

Changing Educational Landscapes

2023-2024 ANNUAL REPORT



THIS TYPE OF COLLABORATION

BRINGS THE JOY BACK INTO

TEACHING AND GIVES EDUCATORS

THE LICENSE TO DREAM BIG ABOUT

WHAT LEARNING LOOKS LIKE FOR

THEIR STUDENTS.

-- ESD Curriculum Coordinator







A MESSAGE FROM OUR LEADERSHIP

"The only constant in life is change" is a quote attributed to Heraclitus and expanded upon by Plato, who said,
". . . and comparing existing things to the flow of a river, he (Heraclitus) says you could not step twice into the
same river." PEI, like the river, is in a constant state of change. Some of that change is apparent to our friends and
supporters as they track our newsletters, website and social media posts. Other changes are less transparent and
yet critical to the evolution of the organization.

The last seven years have seen some profound shifts that have positioned PEI to continue as a leader in community-based, high-quality educational programming that connects people to place through nature.

Among them:

- We have increased staff from 5 to 19.
- Last year we welcomed four Associate Directors to the leadership team. PEI's Associate Directors take on management and supervision of our growing programs and staff.
- In changing organizational structure, we are establishing processes to ensure all staff have the tools and support they need to be successful within the communities where they work. This includes working to ensure that PEI is consistently taking steps toward competitive pay and benefits to attract and retain employees.
- Organizational change also helps prepare PEI for future growth by ensuring that we have the capacity to meet the demand for the work we do.

We have committed to continue our journey toward becoming an organization that embraces and takes action with respect to diversity, equity, inclusion and justice work. This requires setting aside time to do the work, and building individual and organizational practices to "walk the talk." As an organization that works with natural resource content, we know it is imperative that our staff are well-versed in tribal sovereignty and treaty rights. In Washington, our Tribal partners are co-managers of natural resources. We can not do our work to educate about those resources without including Tribal voice and the Office of Native Education's John McCoy "lulias" Since Time Immemorial materials.

And, as you will read in the coming pages, we are helping shift the practices in education to support change in the way young people experience their learning.

With deep gratitude to all our partners in this work,

Kathryn Leslie

KATHRYN KURTZ

LESLIE DRUFFEL
Board President

OUR VALUES

VISION

PEI is a leader in promoting a scientifically literate people, empowered to make balanced, well-informed decisions for sustainable communities.

MISSION

PEI empowers educators to advance equitable scientific literacy by promoting outdoor, locally relevant, integrated, career connected, real-world science.

VALUES

Equity: Culturally relevant FieldSTEM learning

Collaboration, Diversity and Inclusion: Considering all voices when making decisions and designing solutions to strengthen communities

Integrity: Utilizing reliable, trusted, scientific resources

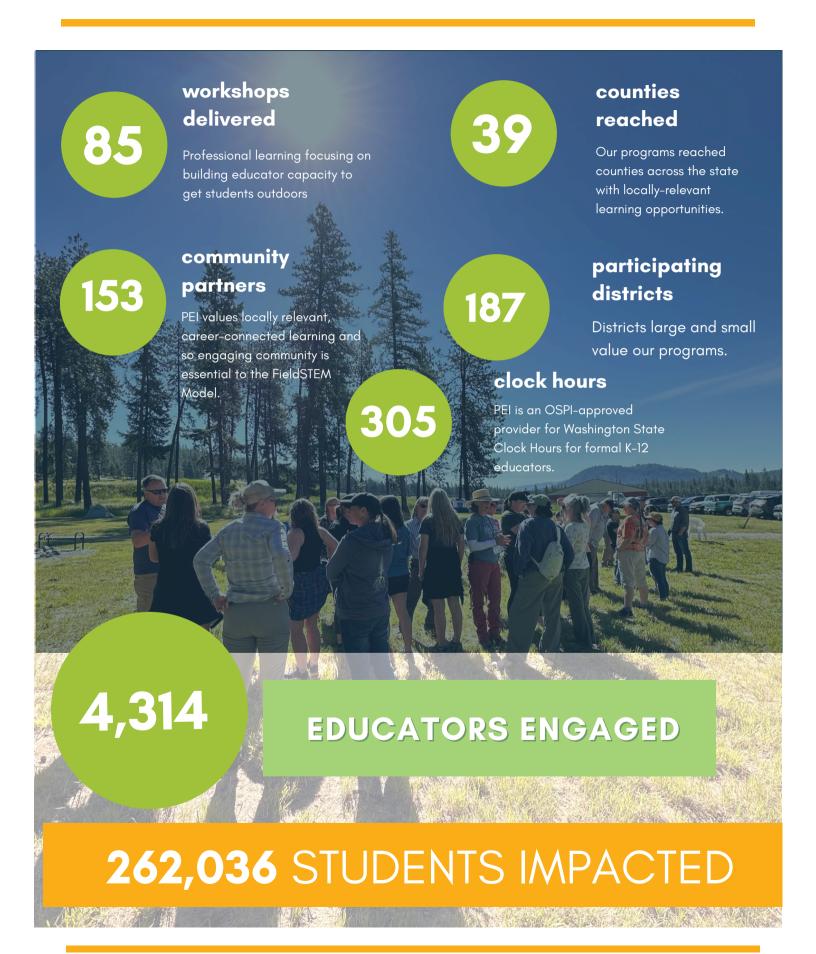
Authenticity: Providing locally relevant economic, social and environmental learning opportunities

