

CULTURALLY SPECIFIC AND CULTURALLY RESPONSIVE SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (STEM) LEARNING OPPORTUNITIES

\$2.18 million invested



What is this initiative?

The ESSER 'After School STEM' grant has successfully funded 14 different projects, impacting a broad range of **64 school districts**, including educational service districts, the Federal Bureau of Indian Education, and the Confederated Tribes of Grand Ronde. Our initiatives have allowed us to impact the lives of students across Portland Metro, Willamette Valley and North Coast, Southwestern Oregon, Central Oregon, and Eastern Oregon, reflecting a statewide commitment to enhancing STEM education.

Activities

- » Hands-on workshops, mobile maker labs, STE(A)M clubs, aerospace-themed leadership camps, and bilingual STEM lessons engaged diverse learners.
- » Programs incorporated geographical, culinary, and culturally specific elements to connect STEM learning to students' cultural backgrounds.
- » Activities included engineering challenges, coding projects, 3D printing, robotics, environmental science experiments, and real-world problem-solving to foster critical thinking and collaboration.
- » Programs were inclusive, supporting families and siblings, honoring linguistic diversity with multilingual translation/interpretation (e.g., Spanish, Mam, Chamorro, Russian, English), and using culturally sustaining curricula that celebrated community heritage and identities.

Lessons Learned

- » **Family Engagement:** Programs fostering multi-age participation and family involvement were highly successful.
- » **Planning and Growth:** Advanced planning, infrastructure investment, and staff development ensured a positive learning environment.
- » **Clear Communication:** Clarifying goals and engaging families directly boosted enrollment and participation.
- » **Community Partnerships:** Expert-led curricula paired with trained staff increased student engagement and excitement.

Outcomes

Surveys showed increased student engagement, confidence, and interest in STEM. All students valued hands-on learning, peer interaction, and culturally relatable mentors. 100% were satisfied with after-school STEM programs and likely to recommend them.



Contact information

Deborah Bailey Deborah.bailey@ode.oregon.gov

Dominique Austin, East Metro STEM Partnerships, daustin@mesd.k12.or.us



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