

STEM Investment Council
FULL COUNCIL MEETING
MINUTES
Aug 16 2023

Voting Members:

STEFAN BIRD, *Chair*
BETH ALCOULOMRE
MARCELINO ALVAREZ
HERB FRICKE
RITA HANSEN
MARV NELSON
NIKKI SALENGER

Advisory Members:

YOLANDA COLEMAN
MELISSA DUBOUIS
KATRINA HULL
PRESTON EAGLEHEART
ANDY GRZESKOWIAK
JESSICA HOWARD
NAGI NAGANATHAN
KYLE RITCHEY-NOLL
SUSAN SHUGERMAN
LELA THIEME
TONG ZHANG

Support Staff:

ELIZABETH
MASSA-MACLEOD
*Administrative Specialist,
Oregon Department of
Education*

Present: Stefan Bird, Mark Farley, Julie Cucuel, Tracy Wilson-Scott, Nickie Shira, Karla Clark, Deb Mumm-Hill, Rita Hansen, Beth Alcoulomre, Jerian Abel, Gabriel Gellon, Sara Whiteside, Christopher Hesselbein, David Melville, Marcelino Alvarez, Lela Thieme, Julia Betts, Kyle Ritchey-Noll, Ken Greenbaum, Alexa Pearson, Kama Almasi, Elizabeth Massa-MacLeod.

Standing Business

1.0 Opened by Stefan Bird, no public comments. [1:04]

Attendance. Quorum achieved but will review previous minutes at a later point.

2.0 Public Comment: No public comments.

Alignment and Partnerships

3.0 2023-25 STEM Innovation Grant Reviews [1:07]

Alexa Pearson reviews key agenda items and review of the types of grants.

Reminder that these Innovation grants are to expand the implementation of effective programs relating to science, technology, engineering, and mathematics, that propose innovative approaches to STEM-based education or provide STEM professional development.

Kama Almasi outlines lessons learned from last grant process: focus within the grants, collaboration, data and deliverables, coordination and timing, & fiscal agents

Timeline review. Next deadline is 8/31 paperwork submitted by ODE to procurement

Project Overview [1:14]

Collaborative Work (Hub collaboration, common themes, network wide outcome measures).

Core STEM: Embed STEM into core subject areas. Call to Action: Increase access to STEM learning by building applied and relevant learning into core subject areas/aligned to standards.

Highlights since June: applied and relevant learning, increased elementary time, high quality curricula and PD. Included Joy & Justice in Math, NASA in the Classroom, and more.

Pathways to STEM (CCL) : Help youth find and travel their path. Call to Action - Support for pathways is critical to diversify high school programs and STEM career sectors. Emphasis on project based learning, teacher PD, connections to real life careers such as career days

Early STEAM: Start early to build STEAM identity. Call to Action - Disparate access to STEM learning starts when youth are very young. We must increase access for youth without privilege to keep future doors open.

Community: Empower Communities. Call to Action - Welcoming and relevant STEM learning must connect to community hopes and values. STEAM inc mobile maker lab, rural community outreach, and more.

Q&A [1:20]

No questions. Many were addressed in informal July meeting.

Proposed allocations reviewed by Ken Greenbaum. Visual breakdown of funds by STEM hub divided between formula based backbone and innovation allocations being discussed today. Allocations per project area: CORE STEM 31%, Pathways to STEM 28%, Community STEAM 22%. Early Learning 19% (approximate)
Q&A

Rita Hansen: were these adjusted since last month?

KG: No, just being presented in a different way that is hopefully more informative.

Proposed Innovation Projects, facilitated by Kama Almasi [1:27]
CO STEM, Tracy Wilson Scott. [See slide for funding and activity breakdown.](#)

Also working with Warm Springs tribes on integrating STEM into K12 native american curriculum

Q&A [1:32]

Rita Hansen: How many students were added from Lake County?

Tracy: About 2K new students.

RH: Were they previously served by another Hub?

TWS: No, this is brand new.

Columbia Gorge, Julie Cucuel [1:35]

Focus on PD that integrates STEM into other areas. Integrate STEM events into established community events. [See slide for funding and activity breakdown.](#)

Q&A [1:40]

(no questions)

East Metro (Jarvez Hall video in absentia) [1:41]

Oregon invitational math tournament, regional qualifiers has not had one in E. Multnomah County but will partner with MHCC to offer this. Community STEM: after school programs connect to computer science programs. [See slide for funding and activity breakdown.](#)

Q&A [1:45]

No questions.

