



# STEM Investment Council

January 30, 2015

9:00am – 11:00am

2 World Trade Center, Plaza Conference Room

121 SW Salmon St.

Portland, OR

Call-In Information:

Dial (888) 204 5984

Code 992939

JIM PIRO, Chair

AUBREY CLARK

HERB FRICKE

JESSICA GOMEZ

LISA GRAHAM

DWAYNE JOHNSON

ERIC MESLOW

THOMPSON  
MORRISON

FRED ZIARI

Staff:

MARK LEWIS

## AGENDA

1. **Chair comments & Director's report**
2. **Governor's recommended budget: STEM & CTE Investments**  
Lindsey Capps, Chief of Staff, OEIB
3. **STEM & CTE Legislative Concepts**
4. **STEM & CTE Employer Coalition**  
Kyle Ritchey-Noll, Oregon Business Council
5. **Connect Oregon: an online platform for connecting industry with educators**  
Jill Hubbard, South Metro-Salem STEM Partnership
6. **Subcommittee Reports:**
  - Strategic Planning
  - Data and Metrics
  - Communications and Advocacy

7. **Public Comment**

*Members of the public wanting to give public testimony must sign in.*

*There will only be one speaker from each group.*

*Each individual speaker or group spokesman will have three (3) minutes.*

*All meetings of the STEM Investment Council are open to the public and will conform to Oregon public meetings laws. The upcoming meeting schedule and materials from past meetings are posted online. A request for an interpreter for the hearing impaired or for accommodations for people with disabilities should be made to Seth Allen at 503-378-8213 or by email at Seth.Allen@state.or.us. Requests for accommodation should be made at least 48 hours in advance.*

STEM & CTE Bill Tracking  
2015-2017 Legislative Session

Bill #	Title	Sponsor	Notes
HB 2728	Oregon Talent Council	Read	Establishes Oregon Talent Council to assess high-demand, high-growth workforce needs, and to administer program start-up funding to post-secondary institutions in those growth sectors.
HB XXXX	Computer Science & Robotics	Komp	Provides funding (\$5m) to support increased CS program offerings in the State through teacher professional development coordinated by the OR Computer Science Teachers Association. Also provides funding for many out-of-school programs in robotics and CS.
HB 2624	CTE Teacher Licensure	Reardon	Meant to increase qualified CTE teachers in the system through professional development and streamlined certification.
SB 112	CTE Investment Council	Dembrow	Establishes Career and Technical Education Investment Council to administer CTE Revitalization grants, make strategic recommendations to OEIB, and improve coordination between K-12 and CC. Requires coordination with STEM Council.
HB 2623	Credit Equivalency Pilots	Reardon	Establishes at least three pilot sites to explore providing equivalency credit (both HS and CC).
HB YYYY	Differential Funding of CTE	?	Changes school funding formula to provide longer-term funding to districts for FTE in approved programs of study. GRB \$11m
HB 2648	Outdoor School	Sprenger	Provides \$44m to OSU Extension for outdoor school camps for 5 <sup>th</sup> and 6 <sup>th</sup> graders.
HB 2616	Apprenticeships	Holvey, Reardon	Funds apprenticeships in occupations prevalent in the construction industry through BOLI. Funding comes from contracting agencies that award public improvement contracts.
HB 2766	Computer Science as language requirement	Parrish	Provides that language-based computer coding may satisfy any world language requirements in public schools and second language requirements in community colleges and post-secondary institutions of education.
HB 2681	CC Placement Test	Komp	Directs community colleges to use one of four national standardized tests for placement of students. Requires computer-adaptive assessments.
HB 2045	STEM Study of Effective Programs	presession	Placeholder.
HB 2046	ETIC Effectiveness	presession	Placeholder.

## Connect Education to Careers Through Career Technical Education And Science, Technology, Engineering and Math

Leadership Summit Discussion Draft

Degrees and certificates associated with science, technology, engineering and math (STEM) are in high demand throughout the Oregon economy. Preparing more Oregonians for high-demand, well-paying jobs will expand the personal potential of individuals, keep Oregon's companies and economy more competitive, raise family incomes, strengthen the middle class, promote equity, and reduce poverty.

The education practices proposed in this agenda bring benefits to students, regardless of career choice. Career Technical Education (CTE) and Science Technology Engineering and Math (STEM) engages students, instills in them good work habits, and motivates them to stay the course. It also supports fundamental skills development, including critical inquiry, logical reasoning, and creative problem solving.

