



Manning Robotics and Parent Mentors at BEST Inc. local competition. Back row from left to right: Mr. Floyd, Mr. Schreiner, Lukas Juska, Cassandra Sterns, Jack Howard, Aidan Floyd, Sean Shi, Ms. Schreine and Ms. Plante. Front row from left to right: Tiana Grosskreuz, Amia Castro, John Schreiner, Nathan Black, Tate Martin, Tony Edwards, Sam Clement, Nick Castro and Diego Plante

Kids SPOTLIGHT

A Tale Of A Robot And The Wooden Warriors

Article and photographs by Tiana Grosskreuz, Applewood resident

On my first day at The Manning School, I was very excited not only for the new classes that I was going to take, but also because I decided to join the Robotics Club. I enjoy the STEM concept (science, technology, engineering and mathematics), and I thought that it was going to be a good fit for me. It turned out to be a blast and a lifelong experience that my teammates and I will never ever forget.

We had to compete in a local competition held by BEST Robotics Inc., the Rocky Mountain Hub. BEST stands for Boosting Engineering, Science and Technology, and it is a nonprofit organization based on volunteers that work diligently on having the competition every year. They provide materials to each club and the members have six weeks to design, build, program, and practice driving a robot in a themed course that the organizers just built for the 2015 competition. This year, BEST chose a mining theme that required repairs and the extraction of valuable miner-

als. Each robotics club became a company that tried to get the contract of running the mine. BEST evaluated the company's prototype robotic system, the project engineering notebook that describes everything the company does to complete the project, the sales presentation (marketing), the company exhibit (booth), as well as the company ethics (spirit and sportsmanship). Our company had 14 members; five were from eighth grade, seven from seventh grade, and two from sixth grade. The sixth-graders were from Maple Grove and Stober Elementary School. We met two times a week after school and on Saturdays.

BEST does allow adult mentors for guidance, but does not allow anyone other than the students to do all the work. We designed a logo and created a name for the company: "Wooden Warriors." To make sure we were working in all the areas of participation, we separated the team into two groups, the robot build design team and the marketing team. However, we all had to be involved in each step and help each other.

Oct. 24, 2015: The big day for our local competition came. During the six weeks, we had bonded so well that we even had nicknames for each member. I could not believe that we were kids that barely knew each other when we started the club. We all felt like one — we felt the team spirit! All our late evenings finishing schoolwork and cold Saturdays were worth it. We were there competing with 27 other schools, mostly high



Manning Robotics at kickoff meeting for BEST Inc. Robotics Competition- Rocky Mountain Hub



The Robot!



Judge evaluation of Manning Robotics' booth



Manning Robotics and BEST Inc. Council with Regional Awards

schoolers. We were ready to win and ... we did! We scored fourth of the top teams and we qualified for the Regional Championship in Arkansas! We again had six weeks until the next competition, yikes!

While our parents were trying to figure how they were going to financially support us and all the logistics of an unplanned trip to Arkansas, we worked at improving all the weakness the judges found in our review from the local competition. We heard that the teams in Arkansas are seasoned teams with great financial and school support that spend months preparing for the Regionals, and what we heard was true. Each team had at least 30 members with an almost equal amount of boys and girls. Our team was reduced to nine members, but that did not stop us from working until the end.

The BEST Inc. Regional Championship was on Dec. 5-6. We again felt like one, but this time, one that included the other three Colorado teams at the competition. We were there to represent our state and we felt very proud to make it so far. We won the BEST Robust Robot Award, which meant that our robot was the sturdiest of all the 32 robots, and we won second



The Marketing Team at the BEST Inc. Arkansas Regional Championship (Jack, John, the Robot aka: Brian Jr., Tiana and Cassie)

place on the BEST T-shirt logo design. We could not make it without our parents, school, community sponsors, and BEST support. Thanks to all! The Colorado teams that went to the Arkansas Regional Championship were: The Manning School, Saint Mary's Academy, Denver School of Technology at Byers (DSST Byers), and Ralston Valley High School.

We are already brainstorming for the 2016 competition! Our goal is to engage more students from Manning and from the neighborhood schools. We hope by doing this, we can increase the participation of girls, inspire students to explore STEM careers, and most of all, to have fun while learning concepts that can be applied to any career you decide to choose. Please contact me if you are interested on sponsoring, mentoring or joining this unique club.

If you know a child who is involved in extracurricular projects, theater, or sports and would like to be featured in the Views from Applewood, please contact Kim Naughtin at kim.naughtin@2pub.com