

# Executive Summary

## Project Impact for Oregon STEM Hubs

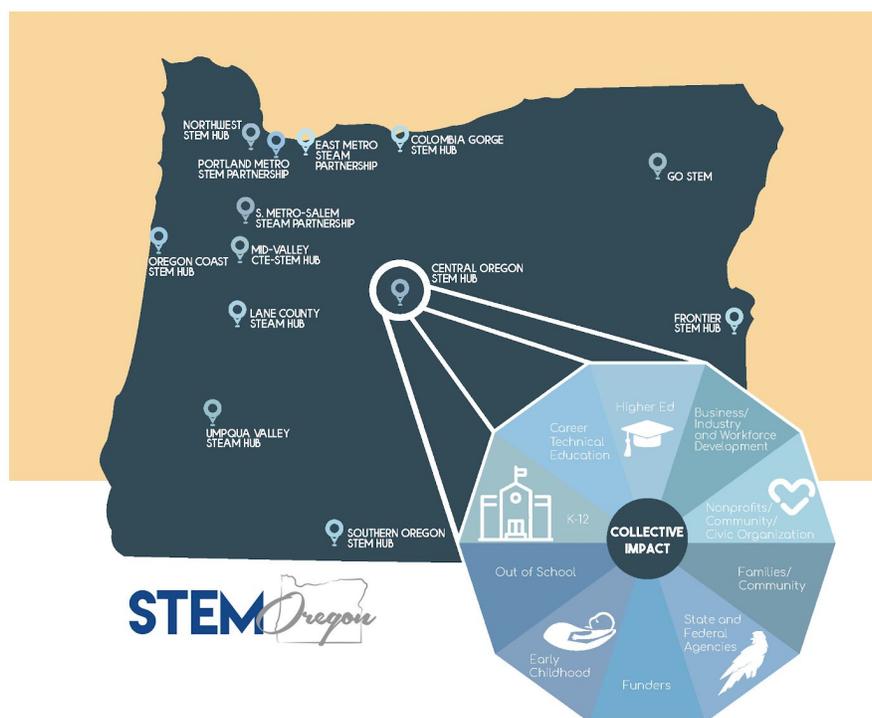
### Introduction

Over the past several years, the STEM Hubs of Oregon have grown from regional grassroots initiatives to a statewide force, balancing local needs and assets with statewide collaborative efforts to change STE(A)M outcomes for students. Starting with the Portland Metro STEM Partnership as the precursor in 2012, the state of Oregon adopted legislation in 2014 that formed the STEM Investment Council and launched the statewide STEM Hub Network with six Hubs. Now 13 STEM Hubs cover almost the entire state. The Oregon State STEM Plan, developed by the STEM Investment Council and published in 2017, serves as the strategic plan to address comprehensive STE(A)M education reform P-20.



Modeling collective impact, they each operate out of a backbone organization, inspire a common agenda for change within their region, maintain open and continuous communications, foster mutually reinforcing activities, and gather shared measurement for data and results. They each convene regional stakeholders across multiple sectors and build capacity in collaborative ways. In practice, this looks different in each Hub's region. The make-up of stakeholders vary across regions as well, from tech giants like Intel in Portland Metro to marine experts like SEATEC on the Coast, from small manufacturing businesses like GrovTech in Troutdale to Quantum Innovations, from Eastern Oregon University to Umpqua Valley Community College, from Portland Public Schools to Culver School District, from Oregon MESA to the Gorge Technology Alliance, and more. Some Hubs focus on STEM, while others integrate the Arts and design to promote STE(A)M.

Yet the core of the work is the same across the state. STEM Hubs universally impact at least two groups: partners and educators. Partners are nonprofit organizations, schools and districts, businesses/industry, professional associations, workforce development entities, government agencies, community members, representatives, and others. Educators include classroom teachers, building administrators, district leaders, instructional coaches, counselors, and career coordinators. Educators also include teacher-candidates (teachers in training) and informal educators such as out-of-school youth educational programming providers and wrap-around service providers.



STE(A)M Hubs believe that every student, regardless of where they live in Oregon, deserves access to the learning experiences that will inspire them to be innovators and prepare them to help solve the challenges of tomorrow.

## Measuring Impact to Prove & Improve

A primary facet of collective impact is shared measurement for data and results. In an effort to build capacity within the STEM Hubs and their partners, the Oregon Department of Education in collaboration with the Ford Family Foundation funded an opportunity for STE(A)M Hubs and community partners to participate in a 10-month graduate-level learning experience called Project Impact, guided by Dialogues in Action. This allowed a deep dive into understanding the core work of utilizing impact evaluation to determine what's working and what needs to change.

Two primary questions guided the evaluation:

1. What kind and quality of impact are we having?
2. What is causing or contributing to the impact?

Each STEM Hub team designed and implemented a mixed-method approach to data collection. For the qualitative inquiry, the teams designed interview protocols, identified a sample of interviewees using purposeful stratified sampling technique, collectively convened 85(+) in-depth interviews with educators and community partners, analyzed the data from the

interviews, and developed themes from the entire data corpus. For the quantitative inquiry, the teams designed surveys that were deployed to educators and community partners.

Key findings show that the STEM Hubs are beginning to show impact in their regions.

1. Industry and education partners are excited at the opportunity to better **align educational strategies and industry needs**.
2. Many educators are recognizing the value and potential of **STE(A)M learning as a strategy for increasing equity** in STE(A)M fields and education as a whole, highlighting the relationship between the two.
3. Educators and partners are shifting their understanding of STE(A)M learning: rather than seeing it as an isolated group of subject areas, educators and partners are **beginning to see STE(A)M as a methodology** and an approach to learning and thinking.
4. Educators are **using STE(A)M methods and content across disciplines to model the interdisciplinary nature of STE(A)M**, integrating it into subjects such as reading, writing, and social studies.
5. STEM Hubs are giving educators the opportunity to **step into leadership roles as STE(A)M champions**, while working with formal leaders to redefine how they support STE(A)M education.
6. Educators reported **increased student engagement and improved attendance** when STE(A)M thinking principles were implemented.
7. Educators report that when engaged through STE(A)M based learning, students are more willing to think outside the box and work through hard problems, **encouraging growth mindset and student voice**.

