

#### Computer Science Initiative Implementation Plan Update

General Session 06.07.23

## **Introductions & Gratitude**

#### 1. Please update your Zoom Name

First Last (Pronouns) Organization, Title Example: Jenn Smith (she/they) Oregon Academy, Principal

#### 2. Introduce Yourself

In the chat, share your name and what brought you here today.



# Agenda

• Overview

- Landscape of Computer Science in Oregon
- Discussion: Preliminary Outcomes & Strategies
- Looking Ahead

#### **Community Offerings**

- Stay equity- and student-focused
- Listen deeply with critical curiosity and ask questions to clarify and expand on each other's thoughts and ideas
- Share space and airtime
- **Respect differences** of opinion and have an appreciative inquiry mindset
- Accept and expect non-closure but not non-action



# Overview

### Directive to ODE and HECC



Oregon Department of Education (ODE) Higher Education Coordinating Commission (HECC)

"Racial, ethnic, and gender disparities in STEM education persist across the state, including gaps in access to computer science and related advanced placement courses. The results of these racial and gender disparities in access to STEM and computer science courses in public schools are clear...In summary, BIPOC, tribal, and female students have the least access to high-wage, high-demand careers requiring a STEM credential or diploma."

- Former Governor Kate

#### **ODE Equity Stance**



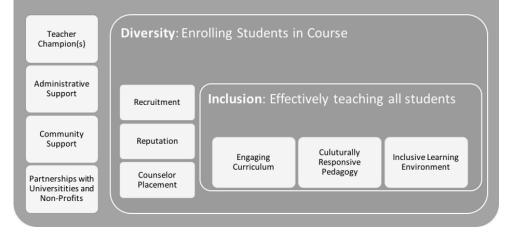
Education equity is the equitable implementation of policy, practices, procedures, and legislation that translates into resource allocation, education rigor, and opportunities for historically and currently marginalized youth, students, and families including civil rights protected classes. This means the restructuring and dismantling of systems and institutions that create the dichotomy of beneficiaries and the oppressed and marginalized.

#### **HECC Equity Lens**



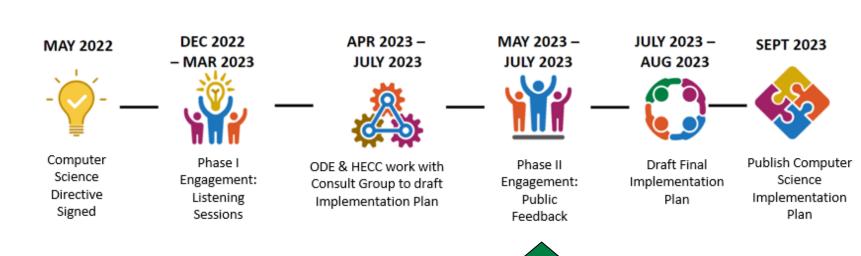
For the HECC, **postsecondary education equity will be achieved once one's community or characteristic**—including but not limited to racial/ethnic identity, socio-economic background, dis/ability status, gender, parental status, veteran status, sexual orientation, and geographic origin or location—<u>no longer predict</u> **inequitable access to and success in postsecondary education and training**. We will work towards this by addressing the root historical causes of systemic racism and inequities, not just their manifestation. This includes the intentional examination and elimination of policies, practices, attitudes and cultural messages that perpetuate the stark inequities in postsecondary education and workforce training we see today. Designing for Equity in Computer Science

Access: Availability of Course for All Students



Oregon Department of Education (ODE) Higher Education Coordinating Commission (HECC) Goode et al. (2019). Rac(e)ing to computer science for all: how teachers talk and learn about equity in professional development

#### Timeline for Computer Science Education Implementation Plan



What Oregonians Shared During Phase I Engagement



Oregon Department of Education (ODE) Higher Education Coordinating Commission (HECC) "Porque es la ciencia del presente y no del futuro. Debe ser un derecho y no un privilegio." - Padre de Oregón ("Because science is from the present, not from the future. It should be a right and not a privilege." - Oregon parent)

"Computer science education should be offered at all grade levels in all Oregon public schools." - Oregon Community Member

*"I think increasing access and participation is critical and has to be paired with any other priority goals." - Oregon Industry Professional* 