Stewardship: Encouraging responsibility for the vitality of environmental, economic and social systems

Creativity: Inspiring innovative, science-based thinking



OUR REACH



CHANGING APPROACHES TO STUDENT BEHAVIOR

A 2023 Ed Week Research Center study found that 70% of educators reported an increase in student misbehavior compared to the fall of 2019. An additional 68% said that student morale was lower than pre-pandemic. More recently a National Research Council survey revealed that over 60% of students are chronically disengaged at school – inattentive, exerting little to no effort, not completing tasks, and claiming to be bored.

Problem, meet solution. In post-implementation surveys, educators described how PEI's FieldSTEM model helps them:

- Build capacity for innovative teaching methods
- Foster outdoor engagement and interdisciplinary learning
- · Take creative approaches to enhancing student engagement and critical thinking



Third-grade teacher Jordan Duncan's class is a case in point. In April we visited Duncan's classroom at Orin C. Smith Elementary School in the Chehalis School District where he was leading not one but two full classes through the kickoff of his wildfire unit, in which students explore why Washington State is having more and larger wildfires.



MOST BEHAVIOR ISSUES HAVE GONE AWAY. WE'RE OUT HERE PERFORMING TANGIBLE TASKS
THAT REQUIRE PARTICIPATION. YOU CAN TAKE THE STUDENTS WITH THE MOST BEHAVIOR
CHALLENGES IN CLASS AND THEY WILL BE THE BEST WORKERS. THEY'RE FULL OF ENERGY,
FULL OF THOUGHTS AND IDEAS. THEY WANT TO ASK QUESTIONS, INVENT THINGS, AND BE
CREATIVE. THIS IS PERFECT FOR THEM.

- Lead Teacher, PEI's Onalaska YESS Program

STUDENT BEHAVIOR, CONTINUED

They listened to a story about a campfire gone wrong, considered what essential factors keep plants healthy, and then headed outdoors to look at diverse types of foliage and imagine whether they would burn in the event of a fire.

Contrary to the widespread belief that taking students outdoors promotes chaos, all fifty students were engrossed and on task during their outdoor learning session. Every time Duncan, PEI's FieldSTEM Teacher of the Year in 2023, asked a question nearly every hand shot up. Engagement could not

have been higher and boredom was nowhere in sight.

A 2024 Youth Engaged in Sustainable Systems (YESS) program had a similar impact. The lead teacher who works with the students throughout the regular school year noted, "Most behavior issues have gone away. We're out here performing tangible tasks that require participation. It provides a richer learning opportunity for all the students. You can take the students with the most behavior challenges in class and they will be the best workers. They're full of energy, full of thoughts and ideas. They want to ask questions, invent things, and be creative. This is perfect for them."

That experience is consistent with findings reported in the journal Front Public Health after a review of 147 studies on nature-specific outdoor learning experiences in K-12 educational settings. "Nature-specific outdoor learning has measurable socio-emotional, academic, and well-being benefits and should be incorporated into every child's school experience with reference to their local context," the authors determined.

Sounds like FieldSTEM just got a ringing endorsement from experts focused on student health and wellbeing.

BEING OUTDOORS HELPS ME
CALM DOWN AND EXPERIENCE
WHAT THE OUTSIDE WORLD IS
LIKE.

- Elementary School Student with A.D.H.D.