To achieve our vision we need:

- High quality teaching and learning, both in and beyond the classroom that engages and motivates students.
- Elimination of the walls between academic and applied learning, between in-school and out-of-school learning, between schools at all levels, and between educators and employers.
- Seamless, articulated standards, curriculum, and assessments.
- Employers taking a strong leadership role in supporting the kind of education system that makes their enterprises more creative and competitive.
- Education providers and employers working more closely together at both the policy and local level to ensure that the pathway works for students.
- State investment in the higher cost scientific and technical disciplines.

### Proposed Key Actions for 2015

**1. *Make Investments and adjust funding formulas to spark new models, pay for higher costs of programs, and connect them more closely with industry.***

- Provide strategic investments to support creation or expansion of degrees and credentials that address industry needs and employment opportunities, especially in skilled manufacturing, technology, health and biosciences, and construction and skilled trades. Ensure hands-on, experiential learning and internships as part of program design.
- Provide additional funding to support differential funding weights for CTE, science, and computing programs in high schools and community colleges and for engineering and targeted science programs in universities.
- Provide support to increase access to out-of-school programs, such as internships, that motivate and prepare students for STEM/CTE fields.

**2. *Clarify and align learning pathways to help students better navigate to their education and career goals.***

- Organize and fund cross-functional teams to align math curriculum to create consistent standards and assessment tools, at all levels of education to enable smooth transitions from one level of education to the next.
- Task and fund the regional STEM hubs to coordinate connections between workforce, economic development, and education. Hubs would promote high-quality professional development, internships, and out-of-school learning programs.
- Incent students to take CTE courses by adopting local policies that grant core credit equivalency.

- Create an electronic Personal Achievement Record that helps students identify courses of study needed to achieve a particular degree or credential – and that records progress to that achievement. Provide prospective students with clear data about the cost of training and expected earnings, so they can make an informed selection about CTE and STEM paths.
- 3. *Connect employers more closely with students and schools.***
- Create a Talent Council in collaboration with the STEM Investment Council and the state and local Workforce Investment Boards to act as an industry portal to education, workforce, and economic development to provide industry information and advice.
    - Provide centralized information and outcome-based metrics.
    - Connect key industry needs to education and training programs.
    - Steer investments in strategic programs.
    - Actively support student work experience.
  - Promote and fund adoption of industry-driven credentials and degrees that help potential employees and educators understand requirements of jobs. These would include credentials in:
    - Career readiness
    - Manufacturing
    - Software technology
    - Health occupations
    - Construction and other skilled trades
- 4. *Expand the size and capacity of our CTE teacher corps by recruiting and training additional CTE classroom teachers.***
- Establish and implement state funded scholarships and externships to attract and prepare new CTE teachers for the classroom.
  - Create and implement new teacher boot camps to award provisional teaching licenses for those with workplace and professional skills as a pathway to teaching in CTE classrooms.
  - Provide continuing on-the-job professional mentoring and a “critical path” professional education pathway to full licensure for boot camp graduates as they teach in CTE classrooms.
- 5. *Implement a coordinated communications campaign to change student perceptions of CTE-STEM careers and to increase awareness of opportunities and pathways.***
- Demonstrate the creativity, curiosity, innovation and fun of STEM/CTE
  - Show the pathways that these careers offer to opportunity and individual prosperity.
  - Highlight and create understanding of STEM/CTE employers and careers.
  - Illustrate the importance of these careers to the economic vitality of Oregon.

# Governor's Connecting Education to Careers Career and Technical Education Investments



\$24 million for Innovation and Expansion  
\$11.2 Weighted Funding from the Oregon State School Fund

## Partner Opportunity Through Facility Survey

\$500,000

- Systematic survey of facility utilization to help inform how and where savings can be achieved

### Outcomes

- Increase Student Engagement/Attendance
- Increase Underserved Student CTE/STEM Enrollment
- Increase Graduation Rates
- Increase Dual Credit Acquisition
- Increase Academic and Technical Attainment
- Increase Postsecondary Degree and Credential Attainment
- Teacher Effectiveness

## Student CTE Youth Engagement

\$7.5 million

- Regional access for underserved students to state-of-the-art facilities, training and mentoring that is not available in their community
- Resources for summer regional instruction for middle school students (short-term exploratory), and
- Advanced students (grades 10-12); intensive study addressing academic and technical attainment and industry credentials

## CTE Revitalization & Innovation Grants

\$17 million

- Continuation of CTE Revitalization and Innovation Grants (\$11.5 million)
- Career and Technical Student Leadership Organizations (\$500K)
- High-wage, high-demand Career Pathway instruction through regional collaborations (\$5 million)

