

**STEM Action Center Board Meeting Minutes**

September 3rd, 2014 • 3:00pm  
IM Flash: 4000 North Flash Drive, Lehi, UT

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<b>Members Present:</b>	Blair Carruth, Val Hale, Stan Lockhart, Joel Coleman, Jeffery Nelson, Bert VanderHeiden, Gene Levinzon
<b>Members Absent:</b>	Robert Brems, Brad Rencher, Tami Pyfer, Jefferson Moss
<b>Staff:</b>	Tami Goetz, Sue Redington, Gina Sanzenbacher, Mitchell Jorgensen, Jenna Johnson
<b>Visitors:</b>	Sarah Brasiel, Kevin Close, Ashley Nicholes

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**I. Welcome and Related Business**

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

- i. Approve Minutes  
**MOTION: STAN LOCKHART MOVED TO APPROVE THE MINUTES, SECONDED BY NORM LECLAIR. THE MOTION WAS UNANIMOUSLY APPROVED.**
- ii. Introduction of Joel Coleman, Interim State Superintendent replacing Martell Menlove, former Superintendent and Board Member.

**II. Presentation****Mitchell Jorgensen, STEM AC and USOE LIAISON**

Mitchell begins by showing a document (see attached) and introducing the importance and history behind STEM Schools, or a STEM School Designation. He shows the criteria for this designation that has been approved by the Utah State Board of Education. Jeff asks for more explanation on the criteria, and Mitchell lists those that have been helpful to the process and the involvement of educators and administrators and what has been learned from the process of designation in other states such as Texas. Jeff asks the Board to approve the list of criteria or ask questions and discuss for clarification- A question on the process of designation was asked, and Mitchell responded with a different designation for dual language immersion schools that he would like to model, and an idea to offer funding or incentives to STEM Schools. Mitchell also discussed the rubric for judging the schools on the criteria, and the recognition of exemplary schools. Mitchell stressed that the details of this process are not ready to be presented. Another question was raised about a STEM school being designated and what that means for arts or other programs, could a school be a STEM school but also have a focus on art? Mitchell responded that that needed to be further thought out and made a note to better clarify in the future. Another question was asked about the emphasis of collaboration on the criteria and why most of the verbiage is dedicated to that. Mitchell explained that the verbiage on strategic alliances was requested by the community and educators as something they saw a need for. Mitchell also was asked to explain the teacher participation and if they saw an importance in this process, and Mitchell stated he would look into that. Mitchell was then asked for more data

to see how educators would view this designation. Dr. Sarah Brasiel, USU Research Lab, joined the discussion and talked about the newness of this type of designation and the key to implementation would be school leadership. Concern was expressed about the “buy in” or the likelihood of pushback due to funding opinions and views. Mitchell stated that many schools are already focused on STEM without an incentive, but do not have incentives to do so Mitchell was asked again to walk through the process of the designation after the criteria was approved, and he answered with an explanation of the rubric and the number of schools projected to participate, but that the process was still unknown. Jeff Nelson, Chairman, stated that many things needed to be developed and some questions could not be answered right now. Jeff asked the question of being able to revisit the criteria at a future time and if changes were made, would it complicate the process. Mitchell stated that further approval from the Utah State Board of Education would be needed if the criteria were to change.

Stan Lockhart, board member, expressed thoughts on changes to the verbiage presented, namely that STEM technology being offered by the STEM Action Center and teacher endorsements be included in the criteria. Other concerns were expressed about excluding schools with other focuses on non-STEM subjects. David Smith, USOE, clarified that a STEM school might have a focus on STEM and integrating that into history or art, etc. Bert VanderHeiden, board member, stated that the verbiage revolved around a school being a STEM school, but little else. Mitchell stated that this process is still in the beginning stages and that he would take these thoughts, concerns and changes for preparation to present again at the next board meeting. Jeff agreed, and stated that it would be difficult for the Board to approve the criteria today, knowing so little about the process. A question was then asked about the difference between a designation for STEM schools being either a certification of a comprehensive STEM program or only have a STEM focus.

