

**STEM Action Center
Board Meeting Minutes
May 14, 2019**

Call to Order

Chair Dave Hill called to order the regular meeting of the STEM Action Center at 1:01 pm on May 14, 2019 in WW-17, State Capitol.

Roll Call

The following were present: Dave Hill, Dee Mooney, Jennifer Jackson, Jeff Rosser, Janie Revier, Jake Reynolds (for Tom Kealey)

Call in: Von Hansen and Paul Casey

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

STEM Action Center Contractors: Cory Compton, John McFarlane, Kaitlin Maguire, and Crispin Gravatt

Absent: Tim McMurtrey

Past Board Minutes Approved: Dave asked for comments on the minutes. No comments. Jennifer moved to approve minutes; Jeff seconded and were unanimously approved for March 14, 2019 meeting.

Agenda Amended: Dave asked that the agenda be amended to remove the Chobani presentation from the agenda. The agenda was amended by unanimous consent. Angela informed the Board that the October meeting would be held at Chobani and we would be given a tour of the facility.

Strategic Planning: Dave commented that most of the meeting would be dedicated to addressing the Strategic Plan for STEM AC. Dave asked Angela to provide a brief background and history of the AC and the current Strategic Plan. She briefly reviewed the legislation that established the AC and the CS initiative. We are in the 3rd year of the current SP and it is appropriate to review and ensure that we are staying within the mandate of the legislation. She reviewed the STEM AC objectives and noted that specific words used in each came directly from the legislation. Briefly described other Strategic Plans; Idaho CS Strategic Plan; the Federal White House STEM Plan, and OSBE plan which provided ideas for our AC Plan. Dave participated in the White House forum and highly recommended that everyone look at the Strategic Plan that came out of that meeting. He also noted that the OSBE Plan has expired and will not be revived. Angela informed the board that the Idaho CS Plan was a requirement of Code.org. Dave commented that now is the time to look at our goals with an open mind and reassess as needed.

Mission: Engineering innovative opportunities for educators, students, communities and industry to build competitive Idaho workforce and economy.

Angela: The Mission statement is important and is often required on grant applications. The mission was reviewed a year ago and tweaked. Not only is the Mission important for grants but also as a statement the board supports and can use when making connections in the community. Dave started off the discussion around the Mission by asking “What does STEM mean?” “Can we create STEM opportunities?” The resulting discussion largely centered on the word “engineering”; the idea of integration; the absence of Computer Science or is that implicit in STEM; should CS be called out separately; learning is missing; engineering= application and integration. After lengthy discussion, Angela provided the board with the

next steps after this meeting. The STEM AC team will have 4 meetings to revise the mission, vision and Strategic Plan. The board feedback from this meeting and going forward will be integral in that process.

Vision: Connecting STEM education and industry to ensure Idaho's long-term economic prosperity.

Dave led the discussion on the Vision by describing a Vision statement as an end result in the future. Angela said this Vision statement was taken from language in the legislation. Discussion included continued discussion on whether to call out CS separately; CS = science and engineering so does not need to be called out; the current vision statement does not reflect a vision as written. Need to think future state, ie; A prosperous Idaho. The vision statement will be part of the upcoming Team Strategic Planning meetings.

STEMpowers: Our core belief is that we empower people. This would be a tagline that could be used in presentations and with donors. Why we believe in what we do.

How are we seen by our different constituencies?

Governor: Discussed the level of understanding about the STEM AC and the work we do. The level of understanding and commitment to STEM are directly related to the budget we will receive. It was exciting to be mentioned in the Governors First 100 Days announcement with the STEM School Designation. Angela said that going forward we need to find more ways to engage. With \$1M instead of \$2M, STEM AC will need to reduce or eliminate 50% of the new CS programming in FY20. **ACTION:** We need help from the Board to encourage and support consistent funding which is imperative to providing long-term, impactful programs.

Legislators: Dave led the discussion by defining the two types of legislators. There are those who support us and those who do not, possibly because of a lack of understanding of what we do. Angela commented this is where industry can help by being an important voice in communities that are impacted by our work. **ACTION:** Angela and the Board will continue to discuss and meet with legislators during 2019. Further comments included: need to find one or two champions on JFAC as our advocates for the budget; need to be more proactive in identifying who our champions are and engage them.

