

**STEM Action Center  
Board Meeting Minutes  
January 15, 2019**

**Call to Order**

Vice Chair Dee Mooney called to order the regular meeting of the STEM Action Center at 1:04 pm on January 15, 2019 in WW-17, State Capitol.

**Roll Call**

The following were present: Dee Mooney, Tim McMurtrey, Paul Casey, Jennifer Jackson, Jeff Rosser, Janie Revier, Von Hansen and Tom Kealey.

Guest: Greg Wilson

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

**STEM Action Center Contractors:** Cory Compton, John McFarlane, Kaitlin Maguire and Joanna Madden

**Absent:** Dave Hill

**Welcome and Introductions:**

Dee welcomed new board member Paul Casey, Jeff Rosser, Tom Kealey and Jani Revier.

**Past Board Minutes Approved** – Dee asked for comments on the minutes. No comments. Minutes therefore approved for October 30, 2018 meeting.

**Introduced Greg Wilson, Sr Policy Advisor to Governor Little:** Greg outlined two primary priorities for the Governor; 1. Literacy 2. Teacher-pay. Both lean into the goals of the STEM AC. With 6300 unfilled STEM jobs, \$400M in lost wages which translates into \$22M in lost tax revenues addressing the bridge between education and workforce is imperative and the STEM AC provides that bridge.

Every sector of the economy in Idaho is related to STEM in some way. Exposing every student to Tech and STEM will make achieving the Governor's mission possible.

Dee turned the meeting over to Angela to provide all new members the overview on the STEM AC Statutes and legislation that provide the mandates for the mission and goals for the STEM AC.

She explained the purpose and importance of all 7 statutes that are the guiding documents and tools for the STEM AC to accomplish the over-arching mission.

The Directives include:

- Professional Development: The majority of STEM AC dollars are spent on PD and it has been a consensus that this is key to workforce development by support high quality STEM and CS training for teachers in Idaho.
- Grants: Distribute to support and educate students, educators and communities
- Competitions: in STEM and CS
- Resource: Serve as the primary resource for instructional materials and best practices.
- Underrepresented Population: During 2016, STEM AC conducted research and defined these groups as: females, diverse races/ethnicities, low socioeconomic status, and rural. All STEM AC applications addresses the importance by asking how the grant recipient will ensure they are engaged these populations as a result of receiving funding and/or training.
- Identify high quality STEM Schools.....will discuss in the update on STEM School designation

Angela discussed how the STEM AC is the bridge between the Vision of connecting STEM Education and industry to the Mission of engineering innovative STEM opportunities for educators, students communities and industry. This synergy creates a competitive workforce and economy for Idaho.

**Legislative Goal:** Angela outlined the 3 goals that are used as the guidelines for everything we do. Since we are still a young agency messaging is critical to continue to educate the public and private sector as to what is the mission of the AC. See goals summarized below.

**Analysis by Project:** Angela outlined how funds were spent by project and the reason behind each. The new sciences standards have increased the need for quality professional development opportunities to ensure our teachers are properly educated and trained to meet the needs of the students. Angela indicated that STEM AC will work with the SDE on PD for educators around these standards.

**FY20 Budget Recommendation:** Angela outlined the Governor's budget recommendation for STEM AC. \$2M in STEM ongoing; \$1M in CS-one time; Funding a new position for a Data Analyst and Increase the spending authority by \$1M for FY19 which was approved today by JFAC.

**JFAC Presentation:** Angela shared the document presented to JFAC that graphically explains the funding model for the AC. The second half of the same document is fact driven outlining the 6300 unfilled STEM jobs and the subsequent impact on the State's economy. It also projects the dramatic increase in the growth of the Tech sector in the state and thus the need for STEM education and workforce development.

### **Goal #1: Coordinate & facilitate implementation of STEM programs throughout Idaho**

**Professional Development:** Angela outlined the professional development opportunities offered by STEM AC. The PD's provide teachers with the tools to help educate our kids and be able to use in their classrooms. Professional development trainings represent the largest portion of our budget.

**Student Competitions:** Angela described the numerous student competitions held across the state. Some are fun by the STEM AC and others we simply sponsor. Three years ago Idaho was one of the few states in the nation that did not have a state wide Science Fair. STEM AC organized the first Idaho Science and Engineering Fairs (ISEF) in three regions 3 years ago. We had student that year go on to the International Fair who were very successful. This year we will have over 600 students and 400 projects in fairs in CDA, Pocatello and Boise compete to go to the International Fair in Phoenix.

**STEM Resources:** Angela announced that the STEM Resource Portal on our website is now available. The Resource Portal includes lesson plans, toolkits and best practices for teachers and students to access. In partnership with the Dept of Labor it also provides up-to-date STEM Job information.

### **Goal #2: Align Education and workforce needs throughout Idaho**

**MakerMinded Update:** John McFarlane gave an overview of the MakerMinded program and how it is being organized in Idaho. As part of the program, John is creating a directory of manufacturers to help schools connect with industries across the state. STEM AC will partner with Dept. of Commerce and Idaho Technology Council to enhance all efforts to create the directory. Angela commented that this grant was very exciting because it allows us to reach rural communities and gain a deeper understanding of the needs and gaps that exist in those areas. We have 66 manufacturers signed up for the directory.

