

- 1. 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.
- FINALIZED

In the past 3 years, 5740 has seen a 100% college acceptance rate. All 4 of our seniors plan on pursuing a STEM major, having earned \$487,000 in scholarships. In addition, four 5740 members have been awarded as Dean's List finalists. Three 5740 graduates have returned to help with several outreach initiatives, including toy adaptation. We feature our alumni & their STEM accomplishments on our website & social media accounts, such as team founder Matt Esser going on to work for Tesla and SpaceX.

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

As a Catholic school, 5740 has the unique opportunity to connect our faith with robotics. 5740 values service through STEM. We have visited 5 senior homes, showcasing our team and connecting with a past generation. We demoed our robot, had meaningful conversations about internet safety & taught residents to FaceTime with their loved-ones. We supported our school with Christmas on Troy Hill and the St. Killian Fellowship Dinner, where we displayed our robot & helped feed underserved communities.

- 3. 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?
- FINALIZED

5740 uses our network of families & community partners to form our outreach events. Via a team mom, we partnered with the Children's Home of Pittsburgh for our Toy Adaptation program. Raising over \$3,500, our team bought, modified & donated 7 toys this December & 28 toys over the past 3 years for medically fragile children. We replicate this model in all community outreach events, like Mars New Year & the Cranberry Maker Faire, where we have been asked to return multiple times by the organizers.

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

5740 participated in the Three Rivers Educational Technology Conference, giving 3 presentations about the benefits of *FIRST* within schools. We also stream a YouTube podcast to discuss our current team efforts and share design concepts online, and communicate with local teams on the Steel City Robotics Alliance Discord channel. During the off-season, we helped other teams by sharing our scouting data, earning us the Gracious Professionalism Award at the Mahoning Valley Robotics Competition.

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

5740 started FTC Team 12578 to function as a class, bridging the gap between robotics & school. We actively mentor the team, providing insight & technical knowledge for members. After a pause from the pandemic, we visited schools such as Blessed Seelos Academy to exhibit *FIRST*'s mission in schools. We have hosted both FLL & FTC qualifiers at our school, where students on our team volunteered to set up, take down & act as referees at these competitions.

- 6. 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?
- FINALIZED

Team 5740 annually runs STEM summer camps where middle school students learn CAD, software, media & build skills. At the end of the week, students got to compete to test their robots they worked on throughout the week. Since the inception of the summer camps in 2018, we have taught 200+ students, many who have gone on to join Team 5740. Additionally, we invited students from a local school to participate in FRC Bootcamp during build season. Students shadow team members and help build the robot.

- 7. 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.
- FINALIZED

5740 connects with the community in 3 ways: authentic apprenticeships, touch point partnerships, and meaningful mentorships. We seek future apprenticeships in schools like Slippery Rock and Pittsburgh Technical College. Touch point partnerships connect us with our sponsors like Penna Flame & Armstrong, while employees of MSA actively mentor our team. Our team toured the Penna Flame facility, observed their work environment & had intentional career conversations with their staff.

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

5740 helped 2 Girl Scout troops, each with over 15 members, earn their robotics badge. They interacted with our robot, learned block code & made a fun robot craft. Also, two 5740 members are part of the St. Anthony's program, which provides students with intellectual disabilities additional learning opportunities. These members go on outreach events with us & help build the robot. We also use outreach efforts like Seniors First & Toy Adaptation to bring FIRST to marginalized communities.

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

Through inreach classes, new members are taught the basics of our code and CAD subteams by current members, ensuring student transition of skills over the years. At weekly meetings, we take time to discuss the necessities before & after outreach events, reviewing any feedback we get. Constructive criticism and positive feedback from outreach partners, like elderly care centers & the Children's Home of Pittsburgh, provides us with the motivation to continue these events & develop them further.

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

5740 uses outreach events like the PRN Discovery Day to create new connections while sustaining previous connections as we update our sponsorship levels to create a longer lasting support system for our team. We engaged sponsors with 11 STEM trips to these businesses to strengthen our

connections & also invited universities to our school in 4 separate visits. All sponsors are kept up to date by Thank You letters & team progress emails, while higher sponsors are given perks like naming our robot.

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

5740 has recognized that there is a stigma surrounding STEM participation. We actively seek to make FIRST Robotics accessible to all, even those not interested in pursuing a career in STEM. We have found success when recruiting students for our various non-technical initiatives. Several members recently joined the team helping to drive our media, marketing, and advocacy efforts. We are continuing to seek unique skill sets to strengthen our multidisciplinary efforts.

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

The mission of FIRST inspired our own: "To build students of creativity, leadership & professionalism - connecting them to a future enlightened by their STEM experiences." We work to acknowledge that 5740 builds more than a robot. With the assistance of mentors, student-led subteams become sustainable in their efforts. Through project managing, inreach teaching & outreach planning, members learn real-world problem solving skills applicable outside of 5740, setting them up for future success.

- 13. 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.

- FINALIZED

5740 participated in NAC, the National Advocacy Conference in Washington D.C., this summer to advocate for STEM programs in low funded places. At NAC, our members talked to senators & representatives from PA to lobby for inclusive STEM education. Beyond advocating at the national level, we used these skills to help improve our team. This created the project management team, which focuses on emotional intelligence and informed student leadership as we increase communication across subteams.

- (OPTIONAL) Please use this space to ask 1 question to your *FIRST* Impact Award Judges which will be answered after each event with feedback from the judges (250 characters maximum). **Note:** Questions asking what is required to win the award will not be answered.

Do the numbers and statistics of outreach efforts matter more or less than the narrative and stories of the students from these outreach efforts when it comes to writing these essays?