IMPACT REPORT
Serving Grays Harbor, Lewis, Mason, Pacific, and Thurston counties

2021–2023
Capital STEM Alliance Impact Report
bit.ly/CapitalSTEMAlliance
WELCOME
TO THE CAPITAL STEM ALLIANCE

The Capital STEM Alliance believes that every young person in the Capital region will have equitable access and opportunities to engage in STEM learning and career preparation experiences that offer multiple pathways to post-secondary, family-wage careers and growth opportunities.

Our youth are the key to our region’s future economic health. We convene stakeholders in community, business and industry, and education to ensure equitable access to STEM education, Career Explore, Career Prep and Career Launch partnerships, and family-wage occupations that will bolster our economic outlook for generations to come.

The following pages offer a glimpse of relationships we build, programs we champion, and systems we improve, to make our region the best place for young people to live, work, study, and grow.

Lorie Thompson, Ed.D.
Director, Capital STEM Alliance
OUR STORY

The Capital STEM Alliance was created in September 2021 to merge three ESD 113 programs (the Regional Alliance for Youth, the Capital STEM Network, and the Capital Career Connected Learning Regional Network) and to establish a regional, cross-sector collective action coalition.

RALLY, STEM & CCL NETWORK INTERSECTION

SHARED GOALS

Community, Tribal, education, and employer partners will provide every young person in the Capital Region with real-world, STEM-related learning experiences and supports that offer multiple pathways to college, career, and life opportunities.
OUR VISION

The Capital STEM Alliance believes that every young person in the Capital Region needs access to real-world, STEM learning experiences and supports that offer multiple pathways to college, career, and life opportunities.

OUR GOALS

Through collective action, the Capital STEM Alliance seeks to:
- Surface and mitigate systemic barriers, and increase equity and access to STEM opportunities in early learning, K–12, and post-secondary education.
- Develop and expand equity-centered onramps to local, family-wage, STEM career pathways for all youth.
- Acquire, utilize, and share multiple sources of data to track and improve STEM educational and career outcomes for youth in the Capital region.

LEADING WITH PURPOSE

The Capital STEM Alliance centers its programming and supports on populations underserved by traditional STEM programs and opportunities, including girls, BIPOC, English language learners, students experiencing poverty or homelessness, students in rural and remote schools, students in foster care, and students with disabilities.
2020–2023 FUNDING STREAMS

Grant Funds Received From

Washington STEM $250,000
Career Connect Washington $392,000

Pass-Through to Program Building

Nisqually Tribe
The Bridge Music Project

Pk–Post-Secondary Landscape Gap Analysis Project
Big Brothers Big Sisters

Timberland Regional Library
Grays Harbor Youth Works

North Thurston Public Schools
Tumwater School District

High School to Post-Secondary Data Project
Yelm School District

Children’s Discover Museum
Puget Sound Estuarium

ESD 113/GRAVITY

GRuB Ground-Ed

TOTAL FUNDED | $63,000
TOTAL FUNDED | $134,000
In 2021, we piloted a Career Explore project with Grays Harbor Youth Works called WAQUA. Sixty-seven students and their parents from rural communities teamed up to design and engineer underwater robots with cameras to study waterway ecosystems from around the Capital region.

In 2022, Big Brothers Big Sisters youth participated with their Architecture mentors at the historic Capitol Theater in downtown Olympia. The students experienced the renovation of this historic building from start to finish. Three of the matches were able to continue their match from the previous year! “These students start the program to learn about careers but find that they are benefiting just as much, or even more than expected by being able to connect with an adult professional. This is the magic of mentoring!” (Moriah Candler, BBBS)
The Regional Alliance for Youth was established in 2013 as a five-county coalition of educators and community-based organizations that collaborate to ensure K–12 success through support of children, youth and families. RALLY consortia share a set of common goals, activities, and vision: to ensure equity and access to the enabling conditions that lead to a quality K–12 education.

For the past ten years, the organizations that make up each RALLY consortium have met monthly to research resources and best practices that support those students and families who are furthest from opportunity.

During the COVID pandemic, RALLY consortia continued to meet virtually to better understand the impact of the juvenile justice system, trauma, mental, social-emotional, and behavioral health issues on young people and their families.
EARLY STEM LEARNING

SPOTLIGHT

Imagine opening a backpack filled with fun and exciting number games, books and activities! In 2022, our partnership with Timberland Regional Library led to the development of lendable early math backpacks in rural communities. Each backpack contained a variety of early numeracy materials—games, hands-on activities, and read-along books.

In January 2021, rural families with young children were treated to an evening with Math For Love's Dan Finkel. Dan presented an array of early numeracy activities for children ages 3–5 and their families, using Tiny Polka Dots.

In 2022, 68% of five-year-olds in the Capital region demonstrated math readiness as assessed on the WA KIDS report.

