

FIRST Impact Award - Team 6652

2025 - Team 6652
Team Number
6652
Team Nickname
Tigres
Team Location
San Nicolas de los Garza, NLE - Mexico
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.
100% of our alumni go to college w/90% pursuing STEM careers (a remarkable step vs to our city's 26% HS graduation rate) & 35% continue in FIRST programs after 6652. 90% of Tigres stay involved in our outreach projects & 66% make efforts beyond the team. 6652 career path open horizons for international scholarships, internships & opportunities in top companies: John Deere, Softtek, AMI, Whirlpool & more looking for Tigres skillset making them our main sponsors, staying true to our core values.
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.
77% of HS students in our state go to public HS due to the financial challenge of private education. +199K students/y dealing w/economic woes & are pushed to work life at 16 yo. Tigres started in a 5x5m room to be the 1st community-based public team in our city made up of 26 HS and members from 74 zip codes. We provided 180 scholarships & paved the way to dev projects recognized by NatGeo, UNESCO & MIT transforming edu & tech model. 90% alumni assure they got their 1st job w/Tigres' skillset.
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 pioneered social innovation with HackaROAR, our annual open recruitment that exemplifies FIRST values where youths develop skills, create knowledge & with mentoring & financing generate high-tech solutions for affective problems. Reaching 30+ schools & building 1.2k changemakers. In the last 6 years, we impacted +1k kids across 5 countries, doing 14 STEAM camps, sowing creativity, teamwork & passion in every one of them, preparing the minds of tomorrow to make the mission of FIRST their own.
Describe your team's goals and the progress you have made towards them to fulfill <i>FIRST's</i> Vision.
Our ROAR has 3 goals: -To be a global platform for social action; thus we became ambassadors of Community FIRST w/ 2096 in 12 countries worldwide. -To promote a culture that celebrates science & technology, giving lessons through Edutrak hub breaking technological barriers in a vulnerable community. -To inspire young minds to become leaders in STEM, involving 90% of the team in social projects. 6652 changemakers ignite the dreams of others & transform the world.

What impact has your team seen from your efforts described in the above question? How does your team measure impact?
Our initiatives have evolved over the years, resulting in 140+ outreach efforts in 48h, allying w/ 80+ teams from FLLE to FRC. The 1st LATAM STEM hub made of 100% recycled materials was reborn into the 1st graduated gen of Edutrak. Inspired by 6652, 50+ alumni are leaders in high-tech companies, 10 becoming our sponsors & fostering STEAM within & beyond FIRST. ROAR results are measured & documented by recognitions, goals reached, alumni, alliances & reached ones, making a sustainable impact.
Please provide specific examples of how your team and team members act as role models within the <i>FIRST</i> community with emphasis on the past 3 years. How do you share these best practices with other teams?
Tigres: an incubator for multidisciplinary leaders w/ soft & hard skills surpassing traditional outreach. In the last 3 years w/ 58k ppl reached thru our events & 90+ outreach efforts eg. Aspire4Impact w/6429: a global mentoring by impact finalists who unlock hidden doors to any teams interested in adopting impactful strategies, being the 1st Mx rep yet. We've shared open sources w/ 2638, 5665 & 9110 building a pillar of sustainability in 6652 & our community, showing how outreach & FIRST unite.
Describe your team's initiatives to Assist, Mentor, and/or Start other <i>FIRST</i> teams with emphasis on activities within the past 3 years.
With 4400, we dev FIRST SEED, a project that opened 15+ teams through operation manuals kept up to date. In 2024, we opened FLL 25141 in a public school, being youth's first robotics & outreach encounter w/ our mentoring. We unveil teams' full potential, so we connected with 9499 & went to their community, an unserved town, & mentored our affective way to dev social projects. Thus we assist teams eg. 7421, 9110, 2638 & 10 others, sharing resources w/ gracious professionalism.
What other initiatives have you created, grown, sustained, or participated in (<i>FIRST</i> 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?
With 130+ outreach efforts, we've reached 63Kppl: 8.9K through Community FIRST; 300+ girls by FIRSTxHER; 2K kids in 14 STEAM Seed camps; 160+ kids in 1yr w/SDG's; connected kids w/soccer idols via Solar Cup; launched LATAM's 1st STEM hub made from recycled materials; we're collaborating w/MIT alumni to enhance CAMO: transforming air into water; working w/doctors & patients on Therapplay: a device for physical therapy support. Our mission doesn't end in competition, it begins in the real world.
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.
Sponsors: We redefined the CSR. As a result AMI & 15+ did their 1st investment in social projects through us, eg STEM Camps & EDI efforts based on FIRST at Softtek, AMI & Whirlpool, reaching 2k+ kids on 20+ global events & investing 190K+ USD on STEAM. We've allied w/5 of the 17 entrepreneurship led by our alumni, strengthening our projects. FIME&UANL: We maintain a unique bond, being a milestone in our school & the 1st student chapter of UANL, inspiring the creation of 14 more & 7 workshops.
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 our rookie year 10% of our members were women, so we closed the gender gap w/STEAMItGirl 2: a science fair at the country's most important science museum & dev Girls4Future & TekIsAWoman for >800 girls in LATAM/Europe. LABGO: collaborating w/ an alumni startup & our city government in a STEAM fair. Thus, the number of girls at K12 events went from 70%B/30%G to 55%B/45%G. Nowadays 51% of our roster are girls & 87% leadership roles are women ruled, rising the new gen of women in STEAM.

