



OREGON  
DEPARTMENT OF  
EDUCATION



Columbia Gorge  
STEM HUB  
SCIENCE. TECHNOLOGY. ENGINEERING. & MATHEMATICS

## Organization

Backbone Organization: Columbia Gorge ESD  
Counties in Region: Gilliam, Hood River, Sherman,  
Wasco, & Wheeler  
Sq. Miles in Region: 6,698  
STEM Hub Director: Julie Cucuel  
Email: [jcucuel@gesd.k12.or.us](mailto:jcucuel@gesd.k12.or.us)  
Website: [gorgeSTEM.org](http://gorgeSTEM.org)

## By the Numbers

School Districts	10
Students	10,765
Educators Participating in PD	349
Educator Hours in PD	2,670
Students Participated in Programs	9,391
Hours of Programming Offered	2,691
Student Hours in STEM Programs	202,110

## Columbia Gorge STEM Hub: Building the Future Together: Collective Impact in Action

The Columbia Gorge region's maritime economy thrives on collaboration. Our Collective Impact Model demonstrates how strategic partnerships between educators, employers, workforce boards, and community organizations create sustainable workforce development systems that deliver results at scale.

Through this shared structure, Career and Technical Education programs connect directly with maritime industry needs, benefiting all stakeholders: industry gains a skilled talent pipeline, schools deliver relevant learning experiences, and the region builds economic resilience.

This year, collaborative efforts reached 237 middle school students through three dynamic days of Maritime Career Awareness. Students participated in hands-on learning at Columbia Gorge Community College's Skill Center, toured industry facilities, and boarded the U.S. Coast Guard Cutter Bluebell. These experiences were made possible by 22 dedicated partners—including Shaver, the U.S. Coast Guard, Army Corps of Engineers, and Sea Scouts—who contributed hundreds of volunteer hours, in-kind support, and technical expertise.

Our collective impact model also includes strategic investments from Airbus and East Cascades Works, ensuring comprehensive support for student success. Together, we're inspiring and preparing students across the Gorge to launch thriving maritime careers. The future of workforce development is collaborative, and it's happening here in the Columbia Gorge region.



## Transforming Math Instruction Through the Oregon Math Project

The Columbia Gorge region successfully engaged educators through the Oregon Math Project, a pivotal initiative funded by the Oregon Department of Education and executed in partnership with Oregon's STEM Hub Network to support instructional practice shifts.

The results are substantial: 59 regional educators received over 310 hours of professional development focused on neurological research insights, establishing strong math mindsets, boosting student engagement, and aligning with current standards. High-quality sessions included Mindset Mathematics, Building Thinking Classrooms, and Data Decoded.

Participant feedback was overwhelmingly positive. Edward Nicols, a Mindset Math participant, praised the initiative: "The STEM Hubs did an excellent job creating a welcoming, collaborative space that honored teacher voice and encouraged risk-taking... The sessions were well-structured, engaging, and grounded in research." Another educator described leaving "feeling motivated to make math more joyful, inclusive, and meaningful for all students."

Complementing these professional development efforts, the state continues developing unique +1 High School Math courses. With funding secured through the 2025-27 biennium, these expanded opportunities promise sustained positive impact in mathematics education for the Columbia Gorge region and beyond, ensuring educators have continued support in transforming their instructional approaches.



## Strengthening Career Pathways Through Regional Collaboration

Across the Columbia Gorge, educators, administrators, employers, and community leaders are strengthening connections between classroom learning and local career pathways. Through the biannual Regional Career & Technical Education Advisory Committee, the Columbia Gorge STEM Hub and Columbia Gorge ESD convene over 60 partners from education, industry, and workforce organizations to address critical skill gaps and regional needs.

These meetings—hosted each spring and fall at alternating school and college sites—provide essential platforms for collaboration. The Spring 2025 convening at The Dalles High School featured CTE lab tours, regional labor data sharing, and priority identification in advanced manufacturing, health sciences, and technical trades. The Fall 2025 meeting at Hood River Valley High School built on this momentum with student-led tours, industry presentations, and cross-sector discussions focused on expanding work-based learning and educator-industry partnerships.



This regional effort aligns directly with Oregon's Career-Connected Learning priorities: expanding access to high-quality CTE programs, equipping youth with essential skills, and connecting employers with local talent. By leveraging Local Needs Index data highlighting shortages in advanced manufacturing, healthcare, and skilled trades, the STEM Hub aligns partners, reduces duplication, and cultivates the next generation of skilled workers fueling regional economic vitality.