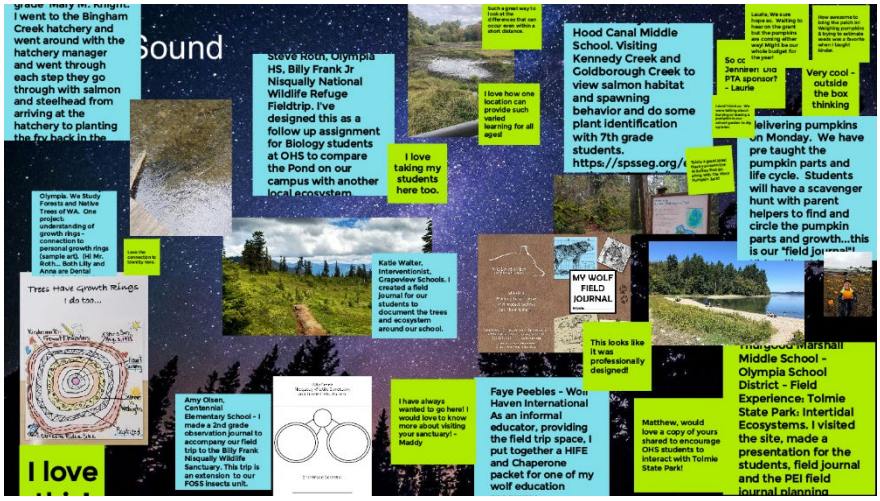
PEI's High Impact Field Experience Workshop

Connects Teachers Statewide through Inspired Collaboration

You know a workshop has been successful when the participants are excited to share what they learned. Karen Lippy, West Sound FieldSTEM Coordinator for Pacific Education Institute led the workshop "Designing High Impact Field Experiences" (HIFEs) and before the workshop ended, teachers began asking her for a way to share projects and ideas, regardless of their region.

"We did some open collaboration using Jamboard, and it opened up what felt like a true collaboration," says Lippy. "People wanted to see what each other were doing and they were excited to share."



Seventy-five teachers from 36 school districts attended the statewide virtual workshop, which was split into two sessions on October 6 and October 20. Each session included two hours of synchronous learning in addition to two asynchronous hours in which they were free to access materials and design projects at a time that worked for them. In the second session, groups attended by region to present their projects and ideas about potential community partners and sites to visit.

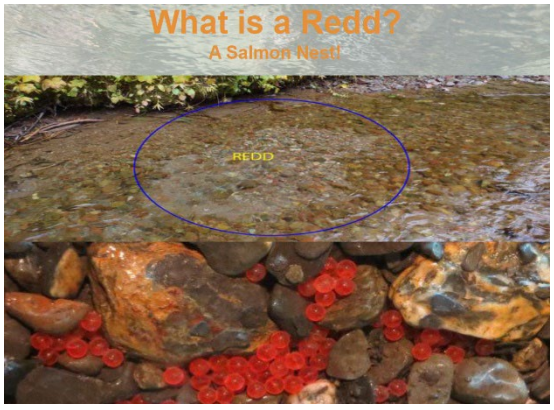
The projects they designed varied widely, incorporating remote regions along the coast and urban areas like Seattle and Spokane, with a target age group of kindergarten through high school. Teachers who attended the workshop received six STEM clock hours and those who submitted plans to implement what they learned with their students earned a stipend.

Already, teachers have been sharing results. "You should see the student work they've been submitting," says Lippy. "Teachers are taking their kids on virtual workshops, doing field

journals and all kinds of outdoor projects. It's magnificent." She has collected their plans and projects into files by name and shared links with other participants.

One second-grade teacher created a Pumpkin Field Experience to explore plant life cycles, using pumpkins the students had planted the year before. Students observed and wrote notes in their journals, then returned to the classroom to dissect the pumpkins, separate and count the seeds and consider why pumpkins have so many. "My class was so eager to be working outside that I had no complaints about the wind blowing their materials around," the teacher says. "Once we returned to the classroom, we had some great discussions about the purpose of pumpkin seeds and the differences between seeds from various pumpkins."

Another teacher had students create research presentations about the spawning behaviors of different salmon species and view a video on the salmon life cycle before participating in a field experience at Kennedy Creek in Kamilche, which was restored seven years ago. At the creek, students split into groups and took on specific roles with the task of looking for spawning behavior such as fighting, digging redds (a shallow hole in the bottom gravel where the female salmon lays her eggs) and dead salmon. "There were tons of salmon coming up the creek and the students were super excited to see them battling their way upstream, cheering them on," says their teacher.



At the upper-grade levels, a high school teacher created five separate field investigations at a local wild space as the culmination of a freshwater watershed unit in a marine science course. Students researched field studies, composed an abstract of their findings, and connected their

work to one of PEI's Career Profile Cards, tools that increase student awareness of family-wage jobs in the environmental, natural resource, outdoor recreation and renewable energy sectors.

Some teachers will be implementing their HIFE plans in the spring. A high school geology teacher developed a virtual field trip to cover the geological history of Washington State which she will introduce to students. Another created a field guide to observe insects in the schoolyard as part of a study of insects and plans to involve the 'Scientist in the Classroom' pilot program, which brings Nisqually Wildlife Refuge personnel into local schools.

"It's inspiring," says Lippy. "It's fascinating to look at the plans that are coming in and see the quality of the work." PEI's regional FieldSTEM coordinators will continue to offer guidance and support statewide for implementation throughout the school year.