

**STEM Action Center
Board Meeting Minutes
January 10, 2020
Capitol WW-17**

Call to Order

Chair Dave Hill called to order the regular meeting of the STEM Action Center at 1:01 pm on January 10, 2020.

Roll Call

The following were present: Dave Hill, Jake Reynolds, Wendi Secrist, Jeff Rosser, Dee Mooney, Paul Casey, Jennifer Jackson, Tim McMurtrey

STEM Action Center Staff: Angela Hemingway, Erica Compton, Crispin Gravatt, Sondra Chadd, Finia Dinh

STEM Action Center Contractors/VISTA: Cory Compton, Joanna Madden, Teresa Vail

Absent: None

Past Board Minutes Approved: Dave asked for comments on the minutes. Wendi had one edit and then moved to approve minutes Tim seconded. Approved unanimously.

Idaho STEM AC Draft Board Bylaws:

Dave provided a brief history on why it makes sense to have bylaws for the STEM AC. The main reason is to determine how and when to vote for Chair and Co-Chair for the board. Angela used the STEM Foundation bylaws and well as the WDC bylaws as a guide for the STEM AC bylaws. Angela explained that the positions are standard from state code as is membership and terms. There are terms expiring and Angela will reach out to the members whose term is expiring to determine desire to accept another term and then pass that information on to the Governor's office. Angela outlined the timeline for acceptance of bylaws at the April 2 meeting and then the nomination of Chair and Vice Chair to be voted on during the first Board Meeting after the start of the new fiscal year. Wendi raised the question of whether the bylaws should include language that would require the Chair be from a private entity. After discussion it was decided to include in the bylaws language that would reflect the intent to have private industry member as the Chair of the board. Angela clarified the language to be: "To extent possible the Chair and Co-Chair should come from private industry as allowable."

Report from SDE:

Todd Driver was unable to attend and give the presentation on the SDE Idaho Coaching Network. Tim McMurtrey was able to fill in with a quick overview of SDE's Coaching Network. SDE is proposing to do the science coaches "in house" in collaboration with STEM AC to give SDE control over the coaches. Coaches were defined as embedded professional development support for teachers in the classroom. Keeping the coaches in house at SDE allows them to hire 4 coaches and provide greater support to rural communities. Having coaches in house allows SDE to focus on schools in need of improvement and move coaches as necessary.

GOAL 1: Advance equitable access

Grant Update:

Crispin provided the Board with an update on our grants.

VR4Ed: Ten grants were awarded for VR4Ed. The training is February 21st and provided by Blocksmith VR with IVRC. A networking event will follow with a digital showcase on October 30th.

Camp and Out-of-School: Eleven grants awarded. This is one of our most effective programs. This round the majority of awards went to first time applicants.

Rural Community STEM Engagement: Application is open through Feb 3rd. This grant promotes stem education in rural communities.

Early STEM: Application opens Jan 10th is a PD with materials for STEM ED 3yr – 6yr.

i-STEM: We received 44 applications. We are adding 4 IDX, 3 Leadership strands, 6 SDE for a total of 57 applications. Will be deciding on these shortly. 37 strands to run which is the maximum number we can run. Nineteen (19) strands are co-sponsored so far (this includes the 4 IDX strands). Sponsors are OSBE (3 strands), SDE (6 strands), DHW (2 strands), Idaho Power (2 strands), PCS Edventures (1 strand), NICERC (1 strand), STEM AC (4 IDX strands). We are seeking additional direct support for teacher fees and meal sponsors.

STEM Leadership: Angela described our Stem Leadership Cohort #2 training: This is an 8-day training and the 1st cohort will join 2nd cohort in Feb in Boise. This training is supported by OSBE with \$100K. Pushing a lot more leadership skills to teachers helping teachers to become leaders or mentors or coaches. Administrators are required to attend as well. Great Feedback. We need teacher leaders for i-STEM to teach leadership strand. 4 volunteered quickly to step into this role. Will work with them to make this effective training in May. Boise training is in Feb 27 and 28 – Board is invited to drop in anytime.

Competitions:

Go Girls: Young women are asked to be the first to unlock 5 cybersecurity challenges and then the whole school can participate. Jennifer commented that this year it will be a bit different. The competition has done a better job with more lead time involving more agencies like SDE and STEM AC. As a result, we can expect more participation. Last year we did well and hope to do better this year. The competition provides cash awards as well as employment opportunities and scholarships. It also hits all the CS standards.

eCybermission: This is a grant provided by the Army. It is a compliment to ISEF. eCybermission is an online middle school research competition and will run the same day as ISEF. We have 23 teams across the state. Winner will receive an all paid trip to the National finals paid by eCybermission (not STEM AC).

MakerMinded: The competition is open and allows schools to compete and earn points for participating in STEM related activities. More schools continue to join.

ISEF: We have great sponsors for 2 of the 3 competitions. Micron is the partner for WISEF. INL is the partner for EISEF. Still working on a sponsor for NISEF. We would appreciate help from board in finding a sponsor.

