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Name of Organization: Advisory Council on Science, Technology, Engineering and Mathematics (STEM)

Date and Time of Meeting: January 25, 2016, 2:00 PM

Place of Meeting: State Capitol Building, Annex
Guinn Room, 2nd Floor
101 North Carson Street
Carson City, NV 89701

This meeting was video conferenced to the following location:

Grant Sawyer State Office Building
555 East Washington Ave,
Suite 5100
Las Vegas, NV 89101

MINUTES

- I. Call to Order/Roll Call
Brian Mitchell, Director, Governor's Office of Science, Innovation and Technology (OSIT)

Mr. Mitchell called the meeting to order at 2:00 pm.

Members Present: Mark Newburn, James Huckaby, Shelace Shoemaker, Gerd Poppinga, Dr. Anne Grisham, Judy Kraus, Richard Knoeppel, Kelly Barber, Dave Brancamp, Dr. Carl Reiber, Cory Hunt, Kristine Nelson

Excused Members: Marcus Mason, Adam Kramer, Mary Frey

Guests: Bill Anderson, Beth Wells, Dan Rudy, Susan Keema, Todd Butterworth, Camille Stegman, Jennifer Dounay-Zinth, Senator Joyce Woodhouse

Staff: Brian Mitchell, Dale Ann Luzzi, Jodi Bass, Zachary Heit

A quorum was declared.

- II. **Public Comment** (No action may be taken upon a matter raised under public comment period unless the matter itself has been specifically included on an agenda as an action item.)

Senator Joyce Woodhouse provided the following public comment.
(Attachment A)

- III. **Welcoming Remarks and Introductions** (Information)
Brian Mitchell, Director, OSIT

Mr. Mitchell asked the Council members to go around the rooms, north and south, and introduce themselves. Mr. Mitchell thanked the members for giving of their time to serve on the Council to further STEM education in Nevada. He also thanked everyone who had served on the previous Council. Mr. Mitchell said that the Governor and the Legislators made significant investments in education and in STEM by creating the Office of Science, Innovation and Technology (OSIT). Mr. Mitchell told the Council that OSIT is dedicating staff for the Council. The charge of the Council is to develop a statewide strategic plan, so more students study STEM developing a new workforce ready of the new Nevada. The Council will coordinate and provide uniform STEM opportunities for all Nevada students.

- IV. **STEM Advisory Council Charge and Duties, Overview of the Assembly Bill 485** (Information/Discussion)
Brian Mitchell, Director, OSIT

Mr. Mitchell provided the Council an outline of the list of the duties from SB 345 of the 2015 Legislative Session, including changes and updates to the Council (Attachment B). Mr. Newburn commented that he thought the non-profit had already been established and asked if it was possible to carry that recommendation forward. Mr. Mitchell said that the nonprofit had been approved in the subcommittee but not by the entire Council. Mr. Brancamp told that Council that the previous STEM Council had left it still in the negotiation stage between the Department of Education and the STEM Council. The details were still being worked out when the STEM Council stopped meeting and no negotiations went forward. Ms. Kraus asked about the recognition for the schools this late in the school year. Mr. Mitchell said the intent was a calendar year not a school year.

V. Review of Council's Previous Work (Information/Discussion)

Brian Mitchell, Director, OSIT

Mr. Mitchell told the Council that he had reviewed all the previous Council minutes, documents and the final report. He said the previous work done by the Council was fantastic and that this Council will be able to build on the work and make adjustments moving forward. Mr. Mitchell noted several accomplishments were a STEM recognition rubric, STEM school recognition form outlining what a program would look like and a STEM symposium. He also noted all the work that went into identifying a nonprofit corporation and the survey and responses that went out to all staff of K-12 schools. Mr. Newburn told the Council that the previous SYEM Council was in the process of working with Switch and the Brookings Institute to start to think about the alignment of P-20W education with STEM industries in the state. He said they did not get very far but it is critical moving forward to be able to deliver the right workforce to the right industries. Mr. Mitchell said this would be important as the strategic plan is written.

VI. Report on the State of the STEM Workforce in Nevada (Information/Discussion)

Bill Anderson, Chief Economist, Department of Employment, Training and Rehabilitation

Mr. Anderson presented a PowerPoint (Attachment C) that outlined for the Council where Nevada is in terms of the overall economy and labor markets. He also provided the Council with information on the STEM workforce in Nevada. He also offered assistance to the Council moving forward with reports that the Council may want or need. After hearing the general question from the Council on the various reports that are available, Mr. Anderson said he could be available for the next meeting and present reports that the Council has requested.

