

Pacific Education Institute Real Life. Real Knowledge.



PEI Mission:

Using the environment as a context, the Pacific Education Institute provides schools and teachers with tools and support to help students become socially and scientifically literate citizens, adept at critical thinking and engaged in a lifetime of discovery.

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Pacific Education Institute

Annual Report 2012

A Message from our Board President: Mike Mosman

This past year marked Pacific Education Institute's 10th year and 2012 was an active one for us. When I see state science scores improve by 15 points at two middle schools with the support of PEI Field STEM programs, I'm energized by the work we do of connecting Washington's K-12 students with local environments while engaging them in realworld science. Our alignment with state standards makes our institute an invaluable teaching resource for helping students reach or exceed Washington's learning standards.

I am proud of PEI's accomplishments this year in the Puget Sound Region where we reached teachers in 38 school districts and over 15,000 students. On the Coast, we worked with 13 school districts and 1,000 students and we continued our Columbia River Region work in partnership with the National Park Service coordinated by their The River Mile (TRM) program and 25 school districts.

PEI's programs have been extremely strong over our ten years of existence, and in the past year we have received both local and national support and attention for our natural resource focused frameworks for education in the outdoors. This includes recognition in the Western Governor's Association's Get Out West report, collaboration with the National Environmental Education Foundation and National Geographic, and receiving the 2011 E3 Washington Nonprofit Education Award. PEI furthers the sustainability of responsible natural resources, grows students' environmental maturity through balanced programs delivered outdoors and exposes students to natural resource and agriculture career possibilities.

PEI will continue to provide the high quality programs that we are known for, and ensure that every Washington student is prepared to think critically about how best to sustain our environment and economy for healthy communities. We find that PEI's local, environment-based science is at a high demand for cash-strapped schools. We are proud of serving a diverse public school student population and our core value EQUITY drives this work in reaching all students. Your support makes this work possible. Thank you for a great year!

National and State STEM

Environmental Science Practices Leadership 2012

PEI provides professional development in education about, in and for the environment, agriculture and natural resources by integrating science, social studies and the language arts. Through hands-on experiential community-based programs for students, PEI prepares critical thinkers who are the homeowners, landowners and natural resource managers of tomorrow.

Focusing on the five-year goals set out by our Board of Directors, the Pacific Education Institute took action in 2012 to fulfill its mission:

Provide leadership advocating Washington state's education standards, environmental literacy and stewardship.

Through PEI's leadership, a Work SMART collaborative was formed in 2012 to develop a common sense Work SMART model that integrates and aligns with federal and state initiatives, and implemented by school district leadership. Administrators must attend to key initiatives including Common Core State Standards (CCSS), Next Generation Science Standards (NGSS), Memorandum of Agreement Between the Tribal Leader Congress on Education (HB 2449 Tribal Education), Statewide Strategic Plan for Secondary Career and Technical Education (CTE), Environmental and Sustainability Literacy Plan and A+ Washington. Together with WSSDA and OSPI, PEI convened statewide leaders to develop a template to deliver the Work SMART Model through challenge/project-based learning where students are solving real-world problems. The Work SMART model components are

- a. Culturally relevant, equitable K-12 STEM-education programs, addressing curriculum planning, teacher practice and assessment
- b. K-12 STEM school models with best practices providing entry points to integrate STEM for effective district wide implementation
- c. Guidance for STEM related post-secondary pathways and careers
- d. Work-based learning field experiences through business, industry and community partnerships and support for STEM

Increase effectiveness of education about the environment through statewide dialogue and partnerships.

PEI made significant investments prior to 2012 to build a rigorous Field STEM (Science, Technology, Engineering and Math) program with accessible STEM guides, paired with Project Learning Tree and Project WILD plus access to STEM professionals. PEI is now realizing its STEM potential by serving a significantly increased number of school districts in 2012. The clear relationship between professional development for teachers providing their students with field investigation experiences, and the state science assessment that requires knowledge of these field science methods, has propelled the demand for PEI programs. Spanning two school years, PEI served the following:

Puget Sound: 38 school districts, 632 educators, involving 15,800 students

Olympic Coast: 13 school districts, 40 educators, involving 1000 students

Columbia River Basin in partnership with and coordinated by The River Mile (TRM): 25 school districts, 57 educators, involving 1,425 students

Through communication and outreach, raise public appreciation of the value of learning about the environment.

In 2012 PEI actively promoted the value of the Work SMART Model for school district administrators to implement cost, effective Field STEM as an entry point and essential pathway for multiple STEM careers. In order to make Field STEM more accessible for professional development with partners, PEI also created a series of webinars available online to augment the PEI guides. PEI also created a new video in 2012 - check it out at PEI Youtube: http://www.youtube.com/watch?v=M6V4YDk0SUc

2012 Social Media presence: 2611 views on PEI blogs, 120 Facebook likes, 344 Twitter followers.

2012 National Outreach:

National Conference: PEI presented with the National Environmental Education Foundation their Project Based Learning outdoors in schoolyards using principles of engineering and problem solving at the California located Buck University Project-Based Learning Conference. **Congressional Delegation:** PEI program lead, Pat Otto joined National Project Learning Tree to deliver the message about the importance of natural resource education to the Congressional delegation in Washington DC.

2012 State Outreach:

Educator to Educator (E2E): PEI brought multiple partners together to develop a pilot Storming the Sound Summit connecting teachers with informal educators and community members through joint Field STEM professional development. PEI played a supporting role in ongoing Storming the Sound events on Whidbey Island and Padilla Bay.

Secure funding to create purposeful and collaborative organizational structure.

In June 2012, PEI created a new position and hired a Development Director to help us broaden our funding base to include a range of foundations, corporations and individual support to ensure our sustainability. To support that effort, PEI held a festive "packed to capacity" Sound Celebration event in September at the MaST Center at Redondo Beach. This event showcased our real world learning project approach in the Puget Sound and honored Lynne Ferguson, who retired as Co-Executive Director of PEI.

Grants received in 2012 came from government, corporate, and private foundations, tribes and individuals. Grants included: Puget Sound Partnership, Russell Family Foundation, National Oceanic Atmospheric Administration (NOAA), Weyerhaeuser Giving Fund, SDS Lumber, The Invasive Species Council, Pacific Coast Shellfish Growers Association, Nisqually Indian Tribe, Washington Fund for the Environment, National Environmental Education Foundation (NEEF) and our major in-kind sponsor Washington Forest Protection Association (WFPA).

To demonstrate through formal assessment that integration meets the Washington state education goals for indepth knowledge, critical thinking and life-long learning.

PEI collects multiple metrics to track student achievement and aspirations, teacher confidence plus behavioral and environmental changes. Most notable in 2012 was the science improvement in 2 Federal Way middle schools where PEI programs were implemented. While state science scores had improved for all Federal Way schools that year, Saghali Middle School and Woodmont K-8 school student scores on the state science tests were 15 points above the other schools. Curriculum leaders attributed this significantly higher achievement to the PEI led hands-on outdoor field investigations the students conducted on Redondo Beach.

2012 PEI Revenue and Expenses

Where Our Support Comes From:

Foundation Grants 22% Government Grants 16% Corporate and Individuals 16% Contributions and Services In-kind 42% Earned Income 4%



Where Your Support Goes:

Programs 66% *Fundraising 19% Administration 15% *8% increase due to capacity building work



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"I used to think elaborate plans were necessary [for field investigations]. But now I know simple and local is powerful!"

- King County Elementary teacher

Vice President, Gordon Thomas Honeywell, Governmental Affairs