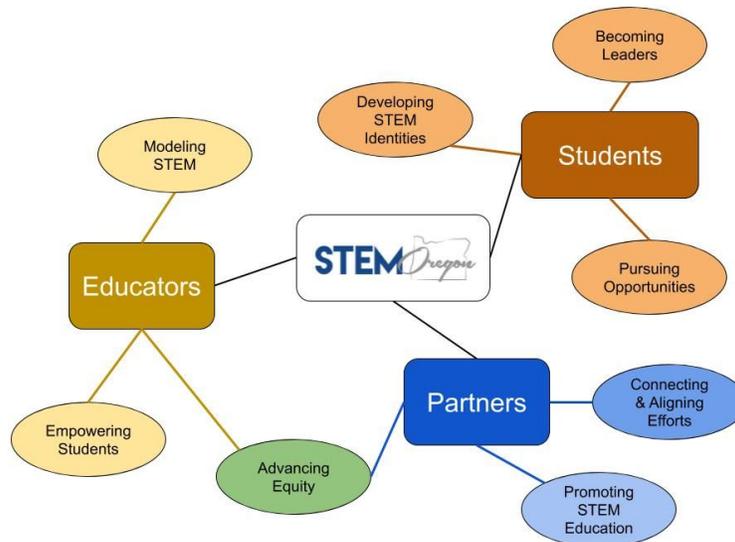
The factors that contribute to these findings include:

1. Oregon STEM Hubs are fostering a **STE(A)M-focused support network, building confidence and inspiring collaboration** among educators and partners.
2. **Professional development opportunities are fostering a safe space for educators** to explore STE(A)M learning and grow their confidence and identity as STE(A)M educators.
3. By using a student-directed approach in classrooms, a major strategy in STE(A)M learning, **teachers are shifting their role to facilitating inquiry** rather than directly providing information and answers.

## Significance & Next Steps

If STEM Hubs are to address the systemic and structural barriers that are impacting marginalized, underserved or underrepresented students and improve outcomes for all students, then STEM Hubs need to better understand the core work of utilizing evaluation to maximize our social sector impact. This includes developing a shared understanding of how to define and evaluate impact as well as how to utilize evaluation results to improve operations and programming, both within each of our regions as well as a state-wide network. Each STEM

Hub employed a team that included regional partners and engaged primary stakeholders to identify the impact of our efforts and areas for improvement. In the process, we increased our individual capacity to utilize impact evaluation and identified the preliminary shared intentions that will inform the development and use of a common, state-wide set of metrics.



While implications and next steps vary across each STEM Hub, areas of common or shared work include the following:

1. Cultivating STE(A)M champions and leaders
2. Strengthening and showcasing equity efforts
3. Expanding high-level, practical professional development opportunities that build educator skills and knowledge related to classroom strategies, modeling, and cross-curricular/integration of STE(A)M
4. Improving community outreach, partner communication, and advocacy efforts
5. Better engaging formal leaders such as district administrators and community program directors
6. Deepening networking and partnership development, especially with industry, and
7. Identifying, sharing, and developing more resources to support this work

As a statewide STEM Hub Network, we intend to develop a set of common metrics and supporting methodologies and tools. In addition, we hope to continue to build our impact evaluation “muscle” in a second phase of work. While a primary focus of STEM Hubs is building educator confidence and greater connections with community partners, including business & industry, our primary goal is to impact systems for lasting change. For true systemic change to occur, STE(A)M strategies and mindsets must be adopted across all learning environments, P-20 and formal & informal.

# Project Impact for Oregon STEM Hubs

STEM Investment Council  
November 2019

# Why and how did we get here?



# What we did



## Two primary research questions:

1. What kind and quality of impact are we having?
2. What is causing or contributing to the impact?

## Selected target audiences:

- Educators OR Partners

## Mixed methods:

- Over 85 qualitative interviews
- Over 146 survey responses\*

\*more pending from Umpqua

# What we found

## **STEM Hubs are beginning to show impact:**

1. Aligning educational strategies and industry needs
2. STE(A)M learning as a strategy for increasing equity
3. See STE(A)M as a methodology
4. Using STE(A)M methods and content across disciplines to model the interdisciplinary nature of STE(A)M
5. Step into leadership roles as STE(A)M champions
6. Increased student engagement and improved attendance
7. Encouraging growth mindset and student voice