## Weighted Funding

\$11.2 million

- .0017 adjustment to the \$6.9 billion K-12 funding formula for CTE; impacting approximately 10,000 students initially
  - .1 additional weight for students who earn 3 or more credits in an approved CTE Program
  - .2 additional weight for students who earn 3 or more credits in an approved CTE Program and are underserved
  - .2 with for students who earn 3 or more credits in an approved CTE Program and acquire an industry credential, or
  - .3 additional weight who meet all 3 criteria, 3 credits, underserved and a credential



## Oregon Needs Unified Investment To Connect CTE and STEM Education To Well Paying Jobs and Careers

**T**oo many skilled job openings in the Oregon economy are either going unfilled or are filled by out-of-state applicants because not enough Oregonians have the math, science, and applied technical education required. This is costly to our enterprises, our economy, our tax base, and to our citizens. In particular, it represents a lost opportunity to put many Oregonians on a path from poverty to prosperity.

Employers concerned about this problem have come together to form the Oregon CTE-STEM Employer Coalition to support state policy changes and investments for math, science, and technical education that connects to well paying jobs and careers. The purpose of the coalition is to advocate for unified and strategic state investment in Career Technical Education (CTE) and in science, technology, engineering, and mathematics (STEM) education.

The Coalition sees CTE and STEM investments as a continuum for preparing students for the cognitive demands of technical occupations and life – from critical inquiry to logical reasoning to practical problem solving. CTE-STEM education also has intrinsic value through applied learning that engages students, instills in them good work habits, and motivates them to stay the course. Preparing more Oregonians for high-demand, well-paying jobs will expand the personal potential of individuals, keep Oregon’s companies and economy more competitive, raise family incomes, strengthen the middle class, promote equity, and reduce poverty.

**Oregon CTE-STEM Employer Coalition Co-chairs:** Jill Eiland, Intel Corp, and Jim Piro, PGE

### Key Outcomes Sought by the Coalition

- Double the number of 4<sup>th</sup> and 8<sup>th</sup> grade students proficient in math and science by 2025.
- Double the number of CTE-STEM degrees and certificates by 2025.
- Increase participation of students from under-represented groups.
- Long range, achieve:
  - Higher per capita income
  - Poverty reduction
  - Increased revenues for public services.

### Key Actions Needed

1. Provide strategic grants to spark new models, adjust school funding formulas to pay for higher costs of programs, and connect programs more closely with industry.
2. Clarify and align learning pathways to help students better navigate to their education and career goals.
3. Connect employers more closely with students and schools.
4. Expand the size and capacity of our CTE-STEM teacher corps by recruiting and training additional CTE and STEM classroom teachers.
5. Implement a coordinated communications campaign to change student and parental perceptions of CTE-STEM careers and to increase awareness of opportunities and pathways.

### For More Information:

Please contact Kyle Ritchey-Noll at [kritcheynoll@orbusinesscouncil.org](mailto:kritcheynoll@orbusinesscouncil.org).



## Commitment to Participate Oregon CTE-STEM Employer Coalition

**YES, my company wants to join the Oregon CTE-STEM Employer Coalition!**

I understand the CTE-STEM Coalition is looking for a commitment that involves two things:

- ✓ Naming a senior manager (or that person's designee) to participate in the Coalition.
- ✓ Giving the Coalition permission to use our company name in public awareness efforts to advance CTE-STEM education in Oregon.

Signature: \_\_\_\_\_

**Please check additional ways you would like to be involved:**

- I want to be kept informed.
- I'm available to testify to legislative committees or provide letters of support.
- I'd like to help develop policy documents.
- I want to make a financial contribution.
- Other:

### Contact Information

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Key Contact Name and Title: \_\_\_\_\_

Key Contact Email & Phone Number: \_\_\_\_\_

Number of Employees: \_\_\_\_\_ Industry: \_\_\_\_\_

Please email to Kyle Ritchey-Noll, [kritcheynoll@orbusinesscouncil.org](mailto:kritcheynoll@orbusinesscouncil.org). For additional information or questions, please contact Kyle at 503-805-6402.