Another question was raised about the end-user expectation, the marketing behind it and being able to meet or exceed those expectations, and that parents should be able to have things made clear so that they do not enroll their student in a STEM school, but having it not be what they desired it to be. More discussion was had on the advantage of having two different designations, and that it might be more appropriate to offer different criteria for each.

Tami Goetz, STEM AC, then asked the Board about what they felt was important to know and see outcomes on concerning STEM schools. Jeff then opened it up for discussion on what the best possible outcome(s) might be for STEM Schools, answers included; superior test scores and accountability measures, critical thinking skills and hands-on experiences, as well as project-based learning, broad-based to impact a large amount of students making it “mostly accessible” and motivating others to participate, including a passion to follow them into their future profession.

Jeff asked another question about administrators and what it means for them, and Joel Coleman, interim Superintendent and board member, mentioned that many consumers cannot define what STEM is or what it is designed to do, and that the designation would mean a school can define it and participate in what it is. Jeff asked about the model of having a STEM school be a sort of “Best of State” model or what that would look like-- is there a certain number of schools that can have this designation, or is it an “above the line” measure based on the criteria?

More discussion followed about geographic location, particularly in rural areas- and the expectation that HB 150 gives of this designation, this included discussion on assessments and follow-up of STEM Schools. Monetary benefits and grants were mentioned, and the schools meeting prerequisites in order to meet the criteria.

Final summary from Jeff Nelson stated two possibilities –one of a distinctive STEM school designation and then the other an application for funding to elevate a school program to be a STEM program. The designation of a school is required by HB 150. Jeff then comes back to the approval of the criteria, and whether to table the approval until more is known about the process, or approve the criteria but continue to monitor progress... Mitchell suggested to approve the criteria and then revisit it in the future. Another suggestion provided that we give the criteria a “trial run” in a school and see how the criteria can adapt and change and become better. More ideas about the Texas model, or remove the phrase “with a focus” from the criteria since that is not necessarily STEM. Another concern was voiced that schools might not be able to meet the criteria since some of them are difficult. Mitchell requested to approve the criteria today so that he might move forward and not have the already approved criteria- but the Board raised the idea that if the criteria were approved conditionally then it would still allow forward movement in developing the process of the STEM school designation.

**MOTION: JEFF NELSON MOTIONS THAT THE BOARD APPROVES THIS LIST OF CRITERIA TO ALLOW MITCHELL AND TEAM TO MOVE FORWARD IN DEVELOPING THE FUNCTIONALITY OF THIS PROGRAM, SUBJECT TO FURTHER REVIEW-. MOTION WAS SECONDED BY JOEL COLEMAN BUT NOT UNANIMOUSLY APPROVED.**

Rich Nelson board member, voiced a concern about excitement of STEM and engaging with students by changing the culture of STEM, perhaps through the involvement of industry-- and not missing out on this critical component. Criteria #9 “Strategic Alliances” offers this component, but Rich would like it to be more by adding a new category called “Industry Engagement” so that it doesn’t get missed and the importance of it can be stressed.

Jeff proposes that criteria #9 being worked on to include more industry engagement verbiage outside of the board meeting—

**RESTATED MOTION: JEFF NELSON MOTIONS TO APPROVE THIS DOCUMENT WITH THE TEN CRITERIA, WITH A POSSIBLE ADDITION OF A HEADING THAT IS FOCUSED ON INDUSTRY PARTNERSHIPS AND ENGAGEMENT BUT WITH THAT MODIFICATION WE WOULD APPROVE IT AND SEND IT BACK FOR CONSIDERATION WITH THE UTAH STATE BOARD OF EDUCATION. MOTION WAS SECONDED BY RICH NELSON BUT NOT UNANIMOUSLY APPROVED.**

Another concern raised by Joel Coleman that the responsibility placed on schools by this is problematic, particularly in a rural area, and that it seems it should be the industry responsibility to focus on this. Rich also states that something should change where industry partners are more welcome to join with schools and progress for the good of the students.

