

## **Team 34 2024 Impact Award Essay**

For the past twenty-seven years, Team 34 has sought to spread STEAM in North Alabama. Over the past three years, our team has more than tripled our involvement in our community, both local and statewide. This year, our team has reached over 64,000 people through outreach events and social media. To our small team of twenty-three students and seven mentors in rural Limestone County, these accomplishments are huge to us and our community. By reaching this many people we have been able to make great connections with local leaders, organizations, schools, and even a group in Zimbabwe, Africa.

### **Connections Far & Wide**

Last year one of our mentors visited Zimbabwe, Africa. On this trip, he connected with a community and school that needed immense help. In this rural farming town, people's livelihoods depend on agriculture. However, due to Zimbabwe's drought-prone climate, the community doesn't have enough water to irrigate their crops. This summer, our team formed a three-phase plan to use STEM to help them. We have already completed Phase 1 of this project which was to reconnect with this community and bring awareness to this cause. We are currently working on Phase 2 of this plan which is to develop K-12 Agriculture learning materials and provide them to the Dora Primary School. Providing these materials will solve problems for years ahead by teaching students the importance of implementing STEM to solve community issues. The third and final phase of this plan is to raise and send money to this community so they can build an irrigation system to water their crops. We hope to complete this project by the end of the year.

### **Community Outreach**

Our connections in Zimbabwe aren't the only valuable connections that we have made. We have made many connections within our community that allow us to demonstrate our team and volunteer at local events. One of these connections is with Eli's Block Party Childhood Cancer Foundation. This organization raises funds for childhood cancer. This summer we partnered with this organization to plan and demonstrate our robot at their annual Superhero Day. Superhero Day is a festival that hosts local vendors to provide games

and activities for children. The 2023 festival raised over \$2,000 to help cure pediatric cancer. In addition to Superhero Day, our team has participated in numerous local festivals.

This includes the Ardmore, Tennessee Crepe Myrtle Festival, the Athens Sippin Cider Festival, and a Fridays After Five concert event. Through these four events, our team reached over 20,000 people. Our team also makes a point to participate in outreach events in surrounding communities. Our team presented at the Huntsville AUVSI Symposium and demonstrated our robot at the Huntsville STEMFEST this past fall. This year we also partnered with the Athens Limestone Farmers Market to run the children's activity table at the market. For six of the market days, we demonstrated our robot, did a STEM activity, or did a craft with the children. One day while we were working at this table a storm hit the market hard. Rain and wind blew the vendors' items and the market tables everywhere. While everyone else rushed home to stay dry, our team stayed to help the market's vendors pack up.

### **Volunteering**

This event helped us to put into perspective the purpose of our team's outreach. Our outreach is service, service to our team, our community, or anyone in need. Being a service-based team is incredibly important to us; the members of our team have a total of 2,665 community service hours. These hours include many local events such as the Athens Kiddie Carnival, and Camp Hope. Camp Hope is a local camp that helps children process their grief after the loss of a loved one. This summer our team volunteered as buddies to the kids at this camp.

Along with volunteering in our local community, we volunteer in the FIRST community. As of January 2024, our team has supported a total of four FLL or FTC events totalling 160 hours of volunteer work. In addition to these competitions, we also volunteer at the Rocket City Regional (RCR) each year. This past year seven students represented our team as student ambassadors and the entirety of our team helped tear down the field on the final day. Aside from competitions, we have approximately 100 community service hours from volunteering at various FIRST events.

## **Advocacy**

Besides outreach and volunteering, it is also important for our team to advocate for FIRST and STEAM. This fall, our team presented to the Limestone County School Board with FLL team 32309. We demonstrated how our progression of Explore, FLL, and FRC programs are benefiting students and our school system. We stay in close contact with our superintendent to spread awareness of any problems we find or events we are attending. He comes to the RCR as well. We also present to city leadership such as the mayor of Athens, Ronnie Marks, and Chairman Colin Daly. We have also demonstrated our robot to local politician Britney Brown and Athens Communications Specialist Holly Hollman.

