

STEM Innovation Grants: Pathways to STE(A)M

Background

The purpose of the STEM Innovation Grant Program is to award grants that expand the implementation of effective programs related to science, technology, engineering and mathematics, that: (1) propose innovative approaches to STEM-based education; or (2) provide professional development relating to science, technology, engineering and mathematics (OAR 581-017-0321). STEM Innovation Grants are also specifically established to help close the achievement gap for students who are historically underserved and/or underrepresented in STEM (OAR 581-017-0327). STEM Innovation Grants are awarded to the 13 Regional STEM Hubs for programming efforts each biennium. For the 23-25 Biennium, projects were submitted via a request for application and all proposed activities aligned to the required grant criteria. This Biennium, STEM Hubs collaborated together to develop their proposed budget allocations and activities and identified four collective areas of alignment across projects, including: Core STEM, Pathways to STEM, Early STEAM, and Community STEM. In addition, STEM Hub Directors and the Oregon Department of Education (ODE) worked together as a network to finalize shared outcome measures for each project.

Pathways to STE(A)M

Purpose: To connect classrooms to the world of work through a continuum of experiences across P-20 that helps learners make informed decisions about their educational and career goals that are culturally-appropriate, place-based, learner-relevant and directly linked to professional and industry-based expectations. Close alignment with ODE's Career Connected Learning (CCL) framework, along with considerations for regionally-specific partners and needs, will inform strategies for the Pathways to STE(A)M project.



HIGH SCHOOL STUDENTS PARTICIPATE IN A CAREER DAY

Alignment with the 2021-25 STEM Education Plan Goals

The Pathways to STE(A)M project is aligned with all four goals of the 2021-25 STEM Education Plan which include:

- Goal 1: Inspire and empower our students to develop the knowledge, skills, and mindsets necessary to thrive in a rapidly changing, technologically rich, global society.
- Goal 2: Ensure equitable opportunities and access for every student to become a part of an inclusive innovation economy.
- Goals 3: Continuously improve the effectiveness, support, and number of formal and informal P-20 STEM educators.
- Goals 4: Develop a sustainable funding and policy environment for STEM and CTE that provides reliable, seamless, and sufficient support across biennia.

These goals emphasize:

- Project-based learning
- High-quality STEM experiences
- STEM Professional Development
- Fund-raising and networking efforts across Career and Technocal Education (CTE) and STEM consortia and industryrepresented groups.

A HIGH SCHOOL SCIENCE TEACHER EXPERIENCES
AN EDUCATOR EXTERNSHIP

Pathways to STE(A)M Activities

Strategies employed across the state to strengthen the work in career-related opportunities include:

- o Student Internships and Educator Externships
- Career Connected Learning for Rural Regions, Math Professional Learning Communities, K-8 grade levels, and within expanded learning settings.
- Aptitude Assessments
- Regional Career Connected Network Development