



TulalipCares.org

## Tulalip Charitable Contributions Funds Distribution Report

**NAME OF AGENCY:** Pacific Education Institute

**DATE OF AWARD:** 2016 Q4

**ADDRESS:** 724 Columbia St. NW., Suite 255, Olympia, WA 98501

**CONTACT:** (360)705-9294, <https://www.pacifieducationinstitute.org>

**GENERAL GOALS:** To advance science literacy and deepen student engagement by empowering educators to teach real-world science outdoors.

### SPECIFIC USE FOR THIS AWARD:

This award went to supporting programs and operational expenses.

For more information please read the attached report from Pacific Education Institute.



Marilyn Sheldon  
Tulalip Tribes Charitable Fund  
8802 27<sup>th</sup> Avenue NE  
Tulalip, WA 98271

Dear Ms. Sheldon and Tribal Members:

Thank you for your continued support of PEI and for your gift of [REDACTED] to provide outdoor, locally-relevant, career-connected science education for Snohomish County K-12 students. In 2017, generous funding from the Tulalip Tribes and many of your peers is allowing us to reach more schools and school districts, to work with partners to deepen impact and to deliver more FieldSTEM workshops and support to our state's educators and administrators so that all Washington students benefit. We believe that the study of environmental sciences, field-based STEM and the important interplay between society and our natural world are critical for students to practice and understand, and that such academic support will enable them to become better stewards of the environment while preparing them for success in STEM-related careers. Improvement in education starts with providing teachers and administrators with the training and support they need. And that is what you are helping us to do! So, thank you very much.

**We're thrilled to report some highlights from our work this past year in Snohomish County and throughout the state:**



Students from Endeavor Elementary School in Issaquah perform water quality tests and record observations of their bioswale (a landscape element designed to concentrate or remove silt and pollution out of surface runoff water).

➤ In 2017, PEI provided training in Marysville for 7 Snohomish County School District educators (and 3 educators from nearby districts) via our 7-hour workshop “Engineering Solutions: Investigating Polluted Stormwater Runoff.” Using our “Engineering Solutions” curriculum, one of our FieldSTEM Coordinators helped educators explore how to use engineering design to solve problems of stormwater pollution runoff in their community — starting with their school campus. The workshop was designed to meet classroom requirements for 6th-12th grade students. During the workshop, participants gained background knowledge about stormwater pollution and how they can help; used models for understanding a watershed; and connected with a local conservation district to learn what resources are available to help them implement related projects in their classrooms. Educators earned 6 Washington State Approved STEM Clock Hours and were provided printed copies of our guides, both free of cost. **This was just 1 of 30 workshops we provided throughout the state in 2017.**