Aside from local advocacy we also work to advocate on a state-wide level. One of our team's leaders, Chloe is the FIRST in AL Youth Advisory Council Chair and an unofficial member of the FIRST in AL Operations Team. Her position allows us to help lead the growth of FIRST in AL. We have been able to attend and volunteer at numerous FIRST events. We also helped FTC secure spots at worlds by assisting in the starting of an FTC team.

Even better, we have begun advocating on a national level. Our team is a StudentsFIRST team. StudentsFIRST is an organization that is working to produce student-led teams, end mentor overreach, and level the playing field. Our team recently became a m.e.FIRST ambassador team. This organization contributes to menstrual equity by providing free menstrual products in FIRST competition restrooms. Additionally, this summer members of our team will be attending the Student Association of STEM Advocacy (SASA) Conference in DC. SASA will allow us to learn valuable skills, make connections, and spread FIRST to national leaders.

## **Pipeline**

Our team's main focus for the past two years has been to increase STEM in Limestone County Schools (LCS). In 2023 we helped to start an LCS middle school robotics camp. This is a week-long camp where students come together to develop Spike Prime robots. This small camp has blossomed into so much more, there is now a robotics club at all six middle schools in Limestone County. This allows all 6th-8th grade students to learn about

robotics. It also gives the teachers who run these clubs a stipend for their hard work. Our team continues to mentor these clubs and attend their meetings as much as possible. These clubs have allowed our district to host a Lego robotics expo that we were able to volunteer at. In May, five of these clubs met at Athens State University to present their work.

These clubs are set to transform into FLL teams within the next year according to LCS administration. Our team's end goal is to have enough FLL teams in LCS to host a FLL scrimmage or competition. Along with this, having 6 FLL teams in our district will provide a pipeline of trained, experienced students for our team. Our team is already reaping the benefits of these clubs. All of the ninth graders who joined our team this year were previously in one of these clubs.

### **Starting and Mentoring with FIRST**

Along with starting and mentoring these clubs we also work with many FIRST teams. Last year we were able to start three FLL Explore teams at Blue Springs Elementary School. These three teams are Team 6041, Team 13712 and Team 2022200730. Our team is currently working to start the first-ever LCS FTC team as well. While starting new teams is important, it is also crucial for us to sustain the teams that we have already started. We have mentored FLL team 32309 The Skyrockets for the past nine years and continue to do so.

### **Recruitment**

While these clubs and teams are creating a sustainable pipeline of students for our team it's important to keep our other recruitment strategies. Last spring, our team reached over 1,200 people by completing fourteen recruitment events. This includes our annual Tough Truck Challenge, a day where interested students come to our facility and build VEX robots to compete in a robotic tractor pull. Our team also sponsors a Spirit Bus that brings over 100 students to the RCR each year to expose them to FRC competitions.

### **FIRST Community**

Our team has made it a goal to connect with more FRC teams. We recently published beginner CAD videos on our website to help teams who are interested in learning Solid

Edge. At our competitions last year, we helped over 10 teams. In the process of assisting teams, we have made great connections. Our most precious connection is with team 6404 Brazilian Storm. Their team reached out to us last year in search of a place to rebuild their robot after transporting it to the RCR. We were able to invite them to use our facility to do this. Throughout this competition, we became very close with them. On the last day of the RCR, they invited us to a pizza party. Members of our team were able to attend this party, trade shirts with the members, and learn about Brazilian culture. This was an amazing experience for our members and we plan to do it all again this year. In addition, we will be helping Team 2869 with a podcast this season.

Within the past three years, our team has transformed for the better. We've grown our outreach, our volunteering and made so many connections. Because of our team, over half of the population of Limestone County and people far and wide have been exposed to FIRST robotics. This is allowing us to expand the mission of FIRST and our team to everyone around us. Most importantly our team continues to have a positive impact on more and more people each day.