



STEM BY THE NUMBERS: EQUITY AND OPPORTUNITY

STEM Networks from Tacoma and Vancouver to Wenatchee and Yakima are participating in the Washington **Early Math Coalition**, working to identify the resources and systems supporting early math learning and identifying high-leverage opportunities where new investments would yield the largest return on investment for children and families. 250,000 children of color, low-income, and rural children will be supported by family members and early educators better prepared to support their early math learning.

In Wenatchee, the Apple STEM Network has increased the number of school districts offering **computer science** through the TEALS program from 11 to 18. By the end of the 2018/19 school year, all students who complete this course will receive college credit from Wenatchee Valley College.

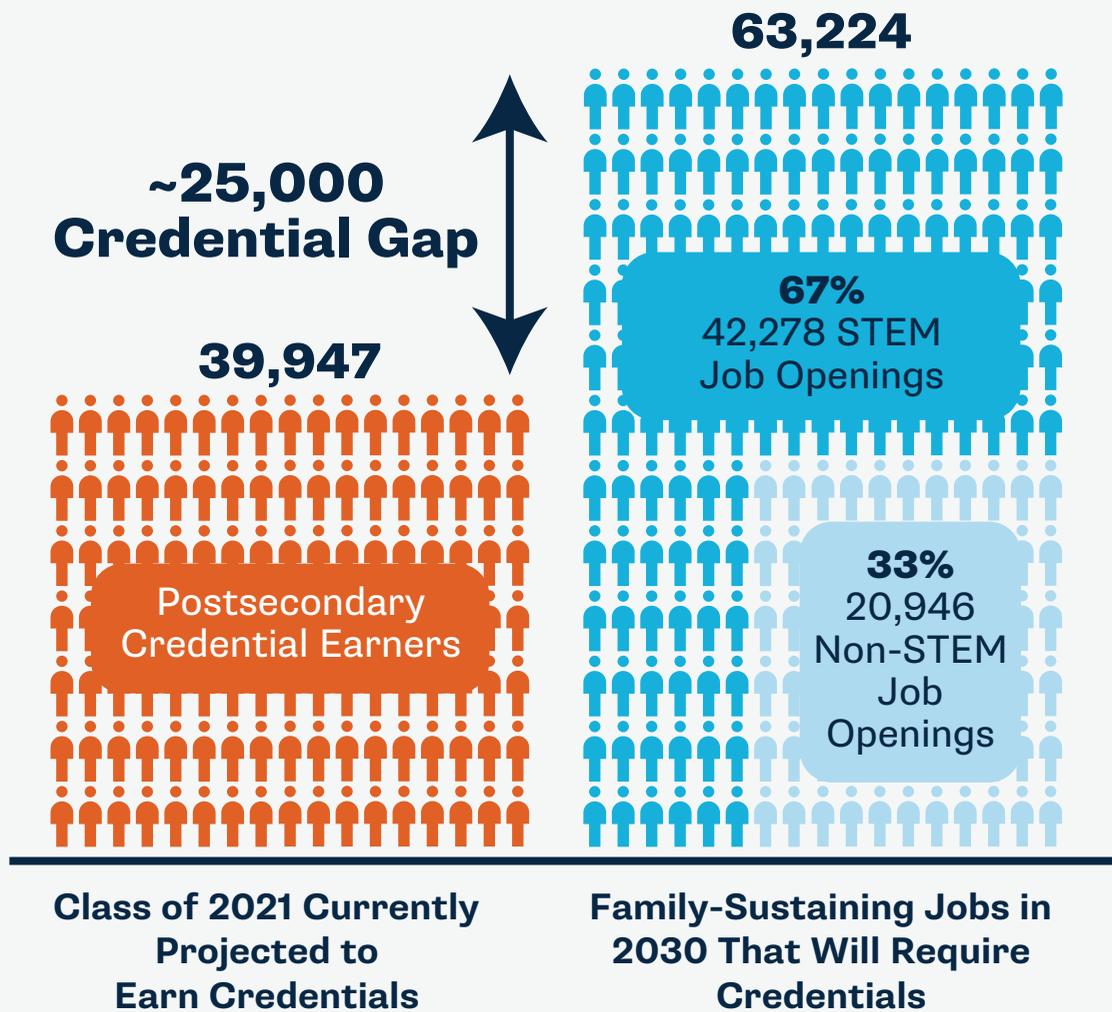
STEM jobs make up the majority of projected family-sustaining job openings AND will be the hardest to fill with local talent, given the credentials they require and the current educational trajectory of local students across our state.