From 2020–2022, the Capital STEM Alliance distributed over 1800 sets of Math for Love’s Tiny Polka Dots numeracy cards to caregivers of young children in rural and remote communities throughout the region. Dan Finkel held two virtual Family Math events using Tiny Polka Dots cards to increase family engagement in early numeracy.
What types of creatures live in Puget Sound waterways? How do currents affect plant and animal life? What happens when the water becomes too acidic? These and other questions were at the top of North Thurston Public School students' minds as they prepared to submerge their underwater remote operated vehicles (UROVs) into Boston Harbor in Olympia.

In 2022, these young people learned how to design and build UROVs through a partnership with the Capital STEM Alliance and Puget Sound Estuarium as part of the Classroom Robotics at Budd Bay (CRABB) program. The students then used them to explore, measure and record things like underwater pollution, acidity levels, currents, flora and fauna and many others. They even mounted cameras on their UROVs to get a look at exactly what was under the surface.

In 2021, STEM professionals from around the region demonstrated their daily work, talked about their career paths, and answered questions from middle and high school students. The idea is to get students excited about some great local STEM careers and the steps students need to enter them.

Here, students at River Ridge High School in Thurston County learn from a local veterinarian on how to give fluids to animals during a STEM Like Me! event.
HIGH SCHOOL TO POST-SECONDARY
FINANCIAL AID AND SCHOLARSHIPS

High school students can often feel overwhelmed by the vast amount of post-secondary choices available. One of the most important actions to take is to submit the FAFSA or WASFA, which is an application for financial aid or a scholarship. To help students gain a sense of control over their future, the Capital STEM Alliance partnered with Grays Harbor Community College and Evergreen College to host a series of Financial Aid and Scholarship workshops in 2021 and 2022.

These workshops were conducted in Spanish, English, and Guatemalan (M’am), and recorded on YouTube. We also worked with Evergreen College's Trio program to bring Shelton School District sophomores, juniors and seniors to the college for a tour, and to help seniors complete their FAFSA or WASFA applications.

SPOTLIGHT

The Capital STEM Alliance funded buses to bring Shelton School District students to Evergreen College. All sophomores, juniors, and seniors toured the campus and learned how to complete financial aid and scholarship forms.
COLLEGE AND CAREER PATHWAYS

Our team connects K–12 CTE programming to post-secondary, internships, or apprenticeship opportunities. In 2022–2023, we’ve helped organizations in their program-building through Career Connect Washington grants. These partnerships revolve around quality employer partnerships with school districts and K–12/post-secondary programming. Education partners in recent and upcoming program builder proposals include:

- Chehalis School District | Lewis County
- Centralia School District | Lewis County
- Centralia College | Lewis County
- New Market Skills Center | Capital Region
- Shelton School District | Mason County
- Tumwater School District | Thurston County
- Twin Harbors Skills Center | Grays Harbor County

*Does not include Running Start or CTE
CAREER TECHNICAL EDUCATION (CTE) AND INDUSTRY ALIGNMENT

CTE not only provides hands-on, problem-based learning opportunities in high demand fields, it also provides a rigorous option for students to meet their graduation pathway requirement for the state of Washington.

Strong CTE program and course offerings in middle and high schools provide more equitable access to quality learning in the context of a career pathway, but can also serve all types of students with more opportunities to meet their graduation requirements.

SPOTLIGHT

Bush Middle School students in Tumwater planted an indoor herb garden in their Green Design and Architecture class.

A student from the Pe Ell School District managed a cart of student Chromebooks as part of his work on the school IT support team.
All young people deserve a K–12 STEM education that prepares them for rewarding, post-secondary experiences that lead to family-wage careers.

For the past three years, the Capital STEM Alliance has proudly supported these equity-based career explore and prep programs in a variety of sectors, to prepare our region’s youth for exciting, local family-wage careers in high-demand STEM occupations.

Taz MacBeth participated in The Bridge Music Project through a $22,000 Capital STEM Alliance/CCW equity grant. The project helps prepare youth for a career within the songwriting and recording industry, The program focuses on recruitment of high risk youth, justice-involved youth and those who have experienced housing insecurity. Taz hopes to pursue a career in songwriting and recording after graduation.

Since 2021, almost 1,000 youth have enrolled in Career Launch opportunities within the five-county Capital region. $1.7M total funding has been administered for CCW programming.

Seven regional organizations have been awarded Program Builder grants to expand or develop 11 career connected learning programs in high-demand sectors—automotive, IT, conservation, natural resources, construction, manufacturing, clean energy, and agriculture.

