

Robotics camp teaches innovation

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AURORA -- The Edgerton Explorit Center's 4-H Gear-Tech-21 robotics camp is going as programmed this week.

"We are learning about robots, GPS and GIS, which is similar to the technology used by county surveyors to integrate all types of information," science educator Mike Randall said. "They get practical hands-on knowledge and will have a lot of fun with it."

The camp is open to kids ages 9 to 14 and is geared toward beginners. The camp has 15 participants, 14 boys and one girl.



6-15-11robotics1_lb Laura Beahm/For The Independent Showing various emotions, Elijah Clarke (left), Josh Bohlke and Ambrose Bykerk react to a video shown by UNL professor Dr. Shane Farritor Tuesday afternoon during a robotics camp at The Edgerton Explorit Center in Aurora. The video showed a robot being used to perform surgery on a pig.

"It's my first robot camp, and it is really fun," 11-year-old Dawson Holsten of Minden said. "We went swimming, and I have met a lot of new people who are my friends now."

As part of the camp, kids stay the night at the Edgerton for five nights. All meals and snacks are provided.

Randall said the kids don't just sit in front of a computer for a week; they also get a chance to watch robot movies, time to run around, go swimming and play in the Explorit Zone.

"We have other opportunities for kids, too," Randall mentioned. "Later, we will be playing robot hide-and-seek using a robot that can see in the dark, which is based off of a real search-and-rescue exercise."

Part of Tuesday's activities included a visit from Shane Farritor, a professor and mechanical engineer at the University of Nebraska-Lincoln.

"I want to encourage kids to get into this area," Farritor said. "I want to tell the kids what engineering is, how it can be a really rewarding profession and what they need to do to prepare themselves for that."

"It's important to have kids start to get their hands on this technology and develop some mastery and build their confidence in it," Randall added. "Most importantly, though, it generates enthusiasm around these different technologies."

Other activities on Tuesday and throughout the week include programming a Lego NXT robot and putting it through various tests and competitions.

"I like the robots because we can program our robot to go exactly one meter and stop and also to go 5 1/4 meters and stop," Holsten said. "I am looking forward to having our robots compete in the obstacle course and do a drag race."

During his presentation, Farritor said it's important for the nation's future that kids focus on being creative and innovative. He also showed examples of how robots make people's lives better through surgery and space exploration.

"I hope they learn computer programming skills, engineering skills, physics, math concepts and applying technology in useful practical ways," Randall said about the outcome of the camp.

"The camp is wonderful," Farritor said. "I think the information was pretty well received. We do exciting stuff at the university, and it is applicable to almost everyone."