Investing in Pathways to Success through CTE-STEM

Breakout Session
3:45-5:00pm – Room D135-136
The Business Case for CTE-STEM

High-wage, high-demand jobs are going unfilled

After 9 years, only 7% have a STEM degree or credential

STEM outcomes for the Class of 2006

- Sophomores 2003-2004: 41,655
- High School Diploma: 30,877
- Enrolled in College: 28,416
- Postsecondary Credential: 11,124
- STEM Credential: 2,768

Projected Annual Openings through 2021

- Industrial Machinists and Operators: 363
- Industrial Mechanics and Service Technicians: 431
- Programmers and Developers: 790
- Business Finance and Compliance: 997
- Data-Enabled Operations Analysts: 1,117
- Nursing: 1,639

Source: ECONorthwest analysis of ODE and National Student Clearinghouse data. STEM credential outcomes based on Brookings Institution definition of STEM fields. Oregon Talent Plan, 2017-20, Findings & Recommended Framework
Established 2012
Represents the voice of employers
Open to all employers committed to CTE-STEM goals
80 Employers, Business, & Labor Organizations
Our Goals

- Double the number of 4th & 8th grade students proficient in math and science by 2025
- Double the number of CTE-STEM degrees and certificates by 2025
- Increase participation of students who have experienced systemic or historic barriers to participation
- Long range, achieve: Oregonians prepared to pursue productive, meaningful careers and lives, higher per capita income, lower poverty, and increased revenues for public services
Our Plan

• Advocate for policies, programs, partnerships, and investments that strengthen CTE and STEM education.

• Connect business, education, non-profit, and foundation stakeholders to align interests and support.

• Communicate the vision and urgency for connecting education more closely to careers.
Progress Toward Shared CTE-STEM Outcomes

STEM Investments
- STEM Education Plan
- 13 STEM Hubs
- STEM Innovation Grants
- $9.6 million in funding 2017-29
- Revitalization Grants – 89 programs created
- Career Pathway funding model
- $19.2 million in funding 2017-19
- 100% district participation in first year
- Increased focus for CTE programs
- $170 million in funding - 34% for CTE
- Alignment of CTE-STEM in career connected learning
- Growing employer partnership & support
- Advocacy for CTE-STEM investments & policies

CTE Investments
- OCF Oracle CTE-STEM Fund
- Private funder investment
Successful Models: Pipeline to Jobs

- Pipeline to Jobs in Albany connects students to pathways to success from education to careers.
- Partnership of Albany Chamber, employers, the school districts, the school districts, local government, and Linn-Benton Community College.
Successful Models: Elevate Lane County

- Elevate Lane County works with employers to connect students to careers in high-wage, high-demand industries.
- Summer externships in industry help educators bridge the gap between classrooms & careers.

Photo credit: Athena Delene
Successful Models: Career Connected Learning in High School Science

• Portland Metro STEM Partnership works with educators and industry to embed career connected learning opportunities into high school science courses.
Successful Models: All Across the State

- STEM Beyond School
- Baker Technical Institute
- Treasure Valley Tech
- Umatilla STEM Academy
- Bright Futures Umpqua
- Oceanus Shipboard Experience
- MECOP Internships
- Math in Real Life

- Columbia Basin Homebuilders Program
- CTEC School in Salem-Keizer
- South Coast Healthcare Pathway Program
- Innovate Dayton
- Apprenti
- Many, many more
Pathways to Success
2019-21 CTE-STEM Investment Strategy

1. Strengthen CTE-STEM system infrastructure and leadership
   • Increase funding & support for STEM Investment Council
   • Increase funding for STEM Hub Network to support growth of network

2. Redesign and improve CTE-STEM learning
   • Continue to invest in STEM Innovation Grants
   • Improve math alignment and pathways across P20 continuum
   • Improve computer science education

3. Increase CTE-STEM degrees and credentials through pathway funding and revitalizations grants
   • Continue CTE Revitalization grants
   • Bolster Secondary Career Pathway Fund
   • Create Community College Career Pathway Fund
   • Fund ETIC Sustaining Pathway funding at universities

4. Fully fund High School Success (BM98)
Congresswoman Suzanne Bonamici
Pathways to Success Panel

- Jim Piro, Chair, Oregon STEM Investment Council
- Kristen Harrison, Executive Director, Portland Metro STEM Partnership
- Mark Mitsui, President, Portland Community College
- Toya Fick, Executive Director, Stand for Children
- Rep. Jeff Reardon
We All Have a Role to Play

- Join the Oregon CTE-STEM Employer Coalition to help advocate for CTE and STEM
- Connect with your local STEM Hub to invest your time and resources
- Open your workplaces and dedicate volunteers to CTE and STEM education