

# Nuiqsut marks the spot



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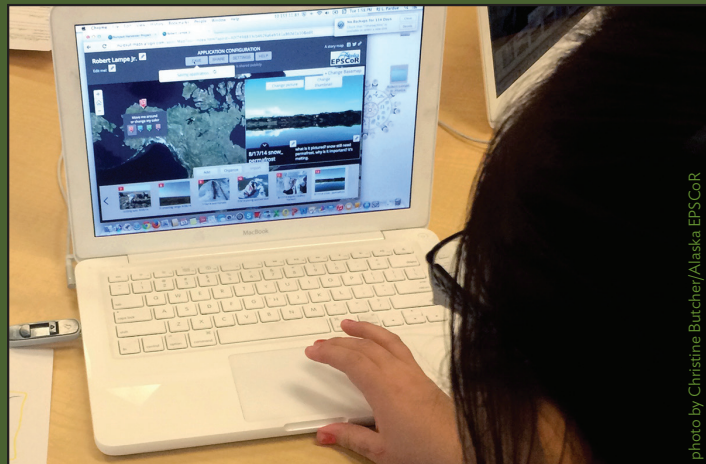


photo by Christine Butcher/Alaska EPSCoR

A Nuiqsut MapTEACH student builds a Story Map in October 2015.

To most of us, Nuiqsut sits on the edge of the map. But an Alaska EPSCoR outreach program is showing Nuiqsut middle school students how to put it square in the center.

EPSCoR Education and Outreach Assistant Christine Butcher has made regular trips to Nuiqsut over the last two years to administer a program called MapTEACH (Mapping Technology Experiences with Alaska's Community Heritage), in which students use Global Positioning System (GPS) devices and maps to better understand their local landscape.

"It helps the kids to understand more about the GPS's that they use when they go hunting," Butcher said. "It helps them to understand more about their community."

During Butcher's visits to Nuiqsut - a mixed-subsistence community near the Arctic Ocean that is the focus of EPSCoR's Northern Test Case - students learn about basic mapping through activities like drawing maps of their route from bed to the school. They learn how to use GPS systems through in-class exercises, geocaching expeditions, and activities like geotagging the village's brightly painted Dumpsters.

"They went from learning how to collect data, to learning how to enter data that they collected, and then progressed

to entering data that others collected."

Most recently, students created interactive online Story Maps out of data collected by local hunters as part of an EPSCoR research project. Hunters had been given camera-enabled GPSes and asked to photograph spots where they saw significant changes (such as slope erosion, wildlife patterns, and seasonal changes), with results used to help guide further EPSCoR research. University of Alaska Fairbanks Assistant Professor of Wildlife Ecology Todd Brinkman, who spearheaded the project, said having the students work with the data is educational and also invests them in the research.

"It provides them with education on what the hunters are doing on the landscape, what they're out taking pictures of and why these images might be important," Brinkman said. "It's a way to get them involved."

Butcher said working with data from the hunters clearly increased the students' level of excitement about the activity, and that the students learned a significant amount about local environmental change through the exercise, as evidenced by pre- and post-activity surveys which showed a greatly heightened awareness of the changes affecting the local landscape.



photo by Christine Butcher/Alaska EPSCoR

MapTEACH students take part in a GPS activity in Nuiqsut in May 2014.