Career/College Readiness



Bridging school and outof-school programs

Why we support excellent education!



Deb Bailey

Applied Sciences/STEM Education Specialist



Sue Wilson

Applied Math/STEM Education Specialist



Marnie Jewell

Career Education /
Human Resources CTE
Education Specialist















ODE Mission, Vision, and Values

Mission-Why does our agency exist?

The Oregon Department of Education fosters equity and excellence for every learner through collaboration with educators, partners, and communities.

Vision-Where do we see the agency going? What are our aspirations?

Ensure all students have access to and benefit from a world-class, well-rounded, and equitable education system.

Values- What qualities will transform our mission and vision into reality?

Integrity
Equity
Excellence
Accountability

CB

Supporting students throughout their PK-12 journey

- 1. Start Strong
- 2. Be Proficient and Transition Successfully
- 3. Graduate College and Career Ready

Supporting internal and external customers

4. Experience Outstanding Customer Service

CB

Supporting students throughout their PK-12 journey

1. Start Strong: Every student enters school ready to learn and is academically successful by fourth grade.

CB

Supporting students throughout their PK-12 journey

2. Be Proficient and Transition Successfully: Every student is supported and on track to meet expected grade level outcomes through a well-rounded education.

CB

Supporting students throughout their PK-12 journey

3. Be Graduate College and Career Ready:

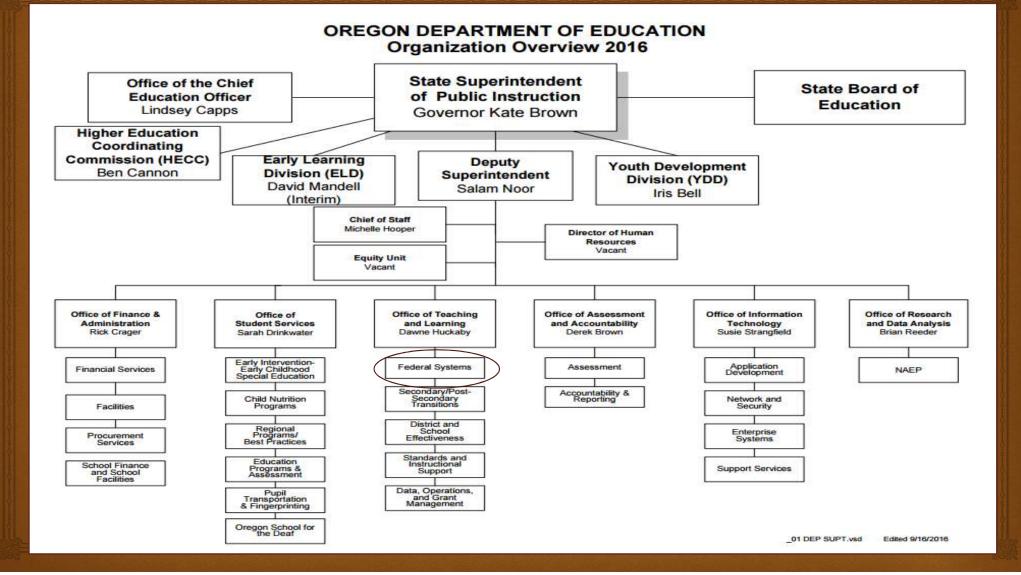
Every student graduates from high school ready for college, career, and civic life.

CB

Supporting internal and external customers

4. Experience Outstanding Customer Service:

Every student, district, and agency employee is supported through high-functioning business operations.



All the Titles and ESSA

Title I-A

Improving Basic Programs -LOW SES

Title I-C

Migrant Education

Title I-D

Neglected and Delinquent or At-Risk Children

Title II-A

Teacher Quality

Title II-B

Mathematics and Science Partnerships

Title II-C

Troops to Teachers

Title II-D

Educational Technology Program under ESEA ended in 2012.