## **Key contributing factors:**

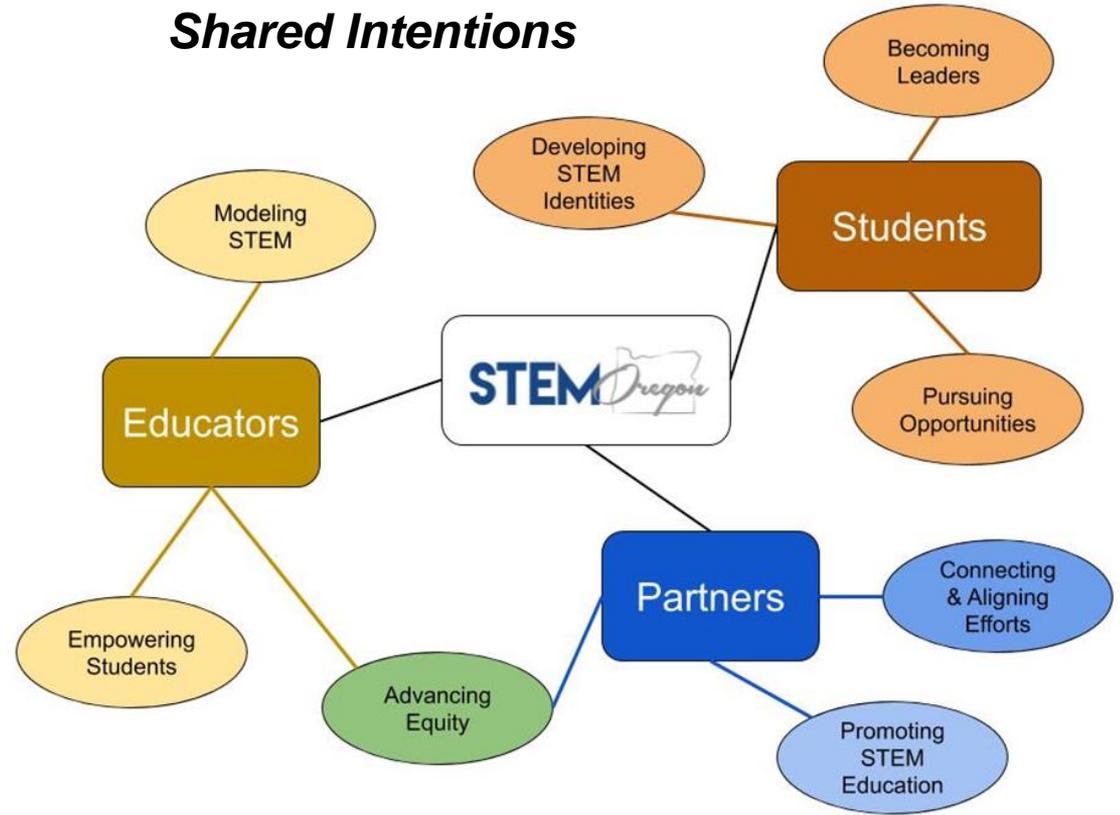
1. A STE(A)M-focused support network, building confidence and inspiring collaboration
2. Professional development opportunities are fostering a safe space for educators to explore STE(A)M learning and grow their confidence and identity as STE(A)M educators
3. Teachers are shifting their role to facilitating inquiry rather than directly providing information and answers

# Significance

STEM Hubs increased individual capacity to prove and improve outcomes

Majority of STEM Hubs have increased their shared understanding and value of impact evaluation

STEM Hub Network is positioned to develop a set of common metrics and adopt a shared evaluation methodology



# Next Steps

STEM Hubs areas of common or shared work include the following:

1. Cultivating **STE(A)M champions** and leaders
2. Strengthening and showcasing **equity efforts**
3. Expanding high-level, practical **professional development** opportunities
4. Improving community **outreach, communication, and advocacy** efforts
5. **Engaging formal leaders** (e.g., district administrators, program directors)
6. Deepening **networking and partnership development**, especially with industry
7. Identifying, sharing, and developing **more resources** to support the work of STEM Hubs

# Next Steps

## For the STEM Hub Network

- Project Impact 2.0 - Seeking funding to:
  - Deepen the work of individual STEM Hubs
  - Develop a set of Common Measures & Evaluation Strategies for the STEM Hub Network
  - Build evaluation capacity of remaining STEM Hubs

## *Legislative Concept Development Schedule – 2021 Session*

Prior to April 17, 2020	<ul style="list-style-type: none"><li>• Develop concept in conjunction with state and local agencies and others that could be affected by the statute or program change.</li><li>• Submit concept, detailed explanation, and draft language to DAS.</li></ul>
<b>April 17, 2020 (or April 13, 2020)</b>	<b>LAST DAY to submit concepts to DAS. Agencies with 10 or more concept requests must submit by April 13, 2020.</b>
April 17, 2020 to May 29, 2020	<ul style="list-style-type: none"><li>• CFO analysts and other key staff review concepts for policy and fiscal issues and contact agencies when questions arise.</li><li>• Governor’s Policy Advisors review requests and recommend whether or not to approve or deny concept to move forward for drafting.</li><li>• DAS notifies agency of final action.</li><li>• DAS sends approved concepts to Legislative Counsel for drafting.</li></ul>
<b>May 29, 2020</b>	<b>LAST DAY for DAS to submit approved concepts to Legislative Counsel for drafting.</b>
<b>June 5, 2020 (or June 3, 2020)</b>	<b>LAST DAY to submit additional placeholder information to DAS. Agencies with 5 or more placeholders must submit by June 3, 2020.</b>
June 5, 2020 to July 10, 2020	<ul style="list-style-type: none"><li>• CFO analysts and other key staff review additional information for policy and fiscal issues and contact agency when questions arise.</li><li>• Governor’s Policy Advisors review additional information and recommend whether or not to move forward.</li><li>• DAS notifies agency of final action.</li><li>• DAS sends approved placeholder information to Legislative Counsel.</li></ul>
<b>July 10, 2020</b>	<b>LAST DAY for DAS to submit approved placeholder information to Legislative Counsel for drafting.</b>
July 10, 2020 to October 30, 2020	Legislative Counsel continues to work on bill drafts – consulting with agencies as necessary. Counsel will allow <b>ONLY ONE REVISION</b> after the first draft.
<b>September 30, 2020 <u>OR</u></b> 14 calendar days from the date on the bill draft, whichever is sooner	<b>LAST DAY to request revisions to first draft of legislative concepts. One revision opportunity per concept.</b>
<b>October 30, 2020</b>	<b>Legislative Counsel stops ALL drafting on agency concepts.</b>
As Final (no later than November 13, 2020)	Final concepts, fiscal impact estimates and “one-page” bill summaries due to DAS for final review and approval by the Governor’s Office and DAS.
<b>December 4, 2020</b>	<b>LAST DAY to pre-session file bills for 2021 Legislative Session.</b> With approval from Governor, DAS pre-session files agency concepts.

