

## FAIR LIGHTS UP SCIENCE CAREERS Technology can be a lot of fun, too

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SPECIAL TO THE TIMES

WEST WINDSOR — Jerry Williams' pedaling literally lit up Family Science Day yesterday at Grover Middle School.

Williams, a fifth-grader at Village Elementary School, turned the pedals on an exercise bike like a champ, but since this particular bicycle was connected to a generator and a string of light bulbs, not only did he get exercise, he made light.

"I thought it was awesome, and it was really a fun way to do an experiment," Williams said.

That was exactly the reaction the Science Day sponsors wanted.

The West Windsor-Plainsboro Education Foundation sponsored the visit by educators from Liberty Science Center, which has joined forces with Educational Testing Service to create educational programs promoting careers in tech

nology, engineering and mathematics in a program known as STEM, said Ernest Price of ETS. The company has issued a report called "America's Perfect Storm" on the need for the U.S. to educate and nurture more scientists.

Price and Jeff Osowski, vice president for learning and teaching at Liberty Science Center, said the science fairs are designed to generate interest in scientific careers. They were held first in economically disadvantaged school districts to broaden students' career awareness.

Marcia Fleres, executive director of the foundation, said West Windsor-Plainsboro wanted the program precisely because it is a science-oriented district where many parents have careers in science.

The event, which drew an estimated 300 children in grades 6 through 8, plus about 300 parents, had financial support from Bristol-Meyers Squibb, ETS and the Intergra Foundation.

The Siemens Foundation, Princeton University and Robotics First sent presenters to run the kid-friendly, highly visual, hands-on demonstrations.

Robert Bartolini, president of the WW-P Foundation, said he developed some of the technologies people use every day in music and video discs while working at Sarnoff Corp.

"Every time we reach into our pockets, we are pulling out one piece of technology or another, whether it's a cell phone or a Blackberry," he said. "Even if you're not going into science, you'd better be aware of it because whatever business you are in will be touched by science."

The loudest collective "oh" of the day came when Hal Clark, director of science educators for Liberty Science Center, turned liquefied tin into tin foil, causing a shiny ribbon to suddenly spill from a stainless steel drum off the stage and onto the floor.

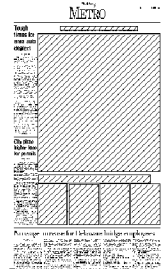
Clark's presentation called "The Right Stuff," focused on how engineers decide what material to use for a product.

"How many of you use tin foil at home?" he asked the audience, causing several hands to go up.

"Tin foil wouldn't be very good to use on your Thanksgiving turkey because it melts at 400 degrees," he said. "People used to use tin foil, but now we use aluminum foil, which melts at 1,300 degrees," he said, giving a very practical example of why materials matter.

Another student, Suntharam Solai of Community Middle School, said he asked his family to bring him because he wanted to see the robotics demonstration.

"I wanted to expand my knowledge of the scientific world," the boy said, winning an approving glance from his father, Sundaram, an environmental engineer.





PHOTOS BY MARY IUVONE/THE TIMES

Top, Richard Register of Princeton University, gives a presentation on polymers during Family Science Day at Grover Middle School in West Windsor. Register had the rapt attention of some of the 300 students in attendance, above left. Above right, Reese Pantil, 9, takes part in a demonstration of angular momentum.