Call to Order

Chair Dave Hill called to order the regular meeting of the STEM Action Center at 1:01 pm on July 7, 2020

Roll Call

Due to COVID the STEM AC Board meeting was conducted via Zoom. On the Zoom meeting were Dave Hill, Jake Reynolds, Wendi Secrist, Jeff Rosser, Dee Mooney, Paul Casey, Jennifer Jackson, Jad Mahnken

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

**STEM Action Center Contractors:** Cory Compton, John McFarlance, Joanna Madden

**Guest Presenters:** Cathleen McHugh from OSBE and Craig Shaul from IDOL

**Absent:** Tim McMurtrey

Dave asked for brief introductions for all participating in the Zoom to welcome our new board member Jad Mahnken. Angela also introduced guest speakers Cathleen McHugh from OSBE and Craig Shaul from DOL

**Past Board Minutes Approved:** Dave asked for comments on the minutes. Since there were none, Wendi moved to approve, and Dee seconded. The minutes were approved unanimously.

**Guest Presentations:** Education and Workforce Trends for Young Adults

**Cathleen McHugh:**

The Importance of Gender and Economically Disadvantaged Status in Educational Outcome

Cathleen provided the board with an analysis of graduation and go on rates through the lens of gender and economic disadvantage. Using the Adjusted Cohort Graduation Rate (ACGR) from the federal government and the go on rates in Idaho. The data that was presented showed that the ACGR for Idaho from 2015-2019 remained stable around 80%. The Gender split is about even with more than half of both genders being economically disadvantaged. She reported that boys are less likely than girls to graduate high school in four-years. The gap between the genders is approximately 6 percentage points. The graduation gap between genders is even larger for those economically disadvantaged students. Economically disadvantaged boys are the least likely to go-on in the fall immediately after graduation and less likely to go-on within 3 years after graduation as well. She provided additional data by education regions.

**Craig Shaul:**

Idaho Demographics
Craig presented demographic data on Idaho’s population by age group and gender. Data showed that while there continues to be a surplus of males in Idaho across ages that gap has narrowed from the 1970’s to present. His report on the gender and the workforce revealed that while the overall gap between genders in 2010 is about .2% more males the gap in the workforce is 8% with more men in the workforce.

The board discussed the takeaway important ideas from both presentations. Wendi offered that we are starting to align efforts across agencies like the WDC and the STEM AC. We still need to keep asking if we are doing enough? We don’t want to leave anyone behind. Estimated that 90K will enter the workforce and we need to make sure they have the skills needed to fill the jobs in Idaho. STEM AC is critical in helping with the workforce skills gap by providing high quality PDs and resources to educators. Alignment across agencies is critical to ensure the resources are used appropriately.

STEM AC Updates Related to Goals and Outcomes:

Angela reported that the deadline for the Strategic Plan has been extended to Aug 28th and when finalized will share with the Board.

Mission and Vision remains unchanged as do the Goals for the STEM AC.

COVID Impact: The majority of PD’s have been postponed; a few have been cancelled. As a result, we are looking at our programs and devising a Plan A and B to address the need for virtual or online PD’s if needed. Discussed the difficulty in doing this for those programs that are largely hands on. We have also cancelled events like STEM Day at the Fair per guidance of the Fair. As a result, donors want to know where the funds they have given are going with COVID. We have had to reallocate funds and for the most part donors have been very supportive.

COVID Initiatives: Angela shared that the STEM AC continues to work under extraordinary circumstances remotely. Since the stay in place order back in March the team had stepped up and launched 3 new initiatives in short order in response to the current pandemic and the needs of the community.

Idaho Makers Unite (IMU) Lead: Erica

Erica reported that since IMU launched in March to protect workers on the front lines in Idaho fighting the COVID we have provided 11,700 fabric masks, 4300 face shields, 5035 mask extenders and 300 3D printed masks. In addition, we have awarded approximately $38K in grants to support materials and shipping the PPEs. We have had requests from130 facilities, organizations, & individuals. The PPEs were made by over 75 registered makers and sewists but an accurate count is difficult because some of the registered makers actually consist of up to 100 individual makers.

