

# Students' inventions not all hot air Dubuque's 4th-graders make puffmobiles at Science in Schools Day

By MADELIN FUERSTE, from the Telegraph Herald



TH Photo by Dave Kettering

Noah Paar (from left), Mitchell Daharsh and Madeline George, all fourth-graders from Bryant Elementary School, race their puffmobiles Tuesday during Science in the Schools Day at the Grand River Center.

If necessity is the mother of invention, then the car of the future could have been designed by one of the area's 900-plus fourth-graders.

Students from both the Dubuque Community and the Holy Family systems joined Dubuque Mayor Roy Buol for Science in the Schools Day.

The event Tuesday at the Grand River Center focused on motivating students in science, math, engineering and creativity.

The seeds for the science day were planted in June when Buol was

approached at the U.S. Conference of Mayors by the DuPont Company. An educational grant helped pay for the event.

The students' assignment involved making a puffmobile - a self-designed, wind-blown car made with a combination of the following:

- \* Three straws
- \* Four Lifesaver candies
- \* Two paper clips
- \* One piece of white paper
- \* Adhesive tape
- \* Scissors

"It's challenging," said Joseph Schwenker, a fourth-grader from Irving Elementary.

He put together his straws, and then made modifications.

"They don't give you many instructions and you can't work as a group. You have to make your own design," he said.

DuPont engineer Shane Campbell caught the science bug when he was just an elementary school student.

His job at a DuPont plant in Wilmington, Del., is to prevent failure: to imagine a breakdown in equipment and to prevent it from happening.

"Using different material to design their vehicle is an issue you'd come across as an engineer," said Campbell. "The idea is that wind is one way to propel a vehicle, but there are others."

Megan Samson, a fourth-grader at St. Anthony's Catholic School, carefully cut and applied paper to her car's body.

"If you have a sail, then it moves faster," said Samson.

Buol, dozens of parents and area volunteers circled the tables helping students and teachers at the event.

"The students look at the end result and formulate in their mind how they want to arrive at it," said Buol. "You'll see some pretty amazing structures."

Teachers were pleased that the event was more than just fun and included a challenge that encompassed science, math and problem-solving skills.

"It's going to be a more thought-based community in the future for them," said Irving teacher Ryan Foley.

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