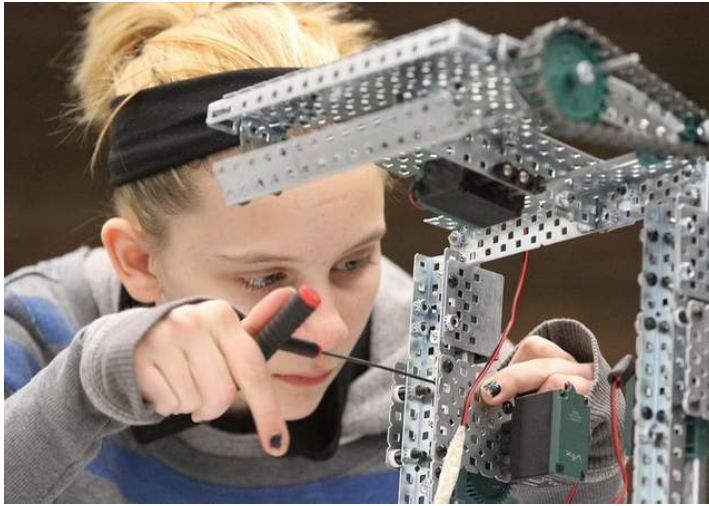


Students take to robot arena

Written by Kurt Moore The Marion Star

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North Union eighth-grader Cassie Strauch makes an adjustment on the scissor lift mechanism on her team's 4810A robot Wednesday. Strauch and teammates Robert Kramer and Chris Winkle competed in the sack attack competition. / James Miller/The Marion Star

Coming Sunday

Area technical instructors launched the RAMTEC Ohio Vex Robotics League this [school](#)

[year](#) to give students experience. They also wanted to help raise money to help teams travel to a world championship to be held in April in California. See Sunday's Star to see how they did and learn about one of the people who originally introduced robotics competitions to Marion County.

MARION — Losing a few nuts and bolts became part of the challenge as middle school students faced off in a robotics competition Wednesday.

Thirty-four middle school teams from North Union, Ridgedale, Elgin, Highland, Grant and Lexington school districts competed in the first RAMTEC Ohio Middle School Qualifier at Tri-Rivers [Career Center](#)

[. It's](#) one of three area VEX robotics competitions scheduled in celebration of National Engineers Week and one of only five middle school VEX qualifiers held in the country.

Educators praised the competition as a way to teach creative problem solving, a skill they say is crucial to entering an increasingly competitive [workforce](#)

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“I think it’s absolutely critical,” Tiffany Krumanaker, an adviser of Ridgedale Local Schools’ Rocket Robotics Club, said. “We are trying to funnel kids into STEM (Science, [Technology](#)


[, Engineering and Math](#)). These are the 21st century skills students need to succeed. It gives them a head start for college, and it’s fun.”

The competitors build their robots using VEX educational robotic kits. They program the robots to compete in sack attack, which pits robots against each other to see which one can pick up the most sacks and place them in a container.

The students must work together with their own teams and with other teams with which they form alliances.

Part of the process is making changes to their robots throughout the school year, including at the competition when something goes wrong. That means using parts they have on hand, which Krumanaker said means telling students at times that they must find other alternatives when a part isn't available.

“They have learned to solve problems on the fly,” she said, comparing it to the challenges faced by engineers and workers in related [careers](#)

 . “In our economy we’ve got to say, ‘We don’t have those parts. You have to do with what you have.’”

Each team went through a six-team qualification match, then selected their three-team alliance for the tournaments held at the end of the day.

The three-team alliance that won the tournament included two teams from North Union Middle School and a team from Ridgedale Junior High School.

An Elgin Junior High School team won the excellence award, a North Union Middle School team won a design award and another North Union team won the judge’s award.

Students could be seen throughout the Tri-Rivers auditorium solving problems on the fly. A Ridgedale Junior High School team made up of eighth-graders Evan Stowe, Corey Vassel and Ivy Clarke tinkered with their robot, making repairs after bolts became loose during one of the rounds.

“It’s hard. You have to make sure it’s all working,” Clarke said, adding that sometimes they make mistakes. “You get stressed out. You know it’s not working right.”

She said she joined the robotics club because she’s “good with robots and stuff” and thought it would be fun.

Kent Kramer, a parent helping with North Union Middle School’s 12 teams, said students also learn their strengths. One team member may be more interested in building while another team member comes up with the concepts and the third handles the programming.

The middle school qualifier is part of the RAMTEC Ohio League launched this school year. Organizer Ritch Ramey said it gives middle school students, including many in clubs just started this school year, a chance to compete against their peers.

Kristi Matlack, an adviser for the North Union teams, said the school has competed for two years in VEX leagues and five years including other robotics competitions.

“In so many other tournaments, they felt a little defeated,” she said. “They knew they had good robots.”

Competition continues Friday with the Society of Manufacturing Engineering Education Foundation’s Marion VEX Robotics Qualifier, which will be from 8 a.m. to 4 p.m. at the Alber Center on The Ohio State University at Marion/Marion Technical Center campus. About 31 teams are expected to compete in the RAMTEC Ohio Vex Robotics League Championship that will start at 10 a.m. Saturday.

Teams from each competition are selected to attend the VEX Robotics World Championships to be held April 18 in Anaheim, Calif.