"It is important to elevate the diverse community of practicing and historical computer scientists and professionals." - Oregon Industry Professional

"The north star has to articulate equity at the center. It is not okay to have gaps in this knowledge based on gender, race, ethnicity." - Oregon Educator

*"I'm excited that this long overdue approach is being considered for our students Pre-K through postsecondary!" - Oregon Parent* 



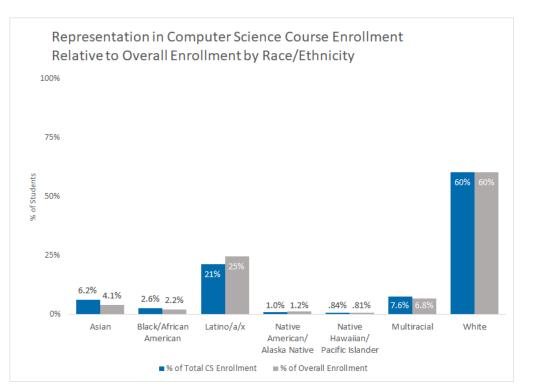
# Landscape of Computer Science Education in Oregon

Oregon Department of Education (ODE) Higher Education Coordinating Commission (HECC) Note: This is preliminary data that is subject to revision.

#### **Computer Science Course Access and Participation**

- 22% of students in the class of 2022 took a computer science course at some point during middle or high school.
- 60% of high schools currently offer computer science courses.

**Disparities in** Computer Science Course Enrollment in Oregon: **Race & Ethnicity** 



Oregon Department of Education Administrative Data (2022)

**Disparities** in Computer **Science** Course **Enrollment** in **Oregon: Gender** 

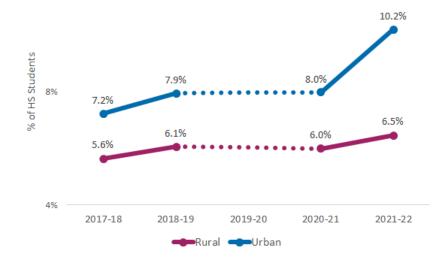
of Students

\*

**Representation in Computer Science Course Enrollment** Relative to Overall Enrollment by Gender Identity 100% 75% 71% 50% 25% 28% 0.8% 0.5% 0% Female (F) Male (M) Non-binary (X) % of Total CS Enrollment % of Overall Enrollment

#### **Computer Science Participation by Locale**

Percent of High School Students Enrolled in at Least One Computer Science Course by Locale



Oregon Department of Education Administrative Data (2022) 16



## Discussion: Preliminary Outcomes & Strategies

#### **Draft Preliminary Outcomes**

- **#1:** Ensure All Schools Offer Computer Science Education Opportunities
- **#2:** Recruit, Prepare, and Retain Educators Teaching Computer Science
- **#3:** Establish Stable, Long-Term Funding for Computer Science Education
- **#4:** Provide High-Quality Instructional Materials
- **#5:** Align High School and Post-Secondary Requirements
- **#6:** Ensure Relevancy Through Career Connected Learning Opportunities
- **#7:** Monitor and Report Progress on Computer Science Education

#### Keep in Mind



These preliminary Outcomes & Strategies...

- Must be considered in **draft form** 
  - Will evolve with additional conversations between ODE, HECC, and other agencies. Will shift on the basis of feedback from the Phase II engagement sessions
- May or may not be included in the final Computer Science Education Implementation Plan

#### Outcomes & Strategies Discussion



#### Step 1:

- Individual Reflection and Response (10 minutes)
  - Review the CS Preliminary
    Outcomes and Strategies
  - Respond to question on the Note Catchers

#### Step 2:

• Discussion (25 minutes)



# Large Group Debrief



# Looking Ahead

# Looking Ahead, pt 2



- Work on the Implementation Plan will continue through the summer and into September.
- Additional Phase II Engagement sessions will take place on 6/15, 6-7:15PM and 6/20, 12-1:15PM
- More information and sign up links are available on our website (link in chat).
- State Board of Education presentation will take place on 6/15 (time TBA). This can be viewed live and will be recorded.
- Questions? Feedback? Contact us at: ode.csinitiative@ode.oregon.gov



Oregon Department of Education & the Higher Education Coordinating Commission