## STEM Investment Council Recommendations, 2015-17

	STEM Innovation Network	Strategic STEM Programming	Post-secondary Talent Development
Purpose	Establish a statewide network of regional partnerships to catalyze economic development, workforce, education, and community development related to STEM. This collaborative network will reduce isolation of practitioners, foster greater communication, exchange of ideas and intellectual resources, and more effective implementation of evidence-based practices to enact local solutions to local needs. These <b>Regional STEM Hubs</b> will be integrated over time with other regional collaborations.	Increase access to successful evidence-based and outcomes-focused STEM programs inside and outside of school along the continuum from early learning through community college— <b>particularly for students of color and high-needs communities</b> . Regional STEM Hubs will be closely involved in decisions, but funds will also be used to build capacity and improve outcomes in communities not currently served by the Hubs. Source of funds are both legislative as well as from industry and philanthropy.	Tightly couple educational outcomes to economic, social, and workforce needs. Increase the adaptability of post-secondary institutions—both community colleges and universities—to changing economic and workforce needs in STEM, while increasing recruitment, retention, and completion of Oregon students in STEM, <b>especially for women and students of color</b> .
Description	<p>A) Provide financial support for coordination, communication, data collection, and program support for ~10-12 STEM Hubs whose multi-sector collaborations will focus on:</p> <ul style="list-style-type: none"> <li>• Implementing Common Core and Next Gen Science standards</li> <li>• Partnerships with STEM employers</li> <li>• Teacher professional development</li> <li>• Mentorships/internships for students &amp; teachers</li> <li>• Dual credit and bridging programs</li> <li>• Early career awareness</li> <li>• Access to effective out-of-school programs</li> </ul> <p>B) Create State support system that provides the connective structures, governances, and communication across the hubs. It also provides:</p> <ul style="list-style-type: none"> <li>• Communications &amp; advocacy</li> <li>• Supportive policy development</li> <li>• Data systems &amp; evaluation frameworks</li> <li>• Shared public and private investments</li> </ul>	<p>This multi-tiered grant program that will provide funding at two levels: 1) <i>Development</i>, and 2) <i>Dissemination</i>. Grants will support the design, implementation, and evaluation of high-probability approaches, programs, and practices. Focus will be on motivating and preparing students for STEM futures. <b>75% of all investments will be serving underserved and underrepresented students</b>, with a special emphasis on intermediate and middle-school years.</p> <p><b>Development:</b> shorter-term interventions designed to spark innovations and research promising practices and approaches.</p> <p><b>Dissemination:</b> Multi-year funding to spread effective program interventions that have demonstrated evidence of impact.</p> <p><b>Primary Foci:</b> Close the achievement gap, Out-of-school programs, middle school youth, digital literacy &amp; computing, engineering, applied math.</p>	<p>A. Start up funding to adapt community college and university programs aligned to industry needs in:</p> <ul style="list-style-type: none"> <li>• Health care &amp; bio-sciences</li> <li>• Computer science &amp; informatics</li> <li>• Engineering &amp; mechatronics</li> <li>• High-tech manufacturing</li> <li>• Agriculture &amp; natural resources</li> </ul> <p>B. Incentive funding to improve student recruitment, retention, completion, and Oregon job placement—especially for women and students of color. Examples include:</p> <ul style="list-style-type: none"> <li>• Undergrad internships</li> <li>• Undergrad research</li> <li>• Cultural and academic support</li> <li>• Tuition incentives</li> <li>• Employer incentives for Oregon grads.</li> </ul>
Outcomes	<ol style="list-style-type: none"> <li>1) Increase student achievement scores.</li> <li>2) Increase career awareness of STEM jobs.</li> <li>3) Increase teacher effectiveness in STEM.</li> <li>4) Effectively implement new math &amp; science stds.</li> <li>5) Strengthen coherence and effectiveness of state system</li> </ol>	<ol style="list-style-type: none"> <li>1) Close the achievement gap in STEM.</li> <li>2) Increase student understanding of content.</li> <li>3) Increase student interest and motivation.</li> <li>4) More informed career &amp; academic choices.</li> <li>5) Revitalize rigorous, hands-on learning tied to career-related skillsets.</li> </ol>	<ol style="list-style-type: none"> <li>1) Increased post-secondary credentials tied to high-demand STEM fields.</li> <li>2) Increased # of under-represented students and women receiving STEM credentials and degrees.</li> <li>3) Increased Oregon grads in Oregon jobs.</li> <li>4) Increased tax revenues.</li> </ol>



**Governance: Establish systems, processes, and communications strategies to effectively manage and evaluate impact of investments.**

## Key rationale:

- **STEM = Jobs**

- STEM Jobs are growing at 2-3 times the rate of non-STEM jobs, especially in: Health care & bio-medical, Computing & Analytics, Engineering & mechatronics.
- Oregon employers consistently need to import talent to meet their needs

- **STEM = Prosperity**

- STEM jobs pay more (25% on average)
- Higher earnings in STEM generate additional revenue for the State and local communities.
- Increased access to STEM jobs can break inter-generational poverty

- **STEM = Economic Growth & Innovation**

- Innovation is a primary driver of American prosperity. We can not compete with China and India in terms of mid-level jobs.
- STEM fosters creativity, curiosity, critical thinking, and problem solving
- STEM solves the problems of tomorrow, today.

