Integrate Learning Standards/FieldSTEM

Statutory and/or Budget Language

\$750,000 of the general fund—state appropriation for fiscal year 2024 and \$1,000,000 of the general fund—state appropriation for fiscal year 2025 are provided solely for the office of the superintendent of public instruction to contract with a qualified 501(c)(3) nonprofit community-based organization physically located in Washington state that has at least years of experience collaborating with the office and school districts statewide to integrate the state learning standards in English language arts, mathematics, and science with FieldSTEM outdoor field studies and project-based and work-based learning opportunities aligned with the environmental, natural resource, and agricultural sectors. The office may require the recipient of these funds to report the impacts of the recipient's efforts in alignment with the measures of the Washington school improvement framework.

Purpose

The purpose of this proviso is to use state funds to support a program called FieldSTEM, which helps students learn by connecting subjects like reading, math, and science with outdoor activities and real-world projects. The state is providing \$750,000 in 2024 and \$1,000,000 in 2025 to hire a nonprofit organization with experience working in Washington's schools. This organization will help students learn about the environment, natural resources, and agriculture through hands-on experiences. The nonprofit might need to show how their work helps schools improve.

Description of Services Provided

PEI works with schools and districts across Washington State to make learning more hands-on, place-based, content-integrated, and connected to the natural world. They provide professional learning support and training for many districts and educators receiving funding from the Outdoor Learning Grants Program. Many recipients seek increased professional learning, helping schools bring outdoor, project-based learning into classrooms. PEI partners with 73 school districts, and their Regional FieldSTEM Coordinators play a key role in helping schools design lessons that include learning about the environment, nature, and agriculture. This, in turn, has enabled districts to incorporate locally relevant and environmentally focused learning into their curricula.

PEI works closely with school districts, offering guidance in co-designing curriculum, refining FieldSTEM implementation, and fostering community partnerships to ensure that outdoor education is effectively integrated into existing school programs. This approach extends beyond



traditional support, positioning PEI as a key resource for districts seeking to build robust outdoor learning initiatives.

In the past year, PEI hosted over 1,100 educators in workshops and training sessions, making sure teachers have the tools they need to teach students in fun and engaging ways. Teachers shared that these experiences helped them create better outdoor lessons and get their students excited about learning outside.

PEI is committed to reaching rural, remote, and underserved schools, using data to make sure no school is left out. Their focus on equity and inclusion ensures that every student has the chance to learn through outdoor experiences. By working closely with schools and teachers, PEI is helping students across the state connect what they learn in the classroom with the world around them.

Criteria for Receiving Services and/or Grants

The program prioritizes schools serving Title I or other students historically underserved by science education, including rural, emergent multilingual, students of color, and students with disabilities.

Beneficiaries in the 2023–24 School Year

Number of School Districts73Number of SchoolsN/ANumber of StudentsN/ANumber of Educators1100Community Partners77

Are Federal or Other Funds Contingent on State Funding?

State Funding History

Fiscal Year	Amount Funded	Actual Expenditures
2024	\$750,000	\$748,397
2023	\$750,000	\$750,000
2022	\$750,000	\$750,000
2021	\$500,000	\$492,918
2020	\$500,000	\$500,000

Number of Beneficiaries Per Fiscal Year (e.g. School Districts, Schools, Students, Educators, Other)

Fiscal Year	Number of Districts	Number of Schools	Number of Educators	Number of Students
2024	63	N/A	1,100	N/A
2023	156	426	1,036	73,565
2022	106	289	911	43,352
2021	81	228	900	31,367
2020	74	N/A	290	13,628

Programmatic Changes Since Inception (If Any)

This year, funding increased to expand the program's services across more areas of the state. The additional funds allowed some staff positions to grow from part-time to full-time, which helps the program reach more people and ensures that staff earn a living wage. Cost-of-living adjustments were also made to help staff keep up with rising expenses.

Program Evaluation or Evaluation of Major Findings

Outcomes for Schools and School Districts

- Statewide Impact: PEI worked closely with 73 school districts through Regional FieldSTEM Coordinators for planning and implementing FieldSTEM. District administrators increasingly view PEI as an essential resource for orchestrating successful integrated environmental and sustainability and outdoor learning.
- During the 2023–2024 fiscal year, over 1,100 educators participated in various events, workshops, and training sessions, indicating widespread engagement and interest.
 These supported their development as FieldSTEM educators. "This was a great experience, and my students loved every lesson! We will continue to use the outdoors as much as possible in creating meaningful learning."
- Tailored Support: PEI's efforts include co-designing curriculum with schools and districts, refining FieldSTEM practices, and fostering connections between districts and community partners to create locally relevant learning experiences.
- PEI's commitment to diversity, equity, inclusion, and justice (DEIJ) ensures that support reaches rural, remote, and underserved schools, expanding access to meaningful outdoor education.
- Teacher Leadership: A core aspect of FieldSTEM professional learning is building teacher leadership through workshops like "Building Teacher Confidence", supporting educators to become FieldSTEM leaders in their schools. PEI's FieldSTEM Teacher Leadership Team enables educators to take on larger roles, including facilitating workshops, beta testing new feedback tools, and participating in leadership events that promote FieldSTEM

