## Sparking interest in science

Michigan Tech hosts local high school students

By STACEY KUKKONEN, DMG Writer POSTED: February 26, 2010

Stacey Kukkonen/Daily Mining Gazette

Steve Marshall, a student at Horizons School, looks into a mircoscope Thursday at Michigan Technological University while Mike Massicotte, a student from Chassell Schools, looks on. The students were participating in a science event that explored using forests as a viable source for transportation fuels.

HOUGHTON - Students and faculty at Michigan Technological University have focused extensively on the "Future Fuels from Forests" project and are now sharing what they have learned with local high school students.

The five-year project aims to discover different avenues for fuel and share their findings with local high school students Thursday. Students from Chassell and Horizons Schools all participated in the day-long event. The project, which brings together the work of different kinds of scientists as well as economists and social scientists, was possible with the help of the National Science Foundation and also includes an education outreach component.



"High school students are at a point in their life where they are starting to think about careers," said Joan Chadde, education coordinator for the Western Upper Peninsula Center for Science, Mathematics and Environmental Education.

The event is an opportunity for students to see how interdisciplinary research is done as well as discover a variety of careers and making choices about energy.

"This really gives a broader background to help them understand some of the challenges our country faces and the kind of information we need in order to make those decisions," she said.

The day started at the U.J. Noblet Forestry Building, where the students explored the idea of the forest being a viable source of transportation fuels. The students learned about consequences of cutting trees down, life in the forest or biodiversity and processing, where they worked in the Graphic Information Systems lab and then later with a computer simulation model in the R.L. Smith Building, Mechanical Engineering-Engineering Mechanics.

"That was really cool for the students to see how that worked," Chadde said.

Throughout the day, students were reminded of the question at hand - are Upper Peninsula forests are a viable source of transportation fuels?

During the second part of the day trip, the students moved to the Chemical Sciences and Engineering Building where they learned about getting trees from forests to the processing plant and then participated in a lab, "Converting Tree Biomass to Fuel," where they examined woodchips and heard from professionals in the department of chemical engineering.

"This last part, they are getting to see how we change this wood into transportation fuel," Chadde said.

Ashley Blaksley and Angel Youmans and the rest of their class at Horizons School participated in the science event and said they learned a lot of information they didn't know about before.

"We learned a lot about creating biofuels and the positives and negatives of biofuels," Blaksley said. "It was pretty fun."

Angel said the group looked more in-depth at things the students were learning at school in their environmental sciences class.

"There are a lot of different steps to it, more than I would actually begin to think of," Youmans said.

Mary Markham, a teacher from the green science class at Chassell High School, said the students were learning about the future of energy and how the research lays the ground work for people to understand biofuels better.

"They're learning a lot," Markham said. "This is interesting for them."

The morning demonstration was the best part for Olivia Walter, a student at Chassell High School, who said she has always had an interest in science.

"I know a lot more now than I did before," Walter said.

Stacey Kukkonen can be reached at <a href="mailto:skukkonen@mininggazette.com">skukkonen@mininggazette.com</a>.