VII. National Perspective on STEM (Information/Discussion)

Jennifer Dounay-Zinth, Director of High School and STEM, Education Commission of the States

Ms. Dounay-Zinth, representing Education Commission of the States (ECS), reviewed for the Advisory Council a PowerPoint from the Education Commission of the States: STEM: A National Policy Perspective. The presentation highlighted STEM policy trends for states across the country and what states are doing in regards to organizing and coordinating the work, early college opportunities, scholarships and teacher recruitment scholarships. She told the Advisory Council that plans that have been put into places have not necessarily solved the STEM challenges. Some challenges that states are facing are: taking on too much, programs are not supported by adequate funding streams and inadequate state coordination of efforts. Ms. Dounay-Zinth said states are developing a cohesive

approach by connecting education to careers, strategic CTE investments with strategic STEM investments. She provided the Advisory Council with examples of what Massachusetts and Utah have done to coordinate successful STEM programs. She finished her presentation on computer science- what can states do to create pathways toward access for all students. Some things she suggested were; making computer science count, require all high schools to offer at least one computer science course and fund professional learning opportunities for teachers. Ms. Dounay-Zinth shared with the Advisory Council eight ideas to make computer science fundamental to K-12 education: define computer science, allocate funding, implement clear certification pathways, create incentives, establish dedicated computer science positions, requires that all secondary schools offer computer science, allow computer science to count as core mathematics or science requirements and allow computer science to count as a mathematics or science requirements at institutions of higher education. (Attachment D)

VIII. Overview of STEM Programs at the Nevada Department of Education (DOP) (Information/Discussion)

Dave Brancamp, Director, Office of Standards and Instructional Support, Nevada Department of Education

Mr. Brancamp told the Council members that as a result of the 2015 Legislative session and some new grant opportunities, there is potential for more funding for STEM. He mentioned the Career and College Readiness grant that could be looked at for STEM funding. Also the Great Teaching and Leading fund will assist with the implementation of the Next Generation Science standards into instruction. Mr. Brancamp also mentioned the Math Science Partnership grant which is changing under the new ESSA and could potentially become a STEM grant. Mr. Brancamp told the Advisory Council about the Nevada Teach program through UNR. Students who are graduating in a STEM field may also be eligible to receive their teaching credentials.

IX. Introduction and Discussion Regarding the STEM Coalition's Upcoming STEM Summit (Information/Discussion)

Brian Mitchell, Director, OSIT

Beth Wells, Executive Director, Nevada STEM Coalition

Mr. Mitchell thanked Ms. Wells for all her assistance and collaboration as the Council drafts a strategic plan. Ms. Wells told the Council that the Nevada STEM coalition board is planning a "STEM Summit II 2016" (Attachment E) scheduled for September 23-24, 2016 in Las Vegas. The Coalition is still in the process of raising funds for teachers to travel to Las Vegas. The last summit was held in 2012. She told the Council that the last summit helped "move the needle" in connecting people around the

state. It help to build new collaborations and generated a statewide math network, which now has its own website with connections for common core math. Ms. Wells said a report was created from the summit and it was used to draft their strategic plan. The 2016 summit will share best practices, renew, enhance and build on new collaborations while identify new partnerships from the input from stakeholders. This will create recommendations for possible with policies and practice. Ms. Wells said the information gathered at the summit will become useful to the STEM Advisory Council as draft their strategic plan. She said the summit would focus making sure that stakeholders have a strong voice. The format will be similar to the 2012 summit, with eight topics of interest, in two hour breakout sessions.

Ms. Wells said what makes this conference different is that the participants in the workshops are the ones who move the conversation.

- X. Election of Chair/Vice Chair (For Possible Action)
Brian Mitchell, Director, OSIT

After a short discussion the Council voted to have Mark Newburn and Kelly Barber as co-chairs.

- XI. Discussion of Future Meeting Schedule (For Possible Action)
Brian Mitchell, Director, OSIT

Mr. Mitchell told the Council with the changes in SB 345, the Council is required to meet, at minimum, six times a year. Two of the meetings will be in person, one meeting in the north and one in the south. Mr. Mitchell told the Council that OSIT has the budget to provide for travel reimbursement for the Council members. Mr. Mitchell told the members that they are entitled to request per diem for travel related to Council business. Any member who would like to request this reimbursement was asked to contact Mr. Mitchell to complete the necessary paperwork.