**RESTATED MOTION: JEFF NELSON MOTIONS TO APPROVE THE LIST OF CRITERIA 1-10, EXCLUDING 9, WITH THE POSSIBLE ADDITION OF A NEW HEADING THAT INCORPORATED MORE INDUSTRY ENGAGEMENT IN THE PROCESS, AND WE WOULD PROPOSE THAT**

**LANGUAGES SEPARATELY. MOTION WAS SECONDED BY JOEL COLEMAN. THE MOTION WAS UNANIMOUSLY APPROVED.**

### **III. Board Discussion**

#### **i. STEM Action Center Updates**

##### **Tami Goetz, STEM AC Executive Director**

Issue of Space: GOED has housed the STEM AC for the last year +, and the relationship with GOED is very positive, but the STEM AC is growing, as are other state entities within GOED, and the STEM AC is housed in small and tight quarters. Val Hale is looking into the issue, as is Tami and Sue, and the plan is for the STEM AC to still be tied closely to GOED, but not within the same floor. The ideal space would be in an office close to GOED, possibly a different floor within the same building, but especially staying within the downtown area.

Budget Perspective: Two documents have been provided, but are not helpful, but \$750,000 carryover from 2014 FY. With this, the STEM AC feels comfortable finding a different space to rent or build out, and there will be strategic planning to spend the leftover amount of funds. Next board meeting there will be further discussion on the STEM AC budget.

STEM Soccer Tournament: Gene Levinzon, Board Member, introduced the first annual corporate soccer tournament to happen on September 22nd and how it came about, but the purpose is to creatively raise funds and raise awareness of STEM and industry partners, and have fun! Rio Tinto has donated their field, UTC had donated management of teams and space on their website. Comcast has donated marketing and many other STEM partners have participated. Many cooperate teams have been formed and the interest is higher than the capacity to fill. Next year should be bigger and better.

HB 150 projects: Staff members reported on the status of projects pertaining to HB 150-math software for grades K-6—applications have been submitted and 95,000 licenses were requested. Concern over low participation from districts and charter schools was expressed but Sue will follow up and gather data on why such low participation, especially from charter schools. Based on past year enrollment, there is room for this grant to grow and reach more students.

STEM Elementary endorsement was discussed and Sarah Young's workshop September 22<sup>nd</sup>-23<sup>rd</sup> where she has invited critical stakeholders that USOE would like to participate in the creative process. After that, the criteria goes live for public comment and then is implemented in January. The focus of this STEM endorsement is science. Many Higher Ed partners (UVU, BYU) have begun the process to soon offer this endorsement.

The Middle school and high school project was discussed by Jenna, and the total number of license requests for Middle school were 82, 000 and for high school 78,000. This reaches about 56% of enrollment for middle schools and 65% of high school enrollment.

High School STEM Certification was discussed by Tami and the RFG being released 2 weeks ago along with a webinar with 12 educators, industry leaders and school administrators and partners with applied tech colleges.

The CTE software project was discussed by Tami, the RFP has been rereleased and reviews are set for next week to choose the vendors. The application will be released mid-September.

The Professional Development RFP was discussed by Tami. The application has gone through extensive review and is currently available for LEA's to apply. Scholastic and School Improvement Network will be in contact with schools to show what is available. Evaluation is also in discussion based on criteria and teacher/evaluator responsibility.

The educational Interim Committee presentation was introduced by Tami and what the STEM AC plans to discuss. We are still unsure of the exact time, but will keep the Board updated.

STEM AC will be participating in the State Fair field trip days (education fair) September 9<sup>th</sup> and 10<sup>th</sup> along with other STEM entities. Stan requested a list of the participants so that he can invite them to participate at the STEM Fest 2015.

Lastly, Tami discussed the foundation and what is being done with the Leonardo to do a DBA (doing business as...) for STEM in order to further our funding reach. This is temporary as we work toward our own 501c3.

**IV. Adjournment**

**MOTION: VAL HALE MOVES TO CLOSE THE MEETING. SECONDED BY BERT VANDERHEIDEN AND WAS UNANIMOUSLY APPROVED.**