- **STEM = Equity**

- Less than 20% of students of color score proficient or advanced on nationally normed test in math and science.
- Just 2.2% of Hispanics and Latinos, 2.7% of African Americans, and 3.3% of Native Americans have earned a first university degree in the natural sciences or engineering by age 24.
- In an increasingly complex, technologically-rich world, STEM literacy is required for full participation in society.

- **STEM = Higher graduation rates**

- Quality STEM classes and programs are “*hands-on and minds-on.*” Students are engaged and excited about learning, keeping them in school and on the path to success.
- 64% of first year community college students in Oregon coming from high school have to take “developmental math.

## Recommended STEM Investments (\$21.1m total, \$7m increase from 2013-15)

### Statewide Network of Regional STEM Hubs (\$5m)

#### Outcomes:

- Increase graduation rates.
- Increase teacher effectiveness.
- Increase math & science scores.
- Increase early college credits.
- Increase student interest in STEM.
- Increase college-going rates.

- Expands State network to 10-12 Regional STEM Hubs (~6 new)
- Hubs governed by K-12, industry, workforce investment boards, economic development, civic organizations, out-of-school education non-profits, universities, and community colleges
- Hubs develop an outcomes-based Partnership Plan
- Hubs align with other regional efforts such as Regional Achievement Collaboratives and Early Learning Hubs
- Strategies include:
  - Educator professional development
  - Out of school programs
  - Industry internships and mentorships
  - Bridging programs to ease student transitions

### STEM Innovation & Dissemination Grants (\$7.1m)

#### Outcomes:

- Decrease achievement and participation gaps for students of color and students in poverty.
- Increase attendance rates.
- Increase math achievement.
- Increase student interest in STEM.
- Increase early educator capacity.

#### Two levels of grants

- 1) Taking effective programs to scale
  - 2) Evidencing promising approaches and programs
- Transform mathematics education
    - Pilot computer-based adaptive learning programs for 4-8 grades.
    - Professional development that emphasizes applied mathematics such as in CTE, construction, engineering, and science
  - Expand computer science & engineering programs in K-12
  - Increase access to out of school STEM programs, particularly for students of color
  - Provide training & curriculum for early learning providers in math & science

### High-Demand Post-secondary Programs (\$9m)

#### Outcomes:

- Increase college-going rates.
- Increase degrees and certificates in high-wage, high-demand fields—particularly women and minorities.
- Increase employability of Oregon students.

#### High demand fields include:

- Health sciences
- Computer science & Analytics
- Engineering
- Energy
- High Tech Manufacturing (industrial engineering, mechatronics, etc.)
- Precision agriculture and Advanced Food Processing

# Oregon Connections

the next-generation, web-based tool connecting K-20 educators with  
STEM professionals.

Jill Hubbard ---- [jill@jillhubbard.com](mailto:jill@jillhubbard.com)

STEM Network Director, South Metro-Salem STEM Partnership  
Engineering and Computer Science Teacher, Tualatin High School  
Former Senior Design Engineer – Intel Corporation



SOUTH METRO-SALEM  
**STEM**  
Partnership



# What Are The Goals?



- Provide **authentic** and **contextual** student learning experiences
- **Connect** student learning to professionals and **careers**
- **Inspire** the next generation of **innovators**
- Provide opportunity for **all students**

# Oregon Connections



- **Next-Generation web-based tool**
- **Connects K-20 Educators to STEM Professionals**
- **Statewide access - centralized**
- **Move from a scarcity to an Abundance of Resources**
- **Opens boundaries**

# Student Needs Focused

## Weathering and Erosion

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### Description

We are studying weather, especially the effects of lightening.

### Key Questions

What factors should kids keep in mind when building a structure to stay protected from lightening?

### Expected Outcomes

How to build a shelter to stay protected from the weather, especially lightening.

### Documents

#### Recommended Experts



AMEETA HEMMADI  
Archon Corporation

✉ Send message



Daniel Getz  
HKS, Inc.

✉ Send message



Diego Barrera  
Stantec

✉ Send message



Chad Martin  
Stantec

✉ Send message

Requester

✉ Send Message



**Elizabeth Wong**  
REDLAND ELEMENTARY  
SCHOOL, OREGON CITY  
SD 62

Your classroom scheduled to join this session

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Session Type

Not Specified



Feedback & Support

# Business Profiles Quick and Easy



## Manjiri McCoy

Headline not added yet!

Company: [Autodesk Inc.](#)

Job Title: [Software Engineer](#)

Location: [Lake Oswego, OR](#)

[← Go Back](#)

**Profile Details**



Virtual Sessions



In-Person Requests



## Biography

I am interested and experienced in developing desktop CAD software and managing software development teams. I design software keeping customer workflows in mind, using technologies and methodologies that are best suited to solving their problems. Software quality and ease-of-use are very important to me.