Business/Industry: Comments related to this group included: STEM means qualified employees to meet the needs of the company; does industry see how the AC impacts them or do we need more awareness?; STEM education in Idaho as a recruitment tool to families coming from out of state; regional issue of lack of awareness about STEM AC; industry/companies do not have the long view they want immediate results; need to be strategic on how to talk to industry; P3 grants have made it easier for industry and foundations to support us as a partner; INL sees a need for greater awareness in the East and North ID; P3 is making it easier to have a conversation about common goals. Ecosystem concept was discussed as a way to identify STEM AC as the focal point of STEM in ID. Need for making industry aware of the results of our work. Use a bottom-up approach by having families in their communities share with industry the impact. P3s also help with networking.

Other Donors: Small donors will likely not be a major funding source for STEM AC. Having support from INL and Micron encourages others to donate and participate in our mission. **ACTION:** Identify potential donors in the 6 education regions and create a plan for engagement.

Educators: We have a high awareness and strong reputation with educators. The downside to this is increased competition in the grant process. There is simply not enough funding to fund everyone and the process is highly competitive.

Students/Parents/Communities: Important to inform and engage parents in the process. It seems like there is a lot of information for parents about the need for STEM in ID and their student's potential success. Not as much need to explain STEM anymore. Competitions seem to be the best way to connect the STEM AC with parents and communities. We need to get parents to communicate to their legislators about the impact the STEM AC has on their kids and communities. The Girls Scouts is a great example of how to engage and leverage a network of partners. However; rural communities are still left behind. We need to increase the impact in these communities and communicate to the legislators the positive impact on their kids. If we see competitions as a community event we need to be proactive about getting legislators to attend, get their picture with the winners.

GOAL #1: Coordinate and facilitate implementation of STEM programs throughout Idaho

Comments included the difference between teacher and educator and how educator is all encompassing; whether we have the metrics to measure these objectives; the need to highlight underrepresented populations and rural communities. Discussed how industry could help reach rural and underrepresented populations as well as the opportunity that partnering with community colleges across the state would have on these same populations.

Goal #2: Align STEM education and workforce needs throughout Idaho

Dave commented that these objectives look good and adequately reflect what we do. Discussed the idea of adding another objective; "Collaborate and leverage other state-level partner organizations (OSBE, SDE, CTE, WDC)"

Goal # 3: Increase awareness of STEM throughout Idaho

Comments: Increasing awareness is a fuzzy goal and hard to measure; find a way to highlight impact as a way to measure awareness. Highlight underrepresented populations in this goal as well. Suggested to add to the goal "the importance of" after awareness.

One Unified Vision for STEM: Form a STEM Ecosystem for the State

STEM AC uniquely positioned to lead Idaho in becoming a statewide STEM Ecosystem. Doing so would unify all plans ie; STEM AC, CS, OSBE, and the White House plan. Discussed the need for a clear definition of what an Ecosystem is. What will we do and how will we measure? Need to leverage what everyone is already doing in the State and all "row in the same direction". A statewide Ecosystem would garner greater buy in for the importance of STEM education across the State. An Idaho Ecosystem would be loosely modelled after the White House 2018 Plan. Discussed the need for partners to accomplish this and for it to have meaning. How do we get commitments vs. just signing on without actively participating in the Ecosystem – this is something to think about.

ACTION: Look at examples of successful Ecosystems or failed Ecosystems to learn from them before we begin the process.

How to satisfy requests from Districts/Schools:

The STEM AC team has decided to adopt the Fee Model in FY20. All opportunities will have a fee to help pay for them as well as get buy-in from participants to show up for the trainings. The actual fee is TBD and will be solidified in June. We have tabled the discussion of developing a service provider model at the district level and will take that idea up in FY21 planning.

Strategic Planning discussion ended with Angela committing to keep the board apprised of the progress the Team will make in the upcoming planning meetings.

UPDATES:

Goal #1:

Finia reported on the Grants that have been awarded; Camp Grants this year we funded 1/3 of the applications it was highly competitive with total funding of \$189K in 33 places across the state. Other Grants awarded include VR4Ed, JBC, Botball. Discussed the new CS requirement and how it impacts the schools and students. Our PD's help to train teachers to feel more confident in teaching CS. All CS programs are aligned to CS State Standards.