Mr. Mitchell proposed the Council meet every other month through the end of the year. Dr. Reiber suggested that once a month would be more productive and the rest of the Council agreed. Mr. Mitchell will send out a poll to get input on the best day and time for the future meetings.

- XII. Opportunities for STEM Advisory Council to Learn About STEM Activities in Nevada (Information/Discussion)
Brian Mitchell, Director, OSIT

Mr. Mitchell told the Council in reviewing the previous minutes, he liked the reoccurring agenda item for Council members to share about upcoming STEM opportunities and events. The members provided the following event information:

- Next Generation Science Standards (NGSS), February 6, 2016 at UNLV (<http://www.nevadangse.net/professional-development/snsta-conference-science-for-the-next-generation-february-6-2016/>)
- FIRST Tech Challenge is February 6, 2016, which is part of First Robotics. The regionals for FIRST Robotics are in Las Vegas, March 30, 2016 (<http://www.firstinspires.org/robotics/ftc>)
- The Southern Nevada Science Teachers Conference is February 6, 2016 (<https://www.eventbrite.com/e/snsta-region-one-annual-science-conference-tickets-19390134414>)
- Fernley STEM Council is hosting STEM festival on February 25, 2016. The largest parent participation event in Nevada. (<http://www.fernleystem.com/fernley-stem-festival.html>)
- Southern Nevada Regional Science & Engineering Fair (SNRSEF) at UNLV starting on March 31, 2016 (<https://www.unlv.edu/sciences/schools>)

The information will also be available on the OSIT website: <http://osit.nv.gov/>

XIII. Consider Agenda Items for the Next Meeting and Develop Work Plan
(For Possible Action)

Brian Mitchell, Director, OSIT

Mr. Mitchell proposed to the Council that they create subcommittees, similar to the ones the previous STEM Council had. This way the work could be subdivided and brought back to the committee as a whole. He recommended three subcommittees:

1-a subcommittee to plan and execute the three recognition events, 2-a survey subcommittee to refine, disseminate, collect the data and report back to the Council, and 3- a subcommittee to start the strategic planning process.

Mr. Mitchell said that he would be the staff person for each of the subcommittees and do any research that is needed. Mr. Mitchell said the last STEM Council had a nonprofit subcommittee but he didn't think that one is necessary since this Council has funding in the OSIT budget to carry out the recognition events. This Council needs a nonprofit to act only as a fiscal agent to assist with the implication of the plans developed by the Council and manage the money. Mr. Huckaby asked if a vote was needed for a new nonprofit and if the so, could the STEM Coalition do a presentation on possibly being the nonprofit? Mr. Mitchell said there needs to be a

conversation with the STEM Coalition to see if they are interested in being the nonprofit for this Council.

Dr. Grisham said that a lot of work had gone into developing the survey which was sent out and responses were received. Mr. Mitchell said that the same survey could be used again and built on the previous work. The following subcommittees were formed: Strategic Plan Subcommittee: Kris Nelson, Kelly Barber and Cory Hunt. Survey Subcommittee: Dr. Anne Grisham, James Huckaby, Cory Hunt. Recognition Subcommittee: Judy Kraus, Richard Knoeppel, Shelace Shoemaker.

Mr. Mitchell will send each subcommittee member a plan of action and suggested meeting dates and times.

Mr. Mitchell asked if there was any items that the Council would like on the next agenda in addition to a presentation from Bob Potts from GOED. Someone suggested an update on where the STEM Coalition is going. Dr. Grisham asked if the previous work (report) of the STEM Council could be sent to the Council members. Ms. Kraus asked for an updated membership list.

- XIV. The next meeting date will be determined at the January 25, 2016 meeting of the Council.

The next meeting dates will be determined once the committee responses to the poll are compiled.

- XV. **Public Comment** (No action may be taken upon a matter raised under public comment period unless the matter itself has been specifically included on an agenda as an action item.)

Beth Wells asked if it was possible to have a presentation from the Carson City and or the Fernley school districts who are doing a great job connecting industry and business with the school districts. Mr. Mitchell said that he would also like to have Washoe and Clark County school districts provide an overview of their STEM initiatives.

- XVI. **Adjournment**

The meeting was adjourned at 4:17 PM