# STEM Education Innovation Alliance

Science, technology, engineering, and math (STEM) are vital to Washington's economy. Because of this, it's essential for our state to align education and career training with workforce needs. The STEM Education Innovation Alliance advises the Governor on policies to align and advance STEM education.

The STEM Alliance, legislatively created in 2013, brings together leaders from a broad range of business, labor, education, government, and nonprofit organizations, with the role of advising Washington's governor and Legislature on policy and strategic planning in support of STEM education initiatives.



The group meets several times a year and produces an annual STEM Education Report Card.

#### The Goals of the Alliance include:

- Inspiring youth through career-connected and real-world STEM learning opportunities.
- Providing every K-12 student with access to computer science education.
- Contributing to the state's 70 percent postsecondary education goal and preparing the future workforce by increasing attainment of:
  - Technical credentials.
  - Two- and four-year degrees.
- Improving equity through interventions to:
  - Close educational opportunity gaps from cradle to career.
  - o Provide excellent preparation and support for STEM teachers.
  - Improve workforce diversity.
- Raising public awareness and support for STEM.

#### Additional Resources from the Alliance:

- The <u>2022 STEM Education Report Card</u> updates legislators on STEM education and workforce initiatives.
- The <u>STEM Talent Supply and Demand Dashboard</u> displays data for Washington's employee talent supply in the fields of science, technology, engineering, and mathematics (STEM) and associated workforce demand.



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# **MEETING AGENDA**

DATE October 18, 2022

**TIME** 8:00 AM to 4:30 PM

**LOCATION** Washington State University Tri-Cities

2710 Crimson Way, Richland, WA 99354

Hybrid meeting – <u>Live streaming option</u> available for meeting

Many Thanks ♥ Pacific Northwest National Laboratory will host these meetings. We appreciate PNNL staff's generosity in planning and supporting these meetings.

8:00 AM Washington Student Achievement Council Meeting

STEM Alliance members invited to join these discussions.

Meeting Agenda & Documents

Location: East Building Auditorium (Room 266)

12:00 PM Welcome & Working Lunch

John Aultman & James Dorsey | Co-Chairs, STEM Alliance Location: Consolidated Information Center (CIC) Room 210

12:05 PM Pacific Northwest National Laboratory Overview

Lou Terminello | Associate Laboratory Director, PNNL Physical & Computational

Sciences Directorate

12:20 PM Showcase

Interact during lunch with PNNL STEM Ambassadors - scientists, engineers, skilled

tradespeople, and students who will share their science, work, and internship

experiences.

Showcase Location: Consolidated Information Center (CIC) Art Gallery

1:30 PM Pacific Northwest National Laboratory STEM Education Overview

Evangelina Galvan Shreeve | Director, PNNL Office of STEM Education

2:15 PM Update on STEM Dashboard Progress Indicators

Katie Weaver Randall | Director, Washington State Education Research & Data Center

Jenee Myers Twitchell | Chief Impact and Policy Officer, Washington STEM

**Interim Cross Sector Computer Science Plan - Current Status** 

Jenee Myers Twitchell | Chief Impact and Policy Officer, Washington STEM

Jayme Shoun | Policy Director, Washington STEM

3:00 PM Tours

Laser Interferometer Gravitational-Wave Observatory (LIGO) Hanford & driving tour of key research buildings on the PNNL campus. Guests will board bus in the parking lot outside the Consolidated Information Center.

4:30 PM Return to WSU Tri-Cities campus

#### Manhattan Project National Historic Park | B Reactor Tour

## Wednesday, October 19 | 8:30 AM

Learn about the people, events, science, and engineering that led to the creation of the atomic bombs and helped bring an end to World War II. If interested, sign up <u>online</u> for this in-depth tour. Transportation is on your own.

#### FOR MORE INFORMATION AND ASSISTANCE

**Ellen Matheny** (*STEM Alliance Manager*) welcomes you to contact her at: Office (360) 485-1216 | Cell (360) 515-6810 | Email ellenm@wsac.wa.gov

## **Special Guest**

We welcome **Laura Akesseon**, a Fellow from the <u>Department of Energy Albert Einstein Distinguished</u> <u>Educator Fellowship (AEF) Program</u>, to our meetings during her visit to PNNL.

Laura Akesson of Richmond, Virginia, has taught Physics, Math, and Biomedical Engineering/Design for the past 22 years. Most recently, she was teaching AP and Honors Physics and Biomedical Design to students in grades 11 and 12 at The Steward School, in addition to serving as a Bryan Innovation Lab Liaison. Her past teaching experience involves public schools (7 years), Zurich International School (2 years), and adjunct faculty at Virginia Commonwealth University (2 years). Laura holds a MS in Applied Physics from VCU, a BS in Mathematics and BA in Physics from the University of Richmond. During her years as an undergraduate student, she worked in an experimental research group at Jefferson National Lab. Her graduate work was on optical properties of semiconductors.

Laura defines herself as a perpetual learner, continuously making space for new connections and ideas. Not only looking to experts, but to the great resource and potential that lies in students. In 2009, she founded Science Overdrive, a Virginia nonprofit aimed at inspiring, providing equipment for, and collaborating with Kindergarten - 8th grade Science teachers who in turn cultivate science enthusiasm for thousands of students. Laura also specializes in Systems and Design Thinking, sharing ideas that everything is connected: academic subjects, populations, societies, etc. Along these lines, she has been invited to the TEDx stage and to deliver talks about Science and Social Justice, at DisruptHR, among others.

Laura's primary joy is teaching and working for the benefit of all students and teachers. To this end, she has served on committees developing county-wide physics curriculum standards, state-wide STEM teacher professional development, and nationwide STEM programs. She feels lucky to infuse not only technical expertise into her lessons and products, but an artful fun that should be present in student learning. Laura Akesson of Richmond, Virginia has taught Physics, Math, and Biomedical Engineering/Design for the past 22 years. Most recently, she was teaching AP and Honors Physics and Biomedical Design to students in grades 11 and 12 at The Steward School, in addition to serving as a Bryan Innovation Lab Liaison. Her past teaching experience involves public schools (7 years), Zurich International School (2 years), and adjunct faculty at Virginia Commonwealth University (2 years). Laura holds a MS in Applied Physics from VCU, a BS in Mathematics and BA in Physics from

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