I have over 14 years' experience in designing and developing 3D CAD, Visualization and PLM desktop applications, 6 years' experience as a Tech Lead working with distributed teams, 1 years' experience as a Software Development Manager managing a globally distributed team, and 6 months experience with developing on the Android Mobile platform.

I am passionate about STEM education and have volunteered with the Oregon FIRST Robotics organization for the past 5 years as a volunteer and a Judge. I started and helped conduct a CAD training class at a local high school, and initiated a program to donate high-end laptops to needy local FRC teams to use for designing their robots.

## Skills/Specialties

[Programming](#)

[Software Development](#)

[Software Design](#)

[CAD](#)

[3d Modeling](#)

[C++](#)

[C#](#)

## Affiliations

[FIRST Robotics](#)



[Feedback & Support](#)

# Company Page



Texas Instruments

Organization: Texas Instruments

Industry: Semiconductors

📍 N/A

14  
Members

8  
Completed Sessions

0  
Upcoming Sessions

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## TEXAS INSTRUMENTS

For more than 80 years, Texas Instruments has used increasingly complex signal-processing technology incremental to the revolutionary – to literally and repeatedly change the world.

Every day, our semiconductor innovations help 90,000 customers unlock possibilities for a smarter, safer, more enjoyable world. Our focus on building a better future is ingrained in everything we do, from responsible employee care and active involvement with the communities we live in.

Tiers are a tremendously diverse group, coming from every continent, embracing scores of different cultures and dozens of languages; yet we all share a passion for discovery. After all, innovation is what we do.

TI's amazing past is a prologue to an even more incredible future. And in many ways, our story is just be

### Specialties

Semiconductors Analog DSP DLP Power Management

Education Technology Microcontrollers MCU

### Affiliations

N/A

### Website

<http://www.ti.com>

### Industry

Semiconductors

### Company Size

10,000+



# Virtual Connections

## Exciting Applications of Computer Science

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### Description

My class is learning how to solve problems and then implement those solutions in a programming language. We work with the C programming language

### Key Questions

I'd like the industry expert to demo something they're working on to help generate excitement. Phone apps would be great along with a brief/high level overview of the process and maybe a link to some tutorials for driven students. It's an intro class to it's all about generating buzz and

Presenter

[Send Message](#)



**Sam De La Garza**  
Paycor

Requester

**You!**



**Jill Hubbard**  
TUALATIN HIGH  
SCHOOL, TIGARD-  
TUALATIN SD 23J

Your classroom scheduled to join this session

Want to Share, Edit, or Copy this request?

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# Easily Searchable

## Quick Filters

All (18)

### Company

- Nepris Inc. (3)
- Agri-Business Council Of Oregon (1)
- Autodesk Inc. (1)
- Bizconnect (1)
- Bonneville Environmental Foundation (1)
- Fuse Insight (1)
- Intel (1)
- Microsoft (1)
- Oregon Education Investment Board (1)
- Oregon Tech (1)
- Portland General Electric (1)
- Rogue Workforce Partnership (1)
- Sanyo Solar Of Oregon (1)
- The Nature Conservancy (1)
- Trimet (1)

### Industry

- Computer Software (4)
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- Software Engineering (1)
- Transit (1)

All

Professionals

Educators

oregon

Search

18 members found!



Thompson Morrison

**Company:** FUSE Insight

**Job Title:** CEO

📍 Portland, OR

→ View Profile



Manjiri McCoy

**Company:** Autodesk Inc.

**Job Title:** Software Engineer

📍 Lake Oswego, OR

→ View Profile



Roland Henson

Planes, Trains, and Automobiles

**Company:** TriMet

**Job Title:** NRV Supervisor

📍 Tualatin, OR



Chaun MacQueen

Renewable Energy STEM Teacher Training and Resources

**Company:** Bonneville Environmental Foundation

**Job Title:** Program Dir

Feedback & Support

# The Dashboard

## Dashboard



Your In-Person ASK Requests  
1



Your Requested Virtual Sessions  
0



Your Upcoming Virtual Sessions  
0



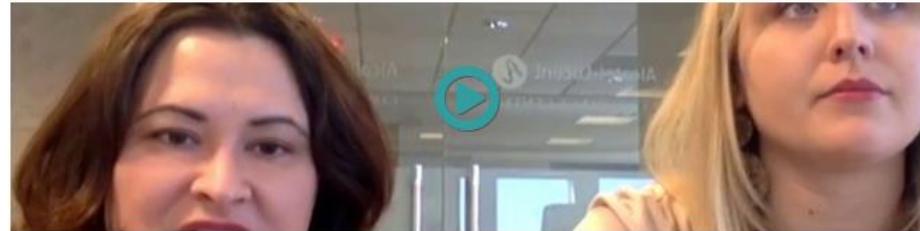
Your Completed Virtual sessions  
1

### Welcome Jill!

Here are a list of quick links for you!

