

Expanding Equitable Opportunities Across Washington State

2020-2021 Annual repor



"I used to think science was so difficult to teach and that I simply didn't have the experience base needed to be an effective science instructor. Now that I have gone to several PEI trainings I know that I can use all that I have learned and the amazing resources provided to be an effective science educator and truly engage students in learning opportunities that will enhance their understanding, create meaningful

connections, and hopefully inspire them to advocate for our environment and all living creatures within." – 4th grade teacher



56



A MESSAGE FROM OUR LEADERSHIP

We have much to celebrate at PEI. As we navigate the new reality of virtual learning, the value of our programs and FieldSTEM learning model are more relevant than ever. We are pleased to highlight in the 2020–2021 Annual Report our progress in supporting schools to offer equitable, integrated, career-connected, locally relevant learning. During the 20–21 school year we furthered our mission through key strategic initiatives.

In July 2020, we established a Justice, Equity, Diversity, and Inclusion (JEDI) committee and committed to bi-weekly anti-racist work. We revised our recruitment process to support hiring a diverse team and board. We hired new staff members, which increased our capacity to connect with historically excluded communities and prioritize their needs in our work. We modified our programming to ensure equitable access and focus on environmental justice. There is still much to do to build upon our JEDI work. In the coming year, we will be conducting an equity audit and will provide professional learning to our staff to further our goal to become an anti-racist organization.

We would like to thank our partners across the state who supported efforts to increase the funding available to PEI through the FieldSTEM proviso. The funds we received are essential to the work we do to support school districts' professional learning related to PreK-12 FieldSTEM implementation. This additional funding allows us to expand work with partners at OSPI, in secondary and higher education, and other natural resource partners to provide equitable programming for high school students. This supports students with relevant graduation requirements and college credit, such as gaining work-based learning skills as part of a pathway to careers in agriculture, natural resources, renewable energy, outdoor recreation, and environmental sciences. Individual and foundation support has also been critical in fulfilling this work; the additional "unrestricted" funding we received supported low-income youth who earned stipend income while participating in summer internships. Expect to hear more about Expanding Equitable Green Opportunities for Youth (E2GOY) in the coming year.

We are excited to share all the work we have done this year through this Annual Report. We are committed to continuing to strengthen our FieldSTEM work to ensure each school district in the state has the support to provide equitable, integrated, field-based, career connected learning for all grades PreK-12 that is meaningful and engaging for every student.



Kay Kung

KATHRYN KURTZ Executive Director



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

8

workshops delivered

community

PEI values locally relevant, career-connected learning and

so engaging community is

essentail to the FieldSTEM

partners

Model.

Professional learning focusing on building educator capacity to get students outdoors

≺.

counties reached

Our programs reached counties across the state with locally-relevant learning opportunities.

136 participating districts

Districts large and small value our programs.

storylines translated

The Solutions Oriented Learning Storylines (SOLS) project is designed to strengthen teachers' equitable climate science instruction through locally relevant storylines.



STEM clock hours

PEI is an OSPI-approved provider for Washington State Clock Hours for formal K-12 educators.





HIGHLIGHTS

PEI is dedicated to ensuring equitable access to locally relevant, meaningful education for all students. However, over the last 18 months, as racial injustices and the global pandemic have increased the visibility of the deeply rooted inequities in our sector, it became evident to PEI staff and the Board of Directors that the work we do to increase equity in education, is simply not enough. We must strive to become an anti-racist organization by actively working to dismantle the barriers that have created inequities in the education and environmental sectors. We also need to do more to help bridge the opportunity gap, to ensure that our teaching materials and professional learning experiences are supporting the most underrepresented people in each community.

To that end, PEI established a Justice, Equity, Diversity, and Inclusion (JEDI) Committee in July 2020 which is comprised of PEI leadership, staff, and a Board liaison. The committee meets regularly to stay accountable to embedding JEDI principles throughout PEI's policies and practices, and to synthesize, operationalize, and facilitate the work among staff, board, partners, and professional learning participants. We are in the early stages of engaging in JEDI and anti-racism work, and recognize this is ongoing; the more we learn, the more work there will be to do. We are committed to continuous learning, as individuals and as an organization, to make meaningful change in our communities. This annual report highlights what we have done over this past year to fulfill on this commitment.