Title III

English Learners and Immigrant Youth

Title IV-A

Safe and Drug-Free Schools and Communities -At Risk Youth and PD

Title IV-B

21st Century Community Learning Centers

Title V-A

Innovative Programs

Title V-B

Charter Schools

Title VI-A

Funding Flexibility

Title VI-B

Rural Education Initiative

<u>Title VII</u>

Indian, Native Hawaiian and Alaska Native Education

McKinney-Vento Act

(formerly Title X) Homeless Education

Personalized Learning

CB

Education Plan and Profile

Students develop a plan and profile to guide their learning and document progress toward their personal, career, and post-high school goals.

Personalized Learning

CB

Career-Related Learning Experiences

Students participate in experiences that connect classroom learning with real life experiences in the workplace, community, and/or school relevant to their education plan.

Personalized Learning



Extended Application

Students apply and extend their knowledge in new and complex situations related to the student's personal and/or career interests and post-high school goals through critical thinking, problem solving, or inquiry in real world contexts.

Oregon CIS (Career Information System)



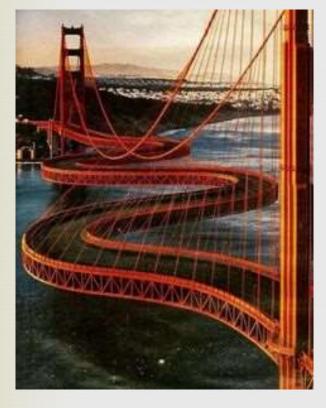
- **©** Occupation Sort
- **CRISITE** SKILLS
- **Work importance Locator**

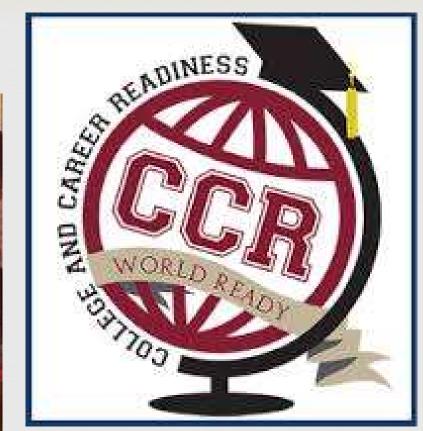


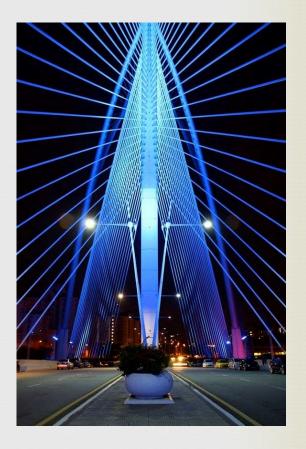
College/Career Readiness CTE Programs of Study/STEM And Effective Practices