- 1 Review offers [GO!](#)
- 2 Create a new session request [GO!](#)
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- 4 Check your public profile [Edit your profile to make it look nice!](#) [GO!](#)
- 5 Do you have a free subscription coupon? [Redeem here](#) [GO!](#)

### Featured Session Video



[Watch all completed sessions!](#)

### Messages

You have 6 new message(s).



**Georgi Harris**

Re: Volunteer Request

Hello,

I was supposed to be an in-person request but I don't think I noticed where to specify it

Jan 21



**Liz Wong**

Re: Volunteer Request

In person would be better. Thanks, Liz

Jan 20

### Your Profile

Your profile is 92 % complete!

92 %

Tips to improve your profile:

Add your school and district info

[Add Now](#)

Add your classes

[Add Now](#)

Create session requests

[Start Now](#)

Write a short bio

[Add Now](#)

### Top Contributors

Super stars in our system!

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- IN THE NEWS

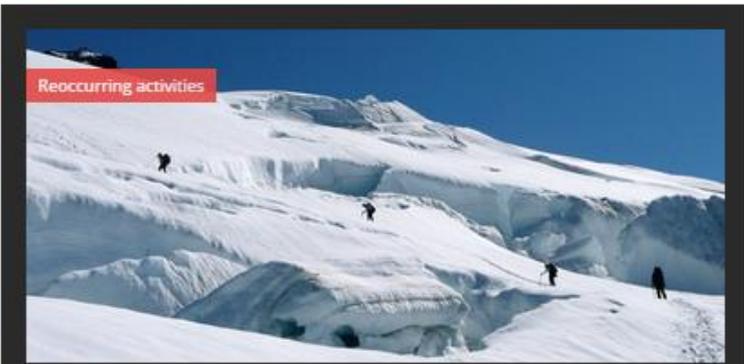


News Ticker January 20, 2015 in Summer Courses // WiSci: Girls STEAM Camp - Rwanda, Summer 2015, deadline Feb 10th.



**Stormwater Pathways Workshops, on Saturday, Jan 24th**

This workshop invites past OCEP teachers and their colleagues to reconnect with OCEP resources through the exploration of the Stormwater Pathways topic guide. We will investigate watersheds through place-based field experiences, connect activities to Next Generation Science Standards, and generate ideas for student led stewardship projects. [...]



Reoccurring activities

Girls On Ice - A Mountaineering

To search, type and hit enter

STEM Oregon Partnership

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- STEM Oregon @stemoregon · Sep 10  
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Why Girls? Why STEM? Oregon Girls Collaborative ... - stemoregon.org/wp-content/upl... #STEM #edtech #stemeducation #edchat
- STEM Oregon @stemoregon · Sep 9  
STEM Champions Wanted - Oregon Girls Collaborative Project - stemoregon.org/wp-content/upl... #STEM #edtech #stemeducation #edchat
- Retweeted by STEM Oregon  
NASA @NASA · Sep 8  
Our 1st completed @NASA\_Orion crew module sits atop its service module @NASAKennedy. More: go.nasa.gov/1qHmxPc



STEM Oregon Partnership

STEM Oregon 2 hours ago

WiSci: Girls STEAM Camp - Rwanda, Summer 2015, deadline Feb 10th. - <http://t.co/FcnNQX5zpt> #STEM @ORLearns @GirlUp



**WiSci: Girls STEAM Camp - Rwanda, Summer 2015, deadline Feb 10th. | STEM Oregon**  
stemoregon.org  
WiSci: Girls STEAM Camp - Rwanda, Summer 2015, deadline Feb 10th.

# We Need You!

## STEMOregon.org/works

# WE NEED



# YOU



SOUTH METRO-SALEM  
**STEM**  
Partnership

HOME EDUCATORS VOLUNTEERS PARENTS STEM HUBS IN THE NEWS



News Ticker January 27, 2015 in Events // ASE Internship February's Informational Meetings, see date below

Home » Oregon Connections » How It Works

## How It Works

Are you a STEM professional looking to make a difference by volunteering in the classroom? **Oregon Connections** is an easy to use tool that matches STEM professionals like you with educators looking for people with your expertise and skills.

