STEM Investment Council

Q2 2025 Meeting Minutes

Location: [Zoom](#) 6/4/25 9:30 AM PST
Duration: 4 hours

Warm Welcome, 9:31 AM
K S Venkatraman, Chair

Roll Call
Elizabeth Massa-MacLeod, ODE Administrative Specialist

Introduction of New Members
K S Venkatraman

Approve Previous Meeting Minutes ([May special meeting](#)and [February Q1 Meeting](#)   - *vote*
K S Venkatraman
Venkat motions to approve May minutes, Rita Hansen seconds. Venkat motions to approve February minutes, Nikki Salenger seconds. No one opposes or abstains from the motion; minutes are approved.

Public Comment
Elizabeth Massa-MacLeod
No requests.

Importance of K-12 STEM & Computer Science, 9:40 AM
SB 541
Skip Newberry
[SB 541](#): Would make CS education more accessible to OR public school students. Decentralized systems and local control have been a challenge in the past. SB will attempt to address the variability
Requires SDs to offer CS ed and computational thinking at all grade levels, inc foundational courses and others
ECS program has been an example with an emphasis on access for disadvantaged communities and skill building like logical reasoning.
Bill is in the final weeks of the process- revenue forecast has been tight, so it will be examined closely.
Bill is modest compared to what other states are doing. Implementing the recommendations of the previous administration.
STEM education is going through lots of changes and is difficult to navigate right now, especially with AI.
Computational infrastructure will be key in the future. We can use this moment to do something transformative for the state rather than incremental changes.
Some are emphasizing using it for individualized instruction, i.e., tutoring.
What are people looking for in new hires? Technical Acumen, microcredentialing, math and language skills, plus problem solving and logic, and computational thinking
More emphasis on human skills- what AI cannot do yet (leadership, communication)
The objective could be to combine what human interaction and teaching can provide with AI individualized tools and instruction

Overall, it is a modest step but may be under scrutiny due to the current budget forecast. Should know the legislative results soon.

Venkat: OSU supercomputer will be a huge step forward. It will also draw in faculty and students. We should continue pushing OSU towards giving out computing credits. Businesses want to hire students who have experience developing software using co-pilots. And so hopefully that part is integrated well into the bill. Just because how frequently things are changing.
Lastly, I just heard a Stand for Children podcast related to this- I will share the link. What does the Bill say about AI integration?
[Podcast link](#).
Skip: It's more about computational skills/reasoning, foundational courses. One trend that will accelerate is that junior hires are finding it harder, and employers are using AI controlled by senior staff. Entry-level will need a higher level of understanding.
Basic coding skills are not enough- you have to understand the architecture now. And AI still has limitations we need to understand- quality control requires its own higher skillset.
Bryan Fix: Are schools embracing the use of AI in teaching... deeper AI is already embedded in Healthcare and changing into more functional support mechanisms by the month. AI for - reading radiology results (faster and more accurately than humans); for managing billing/coding processes with insurance companies; in the Medical Record for predictive analytics around disease states and diagnosis aids for doctors. And, you already know about robotic surgery.

Rita Hansen: When you are ranking last in the states, these modest changes are nice, but don't move the needle like we need to. What do you think needs to happen?

SN: I was just working with Estonia, and they have a new strategy- how to integrate AI into what teachers and students need. Multifaceted and also questions ethics/implications. Emphasizing liberal arts development for hires/students.

Adrienne Pierce: Since much of education in the state of Oregon is driven by legislation, David is correct, it varies. ODE is ongoingly updating guidance and planning for ongoing opportunities for cross-district collaborative opportunities for the fall as well.

Legislative Update HB 3038 & **Accountability Framework,** 10:02 AM
Adrienne Pierce, Director of WRIDL (ODE) & Alexa Pearson, Assistant Superintendent, OTLA (ODE)

10:02
HB 3038 is directed at technical changes.
Deb Bailey: Backbone data collection is based on OARs. See slide
Data collection is a combination of what they're working on and what's available to us. Common metrics from summer 2023.
Had some issues with Google- simplified collection process, but as a result of the delay, didn't get a chance for hubs to use the data system until this year. Received the first round in January, and the next will be in June. Chris Hesselbein helped develop.
Initial results: 54,646 students exposed to STEM programming and 2,286 teachers accessed PD.

25-27 Backbone and Innovation grants: 11.4% reduction as per the governor's budget.
Backbone: formula based on state school fund model.
Innovation: Weighted based on the number of teachers. New criteria based on OARs that was received positively.

Had to adjust based on the governor's decrease.

