#### FIRST Impact Award - Team 8153

#### 2024 - Team 8153

**Team Number** 

8153

**Team Nickname** 

Tech4Peace

**Team Location** 

Istanbul, 34 - Türkiye

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.

In the last 3 years, 90% of our participants plan on pursuing STEAM related fields in university, and 100% of our alumni have chosen STEAM based majors. In addition to this, our team has organized 800+hours per member of STEAM activities for our community. Some of our alumni also became mentors for FRC and FTC teams. The impact of FIRST has also influenced our mentors and alumni who have volunteered for STEAM related activities including FRC, FLL and VRC tournaments.

Describe your community along with how your team addresses its unique opportunities and circumstances.

Our community is an enthusiastic one which fosters a grand passion for learning and development. However, due to economical disadvantages, equal opportunity within does not exist. Therefore we initiated countless projects, whether it be advocating gender equity with the Violence Against Women seminar, publishing translations of the GirlsWhoCode curriculums or providing essential needs and STEAM education to over 200 students from SAGEM, Türkan Efe schools and Eastern Anatolian villages.

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?

When initiating projects, we use the WWH rule: we meticulously outline their purpose (why), goals (what), and execution strategies (how). Our creative approach aims to engage a broad demographic spectrum, emphasizing community impact and a brighter future. Sustainability is ensured through ongoing partner collaboration with feedback from diverse communities gauging our success. Finally we measure results by making forms and receiving all kinds of feedback from our and our partners' communities.

Please provide specific examples of how your team members act as role models within the FIRST community with emphasis on the past 3 years.

#8153 strives to motivate the FIRST community by forming, mentoring and assisting FIRST teams. Our mentors and alumni volunteer at the VEX IQ, FRC and FLL challenges. We ran the Official FRC kickoff and the FLL Explore tournament welcoming over 600 people. Our alumni started and mentored their own FRC team #9409, raising funds from scratch inspiring other alumni. Lastly, our current members attend summits and podcasts about equality and young minds in STEAM, organizing many activities.

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

Since it is our duty to use our wisdom and expertise to inspire and aid others, we vastly value starting and mentoring teams. Regarding that, Tech4Peace founded Germany's 2nd FRC team: MintRobots, as well as 10 FLL, 2 FTC, 1 FPV drone, 1 VEX and 1 WRO teams. We mentored our teams, teaching technical, problem solving and teamwork skills. We assisted #2905, #9093 and #8151 on robot parts and game elements. We also provided published resources such as scouting and rookie guides to aid other 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?

We partnered with Türkan Efe Middle School, giving them courses regarding coding and 3D design, motivating them to participate in the "Kids Coding Water" competition where they won the Applicability Award. We also provided STEAM and safe internet usage courses for 4 years to SAGEM, our local special needs education center students and İZEV, educating over 300 students in the last 3 years. %43 of these students pursued their STEAM journey by joining the FTC and FLL teams we have started.

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

We started Project Pangea, cooperating with 14 FIRST teams internationally aiming to ensure global sustainability. We partnered with İZEV and Best Buddies to provide citizens with special needs, STEAM education and experience. Partnering with Teknokta, we were provided Lego Spike Essential sets which we used to give STEAM education and start FLL teams with children from Diyarbakır&Mardin. We partnered with KOÇ, in order to provide STEAM education to the southeast earthquake region.

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

We translated the GirlsWhoCode curriculum into Turkish, became FIRSTLikeAGirl ambassadors and coorganized "Nokta Koy Zirvesi" ambassadors striving to spread gender equity reaching over 15.000 people. We 3D printed prosthetic limbs for the Enabling the Future movement. We partnered with İZEV, BestBuddies and our local special education center to aid the mentally handicapped with safe internet usage and provided education and essential needs to Kalecik and Kumrucuk villages in Eastern Anatolia.

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

By introducing FLL, FTC and FRC programs to our mentees we ensure that the younger generation of students will sustain their places in STEAM and pass on each others knowledge. We also partnered with "SEEM Türkiye" for team management and sustainability strategies on our initiatives and teams, creating

strategic action plans. We established our own alumni office to sustain unconditional support regarding their expertise and ensure communication.

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

To secure sponsorships, we work with our members' families and contacts in the business world; keeping close ties with our sponsors, documenting our promises to them to ensure we keep them. Similarly, we remind them of how their investment has contributed to us..ln preparation for sponsorship meetings, we specify our reasons for wanting their aid and what we can accomplish with their help specifically. We have visited one of Ford's factories to uphold contact, and been supplied with a mentor.

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

Due to the Turkish Lira losing most of its value in face of the USD, our team found it difficult to deal with our finances. In response, our team opted to find more grant programs for possible financial support. We applied for support from Boeing, whose support was crucial in supplying our registration fee for FRC. Also, we have had issues with recruiting new members, as some of our older members graduated. We plan on campaigning more to our middle school so more younger members show interest.

