



Regional Networks for STEM Equity

Participating Hubs

East Metro STEAM Partnership
Portland Metro STEM Partnership
South Metro-Salem STEM Partnership

Goals and Deliverables

The overarching goals of the regional networks are to:

- Solve regional problems within a community of practitioners.
- Enhance leadership & collaboration skills of the participants.
- Contribute knowledge & resources to the STEM Education community.
- Strengthen the effectiveness of our community.

Grant Overview

During the 2019-2021 Biennium, East Metro STEAM Partnership, Portland Metro STEM Partnership, and South Metro-Salem STEM Partnership commenced work to address systemic equity issues in STEM. To address the equity issues, these hubs convened a network of teachers, administrators, nonprofit leaders, and community leaders to provide a broad perspective in addressing big, and often uncomfortable, issues. They did so by using the Action Learning Teams (ALT) methodology to work to solve systemic issues that impact equity in STEM education that exacerbates the disparate impact on marginalized communities.

Over 60 professionals and community members across the three Hub regions participated in the

advisory team and on five Action Learning Teams supported by ALT coaches. Each ALT identified a problem of practice to research to identify root causes, curate resources, identify professional learning needs, and/or produce policy recommendations. Each ALT focused on answering this question: “What actions can we take to address persistent equity issues in STEM education?”

The work of the Regional Networks for STEM Equity for the 2021-2023 biennium was to implement the recommendations, create professional learning opportunities, and/or scale a toolbox of resources for use by all of the STEM Hubs in Oregon. PMSP focused on providing professional development to our educators.

Addressing Equity

BIPOC, immigrant, female, refugee, and low-income communities are the specific focus of the work and are the groups that will benefit from the implementation of the ALT recommendations. Each ALT was asked to center their work on equity. Each team included representation from a BIPOC individual and/or organization that was BIPOC-led and/or that served a BIPOC community.

es Across the Network

Grant Achievements

Bridge Formal and Information Learning Experiences

STEMposium 2023

Description: This event was hosted at Intel's Jones Farm Campus in Hillsboro and brought 89 out-of-school partners, in-school partners, and industry partners together. Throughout the morning they heard from each other and in the afternoon participated in professional development and networked with attendees.

Equity in STEM Education

STEMposium Video Creation and Editing for Educator Resources

Description: Videography was taken throughout the STEMposium Event and was co-hosted with our local partner Intel on their Jones Farm Campus on Sept. 29, 2023. This event had 89 attendees (83 unique participants). The videography and edits included Intel professionals' presentation on STEM careers, overcoming challenges as a non-traditional individual in STEM. It also included organizational partners' presentations on the impact and importance of career mentors, job and career related projects and applied skills, and STEM School Educators presenting multiple ways to implement transformational change in a school. These resources will be curated and available online and state-wide with other STEM Hubs.

Develop Leadership

Description: PMSP leveraged STEMposium professional development for TOSA's and District Administrators.

Support the Use of New Technologies and Computer Science

Description: During this project period, PMSP coordinated and held eighteen externship sessions. These visits to industries allowed

educators to learn about high-demand/high-wage careers and the pathways to them. The goals were to help STEM employees bring careers to life and create real-world connections to the classroom.

Educator participants included high school science teachers, high school CTE teachers, and educators from community-based organizations who serve youth underrepresented in STEM occupations. We intentionally engage core science teachers and CTE teachers to help support cross-department collaborations. We also intentionally engage community-based organizations that serve diverse youth, girls, and youth navigating poverty.

Increase Time of Science in Elementary Years

Description: Developing Resources for STE(A)M Learning – a new 20-hour course had 31 educators from four STEM Hubs. In total the participants completed 584 person-hours of PD. The total number of students impacted was 1,470. The course focused on finding and curating STEAM partnerships and resources in communities to increase STE(A)M access for every student.

Mini Course (5-hours each): Digging Deeper into STEM Instruction Through K-8 Learning Progressions

Description: these courses had a combined total of 30 participants. In total, the participants completed 443 person-hours of PD. The total number of students impacted was 1,440. These four in-person mini-courses focused on increasing educators' STEM content knowledge and pedagogical practices for implementing integrated standards-based STEM within their school.