FIRST Impact Award - Team 7567

2024 - Team 7567
Team Number
7567
Team Nickname
SESI SENAI OCTOPUS
Team Location
Bauru, SP - Brazil
Describe the impact of the *FIRST* 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 *FIRST* programs as mentors/sponsors.
FIRST has the power to mark our lives forever and we see this when we talk about our alumni. Currently, 100% of them are HS graduates, where they had the opportunity to develop soft/hard skills through robotics, which brings us to 95% of our alumni entering in STEAM fields. In addition, the spark that FIRST has awakened in their hearts has led 100% of them to continue their legacies, but now as volunteers/mentors/judges in all FIRST modalities.
Describe your community along with how your team addresses its unique opportunities and circumstances.
We are giving to +30,000 people the opportunity to have a right that should never have been denied: access to food. And we're doing this through +1.7 tons of food donated to 8k families. In addition, as a results of the heavy rains that hit the northern coast of Brazil, +4,000 people had their lives devastated, and while many lamented the situation, we took an action! Helping 100% of these families, bringing together food & basic supplies.
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?
To make FIRST's message reach even further, we have created OCTOBOOK & the STEAM FOR ALL methodology. The octobook is a teaching material that bring every letter of STEAM to the community, and with our methodology, we can do this in a creative way, through + 24 activities that take all of FIRST's concepts to 5 continents. We measure our results through the sustainability of our projects, knowing that even with the passage of time, the lives of all those impacted continue to be transformed.
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 a source of inspiration for the next generations, and this is only possible through the essence of our vision: volunteering. 100% of our members volunteer at FIRST events, collaborating in +65 events

and inspiring +10K competitors from all modalities. Still wanting to expand this vision, we created OCTOPERTITION, a virtual event where we mentored +100 FLL teams and reached +1,500 competitors.

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

We mentor +60 teams and have already ran +42K miles with our two biggest projects for rookie teams: ROOKIE TO ROOKIE & GEAR ON THE ROAD. These are initiatives focused on preparing and adapting +3,410 competitors, covering all areas of the team, from the robot to marketing. Through specific documentation, a team-prepared robot & continuous monitoring. As a result, we started and accompanied teams #9219, #9200, #9199, #9461, #9611, #9459, #9460, #9458, #9604, #9485, #9617 & #9180.

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?

Through +115 OCTOFICINAS advocated in partnership with our City Hall, we were able to expand our impact, building +10k young people that will represent a generation immersed in STEAM. To do this, we used our inclusive STEAM FOR ALL methodology, which, combined with OCTOBOOK's inovative activities, was responsible for reaching 60% of our city's educational institutions, thus planting a passion for innovation in the hearts of students who expressed an interest in pursuing STEAM careers.

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

Putting all COOPERTITION into action, we shared our experiences with the FIRST community across Latin America. Through the partnership made with team #7565, we connected with more than 30 FRC teams through the FIRST FORUM LATAM podcast, where we acted as co-hosts and were able to create lasting bonds with all the teams there. As a result of this initiative, we entered into new projects with FLL/FTC/FRC teams, expanding our vision to +450 people.

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

Through the STEAM for ALL methodology, we have been able to expand our horizons and include the Kopenoti, Ekeruá and Tereguá tribes, located in our region. By combining the diverse culture of these peoples with a passion for robotics, we are giving new meaning to the importance of STEAM for the natives. And thanks to this expansion, we have been able to include more than 800 indigenous people in this world of technology, and currently 80% of natives kids intend to pursue STEAM careers.

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

At #7567 we value inclusion & teamwork, we also value a strong sharing of knowledge so that all generations can guarantee the team's sustainability! We ensure our sustainability through the constant exchange of learning, where we hold internal workshops to align & learn from each other. In addition, the members have the great responsibility of continuing to document our achievements, projects & initiatives, thus guiding the new generations to continue building an ever more remarkable legacy.

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

Those who have the same vision always meet and, during this journey, we met companies Rockwell Automation, Hass & 36 sponsors, who help us in areas of the team. We recruit & involve them through face-to-face meetings, where we develop bonds. We also create monthly documentation which we present the activities we are doing. We want to achieve mutual growth and we do this through social projects in partnership with our sponsors. We are proud of our partners and we work to make them proud of us.

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

All growth requires improvement, and during training, we realized that team interaction was no longer the same, due to a lack of communication. And to break this down we found the perfect solution: weekly meetings to talk about our strengths and weaknesses, which helps us develop the soft skills we need. To improve our communication, we hold conversation sessions, where the members are able to get to know each other even better, acting like a family and improving our sustainability even more.