# STEM Investment Council Annual Report to the Legislative Assembly

December 2019



## INTRODUCTION

---

This report fulfils the STEM Investment Council’s obligation under ORS 326.500 to submit an annual report to the State Board of Education, Higher Education Coordinating Commission and the Legislative Assembly on progress made toward achieving Oregon’s STEM education goals and on state investments in STEM education.

In 2019, the STEM Investment Council focused its efforts on a) evaluating the results of the 2017-19 STEM Innovation Grants, b) working with the Department of Education and Regional STEM Hub Network to develop a slate of STEM Innovation Grant projects for the 2019-21 biennium, and c) reviewing the current STEM Education Plan and preparing for the revision process in 2019.

This report includes:

- The most recent available data on Oregon’s STEM education goals set forth in statute and plans to identify additional, meaningful metrics to measure progress and success,
- A summary of the STEM Investment Council’s work in 2019 and its plans for the 2020,
- Impact data for the Regional STEM Hub Network and information on individual STEM Hubs’ work in the 2018-19 school year, and
- A summary of the outcomes of the 2017-19 STEM Innovation Grant projects and an introduction to the 2019-21 STEM Innovation Grant projects.

## STEM EDUCATION GOALS

---

### LEGISLATIVELY MANDATED GOALS

ORS 326.500 sets for the following STEM education goals for Oregon:

- 1) Double the percentage of Oregon’s students in 4<sup>th</sup> and 8<sup>th</sup> grades who are proficient or advanced in mathematics and science by 2025.
- 2) Double the number of Oregon’s students who earn a postsecondary STEM degree or credential by 2025

These goals are highly ambitious. For example, in 2019, Minnesota had the highest percentage of students scoring proficient or above on the mathematics National Assessment of Educational Progress at 53 percent.<sup>1</sup> Doubling Oregon’s percentage of students in the 2018-19 school year scoring proficient or above on its statewide mathematics assessment would mean 76.6 percent of students scoring proficient or better – a far higher percentage than the best performing state in the nation.

Furthermore, as we know, true system-wide change takes time, enormous effort, and sustained investment. Each year, the 13 regional STEM Hubs are impacting more and more students, educators, administrators, and districts, transforming learning through career-connected, interdisciplinary, applied instruction and content. While we don’t expect to see significant gains in statewide assessment results from these STEM education efforts yet, we are confident that, with meaningful investment and support, these efforts will move the needle.

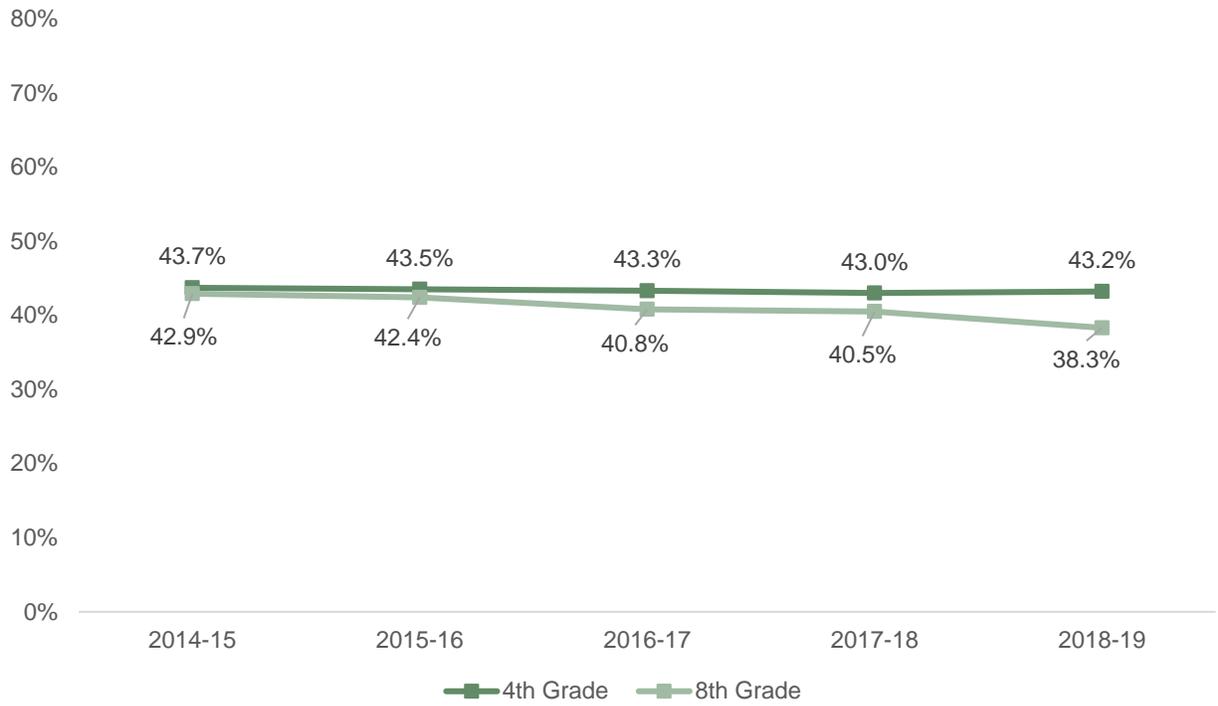
The following tables show the percentage of Oregon students performing proficient or above on statewide 4<sup>th</sup> and 8<sup>th</sup> grade mathematics and 5<sup>th</sup> and 8<sup>th</sup> grade science assessments<sup>2</sup> and the number of postsecondary STEM degrees and credentials earned at Oregon public community colleges and universities.