The outdoor education is essential. It is very tied to our equity work. - Workshop participant



INCREASING EQUITABLE LEARNING ACCESS

Multilingual Programs

We promoted and carried out several Community Cafés with our Spanish speaking and multilingual community (comunidad hispano hablante) in Olympia and Yakima. Led in partnership with the Community Café Collaborative, these events allow the community to share their knowledge and perspectives about a topic, in our case climate change, as well as discuss individual and community actions towards meaningful and accessible solutions. The process involves teachers, community, and students alike in the knowledge and sharing of solutions to decrease climate change through action.

We also designed and delivered two statewide Solutions Oriented Learning Storylines (SOLS) workshops for dual language teachers. Educators who teach science in Spanish had the unique opportunity to experience the Spanish versions of our ClimeTime SOLS and discuss implementation in the classroom.

Our translated Spanish versions of the materials proved to be an asset, allowing educators of bilingual or dual language classrooms to successfully engage in PEI programs that promote equitable, outdoor, locally, and culturally relevant career-connected science education.

Open Education Resources

Through the ClimeTime proviso, PEI made storylines available through the Open Educational Resources (OER) Commons website. This increases equity by improving the accessibility, quality of learning, and knowledge sharing of local and rigorous climate science teaching materials. Districts and teachers across Washington state use these materials to teach relevant climate solutions which are vertically aligned throughout all grades.





I feel confident that I can implement a field project remotely or in person. It is nice to have experienced what it would feel like from the student end if done remotely.

- Elementary School Teacher





Asynchronous Offerings

Leveraging our ClimeTime work through the Department of Ecology Creative Curriculum award, we offered two asynchronous food waste courses to participants across the state. Presenting the content in a fully asynchronous and self-paced course reduced barriers for participation. The teaching resources are available in Spanish and English to offer more access to teachers and students in bilingual and dual language programs.

ENVIRONMENTAL JUSTICE

Expanding Equitable Green Opportunities for Youth

Expanding Equitable Green Opportunities for Youth (E2GOY) is a paid summer program that equips high school students with knowledge, skills, and inspiration they need to pursue conservation careers while earning a stipend and school credit. Through a combination of classroom- and field-based learning, students gain valuable ecological restoration experience, hone their leadership and communication skills, and make professional connections within the environmental community. The ultimate goal of E2GOY is to increase access for students from traditionally excluded and low-income communities to explore natural resources and conservation careers by adding a critical step on their pathway to careers in these sectors.

In the pilot year, students from Highline School District completed a six-week program and presented their own restoration project proposals to industry partners, district educators, and staff from Pacific Education Institute and Mountains to Sound Greenway Trust. The restoration project proposals targeted sections of a local park and included a site inventory, plans for removing invasive species and planting native species, and budget considerations tied to conservation goals. Students incorporated the knowledge and experience gained from the classroom into field experiences where they learned to remove noxious weeds, safely apply herbicides, conduct stream surveys, maintain trails, and other restoration activities. Students also learned about environmental justice and honed their job search skills through resume sessions and mock interviews.



"I used to think that going outside would be more of a break from the classroom, but now I think that doing an investigation outside is actually an extension of the classroom." -Workshop participant



ENVIRONMENTAL JUSTICE

Solutions Oriented Learning Storylines

Our Solutions Oriented Learning Storylines (SOLS) exemplify our environmental justice focus by providing meaningful solutions which center communities that are most impacted by climate change. We added an Urban Forestry and a Coastal Hazards storyline to our growing collection, which provide students access to real world solutions to climate problems that may impact their communities. SOLS make the learning relevant and allow students to take meaningful action.

