

***FIRST* Impact Award - Team 1676**

2025 - Team 1676
Team Number
1676
Team Nickname
The Pascack PI-oneers
Team Location
Montvale, NJ - USA
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.
On our team, there are opportunities for students to be leaders in their SubDivision, Project Group & more. In October, team leaders attended a leadership seminar hosted by our sponsor Comcast/NBC. We host sponsor nights to thank our sponsors; some offer internships to students. Our team inspires members to pursue more difficult STEAM classes in school. To aid seniors attending college, our team gives 2 scholarships. 2022-2025: 100% graduate, 83% enter STEAM majors, 8 alumni returned to Mentor.
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.
Our team spans 4 towns & 2 schools. Our team is diverse: 55% White, 36% Asian (South Asian, Pacific Islander), 4% Black, 5% Hispanic. We are in Bergen County, NJ, on the NJ-NY state line, allowing us to do outreach with teams in NY. Fundraisers help cover travel/event costs for students in financial need. Our team is a safe space for all. We found a unique opportunity in our towns' food insecurity, and built 3 donation bins for supermarkets and host food drives.
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.
Pre-Season, our team hosts Pi-Tech Academy, a 7-week program to help rookies settle into our team and learn about FIRST. Project Groups focus on using STEAM & technical skills to Reach others and benefit our community near and far. Our annual STEAM fair (175 attendees this year) introduces children to FIRST and our team through hands-on activities and demonstrations. 24 teams attended our annual FLL Bergen Brickfest Tournament. We sustain our team & events with organization & publications.
Describe your team's goals and the progress you have made towards them to fulfill <i>FIRST's</i> Vision.
Our community goal is to inspire children to become tomorrow's leaders in STEAM. We demonstrate our robot at events. We are improving our APED device. We aim to Mentor more teams internationally and

share FIRST overseas. We have been Mentoring 5 new teams in South Africa. We are nearly done with a study-help app called Ace-It we have been developing for the past 2 years. We recently finished our Varsity Letter Guide to share with other teams; it is a Provided Published Resource on our website.

What impact has your team seen from your efforts described in the above question? How does your team measure impact?

Our team measures impact through the different demographics and number of people Reached. Whether in the form of Mentorship, development of a website, or Adaptive Physical Education Device, our impact goes beyond our district. Our robot demonstrations and town days have inspired children within our own community, while our International Group inspires children to pursue STEAM around the world. Our Ace-It Website is made for students, and our APED device aids children with disabilities.

Please provide specific examples of how your team and team members act as role models within the *FIRST* community with emphasis on the past 3 years. How do you share these best practices with other teams?

At competitions, our team members & coaches are always ready to Assist other teams. We are working with teams 1807 & 9015 to develop a joint scouting app. All our Published Resources are available on our website. Our team always shares our safety practices. We shared our LEGOs & a Story outreach event with the Sakhikamva Foundation in South Africa & Team 10428 Kaizen in India. We share FIRST & Safety info cards with teams. Winners of FLL Brickfest Tournament receive First-Aid travel kits.

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

Our Mentoring and International Project Groups Assist & Mentor teams with the Sakhikhamva & Coderina Foundations: 15 FTC and 5 FRC teams overseas. 6 of the 12 teams we Mentor in South Africa qualified for Nationals. We hosted teams from India & South Africa. In NJ, we Mentor 4 FLL & 3 FTC teams. We helped a NY team Run their outreach event. We helped Start 5 teams in South Africa this year. The Sakhikamva Foundation uses our Rookie Bookie to host an FTC Boot Camp, Reaching 1,000+ students.

What other initiatives have you created, grown, sustained, or participated in (*FIRST* 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?

We created & Run our STEAM Fair, our LEGO children's series, & perform town day demonstrations. We Host an FLL Tournament every year. These events have inspired participants to join our FLL teams and our team, 116 in 3 years. We established a tool certification process to teach students to safely use power tools. For the past 2 years, we participated in STEAM Night at Boulder Stadium. Our team Reached several thousand people: both FIRST teams and attendees.

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.

We partner with 2 food pantries; collected 8,000 lbs of food since March. We work with the school Medical Club for an annual Red Cross Blood Drive; 111 pints of blood donated in 3 years. We began a Recycling Awareness Initiative with our schools' Environment Clubs. Our Ready, Set, Speak! website is

shared with a school in France. A Councilwoman asked us to host our LEGOs & a Movie event when parents attended a town Bullying presentation. The Mayors & Councils publicly honor our achievements.

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

Our Safety SubDivision made a Diversity, Equity, & Inclusion presentation to educate our team. Our APED Project Group is improving our device to help individuals with disabilities participate in different sports. The device was at West Virginia University, and is now at the University of South Carolina. Ready, Set, Speak! (a website for helping individuals with autism) is translated into Spanish & French and is on our website. We partnered with the Jawonio Foundation to help their fundraising.