---

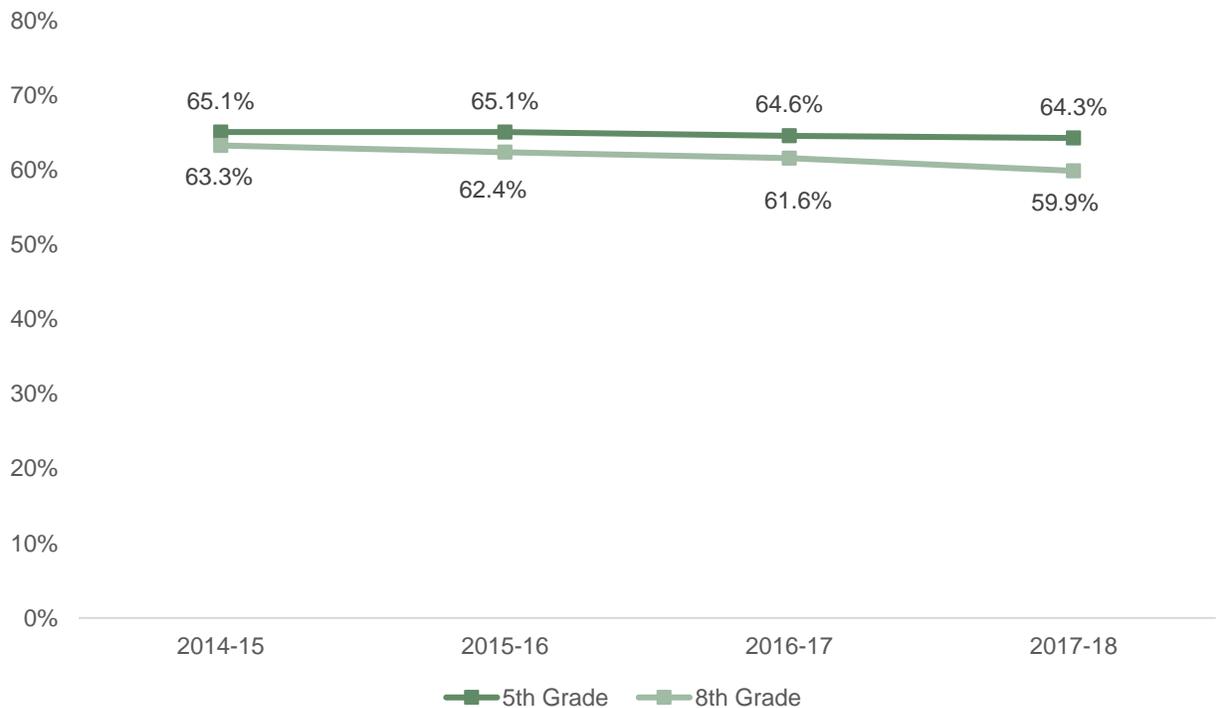
<sup>1</sup> The Nation’s Report Card, <https://www.nationsreportcard.gov/mathematics/states/achievement/?grade=4>

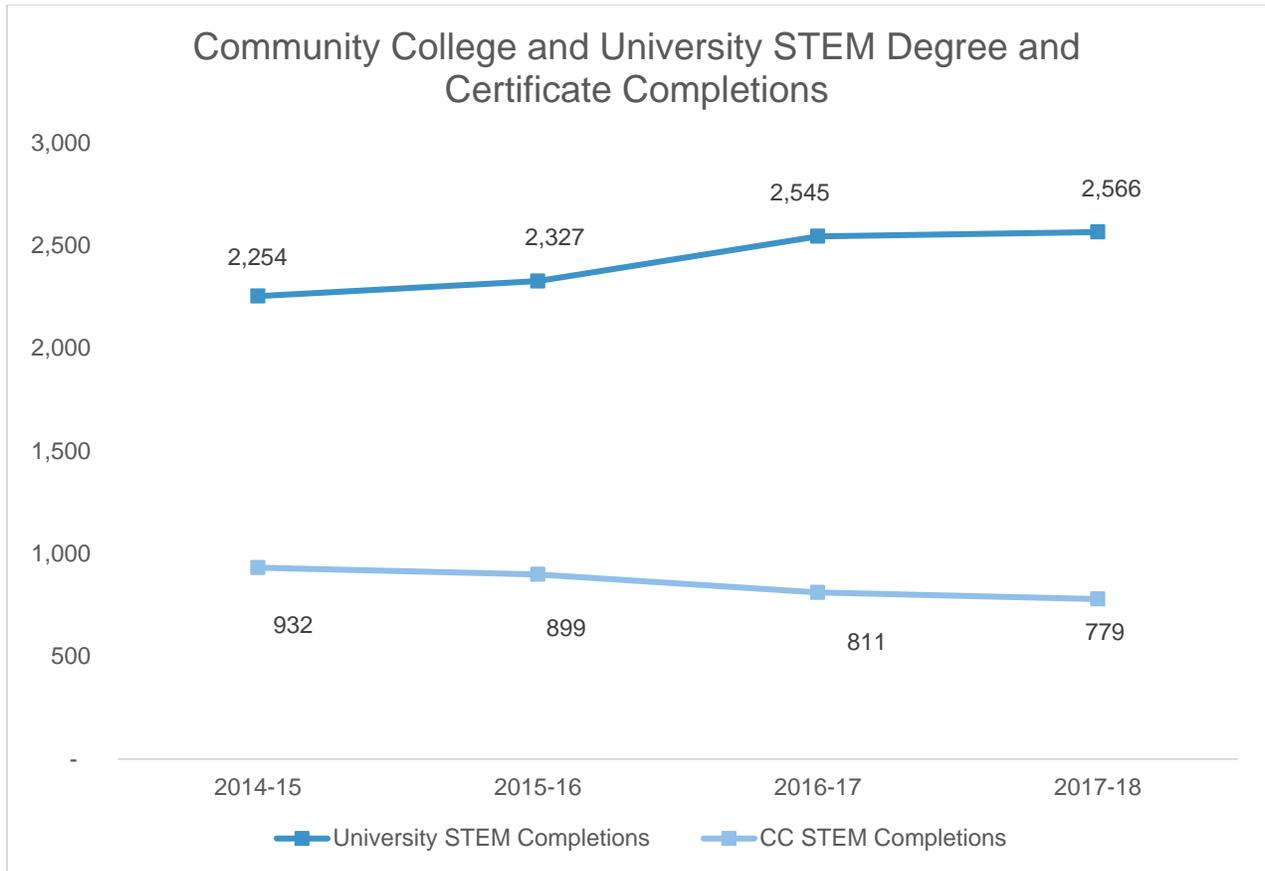
<sup>2</sup> Statewide science assessments are administered in 5th grade, not 4th grade.