Frontier STEM, Nickie Shira [1:45]

[See slide for funding and activity breakdown.](#) Note that they serve a large number of rural small districts with a high poverty rate, so focus on removing barriers and increasing access. Also diverse Latino/x population. Focusing on a CS TOSA for rural districts that lack the subject. Have struggled with high turnover, working with educator networks to pair new ones with experienced teachers YouScience aptitude tests showed that students with aptitude and interest aren't getting enough opportunity.

Q&A [1:51]

Stefan Bird: Any insight why there's such a gap between aptitude/interest in CS?

Nickie Shira: Students don't know what they don't know; no tech industry in the communities. No experts in the schools teaching it.

Beth Alcouloumre: In an area without that community connection to STEM, I like the idea of leveraging the community as much as possible. How do you reach people? Especially those who aren't already interested?

NS: Through mobile spaces and also through CS TOSA. Expanding work we're already doing with GEER funds. Engaging at younger ages. Support educators in coordinating virtual opportunities for experts to join classrooms, share pathways. Still a challenge in remote areas.

Deb Mumm-Hill: Great question Stefan and answer Nickie. We have a gap in programs of study in CS for various reasons in the state. The STEM IC may want to explore how we can help the state think anew about how we can involve industry professionals into this realm and a work around educator credential requirements that keeps professionals out of the classroom.

GO STEM, David Melville [1:55]

[See slide for funding and activity breakdown.](#) Emphasis on mobile maker lab.

KG: The STEM Hub Computer Science Grants to which Nickie and David referred are GEER-funded (Governor's Emergency Education Relief Fund); a separate, one-time funding stream as part of the Computer Science initiative initiated under former Governor Brown in May 2022.

Q&A [2:01]

Stefan: Data center/growth in the area- is there a similar gap to the previously discussed one, given the job opportunities in the area?

David: Umatilla has had this growth but not the other counties in their region.

Lane County STEM, Gabriel Gellon [2:04]

Boundaries coincide with the county's and embedded in the ESD. No early learning listed but using backbone funding for this.

Collaborating with other Hubs. [See slide for funding and activity breakdown.](#)

Q&A [2:09]

No questions

Mid-Valley STEM CTE Hub, Sarah Whiteside [2:10]

[See slide for funding and activity breakdown.](#)

Shared this link <https://linktr.ee/midvalleystemctehub>

Q&A [2:14]

Rita Hansen: Do you have a sense of who is using this site?

Sarah Whiteside: We are tracking usage stats - lots of families, educators, industry via LinkedIn.

RH: Do you have a count of subscribers?

SW: Just added another 25 subscribers from recent tabling events, up to about 600, and get an above average open rate of 50%.

Deb Mumm-Hill: I like your asset map Sarah as it provides a clean overview of partnerships.

<https://www.google.com/maps/d/u/0/viewer?ll=44.400692226315854%2C-122.73789529901123&z=14&mid=1fsYc8MTMfpP7Mbd73OKUAs5pkH4dePZY>

NW STEM, Chris Hesselbein [2:16]

Many small SDs and marginalized communities. Emphasis on retaining and connecting teachers. Keep talent local as turnover in the area is high. [See slide for funding and activity breakdown.](#)

Q&A [2:22]

No questions.

OR Coast STEM, Mark Farley [2:23]

Emphasis on new and historically underserved audience thanks to Cynthia's efforts; Hispanic Latina/x community. A la carte model is working well. Pivoting into youth safety in industry. [See slide for funding and activity breakdown.](#)

Q&A [2:28]

No questions.

Portland Metro STEM, Kristen Harrison [2:29]

CCL is key to Pathways projects. Focus to diversify access. 'Yes and' is their approach. [See slide for funding and activity breakdown.](#)

Q&A [2:33]

Stefan: Assuming you have the most diverse populations. How do you do that effectively?

KH: It is a monumental challenge, Jarvez would have good insight too. Think about where the kids they want to serve are i.e. CBOs,

nonprofits, schools. Cannot serve them all through school but focus efforts there.

