

### STATE OF NEVADA

## GOVERNOR'S OFFICE OF SCIENCE, INNOVATION & TECHNOLOGY

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### **PUBLIC MEETING MINUTES**

Name of Organization: STEM Advisory Council

Date and Time of Meeting: Monday, April 8, 2019 @ 4:00 P.M.

Place of Meeting: Nevada State Library and Archives

100 North Stewart Street, Suite 220

Carson City, NV 89701

Please use the following numbers to join the conference call:

North: 775-687-0999 or South: 702-486-5260 Access Code: 70987 push #

### I. Call to Order / Roll Call

The STEM Advisory Council (Council) was called to order by Co-Chair Mark Newburn at 4:00 P.M. on April 8, 2019, on the above conference line. He will be running the meeting today.

### **Members Present:**

Brian Mitchell
Bob Potts
Camille Stegman
Judy Kraus
Kelly Barber, Co-Chair
Kristen Averyt
Mark Newburn, Co-Chair
Mary Holsclaw (Designee for Andrew Snyder)
Richard Knoeppel

### **Members Absent:**

Chris Sewell Shelace Shoemaker

### **Staff Present:**

Debra Petrelli Tracey Gaffney **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.)

There was no public comment.

### III. Welcoming Remarks and Announcements (For information only)

Co-Chair Newburn welcomed everyone, and made brief comments on the ongoing Legislative Session in Carson City.

## **IV. Approval of the Minutes from the January 30, 2019 Meeting** (For possible action) Co-Chair Mark Newburn

Co-Chair Newburn asked if there were any corrections or additions to the January 30, 2019 meeting Minutes, as written. None were made. Mr. Knoeppel made a motion to approve the meeting Minutes of January 30, 2019, as written. Ms. Kraus seconded the motion. The motion passed unanimously.

# V. Discussion and Possible Vote on the Results of School Site Visits to Governor Designated STEM School Applicants and Selection of the Schools that will Receive the Designation (For possible action) Brian Mitchell

Mr. Mitchell commented that a highlight of the year for OSIT is going out and visiting schools throughout the state who are doing great things in STEM and have applied for the official Governor's STEM school designation. He said a number of schools had been visited this year and he thanked the reviewers that participated along with the OSIT staff. He briefly described the reviewing process of STEM schools; 1) a statewide solicitation was sent out; 2) applications were completed by each school; 3) applications were reviewed and based on information within the applications, a site visit to the school was scheduled; 4) a team of reviewers along with OSIT staff conducted the site visits, 5) following the site visit each reviewer compiled their comments and suggestions and rated the schools according to the provided rubric; 6) each school received comments whether they received the designation or not, based on their strengths, weaknesses and areas for improvement in STEM. He said the schools not receiving the STEM designation will be invited to participate in OSIT's STEM Leaders Academy, which includes a process of designing a STEM strategic plan for their school, as well as learn about the different elements in the Academy's STEM framework and how those elements can be implement into their school.

Mr. Mitchell commented that since last year, OSIT has brought on a new STEM Project Manager, Tracey Gaffney, and together, he and Ms. Gaffney had revamped the STEM school reviewer rubric and created a new STEM framework for the state. He said OSIT is continually learning what constitutes a STEM school and by conducting more research of what schools in other states are doing, he believes the rubric used this year is extremely more comprehensive and makes it a bit more difficult to obtain the STEM designation than last year. He commented that by raising STEM school designation standards each year, Nevada schools will ultimately benefit in years to come.

Mr. Mitchell pointed out that a number of schools applied for one of the three levels of STEM designations, consisting of "Developing," "Established," and "Model," which Nevada currently has schools in each category. He said a couple of schools that had previously been designated as "Developing" STEM schools applied this year to move up a level to "Established." The following schools have been recommended to the Council for each level of this year's Governor Designated STEM School:

### MODEL:

None

### **ESTABLISHED:**

Lied STEM Academy, Las Vegas Roger Gehring Academy of Science and Technology, Las Vegas

### **DEVELOPING:**

Smithridge STEM Academy Elementary School, Reno Pinecrest Academy of Nevada- Cadence, Henderson Pinecrest Academy of Nevada- St. Rose, Las Vegas Oasis Academy, Fallon Carson Montessori Charter School, Carson City Jim Bridger Middle School, North Las Vegas Frank Lamping Elementary School, Henderson Carlin Combined School, Carlin

He said two schools applied to move up from their current STEM designation levels and both made significant progress by responding to and improving upon feedback received in years past. He said while it was determined that both had significantly improved within the "Developing" level, neither merited the "Established" level of STEM designation. He added that both schools will be invited to attend OSIT's STEM Academy and hopefully will re-apply in the future. Ms. Stegman asked whether recognition could be given to those schools that applied to move up a level in their STEM designation by way of a letter of merit outlining their efforts and improvements. Mr. Mitchell agreed and said because those schools cannot be invited to attend the ceremony in Carson City, some type of recognition is warranted and said he would check with the Governor's office about a letter of achievement/improvement.