Explain how you ensure your team and the initiatives you have created will be sustainable.

Our SWOT chart compares Strengths with corresponding Weaknesses and Opportunities with corresponding Threats. Our Business Plan records our finances. Our Book of Pi-Projects logs the events we Run along with feedback from organizers and volunteers. We hold mandatory team meetings. Our team gives Performance Reviews to ensure that team members are productive. We award Varsity Letters to dedicated veteran members. We update our Branding Catalogue annually to maintain our team's professionalism.

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

We are working on our Rookie Retention. We Run Pi-Tech Academy to teach prospective students about our team & FIRST. We bring the Core Values of Fun & Teamwork to our team by hosting "Theme Nights," such as Ice Cream, and Team-Building Night. We Host a Job Fair to show the opportunities our team provides so prospective members can make informed decisions. Our Dashboard has an hour-tracking leaderboard to engage members. Parents are provided with information so they can support their Pi-oneer.

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, particularly noteworthy, or had a large impact.

We are proud of our partnership with our local food pantries. Since March 2024, we have collected & delivered food bi-weekly, impacting many families in our community. We established a Food Pantry Day with our sponsor ShopRite, celebrating their 25 Years of Caring Program. The pantry wish list was handed out at the door, and together we collected 85 bags totalling 1,680 lbs of food, along with \$648 in cash donations and gift cards. The approximate total value of donated food was \$3,600.

Judge Feedback

- What are the top three actions we can take next year to set higher standards?**
- An area the team has an opportunity to improve.**
- Something that really impressed the judges.**

Essay

The key to a stable, sustainable ecosystem is biodiversity. In a healthy ecosystem, every organism plays a vital role in strengthening the overall environment. In many ways, our team models an ecosystem. Every teammate contributes to the cohesion and productivity of the team. However, our ecosystem is only one piece of the overarching puzzle: our biosphere is made up of our local community, the FIRST teams we mentor, and the children we inspire.

The Pascack Pi-oneers is composed of 4 towns, 2 schools, and 52 unique individuals. We are located in Bergen County, New Jersey on the NJ-NY border. Our location allows us to Assist teams in both states.

Our team consists of 2 main Divisions: the Robot Division (which consists of SubDivisions: Mechanical Engineering, Electrical Engineering, Testing & Integration, Chassis, & Programming) and the Management, Outreach, and Design Division (which consists of SubDivisions: Awards, Publications, Media, Information Technology, & Safety).

Aside from these Divisions, our team has Project Groups, which focus on using our skills to benefit others. Project Groups include FIRST Mentoring, International Mentoring, Community Outreach, Apps, & APED (Adaptive Physical Education Device). All rookies and veterans must be in a SubDivision. From a member's second year, they must also be involved with a Project Group.

To promote sustainability, we Host a 7-week Pi-Tech Academy and a Job Fair before Build Season kicks off. During this time, prospective members learn about the team and FIRST. We have Team Contracts that outline expectations and safety protocols. We hold performance reviews so team members can have conversations with their leaders about their performance and give feedback about the team. We have a mandatory scorecard which must be filled out in order for students to join the Build Season Team. Our Information Technology SubDivision built an hour-based scoreboard into our team's Dashboard to keep a record of "high scores," which motivates rookies to attend more events and meetings. Since its implementation, we have seen a dramatic increase in rookie participation.

Locally, the FIRST Mentoring Project Group mentors 4 FLL teams and 3 FTC teams in Bergen County. Given our proximity, we had the opportunity to Assist FTC Team 11995 in NY with their outreach event. We demonstrated our robot, presented team materials, and spoke about FIRST to their team, event participants, & parents. Our team also built an FRC kit bot chassis with them for hands-on experience.

Every year, our Community Outreach Project Group organizes numerous events for children. We Host & Run our LEGOs Series (LEGOs & a Movie, LEGOs & a Movie: Girls Who Build & Code, LEGOs & a Story, LEGOs & a Movie: Day at The Races), Family Coding Day and STEAM Fair events. Our team attends town days where we demonstrate our robot and share information about FIRST. Through these events, we introduce many children to FIRST and STEAM; many of our team members began their STEAM journeys at one of these events. We Ran our 16th annual FLL Bergen Brickfest Tournament in November of 2024. Each year, the event is fully Run by team members.

We partner with 2 food pantries in our area. Our team built 3 food donation bins which have been placed in our towns' supermarkets. We collect and transport donations bi-weekly to ensure that the pantries are consistently stocked. We have collected more than 8,000 pounds of food to help over 170 families weekly in our community since March 2024. New this year, our InfoTech SubDivision is redesigning one of the pantries' websites. We are so proud of this partnership.

New this year, we collaborated with our sponsor Inserra Supermarkets (ShopRite) to establish a Food Pantry Day. We distributed pantry wish lists at the door and collected 85 bags totalling 1,680 pounds of food, along with \$648 in cash donations and gift cards. The value of donated food was \$3,600.

