News Tribune

Lake of the Ozarks attracts LEGO robotics qualifier

Mid-Missouri teams use their brain power to compete

Regan Resz of the Lewis and Clark Middle School Brain Power team aligns her robot before it tries its next mission during the Mid-Missouri FIRST LEGO League Regional Qualifier tournament Saturday at Camdenton High School. LCMS Brain Power won the Robot Programming Award. Photo by Samantha Edmondson.

By Samantha Edmondson

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CAMDENTON, Mo. -- When "Nature's Fury" threw a small community into dire straits during a natural disaster Saturday, elementary and middle school students from across Missouri were there to help rescue its inhabitants and restore its infrastructure.

Photo by Samantha Edmondson

Members of one of Eldon Upper Elementary's two FIRST LEGO League teams prepares for the robot competition during Saturday's regional qualifier event in Camdenton.

However, students did not do all the heavy lifting themselves. They built original robots to carry out needed duties, such as helping cargo planes reach safety, rescuing residents and dogs from homes, and clearing debris and pathways.

Hundreds of teachers, peers and members of the community watched and cheered as 24 teams competed in the first-ever Mid-Missouri FIRST LEGO League Robotics Qualifier tournament Saturday at Camdenton High School.

Hosted by the **Camdenton 4-H FIRST LASER 3284 and World Championship Galileo finalist**, the all-day event involved students participating in an intense STEM (science, technology, engineering and mathematics) challenge, "Nature's Fury."

A three-student team of "Jedi Guys" from Troy, who were just wanting to compete in the regional qualifier for fun, walked away with the Robot Performance Award for highest score during the robot competition, and deemed champions of Saturday's event. The Jedi Guys will advance along with two other teams from the regional qualifier to the Missouri State FIRST LEGO League Championships Dec. 8 in St. Louis.

The other teams who will advance to the championships are the **Leaping LEGOS** from the **Waynesville** and **Ft. Leonard Wood area**, who won another Robot Award, and **the Clockworks**, who won the Professionalism Award.

The teams, which were made up of fourth- through eighth-grade students, participated in three different types of competition. Within the arena-style environment in the high school gymnasium, the 24 teams maneuvered their robots through a series of missions in a LEGO community faced with natural disaster during the tabletop competitions. Each team was able to

compete in three timed robot contests, with its best overall score used to help determine the top robot performance.

Even though all the teams followed the FIRST LEGO League guidelines for building their robots, many of the teams designed their robots with original parts to aid in multiple missions during this portion of the competition such as the nine-student **Lewis and Clark Middle School Brain Power team from Jefferson City**, which won the Robot Programming Award.

"For one of our robots, we added a unique arm that will allow us to do different missions," said Regan Resz, LCMS Brain Power team member and seventh-grade student.

Additional robot awards were given to the **Robot Rhinos** for Exceptional Method Design and **LEGO My Chocolates** for Strategy Execution.

The teams also made a judged presentation that provided an innovative solution to help solve a natural disaster problem within their chosen community. Teams could select from a variety of natural disasters including tornadoes, fires, tsunamis, hurricanes, earthquakes and floods.

The **Eldon Middle School Gearheads** team, which was one of three from the school district and its elementary teams starting this year, presented the "Thinkler." This innovative solution to a fire involved a sprinkler assembled along a fence line that could detect a temperature increase to 250 degrees Fahrenheit or above near a residence.

The "Thinkler" would activate a mobile app to alert homeowners and rescue units, as well as begin to extinguish a fire before firefighters arrived. The **EMS Gearheads** won the Project Research Award for the "Thinkler," and **Camdenton FLL team 571** won the Project Innovative Solution Award.

Students also underwent a core evaluation, in which they completed an unknown activity in front of judges. These scores, as well as their project, presentation and robot competition scores, were calculated to help determine top award recipients.

With the inaugural tournament open to the public, the Mid-Missouri FIRST LEGO League Qualifier saw many members of the Lake of the Ozarks area community in attendance to watch the competition, cheer on its participants, and explore STEM technology with special guests such as Kinetic Kathy from the Mad Science after-school program and robotic demonstrations by the **4-H FIRST LASER Camdenton 3284 team**.

For the participants, the event was one of learning, excitement and fun. It was also a time for first-time FIRST LEGO League teams to gain competition experience and build on their growing interest in STEM education and future career pursuits.

The **LCMS Brain Power team** re-formed this year after a 10-year hiatus from the FIRST program. However, it has past success encouraging young students to pursue STEM careers. Kim Hatfield encouraged her son and avid LEGO enthusiast, Riley, to get involved in FIRST LEGO

League at LCMS. Her brother was involved in the program at LCMS 15 years ago and now is an engineer.

"They have done an impressive job and it is amazing the work they have put into it and the knowledge they have gained through each stage of creating their robot," said LCMS teacher Beth Ayers. "Kim's brother was encouraged to become an engineer through this program, and we hope these students will also gain experience and grow their interest in STEM careers through FIRST, as well."

For more information about FIRST, visit www.usfirst.org.

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