

Fun learning: PLDL's Family Science Night

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By DAN ROBLEE (droblee@mininggazette.com) The Daily Mining Gazette

HOUGHTON - "Why is it important to cover our hair in a lab?" asked Michigan Technological University student Stephanie Bean, a teacher for the evening at K-5 Family Science and Engineering Night Tuesday at the Portage Lake District Library.

"Germs!" called out a few of the dozen or so third through fifth graders in her audience.

Within a few minutes, the germs didn't have a chance. The kids were outfitted in nearly full lab attire, with gloves, masks, shoe covers and lab caps.



Dan Roblee/Daily Mining Gazette

Clockwise from left, Adeline Goldman, Marielle Raasio, Marguerite Goldman, Madeline Raasio, and Autumn Eles examine and record data from blood samples, actually Jell-O, during Family Science and Engineering Night Tuesday at the Portage Lake District Library.

"Now that we're dressed, we're going to play with blood," Bean said.

The kids used Jell-O, not real blood. They counted marshmallow white blood cells and dug around for fruit and other foreign objects to diagnose illness in their partners' pseudo-samples.

"It was fun. We learned about red and white blood cells," said Marielle Raasio, 11, a Hancock home-schooled student who said Bean's science lesson was a change of pace from her normal schoolwork.

The blood lab was one of four hands-on lessons for students. The third- through fifth-graders also learned about concepts of computer programming, while K-2 students learned about the lives of bees, and engineered clay boats to carry marbles in the "What Floats Your Boat?" session.

The activities were designed and led by Tech undergraduates as part of a Communicating Science class taught by Tech Education Programs Coordinator Joan Chadde. The students run about eight children's programs each semester, Chadde said, primarily at elementary schools in Houghton, Baraga, Gogebic and Ontonagon counties.

Chadde said learning to share their knowledge is a valuable skill for the college students that will help them in the job market. They get to pass along their knowledge and love for science, and they're also great role models for the children.

"They're closer in age to the students," she noted. "They can inspire them to go to college."

The Family Science and Engineering Night was sponsored by the Western U.P. Center for Science, Mathematics and Environmental Education and Michigan Tech, with funding from the Family Engineering Program. Tuesday's event also had help from the Portage Lake District Library Community Programs.

Bean, who plans to eventually go to medical school, said it's important for even young students to learn how to not spread germs, especially with cold season coming up, and it's also nice to see parents and kids learning together.

"We put a lot of time into the hands-on activities," she said. "It's fun to see them having fun with it."

Richard Sarau Sr., helped flatten clay for his daughter Katie, 7, son Richard Jr., 6, and their friend Julia Qi, 5, to mold into boats that could be floated in Tupperware tanks and tested to see how many marbles they'd carry before sinking. Meanwhile, one of the Tech students explained concepts of interior volume and load distribution that might help with designs.

"I love it," Sarau Sr. said of the science night. "I think it's a great ideas to get parents and kids involved. I like that the activities for the kids are hands on."

Katie Sarau was equally enthusiastic.

"It's cool because it's our first time doing it," she said. "We've never made a boat out of clay."

In the next room, the older children were learning the concepts of computer programming by writing instructions for how to make a peanut butter sandwich. It was important to be very specific with their programs, or algorithms they learned. Otherwise the Tech-student instructors, acting as literal-minded computers, wouldn't be able to get the job done.

It didn't take the youngsters long to get the hang of it.

"Then she told me to eat it," beamed Chetan Kumar Chaurasiya. "Awesome! She made the perfect instruction."