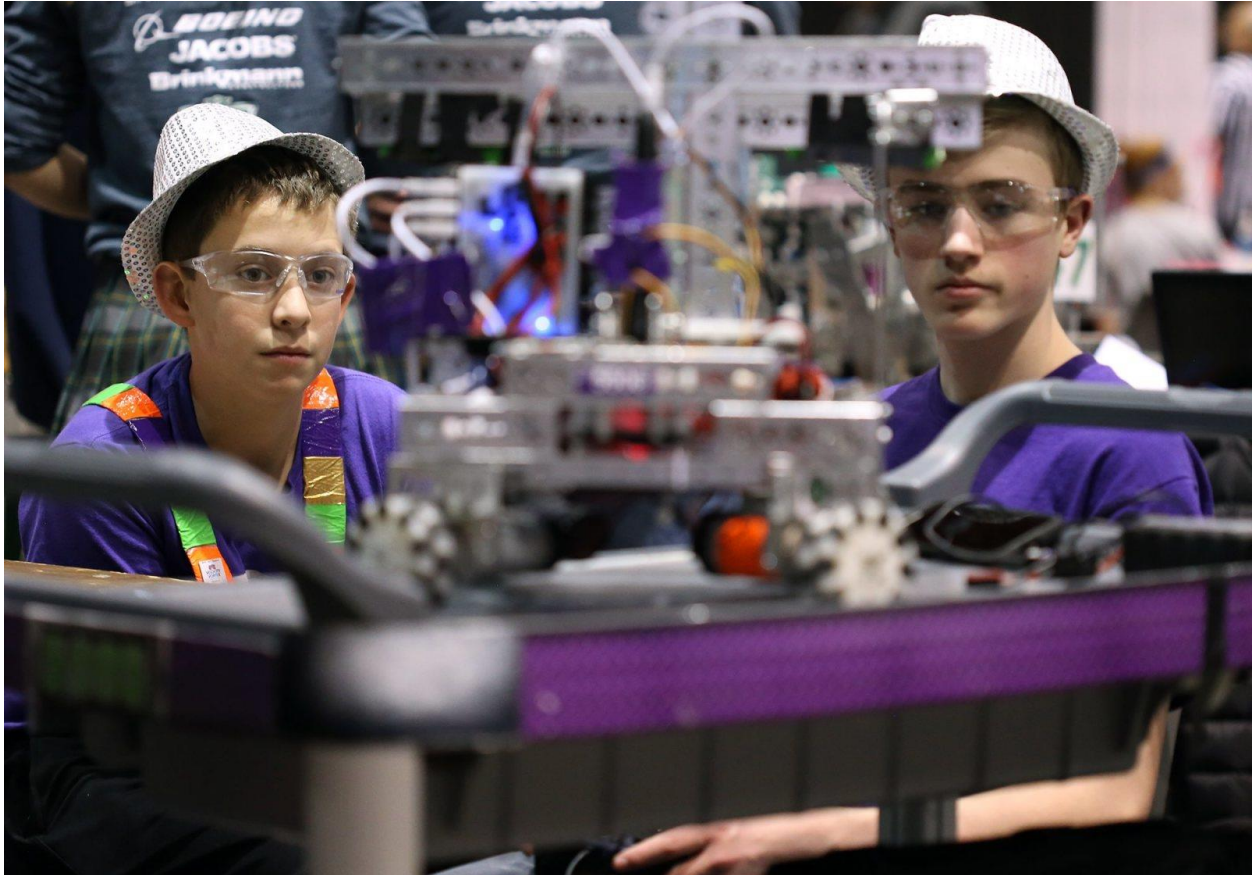


SOUTHEAST MISSOURIAN

Nearly 50 schools test skills in robotics competition in Show Me Center

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By Marybeth Niederkorn ~ Southeast Missourian



Camdenton Middle School students Tristen Steele, left, and Clayton Cowen marvel at their machinery during a robotics competition Sunday at the Show Me Center.

Middle- and high-school students' robots competed head to head in a tournament Sunday afternoon at the Show Me Center.

The eighth annual event hosted by Southeast Missouri State University's Department of Polytechnic Studies saw teams from Cape Girardeau and Jackson, several surrounding towns and even the metro areas of Memphis, Tennessee, and St. Louis.

In all, 48 teams competed in two divisions. Each team assembled a robot from a kit given to them in advance. Teams were judged on performance in a three-minute match in automation, driver control and end game.

Automation required the robots' programming to handle all aspects of game play for 30 seconds. Driver control allowed teams to operate the controls for two minutes, and the end game required the robot to grab, lift and drop a yoga ball into the goal.

"We are constantly surprised with what teams come up with," said Brad Deken, professor of polytechnic studies at Southeast, an event manager and volunteer coordinator for the tournament. "It is amazing the things they can do with zip ties, elastic bands and pieces of metal and plastic."

The most common sight among winning teams is the support network they develop, Deken said.

"They truly understand how to work together. They divide up the work and specialize, but also support one another in what they do," he said.

Frances Wissmiller, administrative assistant to the polytechnic department, volunteered for her second year as a robot inspector. She said it's an interesting challenge.

"It's my job to make sure what's on the robot is legal, won't jeopardize other people's robots or the field they play on," she said.

Recruiters from Missouri University of Science & Technology in Rolla said they appreciated seeing what students are coming up with.

Tim Albers of the Rolla school said whether teams have been at it for years or it's their first event, students are developing crucial life skills.

"A lot of times, a student interested in engineering might be more introverted," he said. "Events like this make them not only work with each other, but each give a presentation on their project. Brings them out of their heads a bit. That's great for professionalism down the road."

Linda Bright of Missouri S&T said she was thrilled to see so many girls on teams.

"It's so important to us to get more females involved in STEM activities," she said, referring to science, technology, engineering and mathematics. "We're seeing several teams that are either all-female or have several on. That's encouraging. We need that."

Bright and Albers agreed the event has grown tremendously in a short time.

“It’s almost doubled just in the four years I’ve been involved,” Albers said. “It’s grown because of how accessible it is, I think. There is some money necessary, but schools can fundraise, get sponsorships. It’s truly a great program.”

Each team has up to eight student members, a coach and often a mentor.

ia Horrell, coach of the Leopold Gearheads, said the team’s dedication and outreach are amazing.

“They’re working on the robot after school, after their other extracurriculars,” she said. “They’re fundraising, they’re helping each other learn aspects they maybe aren’t as familiar with. The community they’re building and the support they’re receiving have been incredible. I’m so proud of them.”

Tony VanGennip is in his first year as mentor for Leopold’s team, and he’s been impressed with the students’ ability to learn from other teams and from their performance at meets.

“They’ll tweak and change almost everything,” he said. “Tear it down to bare parts and reassemble so it works better. They identify issues and fix them. It’s really something.”

But two students on a team from Ritenour High School in St. Louis, Robo Hounds, said they’re in it for the excitement and the friendship.

Jeremy Smith started the team after Ritenour didn’t have a robotics team for a few years, he said.

“That first year, there were only two of us,” he said.

But Jennifer Pham joined after a friend of hers was recruited by their engineering teacher. She said the people on her team now are like her family.

“We work together, and we accomplish our goals,” Pham said. “It’s really cool.”

A list of final competition results was not available Sunday night.