STEM@HOME Lead: Cory

STEM@HOME initiative launched on March 23 to address the closing of schools and the stay at home order due to Covid 19. We partnered with CBS2 to demonstrate SAM activities LIVE on their Facebook page and to promote our resource portal and the new SAM resource tile. With the assistance of two amazing interns we compiled experiments, activities, virtual tours of museums, zoos and even the space station all to populate the new tile. Initially we were posting 2 SAMs everyday with 3 FB Live on CBS2 M/W/F. Once school “let out” we started SAM Summer Camp. CBS2 still does FB Live with Nate and his able assistants…his two darling sons on Tuesdays from their kitchen and we have cut back the STEM
AC posts to M/W/F once a day. The latest FB numbers from CBS2’s FB page are anywhere from 1800-3500 views and reaching between 5800 and 11K followers. The STEM AC has increased our followers from 2379 in January to 3044 today. Resource portal traffic for June we had 22 page views of the SAM Portal.

What’s next for SAM….we are taking the long view that even when Covid passes there will be times that school will be on vacation or summer break and we will look at continuing the @ home learning.

**Idaho Codes: Lead Finia**

Idaho Codes is an online, self-paced computer science program that teaches 7-12th grade students the foundational skills of building websites and developing apps with HTML, CSS, and JavaScript. Industry Partners: Micron Foundation, ICCU, St. Luke’s, Acahand Foundation, Ken Garff Automotive Group, Idaho Technology Council. 1800 students signed up across the state. We have received $125K in donations to the center to support this coding opportunity. 30% of the students are female.

**Goal 1 Program Updates:**

**i-STEM:** Has been postponed until June 2021. Finia will be taking the lead on i-STEM. Kaitlin reported that we had over 400 educators signed up for this year who will automatically be admitted to 2021. We will stick with the same strands and themes for 2021.

**VR4ED:** Finia is lead. Coding for educators and their students in 3D. Training may be conducted virtually in the future.

**IDLA/Code.org:** Finia is lead. Will provide 40 free PD lessons and integrated with daily subjects.

**JR Bot Ball:** Postponed

**Drone PD:** Erica is lead. Will be conducted virtually in 3 locations across the state. PCS Ed is working to pivot this training to be successful virtually. Participants will work online with a mentor then go offline to work on their own and then come back again online. The Drone equipment packages will be drop shipped to each participant.

**Competitions:** ISEF National competition was cancelled. We are going to have Jennifer, Dee/Laurie and Jeff do a Zoom call with the regional winners of ISEF and give them the good news that they will be receiving cash awards. **e-Cybermission** ran in conjunction with ISEF this year online and was very successful for a first run. This online competition could become a model for future ones. **MakerMinded:** Due to Covid the competition ended early. MM will take a hiatus as the national sponsor updates the platform.

**Externships:** John provided a brief history and timeline of how externs were chosen and matched. He reported that last year we had 16 externs and this year we have 42, 36 businesses and greater geographic diversity. However, due to COVID only had 29 businesses that were able to engage with an extern. The feedback from the employers is extremely positive. Dave asked if we had received feedback from externs on the impact their experiences has had on their teaching environment. John shared that teachers reported that because of their extern opportunity they had built ongoing relationships which they are able to share in their classrooms. A true collaborative environment has been developed. Jennifer reported that INL went from 1 extern last year to 4 this year and they are awesome. 3 of the externs are college career counselors which provides a unique perspective. Ang mentioned that the businesses are cost sharing the program. Last year we had $2500 in cost share and this year it is $62,750!

**STEM School Designation:**

Angela briefly went over the timeline of how a school receives the STEM School Designation. The standards have been aligned and updated. We have 6 designated schools with 2 in this year. Schools received $10k annually which will be reduced to $5K due to budget cuts. Angela gave an overview comparison of the standards used in the 2015-2019 process and the new standards to be used in 2020 and
forward. Previous process included 11 standards across 3 domains. The new criteria include 16 standards across 4 domains. Angela shared the Crosswalk document that will go to the State Board. Dave asked if once a school has received the designation is it forever? John explained that it is a 5-year certification and will have to re-certify under the new standards when their designation ends. The new I3 rubric John uses in the field was briefly explained. Dee asked for clarification on equitable access to the process to ensure that rural communities are also able to apply and receive the designation. John mentioned that Cognia representative helps to disseminate information to the rural communities. Angela informed the board that the STEM Leadership training that we have conducted with the State Board will not go forward due to budget cuts. Instead, we will look to engage directly with individual schools rather than take the broader approach of the Leadership Training. Through a P3, Micron is funding one school to work with STEM AC and BSU for a 10-day training to make the shift into a full-fledged Designated STEM School. Angela explained that we needed to have a vote to approve the new standards for designation to send to the State Board of Education. Dee moved: “To send the updated STEM School Designation standards to the Idaho State Board of Education for approval per Idaho code 33-4701.” Jad seconded the motion which then passed unanimously.

