

Service Brings Science to Life at Hardware Ranch | CEHS

02/04/2016



This winter, fifth-graders from Edith Bowen Laboratory School left the classroom, headed for the mountains and took hands-on science to a whole new level.

“When we hopped into the van, I had no idea we would be hauling 3,000 pounds of hay off of a giant sleigh,” said Nathaniel. He joined four of his classmates from Edith Bowen to feed hundreds of waiting, hungry elk.

Eric Newell is Edith Bowen’s place-based learning specialist. He has taken children on a number of learning adventures that don’t look anything like your mother’s field trip. When he took students up to [Hardware Ranch](#), he grilled them on the mathematics of feeding hay to 400 animals, then put them to work baiting an elk trap with armloads of hay. They learned about brucellosis—a disease that causes females to lose their unborn calves. They heard how animals that enter the elk trap are tested for it.

Fortunately, no brucellosis infection has been discovered so far in the Hardware herd.

With the trap ready, the children helped kick, heave and push 3,000 pounds of hay off a flat-bed sleigh to the waiting herd. When it was all distributed, the sleigh stopped moving for a few minutes, and the children sat on the space they had just emptied. They listened to the stillness of a winter day and the sound of elk eating and mewling to each other.

“They were not afraid of us at all,” Julius said. “We got up very slowly so that we did not scare the elk.”

They wrote about their experiences while they were still at the ranch, and they kept at it, delaying their own lunches to make sure they got the details down. After lunch the students put on snowshoes and looked at animal tracks. They played the predator/prey game (similar to tag) to illustrate why it’s not easy to be a lone wolf or an elk with nowhere to hide.

“Students come to life when they’re out in those kinds of places,” Newell said. “Even students that struggle to sit still in the classroom tend to be engaged.”

Newell is working on a PhD in curriculum and instruction from the School of Teacher Education and Leadership within the Emma Eccles Jones College of Education and Human Services. His dissertation will explore and add to the research on place-based learning.

The service learning also helps children to feel like they are a part of something larger than themselves. “Our goal is to create effective citizens who can think critically and solve problems and contribute to society.”

Edith Bowen educators define “place” as wherever the children are—the classroom, the playground or an excursion to the mountains. The important thing is that they apply the concepts they are learning to the world around them.

Newell—and other education leaders at Utah State University—understand that experiential, place-based learning is hard to quantify. “We’ve gotten very good at testing,” said Dr. Courtney Stewart, a researcher in the School of Teacher Education and Leadership. “Outside, it’s harder to control what happens.”

But Edith Bowen leaders say it’s effective to bring real life into the classroom. “When kids know what they’re doing and then they go out in the environment and do it, they can apply it,” said Dan Johnson, Edith Bowen’s principal. “They can reflect on it. They enjoy learning.”

“This has been an experience I will never forget,” Nathaniel said.

The laboratory school is part of the Emma Eccles Jones College of Education and Human Services. Edith Bowen’s visits to Hardware Ranch will continue through February 18.