Sources:

Huebeck, Elizabeth. "Outdoor Learning: The Ultimate Student Engagement Hack?" Education Week, May 7, 2024

Prothero, Arianna. "Student Behavior Isn't Getting Any Better, Survey Shows." Education Week, April 20, 2023

CHANGING CLASSROOM DESIGN

When parents and educators in Ellensburg wanted to upgrade Ida Nason Aronica Elementary School in 2021, outdoor learning was a priority. They took tours of Seattle schools designed for that purpose and shared their findings with the community.

"We included kids in our planning meetings," says former principal Joanne Duncan. "They drew pictures of what a day at school would look like, and what they drew was outside time."

The results were everything they had imagined. At Ida Nason Aronica's new campus, natural light floods the hallways in a circular building designed to honor the four seasons, and every classroom opens to a central courtyard where each grade level has a garden plot. One of the most unique features is a pocket forest of native plants and trees, designed to mimic forest growth patterns with different canopy levels and plant species.

In 2024, PEI recognized Ida Nason Aronica as our FieldSTEM School of the Year for its consistent and comprehensive efforts to integrate place-based outdoor learning into its curriculum.

While the Ida Nason Aronica campus is unique (their pocket forest is one of the only ones in the United States on school grounds), the school's approach to classroom design is part of a larger trend.



OUR COMMUNITY WANTED TO HAVE A SCHOOL FOCUSED ON OUTDOOR LEARNING. WE INCLUDED KIDS IN THE PLANNING PROCESS AND WHAT THEY WANTED WAS OUTDOOR TIME.

-- Former Principal, Ida Nason **Aronica Elementary School**

The number of nature preschools in the U.S. has grown 300% since 2010 to an estimated 800 in the 2022-23 school year, with Washington leading the way as the first state to license them. K-12 schools and districts nationwide adopted outdoor learning as a safe alternative to indoor instruction during the pandemic; many have continued the practice ever since.

CLASSROOM DESIGN, CONTINUED

A 2021 Harvard Graduate School of Education story encouraged educators to apply the lessons learned during the pandemic. Titled 'Make Outdoor Learning Your Plan A', the article highlighted the benefits of outdoor classrooms and encouraged teachers to start small, even if that looked like taking carpet squares outside for a short time or setting up an open-sided tent as a learning space.

"We know that outdoor learning accelerates learning itself and can help with the unfinished learning that resulted from schools closing," says Craig Strang, Associate Director of Learning and Teaching at the Lawrence Hall of Science, and a partner in the National COVID-19 Outdoor Learning Initiative, "but outdoor learning isn't just a remedy for the pandemic. This is good for kids and human beings at all times."

PEI's regional and state coordinators collaborate with teachers and schools year-round to consider how to use existing outdoor spaces or to apply for outdoor learning grants to develop more sophisticated classrooms outside like the one at Ida Nason Aronica Elementary School. Classroom design is changing, and education is changing with it.

Sources:

Bauld, Andrew. <u>"Make Outdoor Learning Your Plan A"</u> Harvard Graduate School of Education, August 18, 2021



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-- Craig Strang, Lawrence Hall of Science Associate Director of Learning and Teaching

CHANGING APPROACHES TO CULTURALLY RESPONSIVE LEARNING

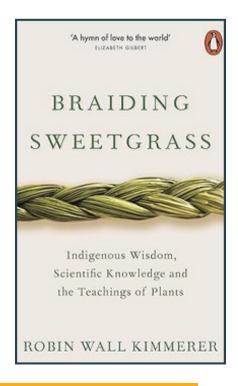
In spring 2024, PEI facilitated an extended workshop for teachers to explore Robin Wall Kimmerer's Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants. Over three months, the group met virtually to discuss their responses to the book's principles and practices and plan how to implement what they were learning with students.

It was one of the best-received workshops of the year, both by participants and PEI's team. The focus on Indigenous perspectives was embedded in the structure of the workshop itself, allowing time for deep and rich reflection. "It felt like we were giving teachers a joyful experience of something many of them have been wanting to do for years- read this book," says Lydia Geschiere, PEI's East Sound FieldSTEM Coordinator.

BENEFITS OF CULTURALLY RESPONSIVE LEARNING

- •Facilitating brain processing. Studies have found that students' reading comprehension and mathematical thinking improve when teachers draw from their cultural knowledge and norms.
- •Motivating and engaging students. Connecting content and ideas to students' lives brings relevance and engagement, resulting in improved attendance and better academic performance.
- •Cultivating critical thinking and problem-solving. Students are better able to analyze, formulate questions, and generate solutions when presented with authentic problems, leading to higher levels of civic engagement.
- *Creating a sense of belonging. Students who participate in culturally responsive learning report feeling both a sense of belonging and a feeling of affirmation for their own and others' cultures. An MIT Teaching + Learning Lab study found that students' sense of belonging improves academic outcomes, increases continuing enrollment, and is protective for mental health.

