

***FIRST* Impact Award - Team 5472**

2024 - Team 5472
Team Number
5472
Team Nickname
The Wyld Stallyns
Team Location
Delray Beach, FL - 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% college acceptance rate, 100% of robotics alumni pursue STEM majors and careers; Alumni have pursued higher education at MIT, Princeton, CMU, West Point, Georgia Tech, Stanford and have worked for companies including Microsoft and GlaxoSmithKline; majored in comp sci, mechanical, software, and electrical engineering, etc; work on projects including CRISPR test for sickle cell anemia. ~50% of alumni/team members return to work at our summer camp and assist with off-season robot assembly.
Describe your community along with how your team addresses its unique opportunities and circumstances.
-More than just a high school robotics team; Wyld Stallyns (WS) is an entire robotics program. -Connects the entire school to the FIRST community with FIRST oriented robotics developments; WS embodies every aspect of FIRST Robotics for K-12 students, offering opportunities in First Lego League through FRC. -WS operates year round, including the summer, offering students of all grade levels and backgrounds the hands-on experience to expand initiatives involving FIRST values.
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?
-Host annual summer camp that is open to all students in the community; students from China came to participate; 1,000+ students over the past 3 years; 20% of campers return the next year. -Annually event with middle and high school girls in STEM to spread FIRST values of inclusion & empowering women. We can measure results by seeing how several of our former team members return to mentor teams and volunteer at competitions.
Please provide specific examples of how your team members act as role models within the FIRST community with emphasis on the past 3 years.
We are always the first team to volunteer at competitions, helping to run the eyeglasses station and set up the field at several competitions. We always emphasize the importance of gracious professionalism and coopertition, inside and outside our team. We stress the importance of team spirit, bringing teams up

and NEVER dragging them down. At recent competitions, we created a program called Stallion Support where we assist teams in need with extra parts and mechanical help.

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

-Stallion Support program; WS sends groups of programming, electrical, and mechanical team members to help teams in need at every competition. - Helped Team 6225 SLC Roarin' Robotics after a hurricane; donated supplies, donated a CNC machine, members traveled to Fort Pierce to clean up their lab.- Shared intake design CAD with other teams; offer other teams help at every competition; loan out tools at competitions. Additionally, we started 1 FLL and 2 FTC teams, and assisted 2 other FLL teams.

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?

Due to team 5472, Robotics became a part of our school's curriculum, exposing more students to robotics than ever before. Engaged with 2 Boys and Girls Clubs to introduce lower school students to FLL robotics (donated 4 robotics kits and game pieces). -Hosted annual Girls in STEM event with 6th-10th grade girls to inspire them to pursue an interest in FIRST robotics. Introduced students and mentors in Karvia, Finland to FLL and FTC style robots through a summer program.

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

-Collaboration with LexisNexis; created an autonomous security robot; 3 members of the team interned with LexisNexis;. -Promoted STEM initiatives & FIRST Robotics through FlexSeal's national ad campaign. Displayed our robot and talked to interested individuals at the COX science center science fair. Through our partnership with Concurrent Real-time , we have established an annual internship opportunity for students to tour the factory.

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

-Team 5472 has been dedicated to the inclusion of all in robotics; -Although WS consists of private school students, > 50% of our members are scholarship students, allowing WS to be more inclusive of our general community. -Anyone who wants to get involved is encouraged to join; WS does not place limitations based on GPA, skill level, or prior knowledge. Our outreach to the public allows more eyes to see the benefits of robotics, creating a larger and more inclusive robotics community.

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

Heavy emphasis on training new members. -Generate interest through summer camp; getting kids involved with robotics from a younger age; giving middle schoolers hands on experience with FTC robots; rising freshmen build robots, mentor younger students. -Workshops throughout the 3-month off-season (CNC Machine, 3D printer, programming, etc.); free accredited summer robotics internship for students going into 9th and 10th (3 weeks, 8 hours a day course). FTC and FLL teams feed into our FRC team.

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

Continuously engage with LexisNexis' Academic Program; members of WS intern every summer for the past 3 years; each intern builds upon past progress. -Contribute to LexisNexis' blogs, interviews & presentations. Play videos with info about sponsors on large TV's in the pit; create buttons & flyers; place sponsor logos on promotional materials; share our awards with sponsors. Concurrent Real-Time mentors our team by regularly consulting with students. Biweekly newsletters keep sponsors informed.

