased STEAM resources through the distribution of STEAM kits to Sierra Leone, Sri Lanka, India, Philippines, Mexico, Colombia, and Australia. With these kits, students utilized problem-solving skills and worked together to build a solar-powered robot. Additionally, we awarded hundreds of dollars in mini-grants to FTC Teams 24132, 17384, and 17871 from NYC, Hawaii, and Romania, respectively and FRC Team 2554 from New Jersey.

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

Through the organization Develop Africa, we donated STEM kits to underprivileged children in Sierra Leone. Alongside FRC Team 9016, we are hosting Brave Eagles Week to allow team troubleshooting before regionals. We host an annual badminton tournament to donate to Girls Who Code and Stony Brook Children's Hospital. Our partnership with Optimum increases awareness of FIRST Robotics and STEM education through our mutual interest in fostering new generations of innovators connecting the community.

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

We collaborated with Students United Alliance to allow our members to engage in training sessions—where we aim to create an inclusive environment for new members. Our efforts underscore the team's commitment to advancing inclusivity within FIRST. We are an ambassador for Team 1868's M.E. Initiative—where we provide feminine toiletries at our local regional competitions. Bethpage School District values women's involvement in STEM and our team's enrollment is consistent with those values.

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

We advance FIRST's message through engineering workshops, podcasts, and FLL practice events. These initiatives build a strong future for our team by teaching young students about STEAM. We prepare young students for STEM education by supporting five Hackathon teams, four FLL teams, our Robotics Summer Camp and our Engineers Helping Engineers program. Our training groups in engineering, mechanical, programming, and operations help underclassmen explore their interests and develop robotics skills.

Describe your team's innovative strategies to recruit, retain, and engage your sponsors within the past 3 years

To recruit sponsors, we mandate team members do cold calling. We follow up through emails to obtain these sponsorships. To keep them engaged, we send monthly newsletters with updates on projects, and invite them to the lab. We also provide sponsor benefits—which include a display of their logo on our website and an invitation to our Sponsor Night. This allows us to continue many partnerships, including an eight-year collaboration with Optimum, who sponsored our Rampage practice event this year.

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

We are dedicated to furthering our support for STEAM education. Our district was inspired by our efforts and increased the number of STEAM classes available to students including an additional Engineering and Computer Science class. We will continue to promote the importance of STEAM education to increase opportunities for future generations. We will increase support for our district's FLL teams and further develop training of new members—instilling both technical and operational skills.

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

We inspire young students through Engineers Helping Engineers—a program to discuss FIRST and STEAM opportunities available in our middle and high school. Through FIRST Together, our volunteer organization, we unite local teams to aid underrepresented groups in the community, following FIRST's values. We also conducted robotics classes for students with learning disabilities through our district's Extended School Year program, teaching them coding and enabling them to build their own LEGO robot.

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.

We host the Regal Eagle Report, a podcast that forges connections with teams from around the world. This year, we started a new 50-state series, in which we interview teams from every corner of the U.S. So far, we have interviewed 25 teams, spanning from Hawaii to Vermont. Through these interviews, we learn about different teams' origins, engineering techniques, and outreach initiatives, painting a vivid picture of the vibrant and interconnected world of robotics.

Judge Feedback

Who/When

Feedback

Apr 07,
2024
11:55:25
AM EST

In which ways can we grow our outreach, both locally and internationally?
An area the team has an opportunity to improve.
Something that really impressed the judges.

Essay

The Band Welcome to The Regal Eagles, where the clinks of gears and hum of motors compose a symphony of innovation! For 15 years, our team dedicated itself to performances across our community.

Now, we're ready for the next step: The Regal Eagles are going on tour! With stops across Long Island, the 50 states, and six different continents, Team 2869 is taking on the FIRST mission of spreading STEAM to younger generations. Our Hometown In Bethpage School District, we promote STEAM education in many ways. For the second year, we hosted Bethpage's annual Hour of Code event, which introduces coding to elementary students through hands-on projects. We helped students with programming, while teaching them how to learn from mistakes. Similar to Hour of Code, we mentor our district's Hackathon team, training them to complete coding challenges efficiently. During elementary STEAM nights our team presented about robotics, demonstrated our robot and gave students the opportunity to drive our robot. In the second year of our Engineers Helping Engineers program, we visited 5th graders in our district's elementary schools to discuss the importance of engineering and future STEAM opportunities. This summer, we ran our second robotics camp; the curriculum involved lessons on circuitry and CAD, and included a tour of our lab. We actively mentor four FLL Challenge teams—one in each of our district's elementary schools and one in our middle school. Through mentoring, we help them with coding and design. We further connect with the Bethpage community through various fundraisers. For the past two years, we have hosted a Regal Eagle Badminton Tournament, where students and faculty teamed up to compete for the title of champion. Not only did this connect our team to our school district, but also to various international initiatives. Proceeds raised from the tournaments went towards nonprofit organizations, such as the Ukrainian Relief Fund and Girls Who Code, furthering our mission to spread STEAM worldwide. Our team prides itself on an accepting and diverse environment. To continue this, we partnered with Students United—a club dedicated to making Bethpage a more inclusive place. We went through equity training, learning about subconscious choices we make that could harm minority groups. Our Community The band's next leg is NYC and Long Island. This year, our team pushed members to volunteer at local FIRST Long Island events. Our team grew closer to our FRC, FTC, and FLL local communities through our participation. Due to our rejuvenated efforts, over the past three years, our team has accumulated over 1000 volunteer hours at FIRST events. In addition, we are in the third year of our non-profit outreach organization FIRST Together. Composed of over 36 LI FRC teams, we collaborate in supporting and funding community-based initiatives on Long Island. For example, we continued our beach cleanups of Jones and Tobay Beaches and our participation in the JDRF Type 1 Diabetes Walk to raise funds for research and awareness of juvenile diabetes. With FIRST LI's permission, we are spearheading a clothing drive at the Long Island regional to donate to Big Brothers Big Sisters of LI—an organization dedicated to mentoring our community's youth. FIRST Together continues to foster Coopertition and Gracious Professionalism amongst LI FRC teams. Within the past year, we have hosted several FIRST Long Island events. We held the 2023 FTC LI Championship and the 2022 and 2023 FLL Challenge Practice Events right in our district. Our members took this opportunity to volunteer and learn more about FIRST beyond FRC. This year, our team conducted robotics classes in our district's Extended School Year Program. In this program—aimed to help students with learning disabilities—we taught K-5 students how to code and build their own LEGO robot. We plan to continue this initiative. Over the years, we have helped other Long Island districts start their own FRC teams. We assisted FRC Team 9016 by donating a CNC machine for their lab and helping to organize their fundraising and outreach. We also mentored FRC Team 4567 and FTC Team 16145 by helping them code their robots during preseason. We presented to the Valley Stream school district and St. John the Baptist Diocesan High School administration, who are trying to start their own FRC teams, about team structure, fundraising, and community outreach. We participated in the FIRST Community Project, a donation program started by FRC Team 263. Our donated batteries will help underfunded robotics teams have equal opportunity in competition. This year we're amping up our largest annual event: Regal Eagle Rampage. For six years, we have built our own regulation competition field and invited teams from across New York to join us at Bethpage High School before official matches. This