Culturally responsive education tends to have that effect. A growing body of research demonstrates that connecting students' cultures, languages, and life experiences with what they learn in school reaps dividends, especially for students from traditionally marginalized groups.



CULTURALLY RESPONSIVE LEARNING, CONTINUED

In the 2023/24 fiscal year, PEI delivered dozens of workshops, both regionally and statewide, that incorporate such practices. We also developed four new statewide Career and Technical Education (CTE) frameworks for aquaculture and fisheries and education through outdoor learning with Indigenous perspectives embedded. PEI's Multicultural Engagement Coordinator delivered six dual-language workshops in Spanish and English for K-12 educators working with Spanish-speaking students.



Photo courtesy of Courtney James, Washington State Department of Natural
Resources

Sources:

Muniz, Jenny. <u>"5 Ways Culturally Responsive Teaching Benefits Learners"</u>, New America, September 23, 2019

<u>"Activating Culturally Responsive Teaching in Place-Based Education"</u>, Teton Science Schools, July 15, 2021

Culturally responsive practice will continue to be a foundational aspect of PEI's work with educators in the coming school year.



I AM EXCITED TO TAKE
MY STUDENTS OUTSIDE
TO BUILD KNOWLEDGE
AND VOCABULARY IN
BOTH LANGUAGES. I AM
ALSO EXCITED TO WORK
WITH OUR STEM
TEACHER DIRECTLY TO
EXPOSE THE STUDENTS
TO MORE LEARNING
OPPORTUNITIES.

-- Dual Language Teacher

CHANGING WHERE LEARNING TAKES PLACE: THE ROLE OF COMMUNITY PARTNERS

Tumwater's 2023 summer Youth Engaged in Sustainable Systems (YESS) program experienced an embarrassment of riches: no less than 14 community partners in natural resources and conservation sharing their expertise and mentoring students throughout the six-week program.

While 14 is admittedly overachieving, several other YESS crews had 10, and seven is the average number. Partnership, with all its inherent benefits, is a key to the program's success. Partners share real-world skills and perspectives, bring meaning and purpose to learning, and provide opportunities for meaningful relationships with adults beyond school and family. Additionally, partnerships can lead to internships or even careers as students explore new interests.





GETTING STUDENTS WORKING WITH MENTORS, WORKING WITH THEIR HANDS, WORKING WITH NATURAL RESOURCES, MAKES A PROFOUND DIFFERENCE FOR THEIR INTEREST IN THE TOPIC, THEIR LEARNING AND THEIR ENTHUSIASM. THIS WAS AN OPPORTUNITY TO ENGAGE WITH THESE COMMUNITY MEMBERS, TO SEE THE STUDENTS' EYES LIGHT UP, AND TO SEE MANY OF THEM RELATE TO AND BECOME INSPIRED BY THE PEOPLE THAT THEY WERE WORKING WITH. THAT IS AN EXPERIENCE THAT I HAVEN'T HAD IN EDUCATION BEFORE.

-- Lead Teacher, PEI's Tumwater YESS Program



What works for summer YESS program is also effective for all PEI programming once the school year begins and applies to all grade levels, starting with kindergarten. Each quarter in 2023/24, PEI engaged an average of 73 community partners through statewide programs for a total of approximately 300, connecting them with schools and districts for place-based outdoor learning.

COMMUNITY PARTNERS, CONTINUED

"Community partnerships bring the classroom to life by offering resources that go beyond what a teacher can provide alone," says PEI's Associate Director Megan Rivard. "These connections not only enrich the learning experience but also actively involve students in their education, making it more dynamic and complex. As students engage with the community, they don't just learn – they start seeing themselves as active participants and decision-makers, shaping their identities as both learners and contributors to the world around them."

Research indicates that community partnerships can be especially effective for students who struggle in regular classroom environments. A 2015 study published in Environmental Education Research concluded that unconventional, hands-on teaching which includes interaction with community members 'can be transformative for children who have found it difficult to excel in the typical classroom and textbook-based learning context. The positive outcomes associated with this community involvement included increased knowledge, improved self-confidence, and a newfound interest in citizenship.'





