

Oregon Coast STEM Hub

Who We Are



Headquartered at the Hatfield Marine Science Center in Newport, the **Oregon Coast STEM Hub (OCSH)** serves coastal educators, youth, and rural communities along the entire Oregon coastline, from Brookings to Astoria. Our Hub's geographic region



provides unique opportunities for place-based learning focused on coastal ecosystems, marine science and technologies, and career-connected learning for the maritime sector and other coastal industries. The OCSH supports a wide array of STEM teacher professional development and student experiences in a variety of STEM fields, collaborating with more than 60 partners throughout the region. Our partners include 20 school districts and five post-secondary education institutions, as well as a broad coalition of industry, community organizations, and government agencies committed to our vision to foster a culture of STEM innovation.

Student STEM Experiences

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Teacher PD

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Community Partnerships



VISION: *Fostering a culture of STEM innovation by engaging people of all ages to create a vibrant and prosperous region.*

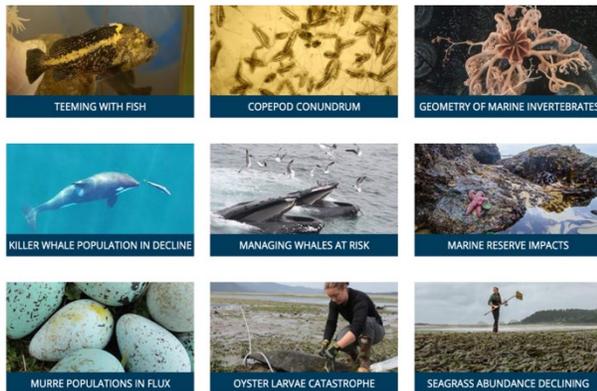
MISSION: *The Oregon Coast STEM Hub engages learners with STEM by leveraging local and regional resources and collaborating with diverse partners.*

Oregon Coast STEM Hub

2021 HIGHLIGHTS & IMPACTS

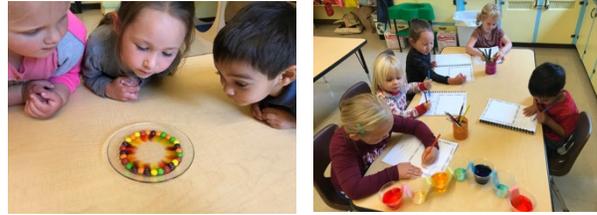
- **1,680** students directly engaged in STEM Hub educational programs
- **317** educators completed **1,155** hours of STEM professional development, reaching **23,846** students
- **120** STEM industry and community volunteers contributed **415** hours to support STEM experiences
- **\$623,500** grants and sponsorships secured for the Oregon Coast

ORSEA PROFESSIONAL DEVELOPMENT – In 2021, the Oregon Marine Scientist and Educator Alliance (ORSEA) partnered 14 middle and high school math and science teachers with 7 scientists who worked in teams to co-create lessons focused on marine phenomena. ORSEA math and science units engage students in data exploration and include career-connected learning. <https://oregoncoaststem.oregonstate.edu/orsea>



“Together our ORSEA partnership created meaningful, collaborative, and ongoing relationships that interconnect current research, meet education standards, and provide opportunities our students wouldn’t have otherwise.”

– 2021 ORSEA team



One Story of Our Impact: Yachats Youth and Family Activities Program (YYFAP) is a non-profit organization that serves children and families in South Lincoln County. Like many small organizations, YYFAP has limited resources and depends on our STEM Hub to help them meet their goals. This year, YYFAP staff participated in OCSH Early Learning Workshops and used the activities to integrate STEM into their preschool programs. YYFAP staff also checked out materials from the STEM Hub Resource Trailer to engage youth in hands-on activities during their summer camp programs. They distributed OCSH-created STEM Backpacks to young children through their *Families Together* program, and hosted an iINVENT Camp for middle school students that the OCSH facilitated through our partnership with OSU PreCollege Programs.

LEARNING IN PLACES

This STEM workshop series held in spring 2021 provided 22 of our rural elementary educators with engaging field-based lessons and activities intended to foster equitable and culturally-relevant science exploration, engage families in student learning, and align with Next Generation Science Standards. Participating K-6 teachers implemented lessons with 425 students and shared their experiences with one another in an online learning community.



THRIVING COASTAL COMMUNITIES

In June, 33 Oregon Coast leaders attended a virtual summit on economic and Blue Sector workforce development on the Oregon Coast. Cross-sector participants learned about the OCSH, Oregon Ocean Innovation Hub (O2IH), and efforts to expand broadband access in rural coastal communities, and participated in discussions to develop coast-wide strategies to address rural challenges.