For kids, Physics Day a wild ride

Education » Elementary students invited for first time to USU event at Lagoon.

By Lisa Schencker

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Farmington » They might not have been tall enough for all the rides, but they were smart enough for Physics Day.

For the first time Friday, elementary school students were invited to participate in the annual Utah State University (USU) Physics Day at Lagoon, now in its 20th year. More than 6,500 students from across Utah and neighboring states competed in physics and engineering challenges amid -- and often while riding -- the park's attractions.

Middle and high school students dropped eggs -- in specially built containers -- from the park's Sky Ride, 60 feet above the ground. They wore homemade accelerometers to measure G-forces as the park's Colossus roller coaster flipped and thrilled them. They designed rides that would be the envy of amusement parks worldwide.

But in a covered pavilion in the corner of the park, students from several Utah elementary schools showed that teenagers aren't the only ones who understand science. The students raced to see whose robot could move the fastest through a small maze.

Teams spent months meeting after school with Boeing workers to build and program their Lego Mindstorms robots, using computer software, typical Lego parts, ultrasonic sensors and motors.

"We experimented a lot," said Abby Wadley, a fifth-grader at Jennie P. Stewart Elementary School in Centerville. "It was pretty hard but also pretty fun."

Wadley and her partner Emily Moos, 11, cheered as their robot "Carl" followed their programmed instructions to move through the maze. Carl made it through the small maze without flipping over, getting stuck or stalling. When the robot hit walls, it quickly turned itself around.

"You're doing perfect!" Moos cheered as the robot rolled along.

"Keep it up," Wadley urged.

The girls said they never imagined they'd build and program a robot. Now both say they want to be engineers.

Trent Moos, Emily's father and a network engineer, said it's amazing how much his daughter has learned at such a young age.
"When I first heard of it, I thought, 'They're too young. There's no way,' " Trent Moos said. "But she's done great."

Russell Randle, who works for Boeing and led the Jennie P. Stewart School teams for the past several months, said children should be challenged when it comes to technology.

"It's a testament to me that our kids these days are way under-utilizing their capabilities," Randle said. "We think they're being utilized in front of computer games, but this is where they shine."

J.R. Dennison, a USU physics professor and organizer of Physics Day, said he expects even more elementary students next year. He said when Physics Day first began, it was only for high school students. Then middle school students started attending. Now, elementary school students are squeezing their way in.

"I guess it goes to show you, when you want to get a anything done with a computer, you ask the youngest guy in the room," Dennison said.