

# The Telegraph

---

## Science takes center stage at Merrimack High School

Published: Sunday, May. 27, 2007

The Merrimack High School Biodiesel Crew has made progress throughout the year.

The oil collected in town by this group most recently was from Shaw's Supermarket in support of alternative fuels and its local high school.

Also, at a Youth Venture conference on May 10, the Biodiesel Crew made connections with Leominster (Mass.) High School students who make murals and business logos with graphic arts for their group project.

Since it's late in the school year, the final decision of a mural and logo on the bus may not be finalized until the fall. However, the Leominster group has agreed to partner with the Biodiesel Crew to adorn the bus.

The biodiesel bus is beginning to make appearances around town. On Wednesday, the bus was driven to Thorntons Ferry Elementary School, where members of Merrimack High's Advanced Placement chemistry class performed science demonstrations to an enthusiastic fourth-grade class.

Chemistry class members were seniors **Craig Stillman, Dave Zaharee, Theresa Connelly, Desiree Amadeo, Cassie Peterson, Steph Lurette, April Geyer, Izzy Hamnqvist, Suzanne Robarge** and **John McIntyre**.

In the classroom, the children learned about acid and base indicators and the reactions that take place when dry ice and Alka Seltzer tablets are dissolved in water. Then the children were moved outside to perform some louder and somewhat messy experiments.

Some of these experiments included an iodine clock reaction, a chemically derived soda fountain, the formation of a glowing green slime, forming "elephant toothpaste," exploding a watermelon and shooting the top off of a soda bottle.

"We chose experiments that would raise the interests of elementary students but would still be able to teach them a new science concept," Peterson said.

Among these concepts were combustion reactions, polymer chains versus monomers, and acid base reactions.

Sophomore **Erica Lawson** and junior **Maggie McCormick** attended the science day with the seniors to present some information on the biodiesel project. They brought along their biodiesel processor to explain how the same oil used to cook french fries at a fast-food restaurant is also used to run the engine in a vehicle such as the biodiesel bus.

Lawson and McCormick also brought a series of solar cells and measured the voltage using a multimeter, explaining this concept as another means of alternative energy that's cleaner for the environment.

This science day will be included as part of the community outreach and education for Merrimack High's sciences classes and Biodiesel Crew.

Throughout the year, the Biodiesel Crew has been asked to present at Alvirne, Nashua North and South, and Souhegan high schools. The Biodiesel Crew will also be presenting at the Massachusetts Institute of Technology from June 19-23 as recipients of the MIT Lemelson Grant.

"This project is far from over," said the group's adviser, chemistry teacher **Raymond Sleeper**. "With rising publicity, eyes are on us, so the pressure is on to keep this bus rolling."