Explain how you ensure your team and the initiatives you have created will be sustainable.	
In 2022 we connected w/ the 1st citizen lab of our city showing us the new outreach's face, “affective research”; it involves the affected groups by their problematics, identifies key issues through active listening & prototypes affective solutions. eg Therapplay: w/5 year trajectory, emerged thru a member’s upper limb injury & today involves patients to improve design. 80% alumni return to 6652 as mentors & train rookies. 6652 is a place where knowledge is not only transmitted: it’s created.	
Highlight one area in which your team needs to improve and describe the steps actively being taken to make those improvements.	
Yearly, we receive 100+ applicants eager to help their community. Sadly, to keep quality support & greater control in our team, we can’t accept them all. So we improved our recruitment w/ HackaROAR, an initiative where anyone can start a social project. Even if they don't become members, we teach them ways to keep changing their community w/ their project by linking them w/ORG’s. However, we’re heading to opening other FIRST’s teams to ensure everyone finds their spot in the ROAR.	
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.	
Tigres: youth’s home to turn dreams into meaningful careers, as our alumni who was honored as the Best 2023 Engineer Graduated from Mx, but also into impactful outreach w/ initiatives like Sustain It Up, an awarded finalist program in one of the most prestigious universities of Mx; CAMO, creative solution to Mexico's hydric problem that transforms air into water, recognized by NatGEO. We lead FRC teams to recreate our outreach, one small step for Tigres, one giant leap for the affective way.	
Judge Feedback	
	What feedback would you give to the outreach efforts of our team that caught your attention the most? An area the team has an opportunity to improve. Something that really impressed the judges.
Essay	
A NEW SPARK In the beginning the universe was chaotic, the planets were immersed in uncertainty: crisis in education, environment, health, inequality & lack of opportunities. Their habitants shouted for help, but no one came to their rescue. It was then a new era was born. 9 years ago, a young man was lost in the nebula of his thoughts when a question shone like the birth of a star: “What are you doing for Mexico?”, being the awakening of the ROAR, a call for brave people w/a clear mission: to generate changemakers who explore STEAM & give balance to the universe. We are Tigres 6652, the space explorers w/no sight for hesitation. We fight so anyone can put on the space suit of a leader & go beyond the stars to inspire their community into action. ROAR ROCKET Every season youths are inspired by this mission to put on their explorer suit along w/other 120+ students from 26 different schools & 74 zip codes. Working together side by side we are the STEM reference for local HS students. We are a team internationally recognized for its sustainability & way of doing projects. This are some actions that shaped our legacy: 1. Documentation: we did 12 manuals that document our creation, management & sustainability of projects, robot development & strategic alliances, such as Tigres Robot Development & Documento de Impacto y Alcance. Our operation manual stays unmatched, being a document that sustains our structure, operation, ideals & goals based on our FIRST experience, ensuring seamless team transition & continuity for future generations. 2. Methodologies: We use agile methodologies like design thinking for	

project management, progress tracking to measure results & six sigma during the construction of our robot for its quality performance & for internal processes empowering efficient strategies that allow us to preview decisions, ensuring endless progress. 3. Operation: We incubate multidisciplinary explorers who encapsulate real-world skills by involving them in our 5 areas; Communication, Sustainability, Engineering, STEAM Ed & Outreach, allowing us to have an optimal operation & internal framework. We stand among the exceptional with these 3 pillars, ensuring that even though the generations eventually graduate, those who come have a guide to continue the team in the foreseeable future. Making 6652 a place where knowledge is not only transmitted, it's created. Thus the ROAR reaches the planets that need it.

APOLO 6652 Before our adventure began we enhanced our propellers to guarantee success in our mission: In 2022 we connected w/the 1st citizen lab of our state, a civilization out of this world w/outreach methodologies that redefine the problems' solutions for our community. They showed us the key to launch into outer space: the affective way, a methodology that humanizes social innovation. It involves the affected groups by the problematics, identifies key issues thru active listening & prototypes affective solutions, aiming towards sustainability & true-hearted nature. We treat our community like bearers of empiric knowledge that must be incorporated into the crafting of solutions & not only in the result. With this tool we transformed our annual recruitment into Hack-A-ROAR, a fun & creative way to recruit, retain & engage youths w/an open invitation to our crossover between FRC competition & the citizen labs, expanding our ROAR. In the span of 4 weeks aspirants obtain knowledge & skills usable in social action, making our explorers the citizens & leaders the world needs. We reached 350+ space trainees who are given access to design equipment for the creation of real-world solutions, making 31 project prototypes & launching our mission:

-FIRST Discovery Other teams share our goal of promoting STEAM, so we collaborated to impact beyond our universe: we became ambassadors of Community FIRST, a volunteering initiative by 2096, joining 82 teams from 12 countries, reaching 8.9K people. We also received signals from the fourth dimension, & in collab w/6429, we held a series of webinars led by Impact's Finalists, where we opened the secret doors for a true impact. We launched an FLLC team in a public high school: 24141, forever changing the way children perceive STEAM & their future, proving that it's not about how many teams you open, but where.