Leading with Indigenous Perspectives

Centering Indigenous perspectives within our climate science work acknowledges Indigenous ways of knowing as a complimentary and impactful resource for creating solutions. As people who steward the land, and have since time immemorial, Indigenous experts and scientists bring important perspectives to work that determines high impact climate solutions. Throughout the SOLS there are Indigenous stories, opportunities for teachers and students to learn about the land they occupy, strategies to connect with local Tribes and stewardship practices to mitigate climate change in Washington. Centering Indigenous knowledge also opens the door for teachers to consider how to create culturally responsive classrooms.





Urban Forestry

Students and teachers at On Track Academy (OTA) in Spokane conducted research to address an important environmental justice issue affecting their community. OTA is in northeast Spokane, an area with notably less tree canopy than more affluent areas of the city. Students researched the benefit of tree cover as it relates to ambient temperature, energy costs and property value as well as the compounding financial, physical, and mental health costs to residents in lowincome communities with low to no tree canopy. They worked closely with Spokane's Urban Forester to learn about tree species and how to determine which trees to plant. Based on what they learned, the students began contacting residents of the impacted communities and presented recommendations on where trees could be planted around their neighborhood to provide the greatest benefit. Several students participated in a neighborhood council meeting. Talia Bender, a Junior at OTA, was one of them. "They listened to us and took us seriously," she says. "It's been good to get outside of my comfort zone and benefit our community as well." Northeast Spokane now has 24 newly planted trees and OTA has plans to keep this project going in future years.

2021 FIELDSTEM HONOREES



Katie Standlea

Teacher of the Year

"Katie is a teacher who always wants to learn and shares that excitement with her students! She uses several of our SOLS to support classroom instruction and is active in planning/implementing field experiences. She has attended several storyline workshops including Fire, Forests, Coastal Hazards and Wetlands and was on the writing team for SOLS Urban Forestry Middle School. She is a dynamic educator that is always working towards best practices, connecting students to community, and working sustainability into her classroom teaching."





On Track Academy

School of the Year

"The most significant community project we have engaged in [in Eastern WA] is increasing the tree canopy in NE Spokane. It stands out as project-based learning and [provided a] social science context. Teachers and students looked at equity relative to the tree canopy across Spokane and planting trees as a solutions-based response. Leadership at the school supported this project every step of the way." – Mike Nepean



Thorp

District of the Year

"Thorp has been working on building out their CTE program with a farmto-school model; students are a very big part of the work being done. The benefits from the infrastructure being built for the CTE program are now connecting younger students with outdoor learning. The entire project is massive, and includes a plant nursery, farm-bot, nature trail, pollinator garden, outdoor classroom and so much more. Please check out their website and YouTube channel." – Megan Rivard



Rayonier

Collaborator of the Year

"Mark Smalley, Engineering Manager at Rayonier, contacted PEI because Rayonier was doing a harvest of the property immediately adjacent to Wishkah School District. He persevered through the various challenges of getting the school district onboard, then organized and facilitated nine half-day career explorations for students." – Julie Tennis







Sen. Warnick & Rep. Shewmake Legislators of the Year

"Senator Warnick & Representative Shewmake were PEI's Senate and House champions, respectively, leading efforts to increase the FieldSTEM Proviso during the 2021 legislative session. They negotiated bi-partisan support to increase the funding by \$250,000 a year in the state operating budget. This funding is critical to our work to expand and strengthen students' equitable access to conservation, land management and environmental science career pathways. A strong environmental and sustainability program with sustained funding at OSPI to offer community-based outdoor learning aligned to Washington's natural resource, environmental and agriculture sectors will support equitable access to green careers for students across the state. Rep. Shewmake's and Senator Warnick's leadership is making this happen."

– Kathryn Kurtz

These individuals and organizations exemplify our vision of promoting civic and scientific literacy by empowering people to make balanced, well-informed decisions for just and sustainable communities. It takes all of us to offer the support educators need to effectively implement FieldSTEM.

