

## Grant Robotics Take on the World



In March, the Grant Middle School robotics teams dominated in the VEX IQ Challenge State Championship at the Marion County Fairgrounds & Veterans Memorial Coliseum, claiming four of the top seven honors. That performance qualified them for a shot at the world championships in Dallas, Texas.

Last week, three teams of 15 students and STEM/Robotics teachers Kristin Tope and Jessica Creamer packed up their robots and headed to the Kay Bailey Hutchison Convention Center in Dallas for the event. Upon arrival the group got to visit the Perot Museum of Nature and Science for a fun adventure before the competition started. Students had a blast at the museum, but were ready for the grind, and a grind it would be. Competing in 40 total competitions over the five day trip, 12 hour days were normal with students and teachers tracking more than 30 miles in steps during the week. Outside of the 791 teams in ten divisions the Grant students were competing against, they also had to overcome the challenge of doing minor rebuilds and adjustments to their bots after removing them from their checked bags on the plane. Remembering their skills and trying to put everything back together wasn't easy working in an environment that they weren't used to, but the teams powered through. They also demonstrated their leadership and flexibility as they joined up with fellow Marion County student Emma Bradac (Pleasant) at the event. Bradac qualified for world's but was a solo member of her team. Since many of the events are team based challenges, 8th grader Leah Price stepped up to help Bradac.





"These kids represented our school and community fantastically," said Jessica Creamer. "They were all very kind and considerate and most importantly had fun. We got to interact with them on a level that we don't get to at school, and so did they with each other. New and closer friendships were formed on this trip."

Team Members Reagan Tway, Jakob Adams, Macey Harper, and Lucy Johnston, better known as Team 2281X, won the Design Award in the Opportunity Division and in doing so brought home Grant's first ever World Trophy. The Design Award demonstrates the ability to implement the most effective and efficient robot design process. It is the top judged award at the Vex World Championships. In order to win the Design Award, the team had to submit their Engineering Notebook and hold a discussion with the judges, needing to hit a number of categories.

- Team's ability to produce a quality robot with minimal adult assistance.
- Engineering Notebook is a clear, complete, and organized document of the robot design process.
- Team demonstrates effective management of skills, time, and material resources.
- Students understand and explain how they developed an effective game strategy and robot design.
- Students demonstrate teamwork and effective communication skills.

To win this award at this incredibly large and difficult competition is no small task, but the road to Team X's victory had one very inconvenient obstacle to overcome. Shortly after the state competition, Team X's winning robot was accidentally disassembled by a substitute teacher. In order to get their bot ready for the world competition, the team had to build it again from scratch using only their Engineering Notebook. This setback ended up being one of the key factors to their ultimate victory proving that their notes and documentation process were completely sound.

"This was a chance of a lifetime for these kids," said Kristin Tope. "The processes are consistent and exhausting at the world competition, but we had the best group of kids that could have gone on this trip. They were reliable, responsible and leaders in Dallas and they did it. They did it, and we are very proud."



After the competition was finished, the students had a formal deconstruction ceremony of their robots so they could make room for the new games they had to bring back to prepare for next year's competitions. Tryouts for the Grant Robotics Program are taking place now and there are roughly 80 students vying for only 40 spots. That internal competition should ensure that we will have another strong team to represent our district next school year.

A trip like this could not be possible without all of the generous donations from our community! A big thank you to the following sponsors:

- Marion County Youth Foundation
- Grant PTO
- Marion Country Club
- Buckeye Furniture
- Kiwanis
- Jeff Johnston
- MEA

- Krista Dendinger
- STAR Turbine
- Beth Pfeifer
- Marion Community Foundation

Congratulations to our entire VEX World Competition finalists and winners:

## 7th Grade

Kiley Workman Timia Jones Braelyn Miller Macey Harper Carter Heilman Lucy Johnston Brayden Crosby Emma Shaffer

## 8th Grade

Gaige Oliver Ethan Baker Kevin Garcia-Jimenez Jakob Adams Reagan Tway Leah Price Lydia Price