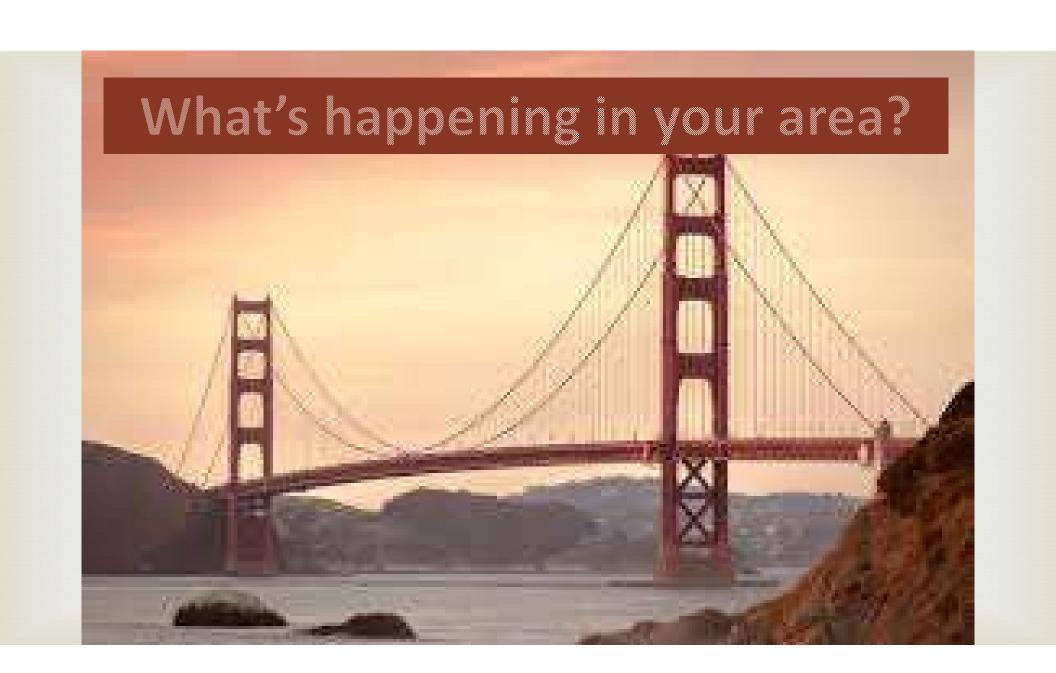






College and Career Readiness Definition for Oregon

College-and-Career-Ready Oregonians have acquired knowledge, skills, and professional behaviors that provide a starting point to enter and succeed in workplace, career training, or college courses leading to certificates or degrees.





C3 - College Career Collaborative
A new cross-sector action group is
working to mobilize counselors,
building administrators, and youth
advisors to accelerate Oregon's
progress toward two of our state's
most ambitious goals--100% high
school graduation and 80%
postsecondary completion.



CCR Alliance Academy: Professional Learning for Student Success

Module	Duration
Building a College Going Culture (Module 1)	4 weeks
College, Career, and Academic Planning (Module 2)	4 weeks
Financial Aid & College Applications (Module 3)	4 weeks
College and Career Advising in the Middle Grades (Module 4)	6 weeks
College and Career Advising for Special Populations	6 weeks
Maximizing School Counselor Impact on Student Success: A Module for School Leaders	4 weeks
College and Career Advising for Educators: A Module for Teacher Advisors	6 weeks
College and Career Advising in the Elementary Grades	Coming soon

College Career readiness

- 1. RACs/Reach Higher
- 2. Professional development/CCR Alliance Academy opportunities
- 3. Resourcing-ideas
 - 1. CTE programs as a resource
 - 1. Visits
 - 2. Webinar/e-meetings
 - 2. Funding/\$ issues
 - 3. Local resources/partners. Who are your champions?
- 4. Professional goals:
 - 1. What can you focus on in your program to move forward?
 - 2. How can you utilize info shared today to enhance your program?
 - 3. What data do you need?

Other Resources

Employment department:

1. Workforce Analysts

2. Qualityinfo.org

Oregon Connections

http://stemoregon.org/stemoregon-connections

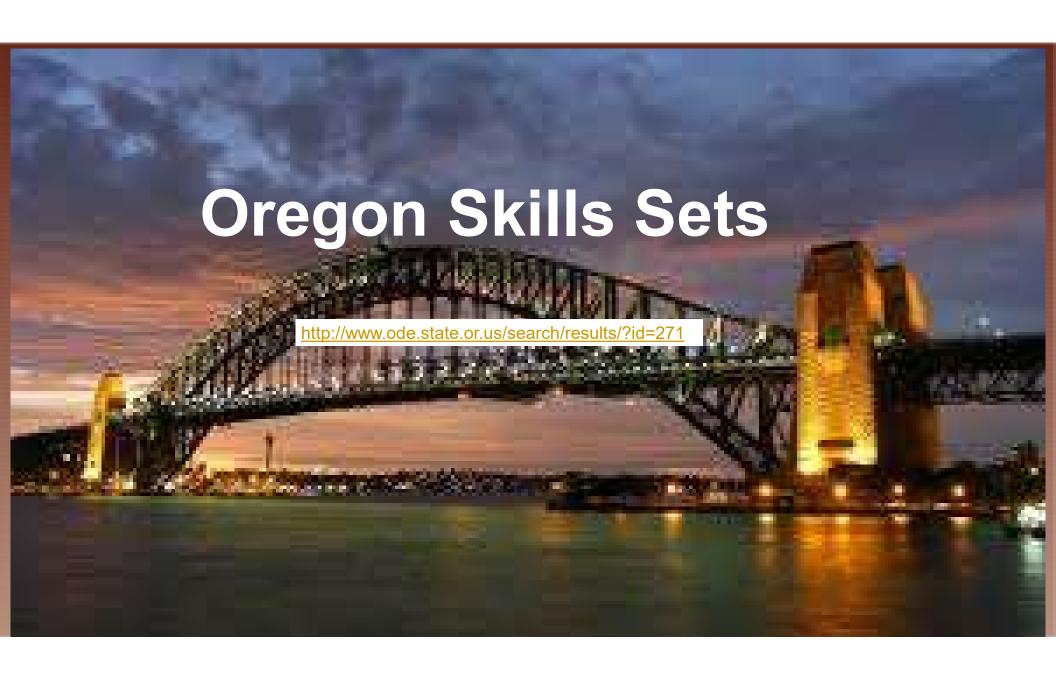
Oregon Education Network

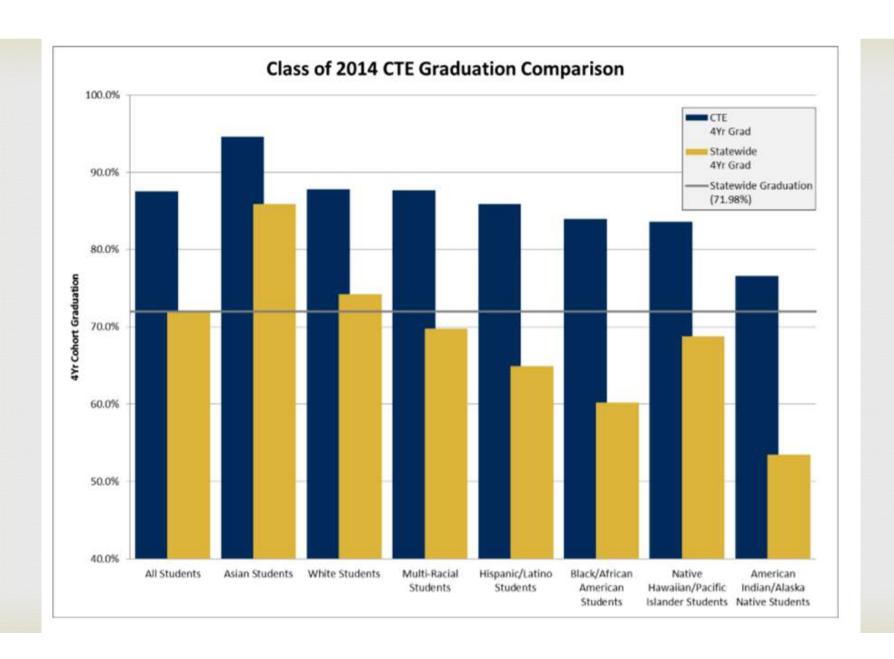
https://www.oregonednet.org

CTE

- Organizational
 Skills Chart
- Development of programs
- Content Advisory
 Panel







Why CTE:

Analysis:

CTE concentrators across every racial/ethnic subpopulation graduated at higher levels than did students in the same subpopulation statewide. The CTE Achievement Gap is particularly pronounced in subpopulations whose students graduated below the statewide average of 72.0%.

