STEM Action Center Board Meeting Minutes

October 17, 2023 • 2:00 PM Zoom Meeting

Members Present:	Vance Checketts, Sarah Reale, Mark Sunday, Aniza Brown, and Andrea Ibanez
Members Absent:	Jamie Morningstar, Sydnet Dickson, Nate McDonald
Staff:	Tami Goetz, Sue Redington, Lynn Reichert, Julienne Bailey, Allison Spencer, Kellie Yates, Clarence Ames, Emmett Speed, Jana Alexander, Shelby Averett, Gina Muhlestein, Becca Robison, and Viena Zeitler
Visitors:	Katherine Potter, Dr. Hamid Karimi, and Rachelle Ackley

I. Welcome and Related Business

Vance Checketts

- a. Approve May and August meeting minutes A quorum was not present so the meeting minutes will be approved at the next meeting or via email. The minutes of the May 16, 2023, August 30, 2023, and October 17, 2023 meetings have all been distributed previously via email. There being no corrections, the minutes were unanimously approved on November 7, 2023.
- b. Board Member STEM share out Sarah Reale promoted a student mini doc on Math that will be premiering at the Grand Campus Theatre at 1pm on November 3 at SLCC. Tami Goetz did a shout out to Mark Sunday on helping discuss possibilities of some loans of materials for the new Utah museum. Vance Checketts gave a huge shout out to Jill Love and her support of the STEM Action Center.
- c. Budget overview

 Financials were sent to the Board members ahead of the meeting. Sue Redington gave a brief overview and reminded the members to reach out with questions.

II. Board Discussion

- a. Al for/in education (30 minutes)

 Tami Goetz introduced Dr. Karimi from USU, who then gave a presentation on Al for/in Education Opportunities and Challenges. The presentation went over the history of technology in the classroom and then also adapt to the needs of educators as well as students. Reasons to use Al would be personalization of lesson plans, efficiency, gaining insights and patterns of specific educational systems, and accessibility. Some of the challenges are protecting data, ethical design and standards, universal access, addressing disparities in tech access, dependence on or biased algorithms, educator training and student adaption, and cultural and contextual sensitivity. Dr. Karimi then answered questions from Board members and discussion followed. Al will be the greatest accelerant for education in human history Mark Sunday
- b. STEM Fest report (10 minutes)

 Shelby Averett/Sue Redington
 Shelby Averett gave a recap of STEM Fest for the Board, highlighting changes from last
 year and how well-attended the Fest was. The next STEM Fest will be September 24-25,
 2024. Discussion ensued regarding the demographic data across different years, using

- data to evaluate what works, and having exhibitors come to the Board to report on their experiences with STEM Fest.
- c. Life Sciences collaboration (20 minutes)

 Tami Goetz/Rachelle Ackley
 Tami Goetz introduced Rachelle Ackley of Talent Ready Utah, and then both Tami and
 Rachelle presented on the partnership of STEM Action Center/Foundation, Talent
 Ready Utah, and various entities, including USBE, school districts, higher education
 institutions, and industry/trade organizations/institutes, such as BioUtah, BioHive, and
 BioMADE.
 - The first grant is with BioMADE to build out and modernize existing bio-tech courses and content that expand to include bio-fermentation skills for the growing bio-industrial manufacturing careers in secondary and higher education. The STEM In Motion kits (SIM kits) will introduce several new kits that focus on bio-sciences in nature and bio-fermentation modules, and the "How Did You Think of That?" podcast will focus on bio-tech for the next two seasons. This grant is for ~\$700K over two years.
 - The Talent Ready Connector grant, if funded, will be ~\$500K over two years and will support pre-apprenticeship/pre-internship opportunities in life sciences with UVU and SLCC through the Innova bio-program for post-secondary students, as well as provide updated equipment at the high school level. This grant is still pending though we should know within the next week or two.
 - The Intermountain Healthcare grant will build out on the Innova grant, expanding secondary bio-tech programs and equip labs. This grant is ~\$996K over two years to expand bio-tech programs within K-12 system, as well as fully furnish and outfit 4 laboratories and upgrade 3 other laboratories across the state, touching six different school districts in the state.

All these grants will provide support for professional learning for professors in the field of biotechnology, biomanufacturing, and life sciences, aligning to emerging and industry standards. During the upcoming legislative session, Talent Ready Utah is requesting an appropriation of \$7M to expand life science programs within higher education.

- d. Foundation update (15 minutes)

 Allison Spencer reported to the Board on the Foundation's work with the industry coalition, which will now include life sciences/bio-technology for the first time.

 Spencer also talked about STEM Fest and its impact on the exhibitors, like Recursion Pharma, who were new to STEM Fest and took a \$10K booth this year.

 Spencer than presented on the partnership with Texas Instruments, USU Extensions, Navajo Strong, and American Indian Services for Tinker Totes in the Navajo Nation (Montezuma Creek, Navajo Mountain, and Monument Valley elementary schools). The reception to the Tinker Totes was so positive. Met also with the Navajo veterans and plan to go down again to meet the surviving Navajo Code Talkers. Spencer also went to the high schools that are interested in hydroponics for the community.
- e. Other business (10 minutes)
 Shelby Averett previewed one of the videos for Week of STEM promotion for the Board. Vance Checketts would like to see the minutes of the last three meetings approved via email, if possible, and Sue Redington will look into the validity of doing that.
- III. Meeting Adjourned at 4:00 pm.

As there was no further business, Vance Checketts adjourned the Board meeting at 3:58pm. The next Board meeting will be in person, in conjunction with the Foundation Board on December 6 at 2pm, location TBD.