- education statewide. These opportunities also help teachers fulfill their Teacher/Principal Evaluation Program (TPEP) requirements while advancing their professional practice.
- Teacher Leadership: "There is an important opportunity for FieldSTEM to support educators to see themselves as changemakers who can more broadly contribute to their schools and districts."
- Empowering Student Engagement: "The greatest challenge I have found is finding issues that teens can feel passionate about. [After this training] I've had some good buy-in with this project as it's quickly and easily relatable to their own lives." Civic Engagement participant.
- Feedback from participants consistently highlighted the quality and value of the professional learning experiences provided. One educator said, "The PEI workshops and cohorts have been great for giving me all sorts of resources!" Another stated, "This training allowed me to take a minimal bug scavenger hunt and turn it into a full field-based project. It has given me the knowledge to create my own projects or grow a project from an existing activity or data collection exercise." Field Investigations 102 participant
- PEI has introduced innovative approaches like book clubs and self-paced courses, providing varied avenues for educators to deepen their skills. This flexibility allows educators to integrate FieldSTEM practices in ways that suit their unique classroom needs and teaching styles.
- PEI continues to lead the way in developing Career and Technical Education Resources, including online folders with relevant activities for PEI's Restoration Ecology and Forest Management frameworks and the Education through Outdoor Learning Framework are available. PEI submitted eight (8) courses for statewide equivalencies: Intro and advanced courses for Restoration Ecology, Forest Management, Education for Outdoor Learning, and Aquaculture and Fisheries. One participant said, ""This was the best PD I have experienced in a while! I felt like I actually learned ways to improve my class and got resources to continue improving student experiences..." -CTE Framework Participant
- Dual Language Supports: Participants in the professional learning offerings valued the translated teacher- and student-facing materials, which promote accessibility and inclusivity for bilingual learners, aligning with the program's goal to integrate state learning standards in English language arts and science.

Major Challenges Faced by the Program

Staff turnover continues to consistently challenge program continuity and relationship building. Most staff turnover results from staff leaving for salary increases available in schools, districts, government agencies, or other career fields. Impacts from the pandemic, budget shortfalls in districts, and transportation shortages impact school districts' ability to participate.

Dual Language program outcomes: Although PEI finished all planned deliverables, attendance was lower than expected, indicating a potential gap in connections with dual-language and

bilingual programs in schools. To address this, PEI plans to actively seek feedback from these communities to better understand their needs and how to enhance engagement. Recognizing the importance of family engagement, especially among Latino-heritage populations, PEI is collaborating with partners to strengthen outreach efforts. They understand that connecting community events to schools is essential for the success of their strategic initiatives

Future Opportunities

The FieldSTEM program is ready to grow and expand. It connects schools and communities to teach students about natural resources, the environment, and agriculture. The program does an excellent job of combining science, math, and language arts in its storylines and lessons. Expanding FieldSTEM would provide more tools for teachers to assess student progress and develop storylines that align with Washington's Environmental and Sustainability Education Standards, as well as other subjects like science, math, social studies, and language arts. This ensures that the program stays up to date with changes to Washington's learning standards.

PEI would like to offer more Spanish-language community hikes, along with translated resources and professional learning opportunities tailored to the needs of Spanish-speaking communities. These efforts aim to further enhance support and foster meaningful connections and collaborative learning experiences, aligning with the purpose of the program to provide hands-on learning opportunities related to the environment and natural resources.

By working with the Pacific Education Institute (PEI) and the Office of the Superintendent of Public Instruction (OSPI), schools and districts throughout Washington can create real-world learning opportunities that are based on standards and integrate multiple subjects. These activities can take place in classrooms, on school grounds, during local field trips, and through field-based learning. The FieldSTEM Regional Science Coordinators connect students in grades PK-12 to hands-on science and social studies learning in their own communities. Additionally, the program aims to grow its focus on inclusion, making sure that all students can take part in and benefit from these learning experiences.

Other Relevant Information

There are a host of relevant FieldSTEM resources and access to the FieldSTEM Regional Coordinators on the <u>FieldSTEM page</u> of the Pacific Education Institute's website, and more articles like these:

- Cascade School District. (2023, October 11). Congratulations! cascade school district named Pacific Education Institute FieldSTEM district of the year. Cascade School District NEWS. https://www.cascadesd.org/article/1283804.
- Erickson, K. (2023, November 24). South Whidbey Elementary School wins STEM award. South Whidbey Record. https://www.southwhidbeyrecord.com/news/south-whidbey-elementary-school-wins-stemaward/.

- Osborne, A. (2024, June 3). 'It's an investment in our youth': more than 10,000 trees to be planted in Spokane county over the next five years. The Spokesman-Review. Retrieved from https://www.spokesman.com/stories/2024/jun/03/its-an-investment-in-our-youth-more-than-10000-tre/.
- Psaltis, M. E. (2024, April 16). Genius hour sparks passionate learning at East Olympia Elementary. ThurstonTalk. https://www.thurstontalk.com/2024/04/20/genius-hour-sparks-passionate-learning-at-east-olympia-elementary/.

Schools/Districts Receiving Assistance

Click here to see a list of all OSPI grant recipients in the 2024 Fiscal Year.

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