Class of 2014 Student Subpopulation	CTE 4Yr Grad	Statewide 4Yr Grad	% Difference	CTE n
Black/African American Students	84.0%	60.2%	23.8%	231
American Indian/Alaska Native Students	76.6%	53.5%	23.1%	226
Hispanic/Latino Students	85.9%	64.9%	21.0%	2,495
Multi-Racial Students	87.6%	69.8%	17.8%	639
Native Hawaiian/Pacific Islander Students	83.6%	68.8%	14.8%	73
White Students	87.8%	74.2%	13.6%	10,030
Asian Students	94.6%	85.9%	8.7%	647
All Students	87.5%	72.0%	15.5%	14,341

Class of 2014 Student Subpopulation	CTE	Statewide	%	CTF
	4Yr Grad	4Yr Grad	Difference	CTE n
Economically Disadvantaged Students	83.1%	64.2%	18.9%	5,698
Students with Disabilities	69.4%	51.1%	18.3%	2,086
English Learner Students	65.0%	51.7%	13.3%	143
All Students	87.5%	72.0%	15.5%	14,341

Developing a Program of Study

The elements of a program of study

- 1. Standards and Content
- 2. Alignment and Articulation
- 3. Accountability and Evaluation
- 4. Student Support Services**
- 5. Professional Development

CTE Licensure

What are the steps involved?

Advisory Committee (IAC)

- Industry Partners
- Well rounded-includes all aspects of skill sets
- Analysis of skill set alignment in various areas
 - Example: Education/early childhood education/family and community services
- Collaboration of educators and industry partners

Connecting Education to Careers

Strategic CTE Investments

- CTE Revitalization Grants
- Regional & Summer Programs
- Sustainable Funding

Shared Outcomes

- Economic prosperity
- Increased graduation rates
- Career and college readiness
- Equity for underserved students
- Student motivation & engagement
 Academic and technical proficiency
- Creativity, critical thinking, problemsolving, communication

Shared Approaches

- Hands-on/minds-on
- Community-based, purpose-driven
- · Interdisciplinary learning
- Opportunities for student choice
- · Authentic, "messy" problem-solving
- Using data & analytics
- Innovation & entrepreneurship
- · Industry partnerships
- Early career experiences

Shared High-demand Careers

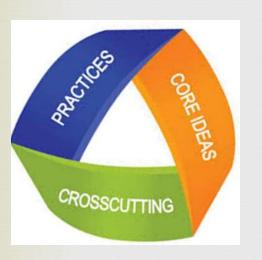
- Health Sciences
- Engineering & Construction
- Advanced Manufacturing
- Computer Science & IT
- Precision Agriculture & Food processing

Strategic STEM Investments

- Regional STEM Hub Network
- Innovation Grants
- High-demand Post-Secondary Programs

"STEM Education is an approach to teaching and lifelong learning that emphasizes the natural interconnectedness of the four separate STEM disciplines. These connections are made explicit through collaboration between educators resulting in real and appropriate context built into instruction, curriculum, and assessment. The common element of problem solving is emphasized across all STEM disciplines allowing students to discover, explore, and apply critical thinking skills as they learn."

NGSS Standards



Ask Questions



- What am Fotomore?
- What does his evidence mount?
- What is the relationshipbetween these variables?
- How can I make my model. more ecounty?
- What evidence do I need to answer my question?
- What hypothesis can I state based on my observations?
- in the data used correctly in the argument?

Investigate



- Phen is course of action that sell provide the best evidence to support execusions.
- aligner why state can be considered evidence

Use Math



- Use mathematical representations to support acientific conclusions.
- Create algorithms (a series of ordered steps) to solve a
- Use digital laboratory tools to observe, measure. record, and process data.
- Make quantitative produtions.

Communicate

- the a critical consumer of information about science
- Critically read scientific texts to determine the central ideas and obtain scientific. information to describe. patterns in evidence.
- Use multiple sources to obtain information used to evaluate the validity of claims and methods.
- Communicate ideas by using tables, diagrams. graphs, models, interactive displays, and equations as well as orally, in writing, and discussion.

Design a Model



- representations, unatogers and computer simulations
- Modern highlight name ideas and simplify others.
- Modelle are used to help presided, and to statements black
- erodetton New evolution changes the model

Analyze Data

- Construct and interpret graphical displays of data.
- Use computers to tabulate. graphically represent data. visualize, and statistically.
- Use much to represent relationships between variables and identify
- Take into account sources of error.
- its one variable the cause (count), or do both just happen at the same time (correlational)?

