

**STEM Action Center**  
**Board Meeting Minutes**  
**August 22, 2018**

**Call to Order**

Chair Dave Hill called to order the regular meeting of the STEM Action Center at 1:13 pm on August 22, 2018, at WW-17, State Capitol. The meeting began late due to technical difficulties.

**Roll Call**

The following were present: Tim McMurtrey, Dave Hill, Bobbi-Jo Meuleman, Dee Mooney, Von Hansen, and Melinda Smyser.

Via Conference Line: Amy Lientz (for Mark Peters)

**STEM Action Center Full-Time Staff:** Angela Hemingway, Erica Compton, Finia Dinh, Stephanie Lee, and Sondra Chadd

**STEM Action Center Contractors:** Kaitlin McGuire, John McFarlane, and Joanna Madden

**Absent:** None

**Past Board Minutes Approved** – Dave asked for comments on the minutes. No comments. Dave motioned to approve the minutes, Bobbi-Jo seconded the motion. All in favor, minutes therefore approved for May 4, 2018, meeting.

**Welcome and Introductions:**

Angela introduced new team members (Sondra, Kaitlin, John, and Makayla) to Board.

**STEM AC Updates:**

**1. State and National STEM Initiatives**

- a. Governor's Executive Order on Nuclear Production and Manufacturing
  - i. This opportunity was signed a couple months ago and was discussed in the Workforce Development Council. It is an awareness piece and gives guiding actions focused on the nuclear sector. The STEM Action Center hopes to play a role with INL.
  - ii. Amy and Rick Aman co-chair a subcommittee that is working on a nuclear careers roadmap that allows people to understand what career opportunities there are and to understand next steps. It also provides grant and mentoring resources. The STEM Action Center will partner with INL and be referenced in opportunities. There will be a dialogue on how STEM AC and INL can work together on opportunities to provide additional funds to help support curriculum development and enhance strands for teacher PD tied to nuclear.
  - iii. Bobbi-Jo stated that most other places don't have a lead nuclear lab as a pipeline like Idaho does to give a pathway for a student to go into the nuclear energy field and stay in Idaho. It is a good example of the state is being proactive.
  - iv. Amy mentioned the shortage of advanced welders, so it is important to get a grant for more welding programs to occur, and this ties into high schools as well.

- v. **ACTION:** Angela – add an update on the Governor’s Executive Order on Nuclear Production and Manufacturing to the October Board Meeting. Bobbi-Jo and Amy to give a brief update related to that.
- b. White House – American Worker’s Pledge (President Trump’s Executive Order)
  - i. This is focused on creating the President’s National Council for American Workers and a Policy Advisory Board. This allows a national group to focus on urgent workforce needs. Angela will keep the Board apprised as she learns more.
  - ii. Dave Hill, Marilyn Whitney, and Wendi Secrist attended White House STEM Summit in May. The administration developed a STEM policy document to get STEM-interested people to brainstorm around what STEM-related policy looks like at the federal level.
  - iii. Angela said the federal STEM strategic plan is due in December and will bring that forth at that time. The policy document got buried and wasn’t brought to the forefront. The new science advisor will update plan and make it usable for states to look at what the federal government is doing.

## 2. Idaho STEM AC Statutes

- a. Angela discussed the statutes related to STEM and how they are included in our transition after the new governor is elected. We may have some new additions to the Board at that time.
  - i. Major initiatives are happening relating to the Computer Science Initiative
  - ii. Computer Science for All requires all most schools to offer computer science by 2020.
  - iii. STEM Diploma legislation (by Senator Nonini) was enacted as emergency legislation. 9 students from N. Idaho STEM Academy graduated with a STEM diploma this year. How do we do a STEM diploma for our students? It could be a seal, could be honor cords, or other ways to designate students even if it’s not a STEM-designated school.

## 3. Legislation

- a. We will move forward with the AdvancEd model for STEM School designation. This is the same company that oversees Idaho’s high school accreditation.
- b. A school can be designated for about \$1,500 and can apply for designation for about \$900. They may receive funding in they reach a certain threshold based on a range of scores derived from the AdvancEd rubric. STEM AC anticipates about 5 schools with STEM designation by December.
- c. John is currently a reviewer and will make on-site visits at schools.

