



## Organization

Backbone Organization: High Desert ESD  
Counties in Region: Crook, Deschutes, Jefferson, & Lake  
Sq. Miles in Region: 15,191  
STEM Hub Director: Tracy Willson-Scott  
Email: [Tracy.willson-scott@hdesd.org](mailto:Tracy.willson-scott@hdesd.org)  
Website: [centraloregonstem.org](http://centraloregonstem.org)

## By the Numbers

School Districts	13
Students	38,033
Educators Participating in PD	424
Educator Hours in PD	5,079
Students Participated in Programs	25,202
Hours of Programming Offered	2,352
Student Hours in STEM Programs	90,266

## Central Oregon STEM Hub

**Driving Regional Impact Through Strategic Partnerships** The Central Oregon STEM Hub serves as a catalyst for exploration in STEM; cultivating strategic partnerships across education, industry, and community sectors to ensure equitable access to high-quality STEM programming for all students in the region.

**Investment in Educator Excellence:** High-impact professional development for regional Pre-K through 12<sup>th</sup> grade educators represents a core strategic priority. The Hub's comprehensive professional learning portfolio is built upon collaborative partnerships with subject matter experts. These efforts deliver professional development integrating and spanning science, mathematics, engineering, computer science, data literacy, and strategies for increasing equitable access. By connecting educators, industry leaders, and community resources, the Hub deepens student engagement, establishes career pathways, and invests in teacher excellence. This commitment ensures that every student develops the skills and knowledge necessary to thrive in an innovation-driven economy.

**Community and School Engagement:** During the 2024-25 academic year, the Hub significantly expanded its community outreach initiatives. The Hub supported local schools by participating in dedicated STEM/STEAM Family Night events, creating opportunities for families to engage with hands-on learning experiences. Additionally, the Hub maintained a presence at key regional events. These diverse touchpoints enabled the Hub to reach families and educators across varied community settings.

## Math Initiatives

The Central Oregon STEM Hub expanded mathematics education programming in 2024-2025, delivering comprehensive professional development from Pre-K through high school to strengthen instructional practices and elevate student achievement regionally.

**Early Childhood Mathematics:** Early learning educators integrated literacy and mathematics through play-based, story-driven activities that build foundational mathematical thinking.

**Data Literacy:** Elementary and middle school teachers participated in Interdisciplinary Data Literacy and Data Reasoning workshops and professional learning communities. Virtual training reached educators across Central Oregon, the Oregon Coast, and Columbia Gorge regions, emphasizing growth mindset and problem-solving strategies.

**Secondary Instruction:** Middle and high school teachers engaged in Ambitious Math Teaching through Teachers Development Group, advancing complex instructional practices and mathematical discourse.

**Rural Access:** Through the Eastern Oregon Regional Educator Network, we coordinated hybrid learning collaboratives to ensure equitable professional development access for educators in remote communities.

These initiatives strengthened math instruction across the region while ensuring geographic location does not limit growth opportunities.



## Career Connected Learning

### Strengthening Workforce Pathways Through Strategic Education Partnerships

The Hub partners with over 150 industry, community and higher education partners to connect education to careers for students who typically don't have access or exposure to diverse STEM career pathways.

Building on the existing range of CCL opportunities for educators and students of all ages, the 2024-2025 programming focused on expanding career exploration events for regional 7<sup>th</sup> and 8<sup>th</sup> grade students. Highlights of new activities included:

**Make-A-Thons:** Rural middle school students were paired with OSU-Cascades computer science students for hands-on technology challenges.

**Engineering Design Challenges:** Students worked alongside professional engineers to design and build Rube Goldberg machines.

**Outdoor Products:** Warm Springs AVID students explored OSU-Cascade's unique program while creating leather bags from recycled materials.

**Summer Science & Manufacturing/Construction Camps:** Students from targeted locations participated in science, manufacturing and construction camps at COCC regional campuses.

**Career Course for Transition Students:** The Hub partnered with the team at Sisters High School to pilot a *Careers in the Trades* course, featuring weekly industry site visits to inform post-graduation planning.

These collaborative efforts helped students gain hands-on experiences, build connections, and envision a future where they can thrive. The Hub is not only shaping the next generation of professionals but also strengthening the ties between education and local workforce, ensuring a brighter and more inclusive future for all.