

Young Scientists Enjoy USU Physics Day at Lagoon | CEHS

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In what's become a spring rite of passage for hosts of Intermountain teens, some 7,000 budding scientists recently descended on Davis County's Lagoon amusement park for Utah State University's Physics Day. The day-long extravaganza featured hands-on learning, academic competition and fun.

Elementary, middle and high school science students from Utah and surrounding states transformed this popular amusement park into a giant laboratory to explore such basic physics concepts as gravity, projectile motion and centrifugal force.

The annual event is supported by USUs Emma Eccles Jones College of Education and Human Services (CEHS) and multiple other sponsors. Dr. Colby Tofel-Grehl and Dr. Kristin Searle of CEHS worked on a project for Physics Day with Syracuse High School physics teacher Doug Ball.

Ball taught his students about acceleration, gravity, G-forces and coding by having them design wearable G-force meters as part of USU's Project Stitch, a learning resource devised by Dr. Tofel-Grehl and funded by a federal grant. Students build the accelerometers to measure G-forces on the Colossus, the Cannibal, and other roller coasters at Lagoon.

"Physics Day motivates students' interest in science and relates abstract concepts to familiar examples in a fun way," said J.R. Dennison, USU physics professor and a founding organizer of the event. "What better laboratory to entice young people than an amusement park?"

The day's activities included other experiments performed directly on the park's rides, such as the creation of protective containers meant to keep eggs intact as they're thrown from Lagoon's Skyride.

While the day includes a boatload of conventional amusement park fun, Dennison said it's gratifying to hear youngsters' lively discussions about free fall, drag forces, energy conservation and impulse. "Who says physics has to be dull?" he said.