## 4. Goal #1: Coordinate and facilitate implementation of STEM programs throughout Idaho

- a. Rural Community STEM Engagement workshops: Erica reported that we had our first workshop in Driggs at the Valley of the Tetons Library. Jeff and Francesca from the Salmon library ran a workshop that was amazing. And “elder statesman” said that he had been to many PD workshops over many years, and this was the best one, it was amazing, and he couldn’t believe it was the first one. The community came out and engaged and felt it was a valuable time to talk through their goals as a community to support education and workforce development. It was the first of four workshops. McCall and Payette are next in September, then Glens Ferry in November.
- b. FabSLAM facilitator training: Erica reported that we took 9 educators that already ran through the project and trained them to be certified Idaho trainers so we don’t have to rely on outside educators. There will be 3 training locations with 3 trainers at each location in October. FabSLAM hopes to move into i-STEM as a strand.
- c. Elementary drone trainings: Erica reported on “Ready, Set, Drones!” which is the elementary program. The advanced program was a little too intimidating, so we stepped back to do a smaller drone that is already assembled and can be flown indoors so kids don’t have to worry about weather or other limitations/restrictions to outdoor flying. We looked at outcomes and next steps because it’s a growing industry. Drone pilots can get a job quickly without advanced training, so there are some good skills being learned.
- d. Educurious STEM Leadership Training (OSBE): Finia reported that we partnered with Educurious for 1 of 4 competitive PD grant awards that we put out last year through STEMworks. It was well received with educators, so we rolled out a second year. We partnered with Christina

- Linder with OSBE for leadership training throughout the state. Angela said that STEM will not be as successful if we don't make it more systematic than having a single teacher because the teacher could leave and materials may not be utilized if left behind. As a former superintendent, principal, and teacher, John brought expertise to the team and is on a leadership team with OSBE. The Utah STEM AC had a similar model with administrators. It helps administrators with evaluations to recognize that STEM classrooms are different from other classrooms, especially if project-based learning is being employed. The more we can help educate our administrators what a project-based STEM learning environment looks like, STEM teachers will be more confident. We want to ensure leadership understands it will involve administrators and teachers. There are 10-20 interested groups, and the limiting agent is funding, so it has to be a competitive process. Kaitlin can bring forth i-STEM teachers administrators to help teach other teachers and administrators.
- e. Junior Botball Challenge: Finia attended the Global Conference on Educational Robotics, and at the junior botball level, 21 Idaho teams attends from 4 schools. Most teams attended for the first time. 10 of those teams got 1<sup>st</sup> place, 2 got 2<sup>nd</sup>, and 6 got 3<sup>rd</sup>. We had a couple strands at i-STEM, so Idaho teachers are helping train other Idaho educators.
  - f. I-STEM: Kaitlin reported that the program has been going on 9 years, but it was STEM AC's first year. There are various workshops at 6 post-secondary locations across the state. About 350 educators attended. After surveys were conducted, we are in a regrouping phase after seeing what needs to change next year. I-STEM was a success and we're looking forward to reworking and moving forward.

## 5. Goal #2: Align education and workforce needs throughout Idaho

- a. MakerMinded: Kaitlin reported that we received \$90k for MM. There is a point system where the school with most points wins a prize.
- b. Making Spaces: Kaitlin reported that we received \$30k. Erica will be leading. This supports five schools in maker education.
- c. FamLAB Sparks Grant: Kaitlin reported that we received \$25k to bring together people focused on early STEM work throughout the state. They will meet in October and come up with an action plan. We are collaborating with several partners and hope to bring in more. Erica will be leading.
- d. Laura Moore Cunningham Foundation: Kaitlin reported that we received \$50k to support teams going to FIRST robotics competitions, specifically rural teams, and help cover the \$5k entry fee.
- e. MakerMinded: John talked about the competitive opportunity for schools to be involved in STEM activities. Reaching out to partners throughout the state to raise awareness of the program. We received a list of around 3,500 manufacturers (coding, metallurgy, high tech, etc.) throughout the state from the Department of Commerce. The idea is to help facilitate working partnerships with manufacturers and their local school districts. Building a network of manufacturers will be critical as we launch. If we look at the way the MM platform is developed, it's supposed to level the playing field among large and small schools. It might be a good idea to divide divisions based on size. 7 states total are part of the MM program.
- f. **ACTION:** John and Angela – set up a meeting with the Workforce Development Council in October to let them know this is a tool that is under development (and possibly collect best practices for the resources portal for other manufacturers).
- g. STEM AC Foundation Update
  - i. Kaitlin reported that we raised about \$300K via the Foundation since last fall.
  - ii. STEM AC has hired grant writer (Kaitlin) and fundraiser (Joanna).
  - iii. We are signed up for Amazon Smile for ½ percent of each purchase to STEM AC Foundation. We are in the process of signing found up for Fred Meyer Community Rewards Program.
  - iv. There is a donation button on the Foundation website separate from STEM AC button so you can choose which to donate to. You can donate to the Center for the Idaho Education Tax Credit (as well as state and federal deductions) or the Foundation for state and federal tax deductions.