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

We aim to awaken the potential that exists in everyone's heart, and we know that each initiative created during our history has led us to OCTOBOOK. Based on our STEAM FOR ALL methodology, our material has reached 5 continents, and in partnership with the FIRST community, we have been able to implement it in countries like Brazil, Mexico, Canada, USA, Israel, France and Australia, showing +1MI people how robotics impacts the lives of all those who get in contact with our tentacles.

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.

STEAM FOR ALL is an inclusive & progressive teaching methodology, that immerses young people in STEAM through interdisciplinary knowledge and everyday activities, ensuring that our students can apply all the concepts learned in their daily lives. Due to its easy applicability & focus on equity, our methodology can be used anywhere and by anyone! This is possible thanks to its activities, which have been adapted to the different conditions of each pupil, thus reaching 100% of all social classes.

Judge Feedback

Who/When	Feedback
Feb 29, 2024 03:24:43 PM EST	**Which area of our team did you like the most and do you think we should give more emphasis to?** **An area the team has an opportunity to improve.** **Something that really impressed the judges.**

Essay

Reality can be tough for some of us, especially when we think that in the technology era, countless people don't have STEAM opportunities. Every day FIRST inspires us to reach our main goal: AWAKE THE POTENTIAL that exists in everyone. This journey begins with a starting point: our community.

Imagine living in a country where 74% of women don't have access to STEAM. What would you do to change this? We created Octogirl! A project that assists +11K girls of our community, promoting discussions about empowerment & challenges faced by them. It goes beyond a workshop, it's an opportunity where we've included 55% of the girls of our city in STEAM. As a result of our efforts, we´ve seen an increase of 700% of women joining our team and now, we´re composed of 80% girls.

Brazil and USA are far from each other, but we share the same mission: overcome cultural barriers to ensure the inclusion of women in STEAM. Uniting our tentacles with the gears of the Rebel Robotics team, we show to +300 girls that there´re no limits when it comes to robotics. And through workshops, we connected our two projects for women: Octogirl & SHE.

We can't limit our initiatives to a single public, everyone deserves the opportunity to have their potential awakened, and OCTOFICINA is the right tool to make it possible! Through workshops for +10K children, we include them in the ENGINEERING world. Also, using our robot as an inspiration source, in +400h of workshops, our pupils build hard skills to apply it in activities with Ev3 robot kits.

Expanding our initiative to +145 schools in São Paulo state, using coopertition with 2 other teams, we´ve created the largest source of robotics immersion: CODE+, a school where we use our STEAM FOR ALL methodology, promoting evolutionary activities, including concepts of logical thinking. This journey led us to +100k students who are inspired to join FIRST programs.

Our methodology was implemented across 5 continents, and we've united +1 million hearts to inspire a generation to embody the continuity of our legacy. Thus, a new course for this journey emerges: OCTOBOOK

OCTOBOOK goes deeper than a workbook. It's an innovative educational material, which immerses +110k young people in STEAM! To do this, our material has 3 modules, each containing 8 activities. And as the unit progresses, the complexity gradually increases, developing a sense of leadership in this generation.

Through our journey, we met those who believe in the role of Brazilian youth and hearts that yearns to awake the potential of the community. On this path, SESI-SP (Industry Social Service) is our link with FIRST. Inspiring +17k competitors. Together we host +12 FIRST events in our state, creating lifelong experiences.

Acting as the supplier of machinery for our robot, SENAI (National Industrial Learning Service) has a deeper involvement with the FIRST message. Together, we spread engineering advocating +200h of events, using our robot as a source of inspiration for +1,500 people.

Our partners share the same vision as ours, and for 6 generations we have looked into the eyes of those who represent much more than financial support, thus achieving the significant growth of 1,800% of our allies, totaling 38 purposes united. With the financial support of $10,200 we´re able to improve our materials and make them available to +50 teams.

We´re building a foundation for a generation that will leave a lasting impact on our nation. And it all begins with the sharing of knowledge, that´s how we ensure our sustainability. Our members are constantly sharing experiences, thus building a legacy that will guide the next generations.

To bring robotics closer to the community and recruit new members, we disseminate our projects to our school. Which allowed us to implement the STEAM FOR ALL methodology by hosting the first internal robotics tournament and offering all the support for +90 competitors to build and program carts. We´ve inspired +490 pupils, awakening in their hearts an interest in what has transformed our lives: FIRST.

