Getting the Word Out

There's one key reason why Alaska EPSCoR devotes so much energy to connecting with the public: The public pays the bills.

"We are accountable for what we are doing using tax money," noted EPSCoR Education Director Elena Sparrow. "We can't isolate ourselves from the general public because we are directly connected through funding."

But that's far from the only motivation behind EPS-CoR's Education, Outreach and Diversity (EOD) component. EPSCoR's activities help to prepare the next generation of scientists, keep Alaska's communities



Kenai Peninsula College Anthropology Professor Alan Boraas leads a field trip as part of the Kenaitze Tribe's 2015 EPSCOR-supported Janteh Science Camp.

aware of and involved in local research, and broaden scientific inquiry by incorporating wider perspectives.

Education EPSCoR's flagship K-12 education effort, Alaska GLOBE (Global Learning and Observations to Benefit the Environment) has been an EPSCoR component since 2001. The program brings K-12 teachers together to learn scientific measurement protocols, which they use to teach students about research by having them observe their local environments.

GLOBE students primarily measure biophysical variables, but the program now also incorporates social science in keeping with the current EPSCoR focus on social-ecological system studies. "The social science measurements are surveys or interviews," explained Sparrow. "For example, they have asked elders questions about what they know in terms of weather and climate and changes they have seen, as well as impacts of these changes on their lives."

EPSCoR's most visible K-12 education tools are its augmented-reality sandboxes, which use overhead pro-

jectors to create interactive topographic maps. While the devices (based on a design from the University of California-Davis) have been very popular outreach tools for over a year and a half, it's only recently that EPSCoR has completed an educational curriculum to go with them.

Outreach EPSCoR publicizes its research through publications, social media, guest speakers, and short videos. Sparrow said EPSCoR outreach to Alaskans is based on a "cultural learning pathway" paradigm, which holds that exposing people to topics of social and environmental change has a snowball effect. "The

more adults learn about and identify with the changes and the issues that we're studying, then the more involved they are and the more they want to learn."

While some outreach is aimed broadly at Alaskans and academics, EPSCoR also focuses on connecting with its specific research areas: the Kenai Peninsula; Juneau; and the North Slope village of Nuiqsut. "Involving your locals in your research and education in your communities is a way to have a more thorough and robust research model, be-

cause as locals they're familiar with what's happening in the region," noted Clucas.

Diversity EPSCoR partners with the Alaska chapter of the Association for Women in Science on several programs. EPSCoR efforts also focus on Alaska Natives, including support for programs like the Alaska Native Science and Engineering Program and Upward Bound.

But "diversity" also means geographic, institutional and disciplinary diversity, which EPSCoR incorporates with its statewide reach and the widely varied fields of its researchers. "In a lot of ways diversity is actually important to having a more rigorous scientific approach," Clucas said. "You don't end up with an echo chamber of people who've all been brought up intellectually and academically in the same way."