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

Our goal is to continue sharing the FIRST Mission with our local community and greater global community. We will continue working with the Boys and Girls club to maintain a STEM connection. We plan to contact our State Representative to tour our facility and are awaiting their response. Our outreach in Finland will run completely on its own. We also plan to start a program to help STEM students gain communication and public speaking skills so that they can become future leaders in the industry.

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

- Partnered with municipal office & school board in Karvia, Finland to introduce robotics to local youth. - Start this summer with a training camp for mentors in town; start a 2 week summer camp. -Introduce robotics to grades 3-9 to include robotics in the school curriculum. -WS is developing a curriculum; assisting local authorities in developing budgets. -WS will continue in person & online support for Karvia; goal is to run independently in 3-4 years & spread FIRST message to surrounding towns

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.

-WS's diverse school community is well-reflected in the makeup of our team; team members speak Spanish, Portuguese, Finnish, French, Haitian Creole, Telugu, Gujarati, Turkish, etc. -Allows WS to better facilitate interactions and camaraderie with international teams at competitions; integrate more members from the community into FIRST. We are in the process of creating a program to help STEM students develop communication skills so that they can become future leaders in the industry.

Judge Feedback

Who/When

Feedback

Mar 15,
2024
10:51:44
AM EST

Are there any teams that have expressed an interest in creating a program to help robotics students gain communication skills?

An area the team has an opportunity to improve.

Something that really impressed the judges.

Essay

Founded in 2014 by less than a dozen robotics enthusiasts, Team 5472 - The Wyld Stallyns has evolved into a community of over 80 students. Robotics is not just an after-school club - We also mentor FLL and

FTC teams. Here at American Heritage (Palm Beach campus), robotics is ingrained in the academic curriculum. Our school offers classes such as Robotics 1, Robotics 2, Digital Electronics, and a full offering of Pre-Engineering classes.

One of the goals of the team is to continue to grow our impact. We focus on three areas to foster growth: Growing FIRST/STEM at American Heritage Palm Beach Campus: We do this by investing in our local FIRST and STEM Community at our school. We strive to increase the impact of our robotics program on our immediate community while fostering the growth of our under represented members. We also encourage early involvement in STEM and Robotics by supporting summer camps and mentoring FLL teams. Giving Back to the Community: Our team is also focused on giving back to our community and we make these activities a priority for all members. We are involved with charities like the Leukemia and Lymphoma Society and the Boys and Girls Club. We are also involved with local companies to advance their mission of safety and security. FIRST Ambassadorship: Our role as ambassadors for FIRST extends beyond borders, fostering partnerships with industry leaders like FlexSeal to promote STEM education globally and through initiatives like our robotics program in Finland, we strive to inspire innovation and collaboration in communities worldwide.

Growing FIRST/STEM at American Heritage Palm Beach Campus Our K-12 campus seeks to develop the full potential of each student to be a contributing member of society through the embodiment of knowledge, integrity, and compassion. Our team is especially passionate about providing girls with opportunities to explore STEM in an inclusive environment. Every year, we invite girls from our elementary school and middle school to visit our lab and participate in fun STEM-centered activities led by the female members on our team. Through hands-on activities like soldering friendship bracelets, driving past FTC robots, and learning how to rivet, participants are engaged in multiple varied challenges. Through this program, we not only provide girls with the opportunity to experience firsthand what STEM entails, but also provide our female team members with the opportunity to step up as mentors and role models. We've noticed an increase in female participation in FIRST robotics following the launch of our Girls in STEM program; a change of which we're both proud and excited.

Our school runs an annual summer camp where 150 to 200 children are introduced to robotics and FIRST every year under the supervision of our director, Taiowa Donovan. The elementary-level curriculum is based on FLL. We serve as counselors and mentors to help students design, prototype, build, and program FLL LEGO robots. The elementary camp culminates in a mock FLL competition, where students work to accomplish the tasks of a previous FLL season. Our middle school campers are taught more advanced processes such as CADing, manufacturing, assembly, and programming of FTC-style robots. The kids then use the robots they design and build to compete in a tournament designed by our team. Approximately 25% of the camp attendees end up joining our school and our robotics program after participating in the summer program. Both of the camps are led by the Wyld Stallyns, who create the summer camp curriculums during the school year and teach and guide the campers throughout the summer. Many of our first-year camp counselors work with our FTC team at the beginning of the school year and progress to Team 5472 when the FRC season kicks off. The majority of our current leadership has participated in past summer camps.