Mr. Mitchell said the above schools awarded with a STEM level designation will be invited to attend a ceremony in Carson City with the Governor and receive a 10-foot banner signifying they are an official STEM school recognized by the State. He added that the State is paying for airfare for two individuals from each school in Clark County for the event and per diem mileage for those schools driving to Carson City further than 50 miles away. He said the ceremony is taking place this year on Wednesday, May 15, 2019 at the Capitol in the Old Assembly Chambers in Carson City at 11:00 am. He invited all Council members to the event, and announced the dates and times of all of the Council's upcoming STEM events:

<u>STEM Student Recognition – Southern Nevada</u>: May 3, 2019 @ 4:00 p.m. to 8:00 p.m., Desert Research Institute (DRI), 775 E. Flamingo Rd, Las Vegas, NV

<u>STEM Student Recognition – Northern Nevada</u>: May 15, 2019 @ 4:00 p.m. to 8:00 p.m., Desert Research Institute (DRI), 2215 Raggio Pkwy, Reno, NV

Governor's Designated STEM School Event: May 15, 201 @ 11:00 a.m., Nevada State Capitol, Old Assembly Chambers, 101 N Carson St, Carson City, NV

Mr. Mitchell said the newly designated STEM schools will be published on the OSIT website once the council officially ratifies the above-named-schools, as well as being added to the STEMhub website. It was suggested the schools that re-applied for the next level of designation could also be recognized on the websites. Mr. Mitchell added that schools listed on the website are not listed by the year they are awarded, but rather by the STEM level they have achieved. Mr. Newburn asked when the press release would be coming out. Mr. Mitchell replied he is working with the Governor's office and expects something within the next two weeks.

Ms. Stegman commented on the great work of reaching out to the rural areas and how exciting it is for those schools to be included in this process. Mr. Mitchell agreed. He commented that in general the rural areas have not shown a lot of interest in the program and was happy to see Carlin Combined School apply for the designation this year. He added that OSIT wants to continue to work with Carlin as they do have many challenges that schools in Las Vegas or Reno do not have, and despite those challenges are doing really good things in STEM.

Co-Chair Newburn, as a reviewer, commented that in visiting Lied Middle School, and because of their construction management program, tend to receive an enormous amount of business support. Mr. Knoeppel, who sits on Lied Middle School's Advisory Board, said Lied receives many in-kind donations as well as magnet school funding. Mr. Mitchell added that Lied receives funding from the Clark County School District Magnet office by way of a federal grant, out of which both Lied and Gehring schools created their magnet programs. He agreed that Lied has done really well in cultivating business industry partnerships in building that school. He said OSIT has discussed putting together a number of different "toolkits" related to each area of the new STEM framework. He commented that all schools have their strengths as well as weaknesses. He added that one weakness at all schools visited this year was "equity" and understanding what it means and how to help underrepresented students succeed in STEM. He suggested using Lied and other schools that excel in community engagement as examples, and spotlight or even do case studies showing other schools how to accomplish equity. He stated this will become a major project for OSIT over the next year, and OSIT will be relying on the Council to assist in putting together ideas.

Co-Chair Newburn asked for a motion on the recommendations of the reviewing teams to designate the above-named schools as Governor Designated STEM schools in the State of Nevada according to their level of designation. Co-Chair Barber made a motion to accept the reviewer's recommendations and award the designations. Ms. Stegman seconded the motion. The motion passed unanimously."

## VI. Provide Legislative Update (For information only) Brian Mitchell

Mr. Mitchell commented on Governor Sisolak's State of the State Address when he mentioned STEM at the very beginning and his focus on how STEM skills are among the most important to push for our kids. He pointed out that the Governor also called for increased funding for Career Technical Education (CTE) and Graduate Medical Education (GME) in his budget, both of which are STEM areas of education. He said it will be up to the legislature to see how those requests go. He said the Governor also proposed continued funding for OSIT to continue this work.

Mr. Mitchell said OSIT is tracking and reported on AB 6, which alters the membership of the Council by removing the Director of the Department of Employment of Training and Rehabilitation (DETR) and adding the Executive Director of the Office of Workforce Innovation (OWINN) to the Council. He said he had spoken with DETR, as it was a DETR proposed bill, and now with the change of leadership at the Capitol, DETR's Director stated she would now like to stay on the Council, amending the bill allowing DETR to stay on the Council and still bring OWINN as a member. He added the bill was scheduled for a hearing, but then removed from the agenda and has not been heard since.

