

2012



2012 Chairman's Essav

Red Alert Robotics FIRST® 1741

Center Grove High School 2717 South Morgantown Road Greenwood, IN 46143

Team Advisor: Kevin Gallman gakmank@centergrove.k12.in.us www.redalert1741.org www.usfirst.org





Partnerships

FIRST® Team 1741 creates partnerships because we believe in the power of FIRST®. Our partnerships create positive impacts on the future of our students, our team, our community, and the world. FIRST® allows us to grow as individuals and as a team through transferrable skills, hands-on experiences, and self-discovery. We work closely with our mentors to obtain a greater knowledge about STEM, gracious professionalism, coopertition, teamwork, our community, and ultimately ourselves.

Partnership with FIRST®

FIRST® Team 1741 believes the best way to create a partnership is to help facilitate younger teams. Within the past few years, we have partnered with a local high school to help start FIRST® Team 3180. To start them out, we invited them to a local off-season competition and loaned them a robot to learn the ropes. After that experience, they were hooked. They are now an up-and-coming team that has become involved in hosting off-season events of their own!

We have built a strong partnership with many local teams in addition to FIRST® Team 3180. We partner with FIRST® Team 234, our mentor. Each year they weld our robot frame and we return the favor by providing parts and breakfast. We also collaborate to make everyone's Chairman's, scouting, and Business Plans the best they can be!

FIRST® Team 1741 is interested in expanding all levels of FIRST®. We helped to start an FTC team of home-schooled students in our area. Some of our members work as a part of both teams, exponentially increasing their knowledge of FIRST® and spreading gracious professionalism. We are proud to say that we have started and facilitated many FLL teams over the past several years. FIRST® Team 1741 hosts the Indy South Tournament - the only official FLL event in central Indiana and the only event sponsored by an FRC team. This past year, we partnered with an elementary school in our district to form our first Jr. FLL team. Our Jr. FLL team partnered with our high





school students to learn the science behind ice cream. For the past 4 years Red Alert has helped run CAGE Match, a local off season competition.

We have a 100% high school graduation rate and 100% attend college. 70% of our graduates continue on as FIRST® mentors or volunteers. This shows what an impact FIRST® has had on students' lives.

Partnership through Dean's Homework

Dean's Homework is very important to FIRST® Team 1741. This year we developed ideas and methods for spreading the mission of FIRST®. Whenever we go out into the community we make sure to emphasize that we are a FIRST® Robotics team.

FIRST® Team 1741's focus this year was contacting local media. We have appeared in all forms of local media this year including newspapers, television, and radio.

Partnership within our Community

FIRST® Team 1741 partners with our community. We host and participate in events that positively impact our community while allowing our students to step up as leaders and engage in high-level planning. Our build room was a stop for The Amazing Race, where couples built their communication skills while trying to hang a LogoMotion tube. To catch the attention of young children at our events, we hold mini-science fairs. We section off areas dedicated to young children and include student-created lesson plans such as "Fun with Physics." We hold our science fairs at many public events across our state. Red Alert also participates in Project Linus where our team parents, students, and our school's other clubs come together to craft blankets for children in need. Red Alert has also helped mentor several area VEX teams completely composed of homeschool students. We offer them training classes and this year we even built their field!





FIRST® Team 1741 supports our military. We visited an Air Force base to learn about military technology and visited a veterans' hospital to thank them for their service and learn about prosthetics. We showed them our technology and they showed us theirs!

When it comes to the environment, forget Red Alert, we are Green Alert! We partner with our school's Recycling Club to coordinate the recycling of bottles, cans, cardboard, scrap aluminum and batteries. We also partner with The Ronald McDonald House to recycle pop-tabs.

One of our most successful events each year is our FIRST® Community Tech Night. This is a student-led event that attracts over 100 people. We focus on creating better cyber-citizens and increasing digital literacy within our community. We offer 32 different classes including internet safety, video game safety, and anti-cyber bullying(That included a visit from the Greenwood Chief of Police), E-mail, Microsoft Word, and classes for technology used within the school corporation. Most classes are taught by FIRST® Team 1741 students and district middle school teachers. Classes offered for young children included "Silly Science" and "Marble Coaster eXtreme" classes. We reach people of all ages!