practice competition benefits teams who want to test their skills on a life-size practice field before regionals. In March, 25 teams will share advice and collaborate to improve their robots. This year we're hitting a new high note through a joint event with Team 9016. After Rampage, we will transport the entire field to Arumdaun Presbyterian Church for a week-long practice opportunity open to Long Island teams. This event acts as an extension to Rampage so teams can gain more experience troubleshooting their robot. We hope this additional practice week will crescendo into outstanding competition performances! In January, our team visited the Bethpage Bristal Assisted Living Center to promote STEAM awareness amongst the elderly. We brought paint supplies so the group could paint robots as they learned about FRC. We discussed who we are, our mission statement, and future plans. They expressed how we inspired them through our generation's promotion of gracious professionalism, leadership, and teamwork. We plan to continue this partnership with periodic visits to the center. Our National Initiatives Our third tour leg is the 50 states! The Regal Eagle Report, our weekly podcast, embarked on a new mission: hearing the voices of FIRST teams from every state. In our podcast, we discuss robot design, fundraising, and outreach initiatives with teams all across the United States and even internationally. With over 25 states interviewed, from Hawaii to Kansas, our goal of reaching out to the STEAM community is coming to fruition. Continuing the expansion of our initiatives, our annual car wash has become more than a fundraising event; it became a chance to support FIRST teams through mini-grants. We received 68 submissions from across the world and awarded grants to FTC Teams 24132, from Hawaii, and 17384, from New York. We also awarded a grant to FRC Team 2554, from New Jersey. Teams received funding for outreach, event registration, equipment, and parts. Our International Initiatives Our closing leg of the tour was across six continents. Touring Sri Lanka, India, the Philippines, Australia, Sierra Leone, Mexico, and Colombia, we donated robotics kits to children lacking access to a STEAM education. Our members packed their bags and some robotics kits, before flying across the world to teach young students how to compose their own engineering melody. Students developed the basic skills to create a solar-powered robot, while obtaining problem-solving skills, improving logical thinking, and promoting collaboration. In the next few months, we plan to send STEAM kits to Vietnam, Thailand, Cambodia, and Japan to inspire future engineers. In 2023, we interviewed FRC Team 7717, the Steampunks, from the Dominican Republic on our podcast. Our team and the Steampunks collaborated well throughout the interview, leading to our team helping them compete in FIRST LI Regional #2. We housed their robot the week before the competition and arranged their robot's transportation to the FIRST LI Regional at Hofstra University, helping offset any additional costs of storage and transportation. Along with our robotics kits, we expanded our mini grant applications to teams across the globe. 14 percent of teams applied from outside of the US. We awarded a mini-grant to FTC Team 17871 from Romania. This grant allowed the team to buy mechanisms for their robot to update their intake system. Despite our growing impact over the last year, we wanted to strike the chords of opportunity to further share our ideas and progress with other teams in and outside of the States. This year, our team began updating the Open Alliance on Chief Delphi with a team "Build Blog." We post our robot design, CAD, mechanical and programming progress, and outreach initiatives to aid other teams. We consistently answer questions and provide insight, forming connections and creating a positive environment for discussion between teams across the FIRST community. To finish up our international stops, we collaborated with other teams across the country to develop a new app: ScoutingPASS. After the original creators FRC Team 2451 dissolved last year, we decided to contribute to the app to help continue support and add new features. We also developed a series of videos explaining how to set up the app. Our ScoutingPASS allows FRC teams around the world to efficiently scout matches for accurate strategy. The app is available on all IOS devices, making it easier for teams to scout and improving their performance at competitions. ScoutingPASS currently has over 500 downloads. A Successful Tour Returning to the halls of Bethpage High School, we can still hear the sounds of STEAM reverberating

around the globe. On our tour, we did more than spread engineering education to children, teams, families, and schools. We did what music is supposed to do. Inspire. Connect. Change. Because of our work, the core values of FIRST resonate around so many communities. Now, the next generation has the skills to pursue hard work and innovation. Team 2869 will continue utilizing FIRST as a tool to inspire the next generation.;