Goals for MM were to have 50 schools and 1000 users; 50 student activities in the first year. In just the past month, we have 36 schools and 87 users and over 103 student activities.

Mentorship Portal: We have created a virtual, project-based, statewide mentorship platform with the goal of breaking down barriers for teachers and be able to help students engage in STEM. The Mentorship Portal is live and currently populated with 500 teachers and 100 mentors with multiple matches occurring this year. We are actively looking for increase the number of mentors to meet the needs of the teachers. The age range for both is PreK – 12<sup>th</sup> grade.

### **Legislation:**

#### STEM School Designation and MOTION:

Angela provided a brief history of the STEM School legislation and how the pathway to designation was developed. After a rigorous process 45 schools have received STEM School Designation. The designation comes with 10K in funding to help support emerging schools to gain STEM School Designation. The STEM AC Board move to send the approval for Designation for these four schools to the State Board of Education for Designation. Jennifer Jackson moved to advance the four schools, Barbara Morgan STEM Academy, Bingham Academy, Galileo STEM Academy, and Temple View Elementary before the SBE for final approval. The motion was seconded by Von Hansen. The motion passed unanimously with Dave Hill supporting the motion via email. Dave will carry the motion forward to the OSBE at their meeting this Friday.

#### State and National STEM Initiatives:

Jennifer Jackson provided a presentation on behalf-of INL and addressing the Governor's executive order on nuclear production and manufacturing. Jennifer confirmed that the PREZI could be shared: <https://prezi.com/view/bvhQ3UM2I3ccIIP5Qd1Y/>. STEM AC will also put it on our Resource Portal.

#### Federal STEM Plan:

Angela outlined the Whitehouse 5-year STEM Strategic Plan. The plan has 3 main goals and provides a clear outline of how departments will work together to accomplish them. Dave and Angela have met to see if we can develop a similar plan for Idaho. The plan would allow us to see where agencies are working collaboratively and where the gaps are that need to be filled. The Board was supportive of this.

#### Computer Science Update:

Angela was excited to announce that Idaho is a national leader in Computer Science! Finia reported that we are the 2<sup>nd</sup> state in the nation to implement all of Code.org's nine recommendations to move CS forward. We received national recognition in the Wall Street Journal and the New York Times. Angela reported that Arkansas is #1.

#### STEM AC Foundation update:

Joanna gave a brief history of the creation of the Foundation. The Foundation gives an alternative option to donors. All funds received into the Foundation are transferred to the STEM AC for all programs. Joanna is in the process of creating a fundraising plan. Part of the plan is to expand throughout the state to garner industry partners particularly in rural communities. We are also in the process of creating a donor management system.

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

Angela reported that Donor totals for FY19 the cash total was \$615K. Thank you to Micron, INL for their support. We have verbal commitments of \$400K from various industries including support for i-STEM

from SDE and we are confident we will meet the \$1M goal. Angela reported that the top donor programs in FY19 were Educator PD; Student Competitions; INDEEDS Award and STEM Awareness events. Angela reported that in-kind donations FY19 totaled \$3.1M which includes judges, mentors, industry partners and media coverage. The media coverage received by the CS announcement was enormous!

### **Goal #3: Increase awareness of STEM throughout Idaho**

Angela shared the performance draft report and the impact we have had in the first 3 years on students, educators, and communities. We are finalizing the Impact Map that can be found on our website that will allow legislators to see the impact we are having in their districts. Dee commented that the Impact Map is a great tool to help educate colleagues and community members on what the STEM AC does to promote STEM in the State.

Angela highlighted the multiple awareness events we have hosted, sponsored or participated in. Our media coverage has been extensive including, National Coffee Day, INDEEDS, Idaho's Code.org announcement, AAUW/Girl Scouts and Hour of Code.

### **Partner Updates:**

Dee Mooney provided a presentation on behalf of Micron and the Foundation. She shared information about the new Volunteer Portal that the Foundation is now responsible for globally. The mission is to promote science and engineering education and address basic human needs. Inspire learning and research at the university level as well as the K-12. Micron employees choose a charity and Micron makes a 1:1 match. Further employees receive 16 hours of paid time to volunteer. This has been a huge initiative and the Micron CEO is extremely supportive of its' implementation.

### **Public Comments: NONE**

Angela closed out the meeting with a call for support by introducing STEM AC staff to community and industry STEM supporters. We also need board help with recruiting Mentors for the portal and for MakerMinded as well. Angela invited the board to attend the STEM Matters at the Capitol on Jan. 23<sup>rd</sup>; to please respond to the Doodle Poll to set up February catch up calls with Angela and shared the dates for the first Idaho Science Fair in North Idaho on March 1<sup>st</sup>.

**Next Board Meeting is March 14, 2019 Location to TBD.**