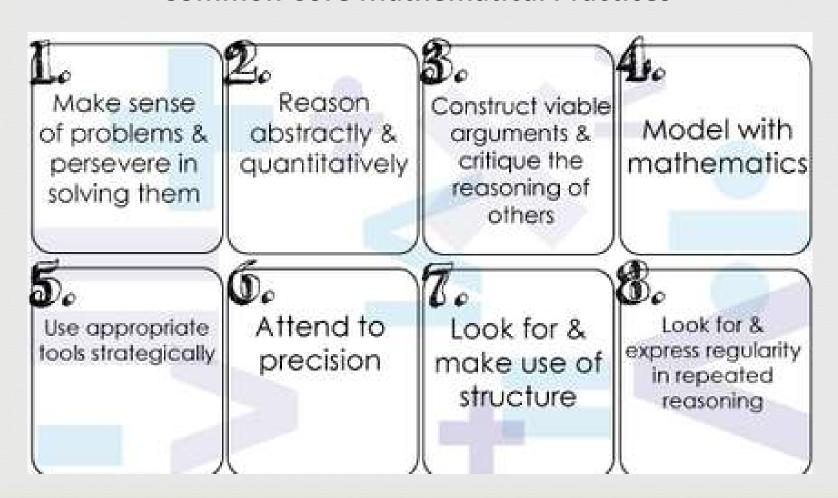
Explain

- sets the relative the terms of variables that predict and describe phenomena.
- Design Investigations that generals data to designing explanations to guidalisms
- Apply according reasoning to show why the data or evidence is adequate for the
- Construct on explanation using models or representations.

Arque

- Argue when investigating a previous providing questions about measurements, building data models, and using evidence to evaluate claims.
- Arguing happens when listaining, companing, and assistating compating ideas. and mathods.
- Respectfully provide and receive critiques about one's explanations, procedures, models, and questions by citing relevant evidence and pening and responding to

Common Core Mathematical Practices



Culturally Sustaining Instructional Framework

- Cognitive Demand
- Depth of Knowledge and Student Understanding
- Mathematical Discourse
- Power and Participation
- Academic Language Support for Linguistically Diverse Students
- Cultural/Community-based funds of Knowledge and Social Justice Support

STEM Investment Council Goals:

- Inspire and empower our students to develop the knowledge, skills and mindsets necessary to thrive in a rapidly changing, technology rich, global society.
- Ensure equitable opportunities and access for each and every student to become a part of an inclusive innovation economy.
- Continuously improve the effectiveness, access to resources and the number of formal and informal STEM Educators.
- Create sustainable and supportive conditions to achieve STEM outcomes aligned to Oregon's economic, education and community goals.

Out-of-school STEM Innovation Grant

- Statewide network of out-of-school STEM programs
- Serves 4-8 grade students, 70% from historically underserved groups
- Builds capacity of existing programs
- Professional Learning Network
- Development of Program Evaluation tools



In-school and out-of-school educators
Regional networks
Business/Industry
Community partners
Higher Education
Internship/Workplace Learning
Student Leadership Organizations

Are you connected?

How are you connected?



If you aim at nothing, you will hit it every time. -Zig Ziglar

Contact us!

Office of Teaching and Learning

Oregon Department of Education

255 Capitol St NE | Salem, Oregon 97310

Susan Wilson

Education Specialist Applied Math/ STEM

Ph: 503-947-5613 | Fx: 503-378-5156

Email: susan.wilson@ode.state.or.us



Deb Bailey

Education Specialist
Applied Science/ STEM

Ph: 503-947-0046 | Fx: 503-378-5156

Email: deborah.bailey@ode.state.or.us

Marnie Jewell

Education Specialist

Career Education & Human Resources CTE

Ph: 503-378-5125 | Fx: 503-378-5156

Email: Marnie.Jewell@ode.state.or.us