OUR FINANCES





EXPENSES

Total Expenses	1,208,755
Fundraising	59,364
General & Administration	175,749
Programs	973,641

OUR PEOPLE

Staff

Kathryn Kurtz Denise Buck Gail Kramer Erika Bjorkquist Katie Hatam Heidi Smith

Hattie Osborne

Julie Tennis

Karen Lippy Megan Rivard

Mike Nepean

Molly Griffiths

Tressa Arbow

FieldSTEM Coordinators

Executive Director Program Director Finance & HR Director Associate Director Program Manager Grant Coordinator

South Sound

West Sound

Central WA

Eastern WA

East Sound

East Sound

Coastal

Board

- Lisa Perry Tim Garchow Gareth Waugh Ron Schultz
- Cinnamon Bear Mark Doumit Leslie Druffel Brian Hatfield Dr. Tamara Holmlund John Ison Doug Kennedy Ignacio Marquez Bill Monahan Scott Seaman Bill Taylor Rhonda Weaver
- President Vice President Treasurer Secretary









Faculty

Barbara Hins Turner Lourdes Skydancer Flores Michelle Townshend Nancy Skerritt Pat Otto Randy James







OUR FUNDERS

100,000+

Washington Office of Superintendent of Public Instruction Connell Family Fund

20,000-99,999

Dawkins Charitable Trust Employment Security Department Hancock Natural Resource Group

1**0,000-19,999**

ArtsFund

Community Foundation of South Puget Sound Grays Harbor Community Foundation Sustainable Forestry Initiative Washington Invasive Species Council Washington Department of Natural Resources

5,000-9,999

ESD 105 · Gottfried and Mary Fuchs Foundation · Green Diamond Resource Company · The Greater Tacoma Community Foundation · Port Blakely · Rayonier · Sierra Pacific Industries · Washington State SFI Committee · Weyerhaeuser Giving Fund

1,000-4,999

Bloedel Timberlands Development · Centralia College · ESD 113 · ESD 123 · Florence B. Kilworth Foundation · Grays Harbor Marine Resources Committee · Hancock Forest Management · Jefferson County Public Health · John Warjone · Mid-Columbia Fisheries Enhancement Group · Nisqually Indian Tribe · NWS Surfrider Foundation · Ocosta School District · Our Community Credit Union · Pacific West Timber Company · Port Gamble S'Klallam Tribe · Puyallup School District · Squaxin Island Tribe · Stimson Lumber Co. · Susan Kurtz · The Rayonier Advanced Materials Foundation · Washington Friends of Farms & Forests · Washington State Department Of Ecology · WestRock · YMCA of Greater Seattle

1-999

Aaron & Lauren Rodriguez · Allyson Rogan-Klyve · Anne Egger · Arlene Abbott · Bill Monahan · Brian & Deborah Bahs · Brian Hatfield · Brianna Widner · Brittlind Company, Inc. · Catherine Taylor · Christopher Overland · Cinnamon Bear · Debora Munguia · Dennis Sterner · Doug Hooks · Doug Kennedy · Eric Barkman · Erika Bjorkquist · Gareth Waugh · Hattie Osborne · Ignacio Marquez · Jane Poole · Janet Shiver · Jean MacGregor · Jennifer Dechaine · Jenny Rieke · Jessica Josephs · John Ison · John Maxwell · John Robertson · Joseph Joy · Julie Fry · Karen Lippy · Kathryn Kurtz · Katie Hatam Kevin & Denise Buck · Kristina Ernest · Kylie Phillips · Leslie Druffel · Lisa Ely · Lisa Perry · Margaret Tudor · Mark Doumit · Michael Nelson · Mike Nepean · Mindie Reule · Mira Lutz Castle · Pam Farr · Patricia Pich · Paul & Gail Kramer · Puget Sound Estuarium · Ron & Heather Sisson · Ron Shultz · Suquamish Tribe · Stephanie Stein · Stephen & Debbie Rowe · Steve & Kathryn Hamilton Wang · Susan Young · Tamara Holmlund · TC&I Chinook · The McGregor Company · Tim Garchow · Timothy Englund · Tina Niels · TOGETHER! · William Taylor

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 <u>devo@pacificeducationinstitute.org</u>.

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 <u>info@pacificeducationinstitute.org</u>.

LEARN

Looking for professional learning opportunities? Please visit our event calendar: <u>pacificeducationinstitute.org</u>