I CAN'T WAIT TO GET MY
STUDENTS OUTSIDE AND
ACCESS OUR LOCAL
FORESTRY RESOURCES.
I AM GENUINELY
EXCITED ABOUT PUTTING
THE INFORMATION AND
CURRICULUM TO USE.
— Teacher in Engaging
Communities in Forest

Education Workshop

PEI's 2024 Teacher of the Year Robin Driver has direct experience with that phenomenon. One of the students in her YESS program was completely disengaged all school year, but it was like a switch flipped when the crew visited a local salmon hatchery. "He could not stop talking about the salmon dissection and the trip to the hatchery," says Driver. "We did a reflection exercise and his hand was going up and up and up."

COMMUNITY PARTNERS, CONTINUED

According to the 2024 Trends in Education report from Hanover Research, community engagement is one of the top trends of 2024. "Many districts are coming to understand that strengthening community engagement not only improves their understanding of the communities they serve, but also positively impacts school climates by fostering decisions that meet the needs of more students, staff, and families," the report states.

As the 2024/25 school year begins, PEI will continue to focus on strong connections between schools, districts, and partners to bring learning to life for all students.



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THE [NATURAL RESOURCES STAFF] IMPACTED

ME IN A TREMENDOUS WAY! THEY HELPED ME

EXPLORE MY FUTURE CAREER PLAN AND

PROVIDED ME WITH LOTS OF INFORMATION ON

THE ECOSYSTEM AND HOW EVERYTHING

WORKS TOGETHER TO MAKE THE WORLD A

BETTER PLACE.

-- YESS program high school student

2024 FIELDSTEM HONOREES



Robin Driver

Teacher of the Year

For the past three years, Driver has been the lead teacher for PEI's Youth Engaged in Sustainable Systems program, a six-week summer course that combines classroom learning with hands-on experience in restoration ecology and forestry management. She also finds opportunities to integrate outdoor learning yearround. "Robin's ongoing commitment to this work is the result of her passion for supporting students who are experiencing barriers and challenges," said PEI's Green Jobs Coordinator Chelsea Trout. "She has tirelessly prepared a robust program that guides youth to learn about career pathways in natural resources while supporting their development and job skills."



Ida Nason Aronica

School of the Year

In just a few short years, the school has created a vegetable garden and a native first-foods garden dedicated to namesake Ida Nason Aronica. Their students have engaged in numerous high-quality field experiences, all while integrating crucial components of the John McCoy (Iulilaš loot-lee-oash) Tribal Sovereignty curriculum across subjects like science, English Language Arts (ELA), and social studies. "Ida Nason Aronica Elementary is a shining example of what FieldSTEM looks like in action," said PEI Associate Director, Columbia Basin & Coast Region Megan Rivard. "They've built a strong, culturally relevant, and sustainable program that inspires their students and engages the larger community. Their dedication to place-based learning, honoring the legacy of Ida Nason Aronica, and providing their students with opportunities to grow into changemakers is truly remarkable."



Tumwater

District of the Year

Tumwater district students have gained firsthand experience of geology, performed water quality testing, studied macroinvertebrates in the field. and explored wild food traditions in their region - all with support from multiple state agencies, the City of Tumwater, local conservation groups, and a regional college. The district also participated in PEI's six-week YESS summer program for the second consecutive year, connecting high school students with professionals in the natural resources and conservation sectors. "This is what happens when an entire district comes together around the design of learning where our world becomes the campus," said PEI's former South Sound FieldSTEM Coordinator Lara Tukarski.

2024 FIELDSTEM HONOREES



Mid-Columbia Fisheries Enhancement Group

Community Collaborator of the Year

MCFEG coordinates efforts to protect and restore wild fish populations and habitats with state and federal agencies, tribes, local conservation organizations, and more. Education is also an essential aspect of their work and they have been a strong partner of PEI's YESS program from the beginning. "Mid-Columbia Fisheries always has a new project on the horizon to inspire the next generation's personal and professional choices that benefit wild salmonid populations, their habitats, and ecosystem function," said PEI's Associate Director of Green Jobs Heather Spalding. "Their work is making an incredible impact on communities in the Columbia River watershed and beyond."



Rep. Kristine Reeves Legislator of the Year

Representative Reeves has been instrumental in increasing the level of funding PEI receives through a legislative proviso initially passed in 2015. She continues to be a staunch advocate for K-12 students and outdoor learning. "Asking for an increase in any budget is not an easy lift," noted PEI Legislative Liaison Nora Palatto-Barnes, "and yet Rep. Reeves has worked as our champion both with the Democratic and Republican members in both the House and Senate to get the increase passed. This funding is critical to both maintain the relationships with our existing FieldSTEM districts and to build relationships with new districts and partners."



