

# UD Mercy Provides Hands-on Learning to Area Students



**METRO DETROIT** students interested in science and engineering got up close to some of Ford Motor Co. and DaimlerChrysler AG's advanced vehicles during the recent Technology Discovery Day hosted by the University of Detroit Mercy.

By Nicole Beattie  
Staff Reporter

Over 700 students from 25 high schools throughout metro Detroit recently attended the 16th annual Technology Discovery Day on University of Detroit Mercy's (UDM) McNichols campus in Detroit.

The students participated in a number of challenging activities and had the opportunity to get closeups of some of DaimlerChrysler AG and Ford Motor Co.'s newest models.

Leo Hanifin, UDM Dean of Engineering and Science, said Technology Discovery Day is an event intended to spark young people's interest in science and engineering.

"It helps prepare students for these subjects at the university level. There's a real need to increase the number of students

in the fields of engineering in this region," Hanifin said.

"In this technology-driven society, a number of Baby Boomers will be retiring and there will be an enormous demand for engineers," he said.

DaimlerChrysler displayed a Dodge Caliber and Chrysler Aspen at the event and Ford brought along its Focus Hydrogen Fuel Cell vehicle, Escape Hybrid and new Edge crossover vehicle.

The automakers were among the event's sponsors along with Pfizer, BASF, Denso Corp., Continental, and Comau Pico.

"(DaimlerChrysler and Ford) both brought some of their more advanced vehicles and engineers were there to discuss the new types of hybrid, hydrogen-powered and fuel cell vehicles," Hanifin said.

"That part of Technology Dis-

covery Day is aimed at giving students a look ahead at emerging technologies, inspiring them to contribute to areas of the environment ..."

Throughout the day, teams of students competed in a number of engaging activities and competitions, designed to get them interested in the fields of science and engineering.

The competitions included everything from the classic Toothpick Bridge to a game of Jeopardy.

"Toothpick Bridge is an old student competition that uses simple glue and toothpicks ... but they have to learn different principles of truss design and structural analysis and that in turn requires the students to learn some different areas of mathematics like trigonometry and geometry in order to design a more effective bridge,"

Hanifin said.

"This all relates directly to becoming a civil engineer."

The game of Jeopardy was moderated by former UDM Professor Kevin Olmstead, who won \$2.18 million on ABC's "Who Wants to Be a Millionaire." Olmstead asked students questions relating to math, physics, chemistry, computers, biology and general science.

The student competitions also included the construction of a catapult and a tower from various materials as well as an activity in which students competed to invent the perfect Rube Goldberg machine.

A Rube Goldberg machine is a complex device that performs a simple task in a very indirect and convoluted way — think of the game MouseTrap.

# ***Tech Day Challenges Students***

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Students were asked to use six steps that could include things like dominos, marbles rolling down tracks and falling weights, to perform the simple task of squeezing toothpaste onto a toothbrush.

Other activities at UDM's Technology Discovery Day included the annual Chemistry Magic Show, sponsored by UDM's Chemistry Club.

"That's usually a very popular event for the students," Hanifin said. "There's all kinds of flames and explosions going on and slime production and colored foam that burns. Basically, all the magic is based on fundamental chemistry."

Paul Lytle, Third Deputy Chief for the Detroit Police Department, was also on hand to discuss what it's like to be a forensic scientist.

Each competition had a first,

second and third place winner and each team member received different levels of gift certificates to be used at the UDM school store. Two students also won iPods in the Technology Discovery Day raffle. Hanifin said UDM's Technology Discovery Day goes far beyond the day of activities and is frequently incorporated into teacher's lesson plans.

"Many teacher's use the competitions as assignments in the classroom so students learn about the different principles of science and math before they come to Technology Discovery Day," he said. "It's critical that we get more students involved to become a part of the engineering work force."

High school teachers in metro Detroit area who are interested in bringing their class to next year's Technology Discovery Day can contact Dan Maggio at (313) 993-1435.