Break [2:36]

South Metro-Salem, Julia Betts [2:45]

Aiming for greater impact across the region, especially after work with CS GEER grant. Highlight: piloting lending library in the region. Not asking for funding around early STEAM- separate funding source. An area of growth and they would like to collaborate across hubs. Eager to collaborate. [See slide for funding and activity breakdown.](#)

Q&A [2:52]

No questions.

Southern OR STEM with Karla Clark [2:53]

Highlighting Core and Pathways since they hope to work deeply within those areas. School improvement (STEM integration) specialist hired last year, coached teachers on integration into subject areas with project based learning and more] Coaching the Coaches was very successful and would like to expand on this Pathways: Emphasis on creating access and utilizing community for this. [See slide for funding and activity breakdown.](#)

Q&A [2:59]

Stefan Bird: We were able to get state and federal grants for a mobile electrical training trailer for rural districts- trades training opportunity- excited about this.

Umpqua Valley STEAM Partnership, Theresa not present. [3:01]

Kama Almasi reviewed slide. [See slide for funding and activity breakdown.](#)

Q&A [3:04]

None

4.0 2023-25 STEM Innovation Grant Feedback [3:08]

Deepest gratitude to Hub directors from ODE staff. Seconded by Stefan, Rita.

Outcome Measures

[Common Outcome Measures](#): Educator Focused, Student Focused, Resources, Partnerships

Q&A

Beth Alcouloumre: Are there targets for these?

Beth Blumenstein: Next slide covers this.

DMH: Good question Rita. There are some common instruments that focus on STEM impacts on students and educators that have been developed nationally the Hubs could consider.

SB: Having a baseline they can quantify. Comments from surveys put color on the data and it's helpful, but I also wonder if framing questions differently would give indicators of change in perspective

over time. Trends would be intriguing to see.

DMH: We have looked at the PEAR's STEM common instrument suite <https://www.pearinc.org/common-instrument-suite>

Karla Clark: Our shared impact work really helped paint the picture. Our collective summaries and individual summaries of findings was helpful this spring.

Targets [3:20]

Difficult to come up with targets with 2 year grants.

Q&A

DMH: It's key to take the burden of measurement off the Hubs unless we fund FTE to conduct the impact surveys, data analysis and reporting. Same is true for tracking key performance indicators — it takes time and systems.

KH: Easier to provide PD in the mid-biennium summer due to fiscal timelines. Can welcome anyone into summer 2024 PD, concern we'd need to exceed that the following summer when budgets are tighter.

SB: How would this work get done? Hub or ODE?

Alexa Pearson: We don't have the staffing but we have funds to support this. Would have to put out for RFP. Sometimes we work with a hub to be able to do this. RADAR office would also be relevant to this.

RH: Do other states have something similar? Have we discussed with them and how they measure data?

KC: That's supposed to be a perk of the PEARS tool.

Jerian Abel: I wonder about funding for each hub to build their capacity in this specific area... adding an FTE.

DMH: An example of using the PEARS tool for impact (KOI) surveys are \$2.75/survey. If each Hub sent out 1000 surveys, it would translate to \$2,750 per Hub, which I believe falls under the sole source procurement laws.....but I'm not sure.

KC: Is it correct that ODE doesn't have the staffing for that?

AP: It stretches our capacity- unfunded position from legislature. Haven't done this in the past.

David Melville: And, to add to Julia, is PEARS reliable and valid?

DMH: PEARS originated at Harvard so I believe the research and approach is valid.

Julia Betts: PEAR is well established, and I have used them in the past - Dimensions of Success tools for out-of-school learning. But in that case my team was trained as observers and we owned the data

JA: re: PEARS, in 2015 I investigated them and while researched based with a 30 year history, I could not tell if they were keeping current on new research. I elected not to pursue them further.

RH: I feel a bit blind as a member, trust the Hub Directors but data will be more meaningful in our future conversations, especially for future voting.

KC: Just nearly \$2700 per hub. Yes we would need to onboard. From what I understand, once we make it a part of our work, it will

save headache in the long run.

AP: Rita, we can also loop back on the question about what other states are doing. Deb Bailey should have more information on that question.

DM: It would be interesting to see what places like Idaho does, being a top-down system at the state.

4.1 Discussion and Recommendations [3:38]

Rita Hansen recommends moving forward with no changes. Stefan Bird seconds this motion. Beth Alcouloumre in favor. No objections. Motion passed.

Minutes from June approval [3:42]

Cannot pass motion at this time.

Chair Bird adjourns. [3:44]