



Computer Science for Oregon

CS for Oregon promotes evidence-based, equity-focused, and culturally responsive high school Computer Science education in the State to broaden student participation in CS courses.

We understand that CS is essential knowledge required to fully participate in society. We believe that denying that knowledge to students is a barrier to full participation, and doing so in a manner that perpetuates the exclusion of women and students of color is unjust. We seek equity of engagement and completion, not only access.

Exploring Computer Science (ECS) Courses as a Change Agent in Oregon

Since 2018, we have prepared **67 teachers in 48 high schools from 36 school districts across Oregon** to teach the ECS course. The 33 districts are geographically distributed across **all 13 of the state's STEM Hubs** that are **geographically, racially, & socio-economically diverse**.

“The program has broadened the number of schools offering entry-level CS courses to [underrepresented] students in Oregon. The ECS PD week followed best professional development and teacher preparation practices...that **resulted in deep teacher learning of culturally responsive CS teaching.**” - Cecilia Martinez PhD, 2020 External Evaluator

“Exploring Computer Science isn't just writing code...it's about identifying real problems and working through them strategically, which lowers the bar for entry to this field and **opens up a world of economic opportunity to students who may have thought that door was closed to them.** Every lesson is interactive, collaborative, hands-on. Every unit is inquiry and project-based. You don't have to have started coding in 5th grade to feel comfortable here. This is a class that makes computer science accessible to everyone.” - 2020 Oregon ECS Teacher

Priming the Pre-Service Teaching Pathway

Since 2018, the College of Education at the University of Oregon has **trained more than 355 pre-service elementary education teachers** on teaching and promoting **Inclusive CS Education** as part of the undergraduate curriculum.

Informing State Policy on CS

Our involvement with the ECEP Alliance and ODE is part of our effort to build a coalition of educators, policymakers, and state legislators to examine systemic equity issues in CS education and inform state policy.



CSforOregon.org

CS for Oregon is an NSF-funded project between PIs:

James Hook
Portland State University
james.hook@pdx.edu

Jill Hubbard
Oregon State University-Cascades
jill@jillhubbard.com

Joanna Goode
University of Oregon
goodej@uoregon.edu



Funding for Nationally Designed High School Computing Education Curriculum & Professional Development

While many students express an interest in a rich understanding of computing and the desire to create within a computing environment, classes often appeal to a subset of the student population and lack diversity.

Thanks to National Science Foundation(NSF) support, **CS for Oregon** is helping to fund Oregon high schools interested in adopting a national, equity-based, evidence-supported curriculum called [Exploring Computer Science \(ECS\)](#).

ECS focuses on developing a welcoming and inclusive environment for all students that is rigorous and engaging. ECS can be used as a foundation for an existing or planned CTE Program of Study(POS) or as a stand-alone course taught by a teacher certified in any subject.

We Provide

- Free national curriculum mapped to current standards
 - Professional stipends for inclusive, hands-on, and inquiry-based PD, including both content knowledge and pedagogy, available to high school teachers in Oregon **credentialed in any subject area**.
 - \$1,000 teacher professional stipend for a week long summer experience.
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We Ask

- Identify an engaged teacher, **certified in any content area**, interested in participating in the funded PD and in teaching Exploring Computer Science at their school.
 - Include Exploring Computer Science as a course offering for the 2022-23 school year.
 - Participate in research activities that evaluate the effectiveness of the ECS curriculum in your environment and identify problems of practice that arise at your school.
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How Can You Join Us?

School districts are chosen based on their commitment to equity and students served. Priority will be given to schools that serve populations underrepresented in STEM by race and ethnicity, rural/urban demographic, and/or socio-economic status. **Interested? Please email jill.hubbard@osucascades.edu**

Our ultimate goal is for every student in the state to be taught basic concepts in Computer Science so that they can effectively participate in society.

**COMPUTER
SCIENCE
FOR ALL**

The CS for Oregon team is led by [Professor James Hook](#), Associate Dean of the Maseeh College of Engineering and Computer Science at Portland State University. [Professor Joanna Goode](#) at the University of Oregon is the lead education researcher and ECS curriculum developer. [Professor Jill Hubbard](#) at Oregon State University-Cascades is the lead practitioner.