We are grateful for our sponsors. Annually, we host Sponsor Nights to honor them and thank them for the support they give us.

Our team partners with our school Medical Club to host annual Red Cross Blood Drives. In the past 3 years, our efforts contributed 111 pints of blood.

Our APED Project Group is also making waves! They focus on building and improving a device that helps children with disabilities play sports. This year they are designing an arm that will be able to swing a bat & putt a golf ball. The device is at the University of South Carolina. We collaborated with a professor at the University along with occupational therapists in order to learn how the device can be properly designed to assist the children.

The Jawonio Foundation in New York supports adults with special needs. To fundraise, they host birthday parties where children build LEGO race cars and race them down a ramp. We noticed the ramp had fallen into disrepair and offered to renovate it for them. This year, our team built a fully programmed, interactive ramp to aid the Foundation's fundraising efforts.

Our Reach extends overseas.

Internationally, we Mentor 12 FTC teams (4 of which are rookies) and 1 FRC rookie team in South Africa (the Sakhikhamva Foundation. 2025 is our 8th year of collaboration). This year, 6 of the 12 teams we mentor in South Africa qualified for their National Championship! We Mentor an FTC team in Nigeria (the Coderina Foundation), an FTC team in Haiti (FIRST Global Challenge), an FRC team in Turkey, and 2 FRC teams in India. We have also Assisted 2 FLL teams in Saudi Arabia and 1 FRC team in Brazil.

This year we shared our LEGOs & a Story event with FRC Team 10428 Kaizen in India and Team 9085 Mega Harpy in Brazil. That event is now shared in South Africa, India, and Brazil. We sent game mats to 2 FLL teams in Saudi Arabia. We met the teams in Saudi Arabia through FRC Team 9692 Sigma in India, who we hosted for a week in February 2024.

We hosted Fatima Jakoet of the Sakhikhamva Foundation at our school with 2 FTC Teams from South Africa in December 2024. We demonstrated our robot for them, and helped them improve theirs. We arranged a scrimmage match for them with FTC Teams BectoBots and Lodi Rams. Our team collected donations of feminine products for one of their all-girls teams from an underserved area, as well as pens, pencils, and markers for the Foundation.

We are always looking to branch out and partner within our schools and other clubs.

Ready, Set, Speak! is a website devoted to helping children with autism and apraxia of speech improve their communication & comprehension skills. The website "utilizes applied behavior analysis and verbal imitation" (Ready, Set, Speak!). The website is currently available in English, Spanish, and French. We have shared the website with our Mentee team in Haiti. New this year, Ready, Set, Speak! has also been

shared with Lycée Amiral de Grasse, a school in Grasse, France.

Last year, our team began developing a new website called Ace-It, a free alternative to paid online studying tools. The Ace-It platform empowers students to transform conventional study sessions into immersive and collaborative experiences—within our district and beyond. Ace-It's study games are designed to help students improve their memory, spelling, & vocabulary skills. This year, we are proud to be releasing Ace-It to the students in our district. In order to promote more collaborative learning, we plan to drop a new feature next year where students can share study decks with one another.

Last year, members of the Robot Programming and Information Technology SubDivisions created a Java program that enables school counselors to upload student data and transcripts from the Genesis gradebook system. This allowed counselors to quickly identify when students were not meeting class requirements and address high-priority issues.

New this year, members of the Information Technology SubDivision designed a program that helps schedule the teachers' duties throughout the day. Administrators input class schedules and desired duty numbers, then generate the schedule with a click. Previously it took them days to complete. Now it takes a few minutes.

We are continuing our Pi-oneer Scouting Network initiative to foster collaboration between our team and teams 1807 & 9015. Our scouting data is open to the public on our website and shared at competitions through USB flash drives. During competitions, our team members & coaches are always on hand to assist and support other teams in their scouting.

Our team posts all Published Resources on our website. New this year is the Varsity Letter Guide, updated Rookie Bookie, updated Animation Guide, & safety resources.

Recently, team members expressed concern that our schools were not recycling plastics, glass, or paper. Our Community Outreach Project Group decided to tackle this concern by beginning a Recycling Awareness Initiative within our district. We reached out to the Environmental Clubs at each school to raise awareness about the importance of recycling. Together, we designed posters & will hang them throughout the schools. We will make bottle cap murals to be displayed at each school. After speaking with both principals, our team created a pep rally event for the schools to collect plastic water bottles in an engaging way. The event will be a friendly rivalry between our sister schools. We spoke with our school's YouTube program (PVTV—Pascack Valley TV) to cover the event. One principal agreed to put a summary about the importance of recycling on our school's website. We hope to make our district more sustainable.

By nurturing the connections with our community and the next generation, we not only strengthen our own ecosystem but also contribute to a larger movement that promotes growth, resilience, and inspiration for all. Within our ecosystem, we work hard every day to become a lighthouse for those around us. ;