FIRST: Kick-off for the regional competition was last weekend. The competition will be held at the end of March at the Ford Center. Angela invited the board to attend. FIRST is a great pipeline with 89% of

participants going on to study STEM. Angela also informed the board that we have put in an application for \$55K grant to support Rural robotics. Our local team called Team Tators was 4th in the World last year!

GOAL 2: Align STEM education and workforce

Externship Update:

Externship opportunity is now open to businesses. We have 25 businesses to date. Angela thanked board members for their assistance with garnering business support. Several businesses are sharing the cost with STEM AC so we are able to take more this year. Crispin is collecting data from this program to learn how they are using their externship experience in their classroom. The teacher application is also open. Repeat applicants will be allowed but receive a lower priority. Paul requested some case studies to share

ACTION: Cory will send him the link.

Applications for businesses and teachers are open until Feb 7th.

STEM Designated School: 2019 - 2023

Angela noted that data suggests that STEM Schools that have been functioning as such for 5 or more years consistently score at or above the state average on math, ELA, and science.

Four schools have been moved on to Designated and currently receiving \$10K to enhance their programs.

They are: Barbara Morgan STEM Academy, West Ada; Bingham Academy, Blackfoot; Galileo STEM Academy, West Ada; Temple View Elementary, Idaho Falls. Angela outlined the timeline for the next round of designation for STEM Schools. During this meeting the STEM AC Board will consider advancing the approval for designation to OSBE of the following schools: Southside Elementary (K-6) and N. Idaho STEM Charter Academy (K-12). **MOTION** made by Jennifer Jackson: "To send the 2019 certified Idaho STEM Schools to the Idaho State Board of Education for designation per Idaho Code 33-4701" Dee seconded the motion. Motion was approved unanimously.

Angela will submit necessary OSEB paperwork and Dave will add this to the active agenda of the OSBE.

STEM School Certification 2020 Update: Cognia is now responsible for the standards that schools will be utilizing to receive the STEM School Designation. These standards are outlined in different domains and are still in alignment with Idaho Code. Angela briefly shared the four domains and the themes within each of them. Each theme is then broken down into standards and schools are ranked on an average scale of 1-4. School does a self-assessment first then outside team spends 2 days at the school to verify that they are doing what is described in their submission. It is a very open process. Angela also shared the rubric used with each of the standards. Jennifer asked if we go back to the previous STEM Designated Schools and ask them to update their materials. Angela explained that Designation lasts for 5 years. The 4 current schools (plus the two new schools, if approved by OSBE) will be rated on the new standards once that five years is up.

STEM Ecosystem:

Angela acknowledged Erica for taking the lead on the upcoming Ecosystem Convening. The first convening will be January 16th at BSU with 67 stakeholders. We are working with Teaching Institute for Excellence in STEM (TIES) to facilitate the meeting. Participants will come from all over the State of Idaho. After this broader convening will begin to regionalize the process. Dave wondered what success would look like. Erica outlined 4 very specific outcomes that would indicate success:

- Develop a shared understanding of the importance of ecosystem approach to goals
- Craft shared goals, aspirations, indicators of success for Idaho STEM Ecosystem
- Identification of constraints that stand in the way of success for Idaho

- Development of outline of action plan for Idaho, including identification of priorities, work groups, general governance structure and timeline

A discussion ensued around the first outcome and how to achieve. Angela commented that creating an ecosystem could change how STEM AC operates in Idaho. It may reset the way we do things.

STEMx Grant is funding these efforts. Will be submitting an NSF grant for funding future meetings.

Grants and Foundation updates:

Joanna reported on new grants that have been submitted to corporate and private foundations. Kaitlin has submitted grants to NSF and IWCF. New partnerships are coming through foundations. Normally we use industry to develop new partnerships but finding that industry also has connections with foundations can be an advantage. Trying to reach out to diverse communities. Joanna used the working with Teton Community Foundation that is working with Sparks Foundation and how that partnership will have an impact on early STEM in the small town of Driggs in east Idaho. The website has been updated to identify donors over \$2500.

Foundation update: Joanna highlighted the growth in the dollars raised by the STEM AC Foundation. Partners can decide whether to donate to the Center or the Foundation based on the tax benefit they would receive and their requirements. Other fundraising opportunities have been our year end campaigns, Giving Tuesday and Idaho Gives. We are also looking for a Board member from N. Idaho and could use Board help in identifying candidates. New partnerships for the Foundation include an annual gift to Support Women in Computer Science Awards. We have 50 new P3 Partners. New sponsors for competitions include Hecla Mining; Idaho Central Credit Union, Cradlepoint, BlackBox, and IBL Events.

Sondra provided the Funds raised as of 1/3/20 total \$958K. Our major donors are INL, Micron and Battelle, and the JR Simplot Foundation.

Top Donor programs for FY20 are Public-private partnerships, Professional Development, Externships and competitions. The P3 is very successful bringing in \$624K from industry partners. STEMx provided \$12K for Ecosystems convening. PD funds are switching over to i-STEM and we are currently waiting on SDE to sign a contract for \$100K for i-STEM. WDC providing funds for externship program at \$57,500.

