

OCOSTA 4-H WILD ROBOTOCATS



TEAM 3787



Briefly describe the impact of the *FIRST* program on team participants with special emphasis on the 2011/2012-year and the preceding two years

Over the past two years, the national *FIRST* robotics competition program has greatly impacted the Ocosta Wild Robotcats. When the team was formed in 2010, they had little opportunity in learning more about STEM. They were overwhelmed by the complexity of *FIRST* but learned a lot. In the 2011 season the team was able to learn and expand even further into the world of *FIRST* and learn more about subjects that are otherwise not taught in school and are still learning and expanding this year.

Examples of role model characteristics for other teams to emulate

Wild Robotcats Team 3787 has gone through many changes over the past three years. Our success wouldn't be possible without the help of many role models and mentors that have positive characteristics from which everyone can benefit. These individuals share the *FIRST* experience with the students and also educate the public about the program, with the hopes of gaining additional support from the community and possibly acquiring more mentors, partnerships and sponsors.

Describe the impact of the *FIRST* program on your team and community with special emphasis on the 2011/2012-year and the preceding two years

FIRST has greatly impacted the members of the Ocosta 4H Wild Robotcats and has taught them valuable skills to use abroad like design, production, teamwork, programming, and marketing. Encouraging each individual to work as a team member instead of independently, all members of the team have a role and responsibility. Teaching each other what they have learned has allowed team members to share that knowledge with others outside of the team.

Team's innovative methods to spread the *FIRST* message

Team 3787 shares the message of *FIRST* in many ways, including community outreach, fundraisers, and presentations to interested groups, including potential sponsors. We also post information about *FIRST* on Facebook and on our team website. Recently, Team 3787 was one of three FRC teams that made a presentation to members of a legislative subcommittee at the Washington State Capitol to explain our robotics activities, the *FIRST* program and to encourage the Legislature to fund the *FIRST* program.

Describe the strength of your partnership with special emphasis on the 2011/2012-year and the preceding two years

The Team has worked with many groups over the past few years. With a struggling start, we have become more effective thanks to the help of others. At last year's competition, teams 360 Pi, the Jegabots and National Instruments gave technical support with programming when our robot was not responding. The relationships gained with other teams will be very valuable in the long run. Online venues like Chief Delphi give the team an opportunity to collaborate with other teams throughout the year.

Team's communication methods and results

Communication is a necessity for problem solving and reaching out to others. The team communicates using verbal, print, and electronic methods. Verbal communications involve phone calls and presentations to potential sponsors and community members. Print communication is used for community outreach such as newspaper articles, flyers and brochures. Email is efficient for contacting all members, sponsors, and other supporters. The team is always exploring new, effective ways for communication.

Other matters of interest to the *FIRST* judges, if any.

Ocosta High School is in the small community of Westport with only 188 students in 9th-12th grade. Since our community has few youth, activities at the school are minimal. The Robotocats give students opportunities that would otherwise not be available. We hope our school district will implement more STEM-related curriculum after learning about the educational value of FIRST and how important FRC is, not only to the current team members, but also to other students in our school district.

Ocosta 4-H Wild Robotcats FRC Team 3787

Team 3787 has come together as a well-rounded group that has encountered and solved various obstacles accordingly. This team has overcome challenges such as the small size of our community, the smaller number of students in our school and the lack of available resources. This program has an important role to play in students' lives. With every new dilemma there is a resolution and we strive until we persevere.

The Wild Robotcats has developed a mission statement that has become the heart of the whole team. Team 3787 wants to spread this statement in order to show the importance of the associated programs: "To produce a positive foundation encouraging teamwork, self confidence, and ingenuity through mentorship incorporating Science, Technology, Engineering, and Math (STEM)". We hope by partaking in each of these disciplines we can better ourselves and the lives of those in the world around us.

Our team was founded in the fall of 2010. We started as an extremely small team of about ten members, most of which were junior high school students, which added stress to our few older members. The build was spent working in a small, unheated garage. The computer base was inside a mentor's house a few minutes walk away from the garage. This made communication very difficult and created segregation between the team departments. Despite these challenges, the team overcame and produced what they had set out to accomplish. We earned the Highest Seeded Rookie Award, and earned ninth place at Regional Competition.