- Leaders in career-connected learning for Washington students, **PEI completed the Workforce Pilot Project (also called Learning Labs) that we initiated in early 2017 in partnership with Washington STEM.** We operate on the deeply-felt principle that high quality K-12 education is a *right* for all students, not a privilege for a few. And we believe that high quality public education propels equality and social justice. An essential part of that is career-connected learning—learning that raises awareness of and expands access to well-paying local STEM jobs for *all Washington students*, regardless of ethnicity, zip code or socioeconomic background. That is why we incorporated it as one of the five pillars of our FieldSTEM learning model. **As part of the Learning Labs project, teachers went on worksite visits to local community employers in Snohomish and Mason Counties so that they can develop career-connected lessons and gain teaching strategies to implement in their classrooms.** In Snohomish County, 3 teachers connected with CTE teachers and went on 8 worksite visits. The Learning Labs continue to inform the importance of teachers participating in worksite visits and implementing what they learn on those visits in their classrooms throughout the year. We continue to look for opportunities to take teachers to worksites and support them in educating their students about well-paying STEM jobs in their communities. **We presented findings from these Learning Labs at the Governor’s Summit On Career-Connected Learning back in May.** Another example of our approach to career-connected learning put into action is our work with the Muckleshoot Tribe, where we are collaborating with educators at their tribal school to develop and imbed forest management curriculum that will help them develop the next generation of tribal forest managers.
- **With education and rural economic development at the forefront this last legislative session, we also introduced a Workforce Study Bill to fund a third-party study into the entry, mid-level and contracts jobs in environmental science, natural resource management, agriculture and outdoor recreation that exist in our state.** We recognized a major deficit in the quality and accessibility of information about these jobs for Washington students. **Now passed as Senate Bill 5285,** we will be working with the Workforce Training Board to accomplish the study in the next year, so that we can confidently support educators in incorporating career-connected learning in these hallmark industries—industries that impact environmental sustainability, and represent a significant segment of workforce availability for Washington graduates, particularly in rural communities.
- **We also developed Implementation Continuums** to help PEI and our partner district leaders more closely assess how a district, its schools and its teachers are progressing in their implementation and utilization of FieldSTEM. This will strengthen our evaluations as well as guide next steps for districts as teachers are trained and supported in implementing FieldSTEM according to their needs.
- **Innovation continues to be at our core:** In 2017, we received funding from Battelle to **create a field-based engineering design framework that will help remove the fear and stigma that teachers feel around the subject so that more children get exposed to engineering design.** They are also funding a **blended-learning model**, which will offer both online and in-person training and support so that FieldSTEM is more accessible to rural teachers. As another example, we have begun working with the Washington Association of Land Trusts (WALT) to develop **a statewide partnership model between land trusts and PEI.** We are developing and piloting the model with Jefferson Land Trust, Capitol Land Trust and WALT. The model will enable more land trusts to contribute real-world, standards-aligned, community-based science learning opportunities to local educators so that students can benefit. We will roll it out to more communities statewide in late 2018-2019.

### Measuring FieldSTEM® Impact:

During the 2016-2017 School Year, PEI hired a consulting firm to conduct a Statewide Impact Assessment for the second consecutive year. **The firm polled approximately 200 educators and administrators who attended PEI workshops and received support from PEI over the assessment period.**

In the process of completing the assessment, we learned that nearly 90% of educators using FieldSTEM believe that it connects students to careers in natural resources and environmental science.



What's more, satisfaction with FieldSTEM workshops and support is very high, with 90% of participants calling the workshops "excellent" and "very good" on a 5-point rating scale. Of over 200 participants, 95% were "likely" or "extremely likely" to recommend our workshops to their peers.

Below are some examples of specific educator feedback:

***"This was one of the best workshops I've ever gone to. The ideas I generated in just one class could hold me over in STEM activities for years to come. The instructors were wonderful, the materials top-notch and loaded with excellent ideas to use right away!"***

***"This workshop was affordable and excellent. Totally worth the long drive from Seattle. The instructors are clearly very knowledgeable and really good teachers. I will definitely attend more."***

***"I used to think STEM all had to take place in the classroom. I now have SO MANY ideas to get my kids into nature to learn science as well as reading, art, and math AND to be excited about it!"***

Thank you for taking the time to review highlights from this year—highlights of programs and initiatives that Tulalip Tribes helped us accomplish! As you can see, wonderful work is happening every day at PEI and out in our communities, with our partners, the districts, educators and our state's students. We will continue to work hard to improve student engagement and empower educators to teach locally-relevant, career-connected STEM in the environment.

We look forward to submitting our 2018 request. Thank you for your ongoing support! If you have any questions about this report, please call 360.705.9292 or email [LRodriguez@pacifieducationinstitute.org](mailto:LRodriguez@pacifieducationinstitute.org).

Kind Regards,



Lauren Rodriguez  
Development Director



Teachers measure the dimensions of a rain garden on the campus of Grays Harbor College, during a "Creating Connections through Performance Tasks" workshops. Over 20 educators from the region developed skills in writing science-based research project for elementary and middle school students. Performance Tasks provide an easier entry to science for primary and secondary teachers who are more comfortable with English Language Arts than science.