-Thirst planet On a desertic planet whipped by winds, the worst hydric crisis in the last 30 years took over in 2022, when 5M+ ppl were left without a single drop of water for up to a week. Faced w/this threat, our explorers created CAMO: a low-cost system based on the use of Peltier cells that captures humidity from the environment to generate water drops that condensate, transforming air into water. This breakthrough earned NatGeo's recognition in "SlingShot Challenge" (top among 2.1k+ projects) & led to a game-changing collab w/an MIT alumni to redefine our prototype.

-The planet of chaos Imagine a planet where the simple act of walking home is a danger, where 8M of assaults were estimated to occur in 2024, & among those victims are the people you care most about. This was the life of many 6652 youths, afraid that a family member, a friend or even themselves could walk in the wrong place at the wrong time. This is why we turned chaos into opportunity w/Student Guard, a web for students that collects data, simplifies & expresses it through digital tools such as heat maps, community forums & a section of rush hours to create a supportive student network.

-Silent voices planet A planet stuck in outdated & unfair ideas, where women are silenced and their dreams set aside, leading to a lack of interest in STEAM as early as age 15. We take action with FIRSTxHER: events by and for women, impacting 300+ girls in the past 3 years. eg SteamItGirl2, a fair at the country's most important science museum, sparking curiosity. We are proud to say that the percentage of women in our team has increased from 20% to 51% in recent years, with 87.5% of leadership roles held by women, inspiring girls to become the captains of their own voyage.

-Neglected planet 6652 explorer Mariath inspired a milestone in our roar when she suffered an injury in her arm but couldn't receive a proper rehabilitation like other 30M Mx due to covid in 2020. Thinking about those lives we saw an

opportunity, faced the challenge, & created a solution based on B2B2C. Since then, we've revolutionized the way therapies are made w/Theraplay: a modular device w/doctors' approval that complements physical therapy for patients' upper limb injuries & involves the users, biomed & professionals in the design process to upgrade the prototype's modules w/active investigation. We redefine traditional medicine, not only diagnosing but having genuine patient engagement.

-The Nowhere Planet Explorers' commitment to sow seeds of STEAM in boys & girls was evident, where a formidable education was nowhere to be seen and made every breath count with these 3 actions: 1. Educational models: Yearly we do "STEM seed", reaching 2k+ kids around LATAM/Europe (collab w/2468 in CDMX) in 14 camps. Plus, to inaugurate the first STEM hub made of recycled materials in a vulnerable school, doing STEM classes to kids who are left behind due to low academic performance, making the 1st gen graduate. 2. Connecting community: "Solar Cup" w/FC Tigres, the most popular soccer club in our city. This opened that season's champ's stadium doors, connecting kids w/ their soccer idols thru robotics, making FIRST the sport of the future. 3. Sustainable development: Sustain It Up, in a culture of poor initiatives for SDG's diffusion we innovated education, reaching 160+ youths in one year by initiatives like discussion panels & one of a kind crossover between FLL x SDG's leading young minds to assemble the solutions of the tomorrow. Sending a strong message: everyone can live into STEAM.

We do not travel alone: we incorporate our allies in exploration, because we believe that true impact does not reside only in us, but in the union of forces. Alongside our main sponsors we've been an inflection point in the CSR strategy, making them invest in social action through us: Softtek, AMI & JD opened a STEAM section in their global citizen strategies; they assign an annual budget of +90k USD for activities as STEM seed, value to 6652 alumni, having 50+ of them in their workforce as leaders enabling 80% of them to come back to the team as mentors. But there were also challenges: in 2023 our main sponsors faced an arduous economic crisis which led us to test the effectiveness of how we create strong alliances. Using Pareto's law of 20/80 top/local companies, 10+ local sponsors joined the roar & we collected +4.3K USD by "Apadrina un proyecto" to sustain our outreach efforts, showing that even though space complications show no mercy, neither do we. Our actions enabled students to start their own missions: inspiring the opening of 14 student groups & 7 workshops. We've been a pipeline in expanding the culture of "student-lead" by being the 1st student chapter of UANL, making a statement: you don't need to leave your planet to change your reality.

COSMIC LEGACY In the vast universe, changing the world could seem like an impossible task, but today, after 9 years, we are living proof it is not. W/a total roster of +1k changemakers from 30+ schools, 82% of 6652 being active participants in social projects, we can say our mission has reached the life of +1.9M ppl around the universe, demonstrating anyone can put on the space suit of a changemaker. As our founder once said "changing the world is not that difficult, you just have to change one life at a time". The space is full of possibilities & the time to skyrocket starts now. We are tigres 6652, the gen of space explorers, telling you to put on a space suit, defy the gravity of your fears, explore the unknown & reach the impossible. Are you ready to join the mission? ;