Grants are currently submitted to procurement in ODE.

Sarah Whiteside: The difficulty is an innovation application process that changes each biennium, often

with very short runways.

RH: How did it previously result in disproportionate funding for SMSP?
AP: It was based on student population and how the application aligned with priorities, so it tied directly into reworking on grant direction. It also had a ceiling and floor based on the governor's budget cut. Part of this was how the formula worked out based on new criteria. Reductions are never easy.

Kristen Harrison: The minimum grant was $300,000, and the maximum was $750,000. SMSP received the maximum, which sounds like a high number, but it is disproportionately low per student and per teacher because the SMSP region has 27% of the students in Oregon.

RH: Maybe we can continue the discussion of numbers offline and see specifics. I want Hubs to know how agonizing it was to take reductions into account.
AP: I actually have that in summary document:
https://docs.google.com/document/d/1OPyZTWfMYu4tzLHCqSNVz_qVc7QCQbIv/edit
DB: We considered several ways to reduce the budget, already had to base on previous levels that were too high, plus the governor's reduction. It was hard this year.
Also want to acknowledge that the process keeps changing; it has to be based on directives, among other things. We did get positive feedback on this year's process and would like to keep it in the future.

Jarvez Hall: Cuts are never easy. The reality is that the two largest hubs bore the brunt of the cuts when it comes to the innovation process.

RH: I want to challenge the backbone process- each Hub has a different agent they have to deal with, and how money gets doled out to hubs. I don't know how to change that as a Council member, but I want to acknowledge this.
DB: Written in law that they have a fiscal agent, they may want to explore different options within their regions, though.

Fidel Ferrer: Is there any way we could have something for new members that would summarize all the previous work?
DB: I'd recommend starting with the onboarding document and its linked documents. I'm open to having a meeting for any questions you have.
RH: Follow the money- see where it went to, when new hubs were added.
Venkat: It might be helpful to add the onboarding info to the website.
AP: Legislative reports could also be helpful if they're not linked already.
FF: Also wondering about the data from before- is impact data collection standardized? Are hubs 'speaking the same language'?
DB: Trying to move toward this with systematic statewide programs. We'll know more after June 30th once we have the next round of data. I'd love to connect some more for your insight, though.

10: 29 Alex Pearson, ODE:
I've invited Dan Farley of RADAR to join me.
Accountability Framework Overview:
HB 2356 established an advisory committee and the governor developed a White Paper. Ongoing legislation around this includes SB 141, HB 2009:
Identical bills. Expands accountability provisions under SSA
Makes ODE expand supports for schools, reduce reporting systems
Repeals fees for publisher materials for high-quality instructional materials- can be hard to budget for
Requires ODE to review division 22 and 24 standards for enforcement and complaints

Metrics (Dan Farley)
Current metrics: on-time graduation rate, 5-year completion rate, 9th-grade on-track rate, 3rd-grade reading proficiency, regular attendance,
Additional metrics proposed: 8th grade math proficiency, K-2 attendance, local metric chosen by SDs

Ambitious and attainable growth targets. Shift from traditional approaches- targets research-based, co-developed with communities and SDs, and are based on the highest performing Oregon districts.

Continuum of supports: ranges from technical assistance to intensive coaching and directed funding. Sets consequences for schools not meeting the 2030 target.

Exit criteria: The State Board of Education is going to have rulemaking authority to determine what criteria will be used. Across that continuum from directed coaching to intensive coaching and also to define how districts can exit, the level or tier of intervention that they're experiencing with the department across time.

Bryan Fix: Is there a way to consider % students choosing CTE track as incoming freshmen? We know that we see higher grad rates and higher attendance rates by students that have a CTE Concentration (2 or more CTE in a track). Giving students something to work "towards" with industry-sponsored career tracks is positive motion as most of our tracks require dual-credit advanced STEM courses like medical terminology, Anatomy and Physiology, etc.

APearson: Districts do have the ability to do local metrics. For my understanding so based on their local context they can have their local metrics.
I can also check back with our SPST team in terms of how they're setting goals within integrated guidance.
BF: Students find value in doing the 'hard stuff'. Also have dual credit students.
AP: We hear about the value of CTE programs a lot for engagement and attendance.

Venkat: Is there a common metric for math proficiency tracking in the accountability bill?
DF: This is from state summative test results. The bill does require interim K-8 assessments three times a year. Currently developing information for state board recommendations. The data will be public.

Kyle Ritchie-Noll: What will be the process for ensuring students actually get to this place?
AP: Early literacy has been a focus- means that we don't have the equivalent for math yet. What we know is that kids aren't getting access to grade-level material. So must ensure every district has adopted high-quality material and time to implement.