- Does your company host field trips or other events? Post an offer and get matched with like minded teachers and students.
- Don't have time to leave your workplace? STEMOregon Connections offers both in-person and virtual connections.
- Does your company have an employee outreach program? STEMOregon Connections can manage, engage, and expand volunteer opportunities.

To use the system, **sign-and and create your profile**. When an educator request matches it, you'll be notified.

## Upcoming Industry Partner Webinars!

Sign up for a webinar. All webinars run approximately 30 minutes. We'll provide a short system overview and help you set up your profile. If you have any questions, please email [jill.hubbard@oit.edu](mailto:jill.hubbard@oit.edu).

- **Register for:** February 3, 2015 at 09:00 AM PST
- **Register for:** February 9, 2015 at 09:00 AM PST
- **Register for:** February 11, 2015 at 09:00 AM PST



In Partnership With



# Building Our Shared Volunteer Pool

- ⦿ Current Connections – What is the state of affairs in your organization?
- ⦿ Making New Connections – How does your organization currently find volunteers or connect volunteers to education?
- ⦿ Facilitating Connections – How are connections currently facilitated ?
- ⦿ Tracking Connections – How are connections currently tracked?
- ⦿ Key Contacts – Who in your organization interfaces with volunteers
- ⦿ Interested in Oregon Connections in your organization? What are the next steps.

# Connect Education to Careers

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THROUGH CTE AND STEM



# Oregon Business Plan Priorities

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**Growing jobs, raising incomes, reducing poverty**

- Connecting education to careers**
- Putting our natural resources to work**
- Modernizing our infrastructure**

# One of 3 OEIB Budget Priority Pathways

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- Kindergarten readiness and 3<sup>rd</sup> grade reading
- High school & postsecondary completion
- **Connecting education to careers**

# Importance to Individuals/Economy

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- ❑ **Costly skills-job gap: Hurts individuals, economy**
- ❑ **Economy depends on fast-growing STEM/CTE jobs, industries**
- ❑ **Individual equity, prosperity at stake**

# Key Outcomes

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- ❑ Double grade 4 & 8 math and science proficiency by 2025
- ❑ Double STEM/CTE degrees and certificates by 2025
- ❑ Increase inclusion of under-represented student populations
- ❑ Long-range:
  - Raise per capita income
  - Reduce poverty
  - Increase public revenues

# Impact of 2X STEM/CTE Degree Output

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**+6%**

**Increase in long-run state earnings**

**+\$ 9 billion**

**Annual increase in personal income**

**\$37,909 → \$40,243**

**Change in annual per capita personal  
income**

# Barriers

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- Disinvestment in STEM/CTE infrastructure**
- Multiple perception issues**
- Higher program costs not covered in current funding**
- Program mentality = fragmented efforts and outcomes**
- Shortage of CTE educators**
- Industry connections are ad hoc, uncoordinated**

# What It Will Take

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- ❑ **High quality teaching & learning**, both in and beyond classroom that engages and motivates students
- ❑ **Elimination of the walls** between academic & applied learning, in-school and out-of-school learning, schools at all levels, and educators and employers
- ❑ **Seamless, articulated standards, curriculum, and assessments**
- ❑ **Employers taking a leadership role** in supporting the kind of education system that makes their enterprises more creative and competitive
- ❑ **Education providers and employers working more closely together** at both the policy and local level to ensure the pathway works for students
- ❑ **State investment** in the higher cost scientific and technical disciplines

# Key Actions for 2015

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- Strategic investments and funding formula changes
- Clarify and align learning pathways
- Connect employers more closely with students and schools
- Strengthen CTE teacher training and recruitment
- Implement a coordinated communications campaign

# Oregon CTE-STEM Employer Coalition

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- ❑ **Broad coalition of private sector employers from diverse industries and skilled trades**
- ❑ **Co-chaired: Jill Eiland, Intel; and Jim Piro, PGE**
- ❑ **Mission: support state policy changes and investments for math, science, and technical education that connects to well paying jobs and careers.**

# CTE-STEM Employer Coalition Role

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- Advocate for ambitious, aligned CTE-STEM education agenda
- Collaborate with Governor, OEIB, policy makers, educators, businesses to develop comprehensive CTE-STEM strategy
- Cultivate private sector champions
- Drive progress on goals

# Join Us

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- ❑ Join with other Oregon employers to advocate for ambitious, unified, and strategic investment in Career Technical Education (CTE) and Science Technology Engineering & Math (STEM) education
- ❑ Kyle Ritchey-Noll, [kritcheynoll@orbusinesscouncil.org](mailto:kritcheynoll@orbusinesscouncil.org)

