

Chairman's Award Essay

Team 2883, Fighting Rednecks Engineering and Design, also known as F.R.E.D., is located in a small town on the Canadian border called Warroad, MN. Team 2883 was founded in 2008, and since then, the team has grown drastically. The program has produced multiple robots that compete in highly competitive situations and promote the values of FIRST. The Warroad team became the second team established in Northern Minnesota, and the team has since helped mentor three other teams in the region. Team F.R.E.D. is always ready to lend a hand to other teams and do its best to ensure their success with electrical and design ideas. F.R.E.D. has expanded the community's knowledge of FIRST and tries to promote the positive results of STEM development.

A major contributor to the program is the locally established company, Marvin Windows and Doors. Marvin has not only made donations to the team as whole, but it provides employees who serve as mentors developing engineering methods and providing real world experiences for students. The school-to-work program is an opportunity for local students to work as interns in various departments within Marvin and ranging from public relations to engineering and design. This was all established for students to receive hands-on experience of "real world" jobs before they venture into paying jobs after graduation. Marvin Windows and Doors invests in its company's future and the future of students who become so passionate working with F.I.R.S.T., they return to the community to seek employment with Marvin.

Team 2883 has also grown in the knowledge of robotics and awareness, in general. It has reached out to its community whose support has grown tremendously. When Warroad High School's F.R.E.D. program began, it was virtually unknown; but, the community rallied around the new opportunity and local support for the FRC team was incredible. Students from the Northwest Angle and Canada travel to Warroad to participate in its robotics program. This proves the F.R.E.D. team literally reaches across borders!

Students and mentors have utilized their skills to become positive role models and reach out to others in the community. They have worked with children, adults, and senior citizens. They have sold energy-efficient light bulbs which were sponsored by Google and have created presentations for elementary students and other community members about the benefits of using LED bulbs. Another way they try to give back locally is by periodically going to our Senior Living Center to help teach the residents how to use electronic devices to help them communicate with their families. Another endeavor of the F.R.E.D. team took place this past year. The team established a project entitled Project Go Baby Go. Team 2883 transformed a battery-powered car into one a preschool boy with cerebral palsy could drive on his own. This car enabled him to interact with his classmates. As a result of this project, he was able to be a more independent at home and at school. It also helped to teach him fine motor skills which he will use when he gets older to control a joystick powered wheelchair.

This year was Warroad's debut season with a First Lego League team. Even after starting the season late, the FLL Warbotics team had an impressive start as rookies and won at qualifiers and regionals, and they are now heading to state. The F.R.E.D. team will possibly be mentoring 10 more FLL teams in the upcoming year. With the success of the F.R.E.D. team and the FLL Warbotics team, there has been a large increase in young students interested in S.T.E.M. based programs.

Team F.R.E.D. is active in curriculum development. Currently, the team has helped launch two college in the high school classrooms. Students that take engineering and drafting classes receive college credit from Itasca Community College. These opportunities would not be possible without the collaboration of the colleges and the F.R.E.D. team. Along with this curriculum development, Team F.R.E.D. in partnership with the school, has installed a FabLab in the Warroad High School. This FabLab increases understanding of fabrication and S.T.E.M. in real world situations.

Having a FIRST robotics program has allowed participants to broaden understanding of jobs that are available in the real world. The experience of robotics and the F.I.R.S.T. program has left lasting impacts on not only its participants, but also the community of Warroad.