KH: Will accountability bring additional data analysis work/capacity in ODE? Schools and districts can't know how their growth compares to others around the state.
DF: We will compare districts and connect them with each other so they can build on their strengths. We will find a way to crunch the data as per law.
KH: It would be great to celebrate greatness not tied to wealth.
DF: Agree, and we have been doing that.

Kama Alamasi: Will open sources be included in materials?
AP: What we review is comprehensive and meets the criteria- not reviewing supplemental yet. So yes, if it's core materials.
KH: They aren't free though.
AP: Some are free, but it depends on the level of what you're looking for.

KA: No need for anyone to address this now, but I want to note that the emphasis on AI-personalized

tutoring does make me a little nervous, as the research strongly suggests that project-based learning and approaches like that of Bob Moses' Algebra Project are so impactful for raising achievement and equity in math - relevance and connections to real life.

RH: What happens if a SD lags behind?
AP: Coaching and directed funding.

AP: Belonging, consistency, and coherence are identified as key to school success. Coherence means support has to be based on what happens in class; this means AI may not always be the best fit. It could be an approved provider list based on schools curriculum.
FF: What criteria would we use, and when will this bill be passed, and what about schools that don't have resources?
AP: Bill is close to passage.
DF: Here is a slide deck from our Spring 2024 results that might be of the most interest to you all. Slide 46 draws attention to some of the success stories that I discussed (and I reached out to staff in those districts to gather stories about what they attribute this growth to).
[*https://docs.google.com/presentation/d/1ax5__W933NOoWGjAHTq7pG30XU8P-UCFIMSTs84_SNM/edit?usp=sharing*](https://docs.google.com/presentation/d/1ax5__W933NOoWGjAHTq7pG30XU8P-UCFIMSTs84_SNM/edit?usp=sharing)

AP: Criteria is currently standards review every 7 years with instructional materials reviewed based on those.

Break, 11:04 AM

STEM Hub Highlights, 11:15 AM**.** Accomplishments and current focus.
STEM Hubs, Introduced by Deb Bailey, ODE

[CG STEM](), Julie Cucuel

[Central OR STEM](), Deb Bailey on behalf of Tracy Willson-Scott

[GO STEM, David Melville]()
FF: You may want to look at electric companies for braided funding for further mobile maker van funding

[Lane County STEM, Gabriel Gellon]()

[NW STEM Hub, Chris Hesselbein]()
Also focused on building community.

[PDX STEM, Kristin Harrison]()
RH: Do we have an understanding of the impact of federal funding across Hubs?
KH: And I think we could get the federal information together pretty quickly. I'm aware of some, you know, through conversations with other hubs.
Of course, the computer science grants, the one in its 5th year out of PSU, and the one in just launching out of the University of work, and we're both also terminated.
And I believe that the NASA funding that has been coming to Oregon pretty consistently is stalled. I don't know if that's based out of South Metro Salem.
Patterns didn't align with recent grants, so it feels like a big missed opportunity.
GG: We, as a network, council, and ODE, need to craft a long-term sustainability and growth plan specific for patterns.

[OR Coast STEM, Kama Almasi]()

Additionally, building partnerships with coastal confederated tribes.

[East Metro STEM, Jarvez Hall](#)
[Esports Championships link](#)

[Umpqua Valley STEM, Teresa Middleton](#)
DB: They also have a great [lending library](#)

[Frontier STEM, Nickie Shira](#)
RH: What kind of work are the summer internships?
NS: OCF funds providing these- BLM, county departments, medical centers, Malheur Works
Internship Highlights from 2024: https://www.malheurworks.org/outreach-material
DM: High-speed internet is a major hurdle out there, too, Rita.

[South Metro Salem](#), presented by Deb Bailey on behalf of Julia Betts. Note that they have the highest number of students reached
[Southern OR STEM, Karla Clark](#)

[Mid-Valley STEM CTE Hub, Deb Bailey on behalf of Sarah Whiteside](#)

JH: As much as we are all STEM Hubs and we collaborate on a variety of work, each of us is different and works hard to provide STEM opportunities for our regions in unique ways with limited resources. We are each creative and find ways to address needs in our communities while overcoming barriers. We each cannot do it all, but each of us does something and works to both make change and make a lasting impact.

Break, 12:17 PM

2021-2025 STEM Education Plan Reflection, 12:22 PM. *A series of questions and conversations in breakout rooms*
Adrienne Pierce and Rita Hansen give some background on the original plan, metrics and rules.
Opportunity to empower the state to take action and drive change.
Convene in breakout rooms for [reflection questions](#) discussion.