Mr. Mitchell said that back in January 2019, the Council had made several recommendations to the legislature and every recommendation made is now contained in one bill or another and currently moving their way through the legislature. He said SB 402 incorporates several recommendations. He said it includes the recommendation to create a statewide STEM license plate with funding from the issuance of the license plate going to OSIT and the Council to fund requests for high-quality informal STEM programs or high-quality programs doing outreach and awareness activities. He said one of the duties of the Council will be to assist OSIT in coming up with criteria and a request for proposals for either non-profits, school districts or institutions of higher education to fund outreach and awareness of STEM activities, or informal STEM programs like high-quality summer camp, field trips, etc. He said also in SB 402, is statutory clean-up language to allow the Council's statutorily required STEM events to be held at other locations beside institutions of higher education if the Council so decides, as well as allow the Council to recognize more than 15 schools, which currently there is a 15-school cap. He said SB 402 also makes two appropriations to OSIT to continue to expand the elementary school STEM grant and establish regional STEM hubs or networks. He commented that SB 402 has passed out of the Senate Growth and Infrastructure Committee, the Senate Education Committee and is on the way to the Senate Finance Committee. He said Senator Woodhouse is the Champion for SB 402 and is assisting in getting that bill out of the Senate and on to the Assembly.

Mr. Mitchell said SB 313 and SB 476, both related to computer science, have been merged and voted out of the Senate Education Committee. Co-Chair Newburn said SB 313 is a follow up to the last legislative session's bill, SB 200, which expanded computer science. He pointed out that SB 313 continues that work with the goal focused on creating more computer science teachers, and has additional appropriations for school districts and regional professional development agencies to do more training. He said it also creates an account for the reimbursement of teachers for getting the new computer science teacher endorsements. He added that SB 313 includes a grant program to Nevada System of Higher Education (NSHE) to support colleges developing curriculum for pre-service teachers in computer science. He said SB 476 adds a requirement for the development of an internet repository of resources for providing instruction in computer science, requiring the Department of Education (DOE) to

assist school districts, charter schools and university schools for profoundly gifted pupils to establish programs of instruction in computer science and establish a program to award grants to school districts and charter schools to provide for a teacher to earn a degree or other credential in computer science.

Co-Chair Newburn commented that since the 2013 legislative session and after being involved in four sessions of working on STEM legislation, he pointed out the significant difference in the current reception and support of STEM bills. Mr. Mitchell suggested Co-Chair Newburn reach out in either his professional capacity or by way of membership in the Council to show his support for these bills. Ms. Stegman asked whether Council members will have any further opportunities to speak on behalf of these bills before the legislature. Mr. Mitchell replied that the best place to register support for a bill would be when the bill comes forward in a committee hearing. He said typically a bill sponsor will present the bill to the legislature, then the public is offered the chance to give their testimony in support of the bill, opposition to the bill, or neutral to the bill. He said getting up to speak in support of the bill is always helpful. He commented that in absence of appearing in person at the legislature, an email to the committee chair or the legislator that represents your individual district, is also a great way to show support for a bill. Dr. Averyt asked whether any of these bills will not pass out of committee during this session given the upcoming deadlines. Mr. Mitchell responded that both SB 402 and SB 313 are already out of committee and are now going to the Senate Finance Committee, but because they both contain appropriations, they are exempt from the upcoming deadlines. He stated he will send email notices of upcoming hearings/meetings of these bills to all members of the Council.

## VII. Discussion of Asset Map of STEM Programs. (For possible action) Brian Mitchell

Mr. Mitchell said numerous organizations within the state have recently approached him to assist in creating asset maps of various kinds. He believes the Council should be involved in this endeavor and whatever gets created should be more comprehensive than current asset maps that are narrowly focused. He gave an example of one project; He said recently the Lieutenant Governor joined with Jan Jones Blackhurst of Caesars Entertainment to bring "Million Women Mentors," which is a STEM-focused mentoring program of female mentors for girls in STEM, to Nevada. He said there is a subcommittee in Nevada of the Million Women Mentors, focused on putting together an asset map of programs, companies or individuals who do mentoring in Nevada. He said a second request comes from a group he participates in by way of a federal National Science Foundation (NSF) grant for broadening participation in STEM, consisting of a six-state consortium, called Intermountain STEM (IM STEM). He said they have discussed putting together asset maps in each of the six states, including the various STEM programs with an equity focus. He said the Council's subcommittee, Informal STEM Learning Environments (ISLE) subcommittee, is planning on sending out a survey providing informal STEM providers with the various practices of these providers. He suggested the importance of having a wider, more focused STEM asset map of all the various STEM programs to include both formal, and informal programs, as well as mentorship opportunities. He added it would be a great addition to the STEMhub website to have a map of everything going on in STEM throughout the state. He said some of the questions he has received include: "What kind of programs or information should go into the map and how the quality of a program should be addressed?" and, "Unlike the STEMworks

program, with all high-quality curriculum STEM programs, would it be more beneficial to include all programs that have gone through some type of vetting process and not necessarily only high-quality programs?" and "What are the target audiences for an asset map?"