### % Proficient on Statewide Math Assessments



### % Proficient on Statewide Science Assessments





## IDENTIFYING MORE MEANINGFUL GOALS AND METRICS

Recognizing that statewide assessments are blunt, far from perfect indicators of the impact of the Regional STEM Hub Network, in 2019, the STEM Investment Council and Regional STEM Hub Network, in partnership with ODE, began the work of identifying additional meaningful goals and metrics. This work will be a central focus of the Council and Hub Network in 2020, with the goal of completing a STEM “data dashboard” for Oregon.

## STEM INVESTMENT COUNCIL

---

### HISTORY, VISION, AND COMPOSITION

#### History and Purpose

In 2013, the Legislative Assembly passed and Governor Kitzhaber signed into law House Bill 2636, which, among other things, established the STEM Investment Council. The council’s statutory functions are to:

- 1) Assist the State Board of Education (State Board) and Higher Education Coordinating Commission (HECC) in developing and overseeing a long-term strategy to advance Oregon’s target outcomes around STEM education.

- 2) Advise the Superintendent of Public Instruction and Executive Director of the HECC on the administration of the state’s investments in STEM education, including grants for the Regional STEM Hub Network and STEM Innovation grants.
- 3) Submit an annual report to the State Board, HECC, and Legislative Assembly on progress on Oregon’s STEM education goals and the state’s investments in STEM education.

The council also provides guidance to the Regional STEM Hub Network, encourages collaboration between education and business & industry, and raises awareness and understanding of STEM education in the education sector, business & industry, and the broader public.

## **Vision**

The STEM Investment Council established the following vision for STEM education in Oregon:

“Reimagine and transform how we education learners in order to enhance their life prospects, empower their communities, and build an inclusive, sustainable, innovation-based economy. Oregonians of all races, economic status, and regions will develop the fundamental STEM-enabled skills and mindsets necessary to:

- Improve the prosperity of all individuals and communities across the state
- Become creative life-long learners who can adapt to changing social and economic conditions
- Fully contribute to an increasingly complex and technologically rich global society
- Address high-demand, competitive workforce and industry needs”

## **Composition**

The STEM Investment Council is business-driven, comprising nine voting members from the private sector, jointly appointed by the Superintendent of Public Instruction and Executive Director of the HECC. The Council is also to recruit additional non-voting members from K-12 and postsecondary education, may recruit non-voting advisory members from additional stakeholder groups, and may establish advisory and technical committees.

## EXPANDED MEMBERSHIP PLAN

In 2019, the STEM Investment Council developed a plan for recruiting new members – voting and advisory – to join the council in 2020. At the beginning of 2020, several voting members of the STEM Investment Council plan to cycle off. These members have been on the Council since its establishment and recognize the value in allowing other business leaders to play a leading role on STEM education in Oregon. In its recruitment of new members, the Council was intentional about ensuring a diversity within its membership, especially across Oregon’s growth STEM industries, but also in terms of race/ethnicity, gender, geographic location, and rural vs. urban communities.

In addition to the transitions among the Council’s voting members, in 2020, the Council will have a host of new, non-voting advisory members. The council knows that all stakeholder groups – and particularly educators and school administrators – provide invaluable insight on STEM education policy, strategy, and investments. In 2020, new council members will include a K-12 educator, principal, and district administrator, and representatives of community colleges, universities, community-based organizations, and other regional collaboratives.

## STEM EDUCATION PLAN 2.0

The STEM Investment Council completed Oregon’s STEM Education Plan in December of 2016. It set forth the following four, overarching goals:

- 1) Inspire and empower our students to develop the knowledge, skills, and mindsets necessary to thrive in a rapidly changing, technology rich, global society.
- 2) Ensure equitable opportunities and access for every student to become a part of an inclusive innovation economy.
- 3) Continuously improve the effectiveness, support, and number of formal and informal P-20 STEM educators.
- 4) Create sustainable and supportive conditions to achieve STEM outcomes aligned to Oregon's economic, education, and community goals.

The inaugural STEM Education Plan introduced a sweeping, comprehensive vision of the future of Oregon's education system – a system predicated on STEM education principles and practices.

In 2109, the council held several work sessions to review and comment on the current version of the STEM Education Plan. The council determined that the next iteration of the plan will be more focused and actionable, and will include specifics around accountability for the achieving the goals set forth in the plan. Much must be done to achieve Oregon's statutory goals and the vision set for in the original STEM Education Plan, but, with limited resources and capacity within Hubs, schools, and school districts, the Council must determine which initiatives, programs, and policies are most critical in the near term, and who is responsible for their implementation. In 2020, the council will undergo a comprehensive revision of the STEM Education Plan.