Whole Group Share Out, 1:00 PM

Group 1: The Current STEM plan is too long and complex. We need to establish a rigorous baseline and how to measure competency and proficiency; what metrics to use and how to execute. Need to define what exactly STEM is as a philosophy: the how (to engage students) and the why (empowering student interest)
- The 2021 – 2025 STEM Education Plan is too long. Need to shorten the plan, summarize succinctly the goals, and align with strategy. (Comments about the Accountability bill – make sure we are aligned if passed!)
- Need to establish a rigorous baseline across all of Oregon to be able to measure outcomes – where are we in Science, Math, and Aptitude?
- How do we measure STEM proficiency in the state? Some ideas are listed below:
- High school:
  - I-Ready Data
  - Course Passage Rates
  - What classes are students taking next – course taking history?
  - Youth Science Data
- Need to recognize that projects (from Innovation Grants, etc.) take time to implement and grow before real change is observed and can be measured.

- Have we considered incorporating parental feedback?
- Lots of discussion on STEM as a philosophy, not a thing. STEM is the HOW, but what is the WHY?
- What is STEM identity, and how do we truly measure it?
- One STEM Hub Director felt that the 2021 – 2025 STEM Education Plan was way too big with too many parties involved and went way beyond the OAR's. How can you accomplish and measure all these things?
- Some STEM Hubs are focused on pursuing Curriculum Development and others are focused on Career Connected Learning. They both are important and need to be integrated and pursued together.
- General comment on the fact that the STEM Hubs are so restricted and constrained by staff (too little) and funding to make such a difference as outlined in the plan. Expectations are unreasonable.

Group 2:
What parts of the plan have been most challenging and most effective?
Challenging:
- wide, overambitious, not concretely guiding; don't think it guides aside from setting the direction
- The expectation is to go places that are not feasible
- Mandate to raise test scores, but that is not necessarily the purview of STEM Hubs

Effective/Positive
- Good aspirations
- Achieve STEM Identity and belonging, which is different than test scores, but can lead to higher test scores

Moving forward:
- Can the new STEM Ed Plan approach higher test scores by acknowledging that while it is not our direct purview to raise student test scores, we can approach the problem by focusing on other goals or objectives
- Example - improvement of teaching
- program-specific: Data will be harder to read, but in the end, perhaps more useful
- Identify in the plan the next steps

Equity - has the Plan helped?
- It's refreshing and important that it's named, but how we do it is up to us
- We agree that the impact on it in the Plan is hugely important

What changes would better support implementation?
What support or guidance would be helpful in supporting AI integration in schools across Oregon?
- OCSH is planning to offer a webinar series to address a variety of AI-related topics and issues in education
- Also, probably a longer-term PD
- We'd love to have high-end help - those who have been conducting or evaluating research
- Best not to have it be from the industry, as there is bias

We don't want to play the "catch-up" game with kids and force them to catch up later because we're feeling cautious
Teaching students how to use it while identifying bias in the systems – medical and healthcare industry – disrupts the idea that AI is factual and highlights that it has bias

Group 3
- STEM identity: students trying to understand it for themselves and we need to ignite interest (fun, cool, creative, technology foundation). Need to continue to create spaces for building confidence with diverse communities.
- Aligning the plan/vision with a plan to ensure the Hubs are set for success (funding, resources,

bi-annual process, etc.).
- Continue to serve the unique needs of the hub region while creating economies of scale in research-based focus areas. Systemic barriers to scaling need strategies to overcome.
- How to reach everyone with our current spend levels and systematic barriers - are there opportunities to better align with work across the state? Industry/Employers? Could you require a STEM elective?
- Start being more clear in how the Hubs align to the plan/vision, how strategies should be incorporated, and have consistency in our processes.
- We have to incorporate AI into the plan. Some of our systems being used incorporate AI. Need to consider that AI tools are great for those who have prior knowledge/experience, but they won't be as helpful to those who don't.
- Additional thoughts provided here.

Q3 Meeting Planning, 1:11 PM
K S Venkatraman
Availability Poll and wrap-up survey

Other Remaining Items, 1:13 PM
RH: When is the next Education Plan expected to be complete?
AP: Up to the Council with ODE support. July 1 is likely when new goals will be identified
GG: I am very skeptical about the usefulness of a common metric. There are many nuances in every project or area of work.

Informal Closing, 1:24 PM
Venkat adjourns.