Each region of our state has developed innovative approaches to STEM education that lead to high-demand careers, from agriculture tech to healthcare to advanced manufacturing. And each region has equity and opportunity gaps. **What would happen if every region in our state had opportunities for all young people to be on track to attain a family-sustaining job?**



By 2030, Washington STEM and our statewide partners aim to **triple the number of students** of color, students from low-income and rural families, and young women who are on track to earn high-demand credentials and enter family-sustaining careers in the state.

BRIDGING THE GAP: A STRONG DEMAND FOR STEM TALENT



*The class of 2021 will have completed credentials by 2030 and be ready to enter the workforce

Our state has an opportunity to better support students of color, students with low-income and rural backgrounds, and young women by removing systemic gaps to access high-demand credentials and family-sustaining careers. By prioritizing those student populations, we are ensuring that all of our state's residents have access to opportunity, and we are securing our state's economic future.

WASHINGTON STEM INDICATORS

Ready for Kindergarten – Math

While two-thirds of all Washington kids are math ready by kindergarten, families of color and lower income families need expanded access to early learning support to close math-readiness gaps.

66% of children entering kindergarten are math ready

↓ **45%** Native Hawaiian/ Other Pacific Islander ↑ **73%** White

3rd Grade Math

Between kindergarten and third grade, math-readiness and skills gaps widen for many students. A quarter of Black/African American students go from meeting to not meeting standards in that four year period.

58% of Washington's 3rd graders meet grade level math standards

↓ **39%** Black/ African American ↑ **59%** Boys

Dual Credit*

While over half of the students in Washington complete a dual credit course in high school, students of color, in particular American Indian/Alaskan Native students, remain underrepresented in these courses.

56% of high school students complete at least one dual credit course (on average they complete 3 to 4 courses)

↓ **38%** American Indian/ Alaskan Native ↑ **58%** Girls

*Dual credit programs give students the opportunity to earn high school and college credit simultaneously. Completion of dual credit coursework is highly correlated with higher education enrollment and completion.

Credential Attainment

While over 89% of youth aspire to complete a postsecondary credential, less than half of all students, and a quarter of Latinx students, complete by age 26.

59% of high school graduates enrolled in higher education **42%** of high school graduates complete a presecondary credential

↓ **51%** Latinx ↓ **24%** Latinx

When we include those who did not graduate from high school, it is estimated that only 31% of Washington students have earned a credential by age 26, with 40% of recent high schoolers on track to earn a credential.



Together with our partners, we are advocating for and developing regionalized, cross-sector, and longitudinal data on 30 indicators to tell us which Washington students are supported to earn credentials and access family-sustaining careers. We highlight student indicators above, and in future publications we will report on systems indicators, like high school course offerings and availability of STEM professional learning and supports for educators.

Data citations and region-by-region analyses will be posted at www.washingtonstem.org/STEMbythenumbers.

WASHINGTON STEM CREATING IMPACT TOGETHER

Washington STEM is a statewide nonprofit organization that supports and scales both systems-level and regional-level policy changes and best practices. As an "outside, but alongside" partner, we support state agencies, local businesses, and educational leaders in identifying systems gaps, learning from peers about what works, and scaling relevant and responsive solutions.

Our **early STEM** work is initially focused on early math and the math experiences and outcomes for newborns to eight-year-olds. We see substantial opportunity gaps as children enter Kindergarten. The gaps measured at the start of Kindergarten actually widen by the time children complete third grade. We work with partners to strengthen the system so that it supports every child in achieving their full potential.

Our **career pathways** work focuses on high school and postsecondary career preparation. We see substantial gaps between the rich opportunity for family-sustaining careers across Washington communities and the preparation young people need in order to benefit from those careers. We work with partners to expand the quality and availability of career connected learning experiences ranging from career exploration to internships and apprenticeships.

Triple the number of underserved students who earn credentials

We fight for statewide **policies**—as well as **policy alignment** across agencies and initiatives—that can fund, scale, and support cross-sector efforts to close gaps for our students so that no one gets lost in the cracks.

186,000 more students on track to earn credentials by 2030

We seeded and now support the scaling of **10 regional Networks and King County partners** that pull together local leaders and practitioners to align regional education-to-workforce pathways, policies, and educational experiences and curriculum, reflecting **each regions' economy, educational context, and residential population**.

Each region has pledged to work toward the statewide goal of tripling the number of students of color, students from low-income and rural families, and young women who are on track to earn high-demand credentials and enter family-sustaining careers in the state.

2.4 million students on-track for family-sustaining careers

We **identify and support innovative solutions** that can address persistent gaps in STEM competency, engagement, and outcomes. We work with our Networks and our statewide policy connections to **scale** those solutions farther, faster.

