

STEM Action Center Board | 2013

STEM Action Center Board Meeting Minutes

November 6, 2013 • 3:00pm to 5:00pm
GOED: 60 E. South Temple, 3rd Floor, Salt Lake City, Utah

Members Present:	Jeff Nelson, Spencer Eccles, Robert Brems, Blair Carruth, Christine Kearl, Stan Lockhart (by phone), Mark Openshaw, Bert VanderHeiden
Members Absent:	Gene Levinson, Martell Menlove, Brad Rencher
Staff:	Sophia DiCaro, Vince Mikolay, Meredith Mannebach, Sue Redington, Carol George, Brian Farr
Visitors:	Sarah Brasiel, Susan Thackeray, Cheryl Hanewich, Sarah Young, David Smith, Brent Peterson, Chris Cochella

Welcome & Approval of Minutes

Jeff Nelson, STEM AC Board Chairman, called the meeting to order, welcomed the group and asked the board members to approve the minutes from the meeting.

I. Approve Minutes

MOTION: MARK OPENSHAW MOVED TO APPROVE THE MINUTES, SECONDED BY BLAIR CARRUTH. THE MOTION WAS UNANAMOUSLY APPROVED.

II. Progress Report

a) Appropriations:

Jeff Nelson discussed his thoughts regarding where the STEM Action Center should be housed – he noted that GOED was a good fit because it is slightly separate from USOE so there is a “healthy orbit.” It works well for all partners and enables them to approach legislators with a difference voice, and with industry support which can make a big difference.

Martell Menlove, STEM Action Center Board Member, commented on the positive reaction the legislators had to Spencer, Vince and Jeff’s presentation at the Public Education Appropriations Sub-committee meeting. Jeff Nelson responded by recognizing the amount of work put in by Meredith, Vince, Spence and the whole team.

b) Report on Project Plan Review

Meredith Mannebach, STEM AC Program Manager, gave a brief update report on the math pilot. There are 48 schools that have a technology where usage is being monitored. They are also in the process of making sure schools complete all of their student

assessments and following up with the teacher surveys (one survey per month). Parents and teachers are giving some very positive feedback on the math technologies.

c) Update on RFP

After an extensive review, they will be able to move forward with contracts. There are 15 respondents for the Middle School Math software and 12 respondents for the Secondary College Readiness software. After the RFP respondents are reviewed and scored, a decision will be made in December. Spencer Eccles asked that at least two technologies be chosen, but based on the success in the pilot, they may choose as many as three or four.

Jeff Nelson commented on the importance of involvement on all levels, so that the schools that want the technologies and will utilize it will get it. He wants the transition to be smooth and doesn't want anything to be forced upon the schools.

Some technology will be carried over from the pilot program. The new technology providers (who are selected through the RFP) contracts will start in January; Meredith assured the board that there will be adequate training for the teachers on how to use it.

d) State Board of Education Presentation Overview

In a very short period of time, a lot has been accomplished with the assessment of the pilot programs, which will give baseline data for evaluation of the programs, and ultimately, the long term performance of the students. It is important to engage the schools and have adequate training and preparation on all levels for the implementation of the programs.

Vincent Mikolay, GOED Managing Director, noted some of the STEM Action Center achievements are: establishing the board, upgrading the staff, hiring the STEM liaison, implementing more than what was requested in terms of technology, involving more educators than was initially requested, and engaging with more schools than anticipated. They also have a pilot program under way, with an assessment to measure the programs' effectiveness. The grand vision of the database is that anyone can pursue it and find the options and information for which they're looking.

Rob Brems, STEM AC Board Member, brought up concerns about existing software that doesn't fit into the RFP but still is a useful resource for teachers and the funding limitation written in the legislation. The board wants to ensure that the budgeting is compatible with what was allotted in the original legislation.

The final component of the review is recognizing high school students who perform well. There will be an awards ceremony for first, second and third place winners of STEM competitions.

Preliminary data for the pilot project will be available in December, but the real initial impact will come in January.

e) Working Group Reports

Fundraising

Stan Lockhart gave a brief update on the committee's efforts in regards to fundraising. He discussed his approach to engage the private sector in our STEM initiatives. One business coalition meeting has been held and was very successful.

High Quality Instruction/Professional Learning:

Meredith Mannebach said the committee has met twice since the last board meeting. The committee has proposed a plan to pilot a Professional Development Pilot Program, which will have a group of teachers focus on professional development to show that it's a two-fold mission to synergize technology training and professional development training. A plan was developed and the committee has met without the technology providers. Some districts were on board, but there were still some concerns. Four districts volunteered to participate in the pilot. The vendors would work closely with those districts to implement an effective program.

Marketing and Media:

Brent Peterson from Comcast discussed the "Be Curious" tag line for the marketing strategy. The concept is to have a creative approach and to launch in January. Outreach has been done with the private sector to craft an agenda about what the STEM Action Center is really doing. The goal is to engage the private sector more fully in the mission of STEM.