The Capital STEM Alliance has invested almost $200,000 in pass-through grant funding to promising pilot projects that build career explore and prep experiences for our region's most underserved youth.
Youth voice is at the heart of our work and drives us to create equity and access to STEM education and career pathways. Our partners proudly share stories, photos, videos, and recordings of youth engaging in career connected learning activities. The opinions of and input from young people are highly sought after at CSA-hosted events and committee meetings, as they drive our collective efforts.
This map shows all the Career Connect program builders in the Capital region as of February 2023. The Capital STEM Alliance plans to support additional program builder proposals in the next round of funding from Career Connect Washington.

Image source: careerconnectwa.org/our-work-and-impact/

As a Career Connected Learning Regional Network, we are involved with and provide support to various committees and advisory boards throughout the region, including:

- South Sound Council General Advisory Committee
- Washington CTE Administrators Association
- Lewis County CTE Co-operative General Advisory Committee
- Tumwater/North Thurston Middle School Advisory Committee
- Twin Harbors CTE CLNA Stakeholder Group
- REVIT Project Committee
- Puget Sound Estuarium
- Pac Mountain Workforce Development Council
- Centralia Community Foundation
Our monthly newsletter increases awareness of the Capital STEM Alliance and ESD 113 career connected learning. The newsletter is located online at the ESD 113 landing page and is updated monthly.

The newsletter includes news from all five counties, updates on scholarships, local career exploration activities, funding opportunities, professional learning info, and free classroom resources available online or in our own community through partners like the Timberland Regional Library. They also offer school-specific CTE spotlights as well as an equity spotlight to promote dignity for all students through culturally responsive teaching and learning opportunities.

In addition to these outreach efforts, our team provides extensive CTE technical assistance to multiple rural and remote school districts who seek to expand more equitable access to programming for their students. This support includes assistance with reporting, course approvals, and strategic planning of community-relevant CTE programming.
OUR ADVISORY BOARD

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Cheryl Heywood</td>
<td>Timberland Regional Library</td>
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<td>Shelly Willis</td>
<td>Family Education &amp; Support Services</td>
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<td>Juan-Carlos Chavez</td>
<td>Nisqually Tribe</td>
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<td>Pete Lahmann</td>
<td>Department of Veterans Affairs</td>
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<td>Monica Brummer</td>
<td>Center of Excellence for Clean Energy</td>
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<td>Angie Mason-Smith</td>
<td>Washington STEM</td>
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<td>Chris Wells</td>
<td>United Way Thurston County</td>
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<td>Tanikka Watford</td>
<td>The Moore-Wright Group</td>
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<td>Lisa Grant</td>
<td>Centralia School District</td>
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<td>Rose Gundersen</td>
<td>Washington Retail Association</td>
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<td>Jacquelin Earley</td>
<td>Sierra Pacific Industries</td>
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<td>Joe Clark</td>
<td>Twin Transit</td>
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OUR PARTNERS

[Logos of various organizations]
OUR TEAM

**Lorie Thompson, Ed.D.** is the Director of the Capital STEM Alliance. She served as an elementary teacher, Title I Coordinator, Special Education administrator, and STEM Magnet School principal in the Los Angeles Unified School District. Since 2016, Lorie has resided in Olympia, where she engages in workforce development at ESD 113. In 2021 she created the Capital STEM Alliance, a five-county, cross-sector coalition that expands STEM career pathway opportunities for all youth in the region. She also serves as a board member of the Pacific Mountain Workforce Development Council, the Puget Sound Estuarium and is a member of the South Sound CTE Advisory Council. [lthompson@esd113.org](mailto:lthompson@esd113.org)

**Cecily Kiester** is the CCL Regional Administrator at ESD 113. She was a former head of school for Insight Schools of Washington. Cecily has worked with and connected educational leaders to industry partners and higher education institutions, and she has created on ramps to high-demand career pathways at the K-12 level. Since joining the CSA team in May 2022, Cecily has vastly expanded our school districts’ understanding of job aligned CTE pathways, particularly in our most rural and remote districts. She is developing a CTE Rural Cooperative in our region for small districts that lack funding, staff, and other resources, to raise educator awareness about the importance of offering occupation-aligned course work to their students. [ckiester@esd113.org](mailto:ckiester@esd113.org)

**Kat Santana** is the Capital STEM Alliance CCL Specialist, and has many years of experience in workforce development, with prior positions in business and career pathways. Kat served at Pac Mountain WDC as the senior Program Coordinator for work-based learning. She led the WING Academy (opioid, warehousing, and logistics), had oversight of High Impact Community grants across all five counties serving over 2,300 students in career connected learning opportunities, and coordinated juvenile rehabilitation work-based learning projects for the PacMtn MyJob program and contracted service providers for paid internships in advanced manufacturing (AJAC), basic carpentry (ANEW), warehousing and agriculture. [ksantana@esd113.org](mailto:ksantana@esd113.org)