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

Our goal is to develop STEM capabilities to contribute to a brighter future where technology peacefully aids human advancement while serving the FIRST mission. To reach this goal, we educate our community on STEM. In late 2021, we met with the district governor to promote interest for STEM areas in public schools. Similarly, we visited the town hall and had a meeting with the deputy mayor, with whom we started a SAGEM project in which we have been educating students in STEM fields for 4 years.

# 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.

Since we are rooted in VRC,we started a VEX team called Terminus.On YouTube, we have a series of livestreams called T4P Talks where we organize seminars regarding robotics, sharing knowledge reaching over 189.000 people. We translated and published the rookie team guide by Compass Alliance to empower the Turkish FRC community,alongside our newspaper "Tech4News" reaching over 1000 people monthly. Finally we attended the Sariyer Literature Festival,reached over 15.000 people with robotics expos.

Judge Feedback
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Who/When	Feedback
Mar 10,	How many combinations do you think you can achieve with the Six Lego Bricks sets?
2024 05:57:25 AM EST	An area the team has an opportunity to improve.  Something that really impressed the judges.

#### **Essay**

A spark of hope for over for over 4 years, now stronger than ever. We unite to spread the motivation behind robotics by running and hosting events, while utilizing our strengths to provide resources to others. We are team 8153 Tech4Peace, and our mission is to develop our STEAM capabilities to contribute to a brighter future where technology and robots peacefully aid human advancement.#8153 aims to ignite a STEAM interest in every child, advocate for the unheard, and provide unwavering support to inspiring communities. We find strength in our mentorship skills driven from our motive to assist developing teams. We value the accumulation and distribution of information, and strive to be recognized as an inspiration by sharing our expertise in the field of robotics. Founded in 2019, our passion for coding, design and problem identification and solving inspired the formation of Tech4Peace.Our team has since expanded globally, vital for our mission-driven projects.Embodying our name, "Tech4Peace", we harness technology and robotics to forge a more harmonious world. Reflecting on our journey,we've orchestrated numerous "Tech4" initiatives to spur community engagement in STEM fields. Now it's time to see the future in show. Tech4Teams: Teamwork and team building is essential in creating sustainable communities. Our commitment to sustaining and providing impact and innovation, inspired us to start and mentor 16 diverse teams including Germany's second ever FRC team "Mint Robots". Aiming to exhibit grand impact, we started by creating teams with the youngest generations within our community, we started 1 FLL Discover team, #45. Afterwards we started 6 FLL Explore teams,#689,#951,#224,#308,#1009,#1053,3 FLL challenge teams,#42,#735,#1122,2 FTC teams,#25073, #25075 and finally 1 WRO team #73. Since our roots lie in the VEX Robotics Competition we started 1 VEX V5 team "Terminus" which we have mentored for remarkable success, qualifying for finals in all 10 tournaments and clinching the title of Tournament Champions in their debut year. Finally we started 1 FPV drone racing team. Through our efforts in starting and mentoring teams through building teamwork, effective problem solving and gracious professionalism skills we empowered over 300 students with invaluable achievements, setting the stage for a future marked by collaboration and technological advancement. Tech4Event: In 2021, despite COVID-19, we sustained our optimism and looked towards the future. We organized to host a groundbreaking VRC tournament which would have been the first time a high school hosted one, but our plans were temporarily halted. This didn't stop us. We bounced back in 2023 with the Official Charged Up Kickoff on January 7th, hosting 18 teams and over 350 participants. We organized 17 workshops, empowering the Turkish FRC community. On June 4th, we successfully hosted a very important FIRST event; an Official FLL Explore tournament with 18 teams and 300 attendees.Looking forward, we are set to host another Official FLL Explore tournament, expecting 15 teams and over 120 participants. Tech4Assist: We collaborated with teams #9093, #8151, #6228, and #6064, sharing crucial sponsorship insights. We guided #8151 on the FIRST Impact Award process and supplied robot components to teams #2905, #9083, #9601, and #9029. Tech4Support: We champion the future of STEAM through active volunteerism. Our mentors and alumni contributed their expertise as judges and volunteers at VEX,FLL, and FRC events. Furthermore, we supported the International Math Challenge program, which welcomes over 10000 global students. We provided essential resources such as printing 600 badges monthly. This sustained effort exemplifies our unwavering dedication to supporting the youth in STEAM. Surpassing 1500 KM, we supported Eastern Anatolia's youth with Global Charity, supplying necessities, educational tools, and toys to Diyarbakır and Mardin's students. We introduced them to STEAM, promoting equal educational opportunities and aiding their academic journey. Tech4Partnership:We were the first Turkish FRC team to partner with GirlsWhoCode which has reached over 500 million people globally and educated over 450000 girls, by translating their resources into Turkish. We also partnered with VESTAS and co-organized a World Clean Up Day event. Additionally we partnered with the Enabling The Future movement, supplying them with 3D printed limb prosthetics. To ensure our team's sustainability, we collaborated with SEEM Turkey to publish a Sustainability Guidebook