Four years ago, we started two FTC teams, 16759 and 16760. The founding members of these teams constitute our current leadership. They use FTC to help our rookie teammates learn and develop the skills necessary to be productive members of our team and to introduce them to the values of FIRST. Our team also created and mentors six FLL teams. We regularly volunteer with and mentor these FLL teams,

totaling hundreds of hours per FLL season. Additionally, we use money collected from team fundraisers to support the FLL teams by buying new materials and covering equipment and travel expenses.

Giving Back to the Community The team participates in the Leukemia and Lymphoma Society's Light the Night event annually. We successfully raised over a thousand dollars by hosting a carnival booth with raffle prizes, pie in the face, and robot demonstrations.

Last year, we extended support to our local Boys and Girls Club of Palm Beach County by donating two EV3 kits. Our annual pin fundraiser, where we sell pins featuring teacher catchphrases to students, raised over \$300. This allowed us to go further and send an additional six kits to the location this year. We delivered the kits and conducted engaging workshops on building and programming FLL robots. The bond with Boys and Girls Clubs grew stronger during the holiday season when the Wyld Stallyns collected, wrapped, and delivered over 200 toys. Next season, our goal is to establish an FLL team at the Boys and Girls Club of Palm Beach County.

In the aftermath of the Marjory Stoneman Douglas tragedy, our team resolved to enhance our community's safety by starting a long-term project with the support of LexisNexis, our corporate sponsor. We started the development of an autonomous security robot capable of locating and identifying unauthorized individuals. Each summer, a select few team members are chosen to continue the development of the robot. To date, the robot has advanced features such as voice recognition, ID scanners, and a touchscreen. What began as a project has evolved into a rewarding internship with LexisNexis Risk Solutions and HPCC Systems. This provides our students with the opportunity to work alongside seasoned engineers in a professional environment and advance their skills.

The Wyld Stallyns showcased their commitment to advancing robotics education by hosting a Hackathon event with the valuable support of LexisNexis and HPCC systems. This collaborative initiative brought together aspiring young minds interested in coding and technology. The event provided participants with hands-on experience and exposure to the world of coding, fostering a passion for engineering.

FIRST Ambassadorship Our team takes immense pride in serving as national and international ambassadors for FIRST, thanks to our valuable partnership with FlexSeal. Two years ago, FlexSeal surprised us with complimentary products and merchandise, capturing the exciting moment in a video posted on their YouTube channel with just under 1 million subscribers. In this video, they showcased our team and used their brand reach to promote FIRST. The video got tens of thousands of views and hundreds of comments, with some people demonstrating a newfound interest in robotics.

One of our ongoing initiatives is to spread the message of FIRST in Finland. While an FLL system is already in place, many regions have no programs for students who age out of FLL. One such region is Pohjois Satakunta. About two years ago, the Wyld Stallyns, initiated a sustainable summer robotics program in Karvia, a town in Pohjois Satakunta. This process started in November 2021, with Aada Caceres and Kalle Caceres, members of our team, securing funding from various sources, including the municipal government, school board, Finnish Association of Robotics and Science Education, and more. Aada and Kalle spearheaded this effort by training mentors to lead a two-week summer camp and year-round robotics activities. The students learned how to design, CAD, build, and program robots. In December of 2022, a two-day camp was held for local mentors to provide ongoing support. The ultimate goal is for the program to become sustainable by operating independently and expanding across the region. In December of 2023, another three-day camp was hosted for students to continue building their

knowledge and skills. Attendance at the winter camp was twice that of the summer camp, demonstrating the impact of the summer program on the local community. We are committed to providing the students of Karvia with the resources and guidance needed for the program to operate independently in the upcoming seasons.

Another opportunity to spread the message of FIRST internationally is through Munro College in St. Elizabeth, Jamaica. We were able to provide students in St. Elizabeth with two REV kits, tools, class tutorials and an assortment of wheels and pulleys to help ignite a passion for innovation and learning. This initiative not only reinforces the collaborative spirit of FIRST but also serves as a testament to the belief that every student, regardless of their location, should have the opportunity to explore the boundless potential of science and technology.

Looking Ahead Our team plans to create a program to help STEM students develop communication skills so that they can become future leaders in the industry. Communication skills do not tend to be at the forefront of engineering education. However, these skills are vital for successful leaders who need to clearly articulate complex ideas to diverse audiences. We want to use robotics as the platform for this program.

As we reflect on the journey of Team 5472 - The Wyld Stallyns, our commitment to embodying the mission of FIRST has guided every step of our evolution. From our humble beginnings to becoming a beacon of inspiration, our team's story is not just about our accomplishments, but about the transformative power of passion and dedication. ;