When you have passion for what you do, being an inspiration for future generations is just a consequence. That's why we deeply value the volunteer culture. Which leads us to 100% of our members/alumni volunteering at FIRST tournaments, acting as judges/mentors in events, being responsible for setting up the arena missions and assisting teams before presentations. +10k competitors have been impacted through +1,100h of volunteer work. Besides that, we annually promote OCTOPERTITION, a virtual meeting with +100 teams, which aims to share knowledge and experiences between modalities. Inspiring these competitors to continue their legacies in FIRST, but now at FRC.

For the first time in history, Brazil had a team winning the "Rookie All-Star" at the World Championship, and that team is us! We came home with the mission to strengthen the FIRST community! To inspire +40 teams and expand the horizons of +68% of Brazilian teams, we created ROOKIE TO ROOKIE, a manual with concepts to get started in FRC, from programming to mechanics and electrics to tips of documentation, design and social media. We also have encouraged +4 teams to apply engineering in the community with our GEAR ON THE ROAD project, where we bring a specific developed robot for rookie teams, using it as an opportunity for adaptation, training and presentations. These gears have traveled +42k miles, reaching 100% of rookie teams in our state.

We don't limit our tentacles of inspiration just to Brazil, we take this message all over the world. With the same purpose, we linked with the Robonáticos team, and from this partnership came the largest source of connection for the FIRST community in LATAM: FIRST FORUM LATAM. A podcast where we connect FRC teams around the world. In this initiative, we had the opportunity to share our experiences as a veteran team with +30 teams and +450 competitors/mentors/volunteers. We are creating a solid foundation not only for our community but for the whole world, taking the FIRST message to faraway places.

We´re acting as a source of knowledge for +60 FLL, FTC & FRC teams, through +314 hours of weekly meetings, videoconferences and face-to-face visits. We've covered +132k miles & started 12 teams in Brazil and abroad.

For years, we dream that Brazil would have an experience never lived before: A strong community of FRC teams, and we did it! We worked to assist the teams, inspiring +3,410 competitors & empowering the rookie community, so this dream could come true. Now, we're committed to build a solid base, so that the teams can not only carry our legacy but create their own.

This story has just begun and to continue we count on OCTOBOOK united with our methodology. They are created to bring each letter of STEAM to our community, we're walking down a path where we already know the end: STEAM FOR ALL.

S – In order to build a generation that´s passionate about science, we created the OCTOBOOK, putting the letter S in STEAM! We´ve incorporated the ECOSUSTAINABILITY module through applied science experiments; in this way, we explore fundamental concepts of science, as well as stimulate the discovery and development of our students. They are encouraged to apply this knowledge to create innovative solutions in their community.

T – We aim to awaken the potential that exists in everyone, and we know we can do this with technology! Through an inclusive methodology, we planned activities that can contribute to technological education between staff, school and community. Thus, the activities in the OCTOBOOK include levels of learning that can range from logical reasoning to more advanced concepts in programming, including hands-on activities with Tinker Cad/Arduino. By doing this, we're not just putting the T in STEAM, we're also awakening a love for the only thing that can unite this generation: technology.

E - We celebrate our love for engineering by sharing knowledge in OCTOBOOK. It demonstrates engineering in daily life through activities of varying complexities, from basic concepts to practical applications. The AERODYNAMICS module combines activities with programming, mechanics, and electrical sessions, putting the E in STEAM!

A - We leave a purple mark wherever we go, and it's no different with OCTOBOOK. STEAM FOR ALL is the paint brush that colors the A in STEAM, and with our MUSICALITY module, our students explore interdisciplinary connections. Furthermore, the design of our material aims to provide an immersive experience through dynamic visuals, thus creating a welcoming environment for our purple enthusiasts.

We´ve become the first FRC team to include +800 natives in STEAM, taking our project to three tribes in our region. Thanks to their support, we translated our material into 3 native dialects, which added to English & Spanish, totalizes 5 languages united to reach more people.

M - We've paved the way for young people to continue their development in robotics, but it's in the comprehensive OCTOBOOK curriculum that we put the M in STEAM. Incorporating activities from all modules that give meaning to Math. Besides that, QR codes are available in the modules, featuring audiobooks that aid in completing activities and overcoming limitations.

5 continents, 7 countries, +132k miles traveled, 10 social projects, +154 hosted/run events, 100% of social classes reached, 38 sponsors, +800h of workshops & videoconferences, $10,200 provided publish resources, +60 mentored and assisted teams, +12 started teams, reached +17k competitors & +10 mi people having their potential awakened.

In #7567, we learn that everything we have done made this journey real. And dedicating ourselves to our purpose, we build a path to the impossible, CRESCENDO to the highest level of our potential.

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