For the team's second year, nothing was accomplished until the start of kickoff. The Robotcats worked in a minimally heated, large shop owned by two generous mentors. The team accomplished the building of an offensive robot for Rebound Rumble that was able to shoot basketballs and score points. While the build team was working very hard building the robot, the marketing team presented to local businesses and produced marketing materials such as brochures, a PowerPoint presentation, and a website.

Unfortunately, the team had a catastrophic technical failure. Team 3787 received help from many individuals and teams at competition and members were very grateful for their help.

A concern that has been raised is a lack of people to assist and mentor us with everything we may require. Having mentors that are experienced with CAD, JAVA, and other specialized skills are hard to come by. The team's lead mentor is also the build mentor and both are demanding positions. Last year, the team struggled with having enough build mentors.

By the end of the season, all mentors were completely burned out, preventing robotics from being a year-round activity like it is meant to be. A creditable aspect about the mentors is that being completely volunteer-based, they have chosen to help this team.

Along with the negativities come the positives, because everyone has tighter connections to each other and members of the community.

Team members are often on the same page as to what to do and on how to do it. A tight-knit group results in less stress from having members that don't work together well. This has produced a better atmosphere and faster production because many members have worked together in the past so are already familiar with each other.

With the limited amount of students, due to the lack of people in the community, less can be accomplished without overloading the students and consequently, the team must be very selective in activities that the team can pursue. The students that are a part of the team have to be extremely committed to FRC in order to build and raise funds for the organization.

Students on the team have challenged themselves to work in more than one specific department of the group. Within the short time period of the build season, many students commit over 80 hours to build a functioning robot and continue marketing duties. Along with this, we spend the entire year working and learning all the different aspects of the team.

Locally there are few businesses to ask to sponsor the team. This means we rely heavily on grants and corporate sponsorships, like the NASA Grant, to raise the necessary funds. In the past, the team has hosted garage sales, business takeovers, and community dances.

Team 3787, along with raising funds, has participated in community outreach events like going to the school Halloween carnival to host a booth and spread community awareness of our program and mission.

Because we live in a small community, the team has a policy of accepting all interested high school students, regardless of which area school they attend or homeschooling status. Team 3787 believes everyone should have the chance to better themselves with opportunities to gain new skills for the future.

The team wishes to integrate the STEM initiative into as many students' lives as possible because in this era, science, technology, engineering, and math have become of utmost importance in the majority of modern careers. STEM is especially an important part of this team because the local school does not focus on the STEM concept.

To gain money for the group, the team has obtained grants, made some community outreaches, and sponsored fundraisers to get the team through the year. We purchased three laptops to aide all sections of the team. The grants we receive have not only been put towards material items, we also paid for competition entry fees. In our small community, it can be hard to meet the requirements of being an FRC team. The community and sponsors, however, are beginning to get more involved and eager to help out.

All year, our team dedicates itself to enlightening the community. After the build and competition season, we begin to work on next season's budget. We focusing on

promoting and expanding the team. During the summer and fall we focus on fundraising, community events and gaining sponsors. We try to do as much fundraising as possible. The community events we attend greatly improve the community's awareness of and appreciation for FIRST, the FRC program, and STEM.

Our team has a special way of combining all of its strengths into positive outcomes to meet our goals. Each year we come up with a new set of challenges to overcome from each focus of the group and this differs each season. Our goals include teaching and learning about STEM, improving our skills in robot construction and design, developing our business and grant writing techniques, and educating the community about robotics, while at the same time getting more schools involved in the program.

Not only does the team have goals for the near future, but also goals extending far into the future of Team 3787.

Many teams go to multiple competitions. Our team would also like to do this, but in order to accomplish this goal, the team must reach other goals first. One of these goals is growing our student base, to become more involved with the community to gain support for our program. By having and encouraging more members, we wish to teach and better their minds so one day they can accomplish something great.

Every year we improve ourselves to overcome the challenges we encountered in past years and competitions. The Ocosta 4H Wild Robotcats has many goals for the future, and we will continue to strive to achieve them. Our team is on the right track for success, and soon we are hoping to have full community and school support.