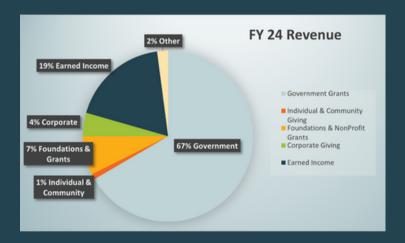
Mark Doumit, WFPA
FieldSTEM Champion

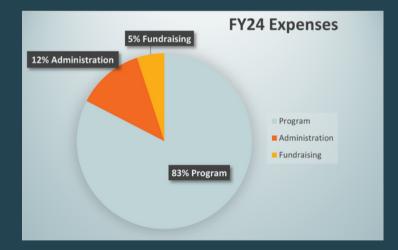
Mark Doumit is best remembered as a tireless champion of Washington forests and the driving force behind the state's landmark Forests & Fish Law that supports salmon habitat and recovery efforts and preserves more than 60,000 miles of streams running through 9.3 million acres of private and public forestland. A former small tree farmer. Doumit served in the Washington State Legislature from 1997 through 2006 before leaving public office to lead the Washington Forest Protection Association (WFPA) as executive director. In that role, he advocated for private forest landowners who manage four million acres of woodlands. Doumit passed away unexpectedly in 2021. "I fondly remember the time I had with Mark," PEI Executive Director Kathryn Kurtz shared. "I benefited greatly by understanding his vision for PEI, especially with respect to legislative work. As a PEI Board member, Mark led the effort to secure the FieldSTEM proviso in 2015 as part of Washington's legislative investment in the work we do."-

OUR FINANCES

REVENUE

Government Grants	1,181,311
Individual & Community Giving	18,306
Foundations & Nonprofit Giving	129,929
Corporate Giving	78,800
Earned Income	327,887
Other	36,808
Total Revenue	1,773,041





EXPENSES

Total Expenses	1,808,886
Fundraising	91,882
General & Administration	223,359
Programs	1,493,645

OUR PEOPLE

Staff

Kathryn Kurtz Executive Director

Gail Kramer Finance & HR Director

Megan Rivard Associate Director Columbia Basin & Coast

Molly Griffiths Associate Director Puget Sound

Heidi Smith Assoc. Director of Communications & Dev.

Heather Spalding Associate Director of Green Jobs

Eli Church Executive Assistant



Amber Yeager Central WA FieldSTEM

Amy Dawley Eastern WA FieldSTEM

Amy Keiper Northwest FieldSTEM

Chelsea Trout Green Jobs Coordinator

Daniel Cuevas East Sound South FieldSTEM

Emily Newman Lower Columbia FieldSTEM

John Hunter Coastal FieldSTEM

Lara Tukarski South South FieldSTEM

Lourdes Flores Multicultural Engagement

Lydia Geschiere East Sound FieldSTEM

Michelle Townshend Project Specialist

Rachel Drummond Program Coordinator

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Hanford McCloud Clare Sobetski
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100,000+

Washington Office of Superintendent of Public Instruction

Washington Employment Security Department

20,000-99,999

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The Russell Family Foundation

10,000-19,999

Gottfried & Mary Fuchs Foundation

ImpactAssets

Key Bank

Taylor Shellfish Farms

The Norcliffe Foundation

Washington Forest Protection Association (WFPA)

Sustainable Forestry Initiative, Inc. (SFI)

Grays Harbor Community Foundation

5,000-9,999

lcicle Fund · Hampton Lumber · Green Diamond Resource Company · Rayonier · Sierra Pacific Industries · Washington Friends of Farms & Forests · Weyerhaeuser Giving Fund

1,000-4,999

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1-999

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AN INVITATION

SUPPORT

If you believe, like we do, that outdoor science education is critical for all students and the future, please consider donating to PEI. When you give to PEI, you directly support educators in building scientifically literate communities.

Consider:

- Making an individual donation
- A recurring donation
- Sponsorship

To learn more, contact devoepacificeducationinstitute.org.

COLLABORATE

Community collaborators are essential to PEI programs. To partner with us on a new initiative or to provide Washington students with integrated, locally relevant, career connected learning, contact info@pacificeducationinstitute.org.

LEARN

Looking for professional learning opportunities? Please visit our event calendar: pacificeducationinstitute.org