- h. Performance Report: Angela reported that we raised nearly \$3/4 million for Idaho STEM education. Dave mentioned the importance of the legislature to see outside money coming in. Angela plugged National Coffee Day on September 29. Last year, Dutch Bros partnered to help Reuseum and wants to help again with \$1 per drink. We match 50%. Last year we had 2 locations; this year we want 3-4 locations.
  - i. Finia is working on INDEEDS sponsorships, announcing two educators.
  - j. CableOne wants to fund us again for Family STEM Awareness events.
  - k. Power Engineers helps support i-STEM and ISEF.
  - l. Trailers Plus did FIRST Robotics.
  - m. Angela reported total in-kind donations. Between \$1.7m in kind and nearly 750k we received in cash, we have a good story to tell in JFAC, who wanted us to raise \$2m per year.
  - n. Angela reported that we have \$307k of donations in the book for FY19.
- 6. GOAL #3: Increase awareness of STEM throughout Idaho**
- a. Awareness Events: Angela talked about P20 Conference Maker Room, IAEYC Development Days, Involta Open House, IASA, and STEM Day at the Fair. Upcoming events include ION Power Up Maker Room, Science & Math Conference, and Hispanic Youth Conference. The STEM AC continually gets asked to host tables and has had to decline some, so we want to hire another contractor to coordinate events. We want to continue to bring forth excitement until we have saturated the market. Bobbi-Jo and Dee offered to have STEM information at their event booths, and Melinda offered ServeIdaho as a resource.
  - b. Performance Report: Angela said we have hit phenomenal metrics in our Performance Report. We only have 300k students in the state, so hitting 400k student engagements means engaging students multiple times. The numbers continue to grow.
- 7. Family STEM awareness Events**
- a. Angela talked about the 1,400 students and 500 parents that took surveys and the results. 36% of students increased awareness of STEM careers, and 99% of parents want child to pursue a STEM career.
- 8. Required Documents STEM AC: FY18 Performance Report and Strategic Plan**
- a. Angela said the FY18 Performance Report is due September 1 and send out the Strategic Plan
  - b. 9 critical things we're doing at STEM AC (reference FY18 Performance Report)
    - i. Total number of grant opportunities capped out
    - ii. Performance measure 4: continues around 70% and we do turn away some applicants
    - iii. Performance measure 5: our goal is \$1m cash
    - iv. Performance measure 5: working on workforce initiatives, working with industries to bring forth PPP
    - v. Performance measure 7: 250 educators so far
    - vi. Performance measure 8: building subscriber list
    - vii. Performance measure 9: we embedded this in every opportunity, may be last year this metric exists
- 9. Analysis by Project – FY17 FY18**
- a. FY18 and FY19 are “bucketed” a little differently
  - b. Angela reported that the grant number went down due to reclassification, but the PD bucket went up
  - c. Most funding we spent last FY is what we're proposing for the upcoming FY
  - d. Dave asked what the right level of operating expense would be. Angela said this number has been steady. Dee mentioned that the operating expense number is incredibly low considering 15-18% is standard for a non-profit, so these numbers (11-12%) are impressive.
- 10. Legislation for 2019 Session**
- a. Angela said we not bringing forth any new legislation from the STEM AC. Due to the transition, only “mission critical” legislation should be submitted.
- 11. FY20 Budget Request**

- a. Angela said she and Sondra and Angela are finalizing the request. Currently we have \$2M ongoing for STEM.
- b. CS funding has been one-time for the last two years, but we want to try to convert it to ongoing, so we will ask for this again this year.
- c. Request funding for the Data Analyst position we were given. We have more data than we can currently analyze, so we need to fill the position.
- d. We want to increase spending authority with a \$1M supplemental for this year so we can move money out the door in the last quarter like we did before. We do not want ongoing spending authority, so it's not assumed we can always raise and spend \$3M.
- e. Foundation director: Now is not the time to ask for that position, especially if we want a new data analyst, so we will hold off for a year. Dave is on the Foundation board and agrees with that decision.
- f. **ACTION:** Since we will have new legislations and some of the STEM champions are no longer serving, we want to find supporters among the new legislators. Melinda has a lot of connections, so Angela will set up a visit with Melinda Smyser from the Department of Labor to have an open discussion about those connections.

#### **12. Support Needed to Create Additional Public-Private Partnerships**

- a. Continue to introduce us to willing partners and look for opportunities to connect with individuals. Dave says we want to maximize interactions among governments and we are doing a reasonable job but asks us to ask ourselves what else we can be doing.

#### **13. Public Comment**

- a. Dave asked Von if we're missing tech opportunities. Von says there are strong connections, there's an Idaho Knowledge Report presentation coming up that STEM AC sponsors on September 12. There is an ITC Hall of Fame event on October 17 focused on Albertsons. There are innovation awards and STEM AC also recognizes INDEEDS winners at that event.

#### **14. Upcoming Events**

- a. Governor's Summit on the Age of Agility – September 11, 2018. STEM AC offering travel stipends for educators to attend.
- b. Next Board Meeting – October 30, 1-4pm, election shortly thereafter
- c. Amy invites everyone to Women in Engineering Symposium on September 12.  
**Next STEM Board Meeting will be October 30 from 1 p.m. to 4 p.m.**

Adjourned at 2:52 PM