## STEM INNOVATION GRANTS

The STEM Investment Council recommends to ODE the projects funded by STEM Innovation Grants. The council receives regular reports on these projects throughout the biennium.

For the 2017-19 biennium, ODE adopted the council's recommendation to continue funding for three projects funded in the 2013-15 biennium: Math in Real Life, Digital Literacy & Computer Science, and STEM Beyond School. For the 2019-21 biennium, the council recommended a slate of new STEM Innovation Grant categories, which ODE accepted. Additional information about the 2017-19 and 2019-21 STEM Innovation Grants is included later in this report.

## REGIONAL STEM HUB NETWORK

---

Oregon's Regional STEM Hub Network comprises 13 STEM Hubs throughout the state. STEM Hubs are multi-sector partnerships linking P-20 education to business & industry, workforce development, economic development and community-based organizations. Hubs devise local solutions to meet local needs by coordinating regional communication and partnerships, improving student outcomes, building capacity and sustainability for change, and encouraging and supporting local and statewide engagement.

A snapshot of each hub can be found below in Appendix A.

### 2018-19 DATA

*Forthcoming*

### PROJECT IMPACT

*Forthcoming*

## STEM INNOVATION GRANTS

---

## 2017-19 GRANTS

Following the STEM Investment Council's recommendation, ODE continued funding for three major projects in the 2017-19 biennium with STEM Innovation Grants: Math in Real Life, Digital Literacy and Computer Science, and STEM Beyond School. These projects were originally funded by the 2013-15 STEM Innovation Grants.

### **Math in Real Life**

Math in Real Life (MiRL) supports the expansion of regional networks to create an environment of innovation in math teaching and learning. The focus on applied mathematics supports the natural interconnectedness of math to other disciplines while infusing relevance for students. MiRL supports a limited number of networked math learning communities that focus on developing and testing applied problems in mathematics. The networks help math teachers refine innovative teaching strategies with the guidance of regional partners and the Oregon Department of Education.

Outcomes of the 2017-19 Math in Real Life grant include:

*Forthcoming*

### **Digital Literacy & Computer Science**

Digital Literacy & Computer Science supports the creation of a state plan for digital literacy and computer science education, as well as the development of a network of teachers who will produce and deliver long-term professional development leading to the creation of new CTE Programs of Study in computer science. The grant also supports the expansion SuperQuest trainings – high quality professional development in digital literacy and computer science.

Outcomes of the 2017-19 Digital Literacy & Computer Science include:

- 567 unique educators participated in three-day SuperQuest trainings, benefiting an estimated 28,000 K-12 students in the coming years.
- Summer SuperQuest trainings were held in 29 of Oregon's 36 counties.
- 97% of educators found the SuperQuest training workshops “extremely valuable” or “very valuable.”
- The majority of SuperQuest attendees – 57% – were first time attendees at a SuperQuest workshop.
- Prior to the SuperQuest trainings, attendees 76% reported their subject knowledge level as “not at all knowledgeable” or “slightly knowledgeable”; after the training 93% reported feeling “very knowledgeable” or “moderately knowledgeable.”
- Prior to the SuperQuest trainings, 10% of attendees reported feeling “completely to very confident” in their ability to teach the subject content, that percentage increased to 61% after the 3-day training.
- The Computer Science Teacher Education Association's Fall and Spring Symposiums had over 242 participants from a wide range of sectors: high school educators, university and college faculty and administrators, industry experts and government representatives.

### **STEM Beyond School**

STEM Beyond School (SBS) works with local community providers across Oregon to offer 50 hours or more of engaging STEM programming for students in grades 3 through 8, with 70% or more participation by historically underserved students: students of color, students in poverty, students with disabilities, and English language learners. Program partners leverage out-of-school time to expand learning opportunities for students. SBS provides over 50 hours of professional development to participating educators to build capacity for STEM programming long term. SBS also formed and supports a statewide network of community-based out-of-school STEM learning providers.

Outcomes of the 2017-19 STEM Beyond School include:

*Forthcoming*

## 2019-21 GRANTS

For the 2019-21 biennium, the STEM Investment Council recommended the continuation of funding – at a lower level – to sustain the progress and success resulting from Math in Real Life, Digital Literacy & Computer Science, and STEM Beyond School. However, the majority of STEM Innovation Grant funding will be allocated to three new grant categories: School-wide STEM Transformation, STEM Leaders, and Innovative Programming.

### **School-wide STEM Transformation Grants**

School-wide STEM Transformation grants use STEM education as the basis for lasting school-wide transformation at the elementary and middle school level. Many of Oregon’s administrators and classroom educators already understand the power of STEM education and have created pockets of STEM excellence in their classrooms and schools. To ensure that these efforts reach beyond one administrator or educator – beyond a single classroom or one employee’s tenure at the school – cultivating a school-wide STEM culture is necessary.

Participating Hubs will identify elementary and/or middle school partners that agree to undergo a rigorous transformation process that will include:

- Establishing STEM leadership teams at each participating school
- Participation by school leadership teams in a professional learning community
- Developing a STEM School rubric and designation process
- Developing individualized STEM transformation plans for each school
- Participating in sustained STEM professional development

### **STEM Leader Grants**

STEM Leader grants develop school and district administrator and teacher leaders who have a deep understanding of STEM pedagogy and STEM education’s power to transform student outcomes. STEM administrator and teacher leaders will create the conditions for STEM integration in our elementary and middle schools, and make the goal of STEM integration become a reality.