Mr. Mitchell said in putting together a list of these statewide STEM programs, it needs to be decided whether the list be comprehensive or only a list of high-quality programs. Co-Chair Barber said it would be helpful to have a way to provide different designations, in terms of the sophistication of the program. She suggested not eliminated emerging STEM programs because they are important in the rural areas of the state. Mr. Mitchell suggested listing all vetted STEM programs with an identifier/asterisk designating the level of quality. Co-Chair Barber agreed and suggested the identifier could include certain certifications, etc., and hopefully assist up-and-coming programs by setting the bar at a higher level. Mr. Potts asked how the level of quality for a STEM program would be measured. Mr. Mitchell said it would depend on the type of STEM program. He pointed out with school STEM programs, a process is already in place, which is the Governor's Designated STEM School program. He said for a formal curriculum program there is also an existing process which is the STEMworks program, which are high-quality vetted programs that any school can purchase. He added there is not yet a process for informal STEM programs, but the ISLE subcommittee is currently working on a rubric by which programs could apply for a designation with a rating process. Ms. Stegman commented that with some STEMworks approved programs, teachers didn't get the professional development required to actually implement the program, thereby frustrating teachers with the program, and suggested having a caveat with each program stating professional development time is required, as well as opportunities to practice with the program in order to make the program successful. She added it may be beneficial to list each program and indicate whether it meets the requirement of including professional development in the price of the program. Mr. Mitchell agreed there needs to be a way to evaluate the implantation of a program and perhaps at this time adding a recommendation statement on the STEMworks website page would be beneficial to teachers.

Mr. Mitchell asked if any council members were interested in forming an ad hock group to further discuss this item over the next couple of month. Co-Chair Barber responded she is interested. Ms. Stegman also responded she is interested. Co-Chair Newburn suggested inviting members from the Council's subcommittees to join as well. Everyone agreed. Mr. Mitchell said he will present an update at the next Council's meeting.

Ms. Stegman asked whether the STEMworks subcommittee had been dissolved after the adopted STEMworks program started. Mr. Mitchell responded that the STEMworks subcommittee had been dissolved but said he would ask former members whether they might be interested in re-engaging in this new working group. Chair Newburn suggested each subcommittee for the council could assume the responsibility of creating an asset map within their specialty area. Mr. Mitchell agreed.

### VIII. Consider Agenda Items for the Next Meeting (For possible action) Co-Chair Mark Newburn

Mr. Mitchell pointed out the Council is required to hold 2 in-person meetings per year, one in northern Nevada and one in southern Nevada. He said in the past there has not been funding for travel expense in the OSIT budget for Council members to attend, and funds were cobbled

together from different categories within the OSIT budget. He said in moving forward, assuming the legislature passes the OSIT budget, there will be dedicated funding for travel for Council members beginning in July 2019. He said at the last meeting of the Council in January, 2019, a June 2019 date for an in-person meeting was discussed, however this fiscal year OSIT does not have the funding to facilitate that travel in June 2019. A group discussion on August 2019 dates ensued. Mr. Mitchell said he would look at the Clark County School calendar and circulate some dates to the council.

Mr. Mitchell suggested further discussion on STEM asset mapping and a discussion on updating the STEM Strategic Plan as agenda items at the next meeting. Co-Chair Newburn suggested a legislative debrief. Mr. Mitchell also suggested an update from each of the Council's subcommittees. He said he would also like to have a conversation at the STEM Council level about postsecondary education and STEM workforce development and what polices they should be encouraging various entities within the state to adopt.

Mr. Knoeppel inquired about new members for the council. Mr. Mitchell said he is hopeful that new members will be present by the meeting and perhaps they could have an orientation at that meeting as well. He said he would circle back to the legislature and remind them that new memberships for filling current vacancies within the Council is necessary.

**IX. 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.)

There was no public comment.

### X. Adjournment

Co-Chair Mark Newburn

Co-Chair Newburn adjourned the meeting at 4:56 P.M.