FIRST® Team 1741 tours the state with our own traveling exhibit called, "Amazing Robots." We visit libraries doing demonstrations, and spreading the word of FIRST®. In conjunction with our library demonstrations we have started a literacy program called "Read Alert" where we boost literacy skills with technology-related literature.

Developing Partnerships within Our Team

We are determined to build a better "us". Students gain transferrable skills in leadership, public speaking, business, and teamwork. We pride ourselves in the strenuous processes of high-level planning and decision-making of our team. Each student must show their commitment and willingness to make decisions for the good of





the team and to work in harmony with each other. We build our strength in these fields through unforgettable memories and experiences geared towards inspiring students to pursue STEM fields.

Before build season begins, we focus on building the skills of our students. We offer training sessions in areas including programming, animation, leadership, and machining. We also hold design exercises were we create robots for previous years' games, so students can prepare for build season.

Grades are very important to our team. During the build season we monitor grades. If a student is struggling, we offer tutoring and a safe, quiet place to learn for help with homework assignments.

Developing Partnerships with Others

Our strongest partnership is with our mentors. Our mentors are always there to encourage and empower us. They put in countless hours to push us towards greatness. Our dedication stems from the commitment they show us. Some of our mentors are people who came in for a day and were so inspired they stayed on the team for years, even without ever having students on the team or a previous affiliation with FIRST®.

Without a partnership with sponsors, our team could not function. Their ability to extend their knowledge and resources keeps us running and gives us a glimpse of our future through donations, summer internships, and jobs. We try to give back to our sponsors by updating them on our success throughout the year by giving presentations.

During the Christmas season our team partnered with a worldwide organization to help pack care packages. We helped pack 1300+ boxes to be shipped across the world. FIRST® Team 1741 also partnered with a local Girl Scout troop for fundraising, and we are helping one scout plan an event for her Gold Award - a FIRST® Radical Robot Camp that will teach simple programming and essential skills for future FLL students.





Through a partnership with Cummins, FIRST® Team 1741 has been able help support the FIRST® community. We recently had a presentation with several technical and community outreach leaders. One of Cummins's main goals is to reach out to the community. With 150 community involvement teams all around the world, they are partnering with us to help expand the FIRST® community. Through this partnership we hope to have Cummins employees mentor teams near their plants, provide financial support for all Indiana FRC teams, help our partner team in Brazil, and start new teams in China, Brazil, and India.

Partnership with our School

FIRST® Team 1741 has developed a partnership with our school. Through our partnership with our school's football team, we were able to help a player with low vision raise money for the Vision Walk - which we have been involved in helping run for the last three years. We also partnered with the school's basketball team to learn different skills for this year's game, Rebound Rumble. Our team is the only school extracurricular activity to participate in the homecoming parade. Each year we have a design that coincides with the homecoming theme and the message of FIRST®.

Partnering with the school curriculum, during the off-season, our team was given a reading and discussion assignment by the school, to increase students' critical literacy skills. Every student read The New Cool and then discussed it in small groups. This allowed students to gain a greater knowledge of what a FIRST® team is all about.

Our team is strongly involved in other areas of the school curriculum as well. Our robot stared in a pneumatics lesson and we are working with the science department to create a lesson on prosthetics. We are also heavily involved in our school's Project Lead the Way Classes. Our robot even made an appearance in the Drama Club's fashion show!





Importance of Partnership

FIRST® Team 1741 knows that partnerships are what make FIRST® such a success. FIRST® is about innovation, inspiration, teamwork, gracious professionalism, cooperation, and passion; we believe these are the essential roots of a partnership. These roots help to fuel our drive and dedication in the FIRST® program. With our partnerships, we strive to plant a seed of FIRST® in the hearts of every individual we come in contact with and to nurture the growth of FIRST®.