Sue Redington, STEM AC Program Coordinator, gave an update on the camps and competitions. They have opened the competitive grant award to all Utah students competing in STEM related competitions. So far, 17 applications have been received, the majority of which are robotics teams. The application deadline date is under review – there may be a second application deadline in January. Ideally, the students learn business and life skills through the process of applying for the grants themselves rather than the teachers applying for them. Currently, \$34,000 is being requested. There is \$150,000 total that they would like to distribute to Utah competitors. The high expense to fund a robotics team is a barrier. The grant works as a post-performance reimbursement, but some teams don't have the money up front to start their projects. Teams can receive up to \$2,500 and individuals can receive up to \$500 in grants. Bert VanderHeiden requested that state, national and international winners should receive further funding for travel to reward success. Robotics competitions go from Feb – May in the calendar year.

The private industry has more flexibility when it comes to helping fund the robotic teams. The Industry sponsors have received requests from districts to help fund teams, which was hundreds of thousands of dollars. Aggregation between private industry sponsors and STEM is very important to help schools and students really get what they need.

Some schools don't even have the funding for science fair projects and the STEM Action Center is unable to give them money up front. There was a request that the administration of funds process be taken back as an item for discussion on the fundraising committee.

Christine Kearn, STEM AC Board Member, suggests taking demographics into account when selecting the schools that will receive grants. Some of the lowest performing students are students in poverty or Hispanic students. Hispanic students are graduating at 50%, in part because they don't have resources or robotics programs at their schools. It is imperative to reach out into those populations to hit the Governor's 66% by 2020 goal.

Spencer Eccles says the idea is to eliminate barriers for those schools. The STEM AC has records of all schools that have applied. They are also involving district specialist to get involved in the application processes.

Sarah Young, USOE Science Specialist, commented that many low-performing schools don't have district specialists for science in math, so inviting curriculum specialists or other appropriate staff members would be great.

Spencer Eccles asks if there is a clear yardstick in place to measure the outcome of money spent for this grant. Vincent Mikolay replied that we cannot account for final dollar numbers until all the receipts are in, but through the process they are asking for updates from the participants so they know what competitions teams have entered, and how they placed. No form of auditing outside of collecting receipts and reviewing accounts payable has been implemented. A team would be responsible for submitting their own receipts to get reimbursement.

Sophia DiCaro, GOED Deputy Director, addresses a process of the financial accounting to select which companies are chosen for a grant. A contract is made where half is paid up front, then the other half is paid when they meet certain criteria. That model could possibly be used for students applying for the STEM Grant. It may also be possible to have an MOU signed by the school district, then the districts report back to STEM. Sarah Young, USOE, discussed the challenges to that model in that it would mean 42 MOUs for school districts. Additionally, there are charter schools and if there is one for each charter school it grows exponentially. Another challenge is having the administration acting as a financial liaison; it would be a large scale endeavor and could eliminate the districts with the greatest need. The bottom line: getting this many MOU's and tracking this many teams will get complicated.

As a wrap up: the STEM Action Center has received 17 completed applications, and there is no reason to think that any of them wouldn't be approved. The schools and teams know they have to have the cash up front. It works for the bigger organizations and schools, but it does not work for the at-risk groups. We need to find a solution for that so that it works for everyone. The money is there to spend; the goal is to get it out to those who need it.

MOTION: SPENCER ECCLES MADE A MOTION TO SUPPORT THE ALLOCATION OF \$150,000 TO THIS GRANT PROGRAM, WITH THE UNDERSTANDING THAT THE ADMINISTRATION OF FUNDS PROCESS NEEDS TO BE REVIEWED. THE PROGRAM NEEDS TO ESTABLISH CLEAR TARGETED OUTCOMES. IT SHOULD BE REVIEWED IN ONE YEAR. THE MOTION WAS SECONDED BY BERT VANDERHEIDEN AND WAS UNANAMOUSLY APPROVED.

Susan Thackeray, Director of Career and Technical Education from Utah Valley University, discussed a meeting that will happen in December. The purpose of the meeting is to launch the three year National Science Foundation's Gender in Science and Engineering STEM Equity Pipeline project in the state of Utah. Utah was selected as one of ten states to participate in an intensive NSF effort to implement research-based practices designed to increase access, success, and postsecondary transition of girls and underrepresented groups in science, technology, engineering and math (STEM). The Executive team will convene at the GOED office to meet with Mimi Lufkin, CEO of the [National Alliance for Partnerships in Equity](#) (NAPE). Mimi is noted by U. S. News & World Report as one of the top 100 Women Leaders in STEM. NAPE was recognized by the White House and the National Science Foundation for the STEM Equity Pipeline initiative, which is "adding momentum to a nationwide shift that promises to strengthen the US economy and job security even as it strengthens families across the country." The meeting is designed to develop the STEM Equity Pipeline implementation plan according to the needs of Utah. Your input is desired to ensure a successful outcome that will demonstrate strong Utah leadership in STEM training. All board members are invited to attend.

MOTION: JEFF NELSON MOTIONED TO CLOSE THE MEETING TO DISCUSS A PERSONNEL MATTER. THE MOTION IS SECONDED BY MARK OPENSHAW. SOPHIA DICARO, VINCENT MIKOLAY, AND CAROL GEORGE ARE INVITED TO STAY FOR THE CLOSED SESSION. THE MOTION WAS UNANAMOUSLY APPROVED.