

Hands on learning helps keep the Girls Scouts sharp this summer with STEM Camp

by Steven Spencer, Staff Writer
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EDWARDSVILLE - Girl Scouts gathered at Camp Torqua this week for their fifth annual STEM Day Camp.

Throughout the week, the girls had the opportunity to learn about science, technology, engineering and math with hands on examples.

"We have about 56 girls registered from all over our council," Program Manager Emily Stanley said. "Every year we have a slightly different theme. This year it's 'to infinity and beyond,' and the girls are doing mainly aerospace and astronomy based activities. All of our activities are hands on because we feel like the girls learn better when they do hands on activities."

Over the week the girls have been given the chance to make constellation boxes, sundials, learn moon phases, fly drones and take hovercraft rides.

"We did a lot of rocket launches," Stanley said. "That's been one of our big themes. So yesterday they designed foam rockets out of pipe insulation and we talked about trajectory. We always concentrate on hands on and we like the wow factor. We know it's

summer time and there's some brain drain going on. So a lot of time we kind of have to trick them a little bit into learning but it works."

The girls didn't let the heat stop them from enjoying themselves and learning.

"Yesterday, we launched water rockets," Catherine Fry of Jerseyville said. "Those were really cool. We made slime yesterday which was really fun. Some slimes didn't work and some did, and we also made bath bombs yesterday. I heard that some of them exploded the day before which was pretty interesting."

A special grant from ConocoPhillips also allowed the girls the opportunity to work with drones. Which they were very excited about.

"The girls will be flying the drones, I think they'll build one on-site. They're going to learn programming and talking about lift, aerodynamics and thrust. The science of drones," Stanley said.

The program was facilitated by LocoRobo Innovations, Inc., which builds affordable, kid-friendly robots and delivers education sessions related to coding and robotics. LocoRobo founder Dr. Pramod Abichandani and summer organizer Lisa Burgess showed girls how drones are constructed and programmed, taught the science of flight and aerodynamics and discussed ways drones are used in business, science and art. Girls were also treated to a sneak preview of a new LocoRobo product headed to market – the Gesturebotics Aura, a drone controlled by hand movements through a specially crafted glove. At the end of the classroom sessions, each girl was able to pilot a drone around camp.

"We're incredibly grateful for Phillips 66 for helping us provide this really unique program," Stanley said. "Girl Scouts has a long history of engaging girls in science, technology, engineering and math – dating back nearly to our founding more than 100 years ago. Now more than ever, providing girls with interesting, challenging and fun activities to keep developing their interest in these fields can help them build bright futures. It's wonderful when community partners such as Phillips 66 can help us offer more of these opportunities."

The girls not only learned relevant and fun STEM skills, but they also discussed how they could continue to pursue STEM fields in their educational and professional futures.

"The Girl Scouts' STEM Camp is a program that encourages girls to be creative, think outside-the-box, and pursue their dreams," said Melissa Erker, Director of Government and Community Affairs for Phillips 66. "This is exactly the type of programming that Phillips 66 seeks to support. Our desire is to see more and more young women pursuing

careers in the fields of science, technology, engineering, and math, and the Girl Scouts STEM Camp does a great job of helping these young girls explore that path. We are proud to support a program that develops the future of our industry.

In observing the girls at camp this week, it is clear that they enjoy grasping complex problems and can demonstrate their full understanding of these topics. It's impressive to see what they have accomplished in a week."

Laney Brandenburd from Neoga said this is her third at the camp and she loves coming. She's most excited about their field trip at the end of the week.

"We're going to Boeing Industries and we're going to talk to some female engineers which I am super excited about," Brandenburd said. "I want to be an engineer when I grow up. I just really like robotics and figuring out how things work."