Final fundraising reports included total In-Kind donations. For FY20 we have received a total of \$1.65M from media reports, grant reviewer, competition judges, training spaces, mentors and industry partnerships. We track all in-kind and use \$30/hr as the wage for the time and talent donated.

STEM AC Strategic Goals:

Angela highlighted the three strategic goals that act as our guidelines for all we do.

1. Advance **equitable access** to high-quality STEM+CS opportunities for educators, students, and communities
2. **Align** education and workforce needs throughout Idaho
3. Increase **awareness** of the importance of STEM throughout Idaho

Budget Analysis by goal:

Angela went through the three goals as related to funding. FY20 is still on target for all these goals. We are giving out fewer direct grants and shifting to PD which is more impactful.

Goal 3: Increase awareness of the importance of STEM

Angela reviewed the impact numbers we have tracked since FY16 discussing the JFAC on Monday will also be looking at these numbers. All are very positive metrics. 61% of our funding goes to rural communities. Dave asked if we would be able to get a visual of the 61% on the impact map. Crispin is updating the map for STEM Matters and will incorporate that idea.

Funding Discussion:

Angela presented the two-page graphic which will be presented to JFAC on the 13th. The Governor has recommended \$500K ongoing for CS. Angela highlighted very positive CS numbers an 11% increase in the number of secondary teachers teaching CS and an 18% increase in the number of secondary students taking CS year over year. She reported today that JFAC unanimously approved an additional \$1M in ongoing spending authority (as was requested by STEM AC and recommended by the Governor). Today we have almost \$600K more cash than we can spend to getting an increase in the spending authority is important. The supplemental will now be in the process moving through the House and Senate and then to the Governor.

STEM AC also requested \$500K one time for CS which was not in the Governor's recommendation. FY21 CS funding was decreased by \$500K but we did get the \$1M in spending authority. We will be keeping out fundraising goal to \$1M.

Angela highlighted STEM and Idaho's Economy. In 2019 there were 7633 unfilled STEM jobs resulting in half billion in lost personal income and a loss of \$27M in tax revenue. Page 2 of the JFAC doc graphically showed the positive move in CS numbers and highlighted the actuals and the "bright future". Currently DOL reports that we have 86K STEM jobs and predicts 105K jobs in 2026, a 19K increase in six years. Discussed the need for collaboration to address the problem and find the solution. Dave asked how much of our budget addressed healthcare education. Angela noted that CS initiative was a large portion of our funding and we are searching for partners to help address the healthcare issue. It was noted that the ratio of girls to boys in college is 55/45 so there is a need to find a way to re-engage boys, so they go on after high school. Wendi suggested that DOL and WDC provide a report on the labor numbers at the next STEM AC Board meeting on April 2.

Talking Point Discussion:

Angela shared the STEM AC's thoughts on what our goals and mission are and how to provide the board with meaningful and useful talking points. The Team looks at STEM through the lens of Equity. We achieve Equity with 3 goals; Access, Alignment and Awareness. Computational literacy is critical to allow our students to have basic workforce skills. Angela asked for guidance from the Board on how we can talk about the STEM AC and what we do. Discussed the idea of literacy and how it has different meanings. It was suggested to tie STEM literacy to the financial opportunity of being STEM literate and able to take higher paying jobs. Other suggestions for talking points was to stop at Access, Alignment and Awareness; work around "heart, mind and wallet" and have stories to support it; data is helpful to have on hand.

Legislation for 2020 Session:

Idaho Promise Update- Mentorship and Scholarship: Idaho Promise is linked to the STEM AC. Sen. Burgoyne is running legislation around mentorship for kids going to college the intent being to help kids who struggle with attending college and being successful. Mentors are different than college counselors. Because we have mentorship in our statute, he felt that perhaps the program manager and admin in the legislation could be housed under STEMAC. STEM AC will remain neutral.

Board Support:

We need continued support from the Board to introduce us to individuals, businesses, or companies that share our mission and vision. These connections are important for developing new donors, volunteers and P3 opportunities and we greatly appreciate the help we have received from the Board. Further we need help identifying candidates from North Idaho to join the Foundation Board. Send potential names to Angela.

Awareness Events:

Angela invited the Board to join us for STEM Matters! at the Capitol on Jan. 15th. Next event will be STEM Day on the Blue at BSU on April 24th.

Wendi shared information about the youth apprenticeship program in Colorado called Career Wise. They plan on having 20K youth apprenticeships in 2020. IBE is going to apply for a grant to expand access to a youth apprenticeship program throughout Idaho. Wendi asked if the STEM AC would be willing to provide a letter of support to WDC for the grant. Cory to work with Wendi to get it done.

Public Comment:

Dave asked for any comments from the public. None was given.

Upcoming Meetings:

Angela reminded the Board that our presentation before JFAC was Monday morning and asked board members to attend if possible, in a show of support. STEM Matters! is Jan 15th and all are welcome, and the first Ecosystem Convening is Jan.16th.

Board Catch-up Calls:

Cory will be sending out a Doodle poll to set up catch calls in late Feb. and early March. Please respond to the Doodle Poll to get these calls on your calendars.

Meeting was adjourned at 3:48

Next Board Meeting is April 2 at the Capitol 1-4 PM Room TBD