Participating Hubs will:

- Provide a series of professional development opportunities to cohorts of elementary and/or middle school and district administrators and teacher leaders on topics including, but not limited to:
  - Equity in STEM
  - Integration of applied learning, project-based learning, problem solving, and inquiry into curricula
  - Integration of Next Generation Science Standards into curricula
  - Partnerships with industry and community-based organizations
  - Increasing time on science and math
  - System-change and school transformation
- Develop a network of STEM administrator and teacher leaders that will:
  - Provide STEM professional development to fellow administrators and teachers
  - Promote STEM education and shape STEM policy at the school, district, and state level
  - Identify and share STEM resources and best practices with the broader education community
  - Serve as a resource for pre-service teacher preparation programs

### **Innovative Programming Grants**

Innovative programming grants will expand regional implementation of innovative ideas related to the STEM Education Plan’s goals. Projects under this grant category will focus on:

- Efforts that increase cross-Hubs collaboration
- Efforts that increase time on science in elementary school
- Efforts that increase youth voice
- Efforts that increase use of Oregon Connections
- Efforts that increase communication of STEM education efforts.

## CONCLUSION

---

*Forthcoming*

## APPENDIX A: REGIONAL STEM HUB FACT SHEETS

---

1. CENTRAL OREGON STEM HUB
2. COLUMBIA GORGE STEM HUB
3. EAST METRO STEAM PARTNERSHIP
4. FRONTIER STEM HUB
5. GO-STEM
6. LANE STEM
7. MID-VALLEY STEM-CTE HUB
8. NORTHWEST STEM HUB
9. OREGON COAST STEM HUB
10. PORTLAND METRO STEM PARTNERSHIP
11. SOUTHERN OREGON STEAM HUB
12. SOUTH METRO-SALEM STEM PARTNERSHIP
13. UMPQUA VALLEY STEM HUB



# STEM Investment Council

## Members:

JIM PIRO, Chair  
CELESTE EDMAN  
HERB FRICKE  
RITA HANSEN  
ERIC MESLOW  
PAUL STEWART

## Ex-Officio Members:

MELISSA DUBOIS  
TODD NELL

## Technical Advisors:

KAREN HUMELBAUGH  
*Director, Office of Workforce  
Investments*

KURT TACKMAN  
*Deputy-Director, Office of  
Workforce Investments*

## STEM Staff:

SYDNEY KING  
*Board Administrator*  
JULIA STEINBERGER  
*Director*  
STEPHANIE SOLOMON  
*Board Administrator*

**DRAFT**

**September 4, 2019**

9:00am – 12:00pm  
Public Service Building  
255 Capital St.  
Salem, OR 97310

To listen, call: 888-808-6929 Access Code 2135630

## MEETING MINUTES

**Members Present:** Herb Fricke, Rita Hansen, Eric Meslow, Jim Piro

### Members Excused:

**Ex-Officio,  
Technical Advisors  
and Staff Present:** Melissa Dubois, Todd Nell, Sydney King, Julia Steinberger,  
Stephanie Solomon

## Standing Business

### 1.0 Preliminary and Organizational Business

1.1 Chair Piro brought the meeting to order at 9:05 am. Chair Piro provided a few opening remarks and reviewed the agenda.

### 2.0 Consent Agenda

2.1 ACTION ITEM: Approve May 2019 minutes. After providing time to review the May 2019 minutes, Chair Piro moved to approve. Councilmember Meslow motioned, and Ex-Officio Dubois seconded the motion. Motion passed, minutes approved

### 3.0 Public Comment

*Each Individual/Group will have a time limit of three minutes*

3.1 Public Comment: Don Domes, involved with the STEM Innovation Grant on Computer Science and Digital Literacy, spoke to the importance of the STEM Council. He focused on digital literacy. With the last grant cycle, they were able to provide computer science professional development to over 500 teachers.

# STEM Investment Council

May 17<sup>th</sup> 2019 MINUTES (continued)

## Members:

JIM PIRO, Chair  
CELESTE EDMAN  
HERB FRICKE  
RITA HANSEN  
ERIC MESLOW  
PAUL STEWART

## Ex-Officio Members:

MELISSA DUBOIS  
TODD NELL

## Technical Advisors:

KAREN HUMELBAUGH  
*Director, Office of Workforce Investments*  
KURT TACKMAN  
*Deputy-Director, Office of Workforce Investments*

## STEM Staff:

SYDNEY KING  
*Board Administrator*  
JULIA STEINBERGER  
*Director*  
STEPHANIE SOLOMON  
*Board Administrator*

## 4.0 Director's Update

- 4.1 Director Steinberger gave updates regarding STEM Investment Council. The legislative session and funding was not given to STEM Investment Council. Director Steinberger will be moving into a new position, and STEM will remain in her portfolio. A side effect to this change is that Director Steinberger can only support 2 meetings a year rather than the 6 that was custom. Discussion around this topic and what the board can do to support STEM ensued.

## Leadership and Strategy

## 5.0 Department of Education (DOE) Update

- 5.1 Quite a few topics were discussed:
- New Network meeting cadence discussed, from 6 meetings to 4 a year.
  - Hubs: How to monitor progress, track funding, track success, how to align all Hubs. Hub representatives as well as the Council discussed.
  - Council raised concern about going on “auto-pilot” regarding Innovation Grants. Checks and balances need to be established.
  - Board invited to join STEM Hub Directors’ meeting 10/3 at Chemeketa Winema in Salem.
  - Success with action teams and work groups.
  - ACTION: Deb Bailey will send CIP reports to the council.

## 6.0 STEM Education Plan

- 6.1 Chair Piro facilitated discussion on the STEM Education Plan. Working with Director Steinberger, they tried to create accountability around goals. Performance targets don’t align with initiatives. This creates a gap with performance data reports. It was suggested that a work group be formed to focus on performance targets and initiatives. The STEM Investment Council can be the voice for the Hubs. The full group is needed to look at the STEM Education Plan.

## 7.0 Adjourn

Meeting adjourned at 11:38am by Chair Piro.