

Middle, high school students to look at polar life, human impact on climate at Science Center

By: Ariel Lev

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Students and teachers from middle schools and high schools in Northeast Ohio will gather at the Great Lakes Science Center in Cleveland to participate in science workshops and hear a presentation by university faculty member Jenny Baeseman Friday.

After months of preparation and research, the students will come together in an interactive workshop to share their research, present their findings and learn about issues affecting the world today.

"This is a good opportunity for kids to see how everything in their world interacts," said Mandy Munro-Stasiuk, associate geography professor and member of the team coordinating the Science Center workshop. "Also, they get to do real science with real scientists, which is exciting for them."

With help from a \$1.87 million grant from the National Science Foundation, Kent State has placed 10 graduate students in classrooms around Stark County, Munro-Stasiuk said. The graduate students help teachers teach and students learn about satellite imagery, how to analyze the images, surface temperature issues, comparing scientific data and more.

Teachers in schools around the world are teaching their students about these concepts and how to apply them, she said. Kids use satellite images and temperature data of the earth to compare regions and learn about the effects human activities have on the environment.

Munro-Stasiuk said students from around the world have gathered information through scientific research and put it into a universal database. This universal database lets the students compare their work with the work of students from around the globe. The students can compare the information gathered in their region with data from other regions involved in the project, she said.

Comparing this data allows students to understand how geographic features and human activities affect the climate around the world. The students can use satellite images to compare geographic features and relate them to their research.

All of these issues tie into the International Polar Year project and its goal of promoting global warming awareness. The Science Center workshop allows kids to use the information and knowledge they have gathered to present their findings to real scientists while doing something enjoyable and educational outside of the classroom, Munro-Stasiuk said.

The workshop will also feature three keynote speakers: Baeseman, a biogeochemistry professor; Claire Parkinson, climatologist at NASA's Goddard Space Flight Center; and David Herring, program manager for NASA's Committee for Education & Public Outreach.

"I'm going to talk about climate change, the International Polar Year and being a scientist in Antarctica," Baeseman said. "I'll tell the kids about what it's like to live and work in the Polar Regions and how the Arctic and the Antarctic are different."

During her speech, Baeseman will bring kids on stage to participate in a demonstration. The kids will try on Extreme Cold Weather gear and try to walk in a full set of clothing. The clothes are designed to protect people in extremely cold conditions, and the full set weighs about 70 pounds.

Baeseman will also show kids the importance of blubber to animals in the Polar Regions by using cold water, Ziploc bags and Crisco.

Students have done a lot of research and scientific studies in preparation for this program, and all of that work will not go to waste. The students will host poster presentations at the Science Center where they will explain their research and the conclusions they have reached.

"The students will then be judged by teachers and scientists from around Ohio," Munro-Stasiuk said. "It will be a great experience for them to participate in real science with real scientists. We want the kids to be excited about science and this is a good way to get them interested."

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