Awareness Events: Erica reported that STEM Day on the Blue was success. Student Athletes who are STEM majors led the hands-on activities for over 260 elementary students. We garnered a lot of media attention with all 3 TV stations reporting on the event. Next year it will be larger and actually on The Blue. STEM Day at the Fair is Aug 16th and we have met with both the Fair and KBOI to begin planning for opening day.

Professional Development Updates:

Finia reported that the UI Dual Credit training will take place in East and North Idaho. Virtual Reality PD will partner with Blocksmith with middle and HS students coding virtual worlds which they will showcase at the end. Drones PD this year will be programmable for inside use and be cheaper and easier to fly. JBC and Botball PD; Jr Botball is elementary and middle school students coding robots using C language. Educurious; Project based learning for educators, also looking to continue to partner with OSBE on the administrators training.

ISEF:

Intel International Science Engineering Fair is this week in Phoenix. The participation in the Fairs first three years has increased exponentially. Stay tuned for results.

Statewide Botball Competition:

Statewide Botball competitions were held this past month. We will be sending teams on to the World competitions in Oklahoma in July.

Girls Go CyberStart:

Idaho participated for the first time in this nationwide Cyber Security competition. To kick off the competition only girls could participate and "unlock" the first challenge then it was open to boys. Idaho finished 11th per capita and had 3 winning teams.

Goal # 2: MakerMinded Update

John provided the Board with the update. The MM competition closed April 23rd. We had 3 First Place winners and 4 secondary winners. The teams were broken into classification by size. The winners will spend the funds awarded on STEM manufacturing equipment.

Externship Update:

John reported that we had a goal of 10 externs but happily ended up with 16. Externs are very excited to bring workforce ideas back to their classrooms.

STEM School Designation:

John explained to the Board that since awarding our first 4 STEM Schools we are now working with emerging STEM Schools to get them to the STEM School Designation.

INDEEDS:

Finia announced that nominations are open until the 19th. We are in need of more nominations so if you know a STEM-azing educator please put their name forward. We are also still accepting sponsorships for the Award until Friday the 17th. Awards will be announced in October at the ITC Hall of Fame event.

STEM AC Foundation Update:

Kaitlin reported that the Foundation donations to date are \$379K. Idaho Gives was better than last year. We had one major donation from industry, Midas Gold. Our total this year was \$6,160. Kaitlin successfully applied for a was awarded a \$50K AEOP Grant for ECyber Mission competition. Currently working on an NSF ITEST Grant which is due in August. The grant integrates computational thinking and CS in every day instruction. **ACTION:** Need partner letters of support by August for the NSF ITEST grant.

Goal #2:

Angela reported that we have exceeded our goal of \$1M in revenue!!! Wahoo! Thank you in large part to our two major donors Micron and INL. We have decided to keep our fundraising goal at \$1M for FY20.

Top Donor Programs FY19:

Our top three donor programs are the P3 partnerships, Competitions, and Educator PD. Our budget cuts will not affect these top programs in FY20.

In-Kind Donations:

Our total in-kind for FY19 is \$3.4M which includes judges, mentors, industry partnership and media coverage. Angela reported that \$2.3M was the result of extensive media coverage for the code.org CS success. JFAC asks to see the details of in-kind so we track this carefully.

Goal #3:

Update on Data Collection and Outcome Metrics. Angela presented the data and metrics for student engagements, educator interactions, cash and in-kind actuals for FY18. She anticipates that with the 25% decrease in our FY20 budget we will see the numbers decline and we will need help with messaging this decline.

Public Comment: None

Areas of Support:

ACTION: We need Board support with introductions to STEM supporters and potential partners.

Board Catch-up Calls:

Angela reiterated how helpful and important these quick, 30-minute calls are to her and she greatly appreciates the time you take to share your thoughts. Cory will be sending out a Doodle poll to set up these calls in June/July. **ACTION:** Please respond to the Doodle Poll to get these calls on your calendars.

Angela closed out the meeting noting that the next meeting will be August 8th.

Meeting adjourned at 3:39 PM

Next Board Meeting is August 8, 2019 1:00 – 4:00 PM WW17