to help other FRC teams in this subject. Finally we created a global, student-led community, uniting 10 FRC and 4 FTC teams from 5 different continents, gathered for the mission of building a sustainable FIRST community by 2030 and achieving %51 participation rate. All of our ambassadors are working towards spreading inclusivity, innovation, impact and fun while building a sustainable community within their district. There are Project Pangea ambassadors from 8 different countries being: FRC#2659,#4729,#8276,#8066,#6865,#5672,#8015,#9053,#7632,#9247 and FTC#25073,#25075,#24094,#22413. Tech4Equity:We traveled over 1500 KM across Turkey,with the impactful mission of providing equal education opportunities for our sisters and brothers in Eastern Anatolian villages. We introduced VEX 123 and 6 brick lego activities to over 20 preschoolers by providing our own 6 Brick Lego Activities booklet and robot kits. To pursue and honor our mission in Diyarbakır and Mardin we introduced 76 primary schoolers to FLL Explore creating our own FLL team in order to sustain and support their STEAM journey utilizing the LEGO Spike Essential Sets that our partner, TEKNOKTA, had provided. Our posts and the documentary we produced generated a significant resonance globally, reaching a total audience of over 106000 individuals. In pursuit of gender equity as a primary mission, we partnered with the Violence Against Women Organization for the "Nokta Koy Zirvesi" event. Our team's girls championed STEAM inclusivity and career accessibility, impacting over 5000 people across Turkey for a diverse and equitable world. We partnered with FRC team SEZMECH #8209 to promote gender equity in STEAM.Our girl teammates were featured on their "Stories Filled With STEM From Women" podcast, sharing insights and experiences. We are also #FIRSTLikeAGirl ambassadors, contributing to the grand mission of inspiring girls to become the next generation of STEAM leaders, by acting as role models, sharing our girl teammates' experiences in the STEAM fields via 1 minute videos, reaching over 6500 people globally. We created a significant impact, inspiring other Turkish FRC teams to also become ambassadors. We advocate for inclusivity, recognizing that neither physical nor mental diversity is a barrier to join the STEAM community. Therefore we partnered with IZEV, BestBuddies and our local Special Education Center, including them in the STEAM community by organizing courses to educate them on safe internet usage and provide robotics education. Additionally we provided 25 educational STEAM sets to children under oncological treatments, partnering with the global influential project AWish and the Turkish STEAM education company Robotic Things. We partnered with KOC Holding to bring STEAM education to kids in the Turkey earthquake zone. This spring, we'll return to Hatay with FLL education and LEGO Spike Essential sets, aiming for significant impact. Tech4Publishing:We're passionate about promoting global technology and STEAM education. Our monthly newspaper, Tech4News, informs over 1000 people on the latest tech news. Our apps, Teleop and ScoutFirst, support and connect the FIRST community. Teleop enables interaction, while ScoutFirst stores scouting information on teams. Since we strive to make knowledge available to all, we translated and published the rookie guides of the Compass Alliance and their Design, Prototyping, and Programming 101 guide and the GirlsWhoCode curriculum into Turkish to empower our Turkish community. We taught 3D design and programming to our viewers by starting our YouTube channel to enhance their knowledge of STEAM.We filmed and published a documentary of our "Robot On The Roads" project where we visualized the impact of our project regarding the education of children in the Eastern Anatolian Villages on YouTube. We published a Six Bricks activity booklet to give to the kindergarten children, teaching that less is more. We believe in the transformative power of knowledge, and our Tech4Peace Talks series, featuring our exclusive interviews with leading figures in technology, programming, design, and robotics, has reached over 168000 people. We also published a scouting guide to aid newcomers in understanding scouting. Lastly, we published 2 guides about sustainability, one being the result of a partnership with SEEM Turkey and one for "Project Pangea" where we united as 15 FIRST teams from around the globe to make a change, reaching over 6000 people. Recognizing that art is integral to STEAM, we harnessed technology to create impactful pieces. Drawing inspiration from our FIRST

journeys,teammates crafted original music. Sharing our art on Spotify, we connect with other teams, enriching the community. Tech4Advocacy: We engaged with Mayor Şükrü Genç, Deputy Mayors Sevgi Atalay and Hüseyin Coşkun to partner on a STEAM education initiative; Sarıyer Municipality Youth Education Center which has fostered 3D design, coding, and robotics learning, spurring the formation of numerous FLL teams and bolstering Turkey's STEAM future. Additionally, our meeting with the mayors of Küçükçekmece and Kadıköy furthered our commitment to advocating Robotics and FIRST.

Tech4Future: Echoing Dean Kamen's wisdom, "Life is so short. Why waste a single day of it doing something that doesn't matter, that doesn't try to do something big?" Tech4Peace embraces visionary endeavors. Project Pangea, The Equity Projects, and our key partnerships all aim to sculpt a better community and witness the future in show.;