**Goal 2: STEM Diploma**

Angela noted that the course list for the STEM Diploma was attached. Essentially the STEM Diploma requires 4 math, 4 science and 3 additional STEM classes which are not clearly defined. No one is currently tracking who and how many are receiving the Diploma. There is a need for a reliable list of courses for consistency and ease of tracking.

**Budget:**

**Grants:** Kaitlin reported on the recently awarded Grants. The NSF grant for $99,499 is the first federal grant we have received and will go to support the Ecosystem. The FIRST grant will be in support of 5 new rural teams.

**STEM AC Foundation Update:** Joanna provided the Foundation Update. The first board meeting of the Foundation went very successful. We are actively searching for a North ID board member. The foundation raised almost $825K FY20. P3 is the main source of growth and development of strong partners. INL and Micron remain our largest funders. Others include, Laura Moore Cunningham, Simplot, Acahand, Power Foundation, Idaho Community Foundation and Albertson’s Foundation. The website has been updated to acknowledge donors $2500 and above. Total donations to the Action Center is $1,746K for FY20. Angela stated that donors over $2500 are placed on the STEM.Idaho.gov website so board members and the public can see our donors.

**STEM AC Donation update:** Angela reported that the top donor program continues to be the P3 which brought in $1.2M. Total In-Kind Donations total is $4.884 a large portion of that number is due to the extensive media coverage we have received.

**Goal 3: Awareness**

All awareness events like STEM Day at the Fair have been either cancelled or postponed. Angela will provide the Board with an update on future events at the October meeting. Our COVID initiatives have received extensive media coverage as has our receipt of the NSF grant, ISEF and e-Cybermission.

**Budget Discussion:**
Past FY20; Present FY21; Future FY22
The Governor has mandated and across the board 5% budget reduction. Angela gave an explanation of the “beaker” graphic depicting how funds are accounted for and what our spending authority is. Angela provided an analysis of projects by goal and how they will be affected by the cuts. She also reported that the $1M cut in the CS initiative resulted in the elimination and reduction in several programs in FY20. In addition, due to the 500K decrease in the CS initiative, there will be additional cuts to CS as well as broad cuts related to the 5% hold back. The ones to be eliminated include: PK12 Grant, STEM Leadership Training, and Learning Blade Online Career Exploration. Reductions will include: ISEF Classroom Funding, STEM School Designation Support, Competition Travel, Sponsorships, VR4Ed, Drones, Junior Botball and Botball, Camp Grants and Family STEM and Career Awareness. STEM AC provided a spreadsheet of the program cuts. Angela also noted that our Data Collection Metrics show that student engagement was down due to COVID.

**FY22 Budget Request:** Due August 28, 2020
Base budget/spending freeze: FY22 request cannot exceed $3,044,400 for General Fund. STEM AC anticipates it will request one line item for FY22: Move 1 FTE our Research Analyst from STEM Education Fund to General Fund to ensure ongoing cash to fund the position. Dave asked assuming we receive approval for moving the Research Analyst position are we adequately staffed or are we deferring more FTE requests? Angela said there are other positions that are essential but with the current budget environment it would not be appropriate to request additional FTE.

**Vote for Chair and Vice Chair:**
Under STEM AC Legislation and bylaws, we are required to hold a vote for Chair and Vice Chair. Candidate for Chair is Dee Mooney and Vice Chair Jeff Rosser. Wendi moved the approval of these candidates and Jad seconded. The vote was unanimous. Congratulations Dee and Jeff. Dee took a few moments to thank Dave for his years of leading the board as we navigated the early years of the Center.

**Public Comment:** None
Dee as new Chair asked if there was any public comment. None was reported.

Angela asked the Board for help introducing us to individuals, businesses or companies that have a common mission/vision for STEM education. The P3 application will open again in late July.

**Upcoming Events:**
Idaho EcosySTEM Strategic Planning Meeting Sept. 17 – 18; Next Board Meeting: October 19 at the Capitol; January 14, 2021 STEM Matters at the Capitol

**Closing remarks:** Angela advised the Board that Cory would be reaching out to set up the October catch up calls. The next board meeting is currently scheduled for October 19th at the Capitol.

Meeting was adjourned at 3:50pm.

**Next Board Meeting is October 19th at the Capitol 1-4 PM Room WW17**