

#### STATE OF NEVADA

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

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#### **PUBLIC MEETING MINUTES**

Name of Organization: STEAM Subcommittee

Date and Time of Meeting: Tuesday, November 19, 2019 @ 3:00 PM

Place of Meeting: Nevada State Library & Archives (NSLA)

Governor's Office of Science, Innovation & Technology

100 N. Stewart St., Suite 220 Carson City, NV 89701

Please use the following numbers to join the Conference Call:

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#### 1. Call to Order / Roll Call

Marisa Cooper

The STEAM Subcommittee was called to order by Chair Marisa Cooper at 3:00 P.M. on Tuesday, November 19, 2019.

#### **Members Present:**

Candy Schneider Craig Rosen Jeneane Harter Laura Christian Marisa Cooper Meghan Schiedel Sue Dehart Tia Flores

#### **Members Absent:**

Brian Mitchell Alisha Kerlin Andrew Snyder Candace Garlock Mary Holsclaw MaryJane Dorofachuk Sarah Gobbs-Hill Jen Johanson

#### **Staff Present:**

Tracey Gaffney Debra Petrelli

**2. 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.) Marisa Cooper

There was no public comment.

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

Marisa Cooper

Chair Cooper welcomed everyone and thanked the members for being on the call. She briefly discussed that preparations for the NV STEAM Conference are well under way.

### **4.** Approval of the Minutes from the October 17, 2019, STEAM Subcommittee Meeting (For possible action)

Marisa Cooper

Chair Cooper asked if there were any corrections or additions to the October 17, 2019 Minutes as written. None were made. Ms. Schneider made a motion to approve the Minutes of October 17, 2019 as written. Ms. Harter seconded the motion. The motion passed unanimously.

### 5. Discussion on the NV STEAM Conference 2020 (For possible action)

Marisa Cooper

Chair Cooper updated the subcommittee on the NV STEAM Conference 2020. She commented the only change from last year's conference is the addition of three workshops per teacher and exploring the possibility of more teachers coming in to deliver those workshops. She said she is working very closely with those teachers to help support the content of each workshop. She said Mr. Rosen and she have discussed leveraging a group of teachers to workshop the adoption of the STEM structure to create a Governor's STEAM Seal of Approval during the conference. Mr. Rosen said the idea is to create a workshop space where teachers can come together and review the STEM rubric, which has already been created, and see ways to supplement and augment it to allow for STEAM activities to be elevated within that rubric, as based on the subcommittee's white paper. He said after a deep-dive into the rubric, adjustments can be formulated to produce a quality rubric of what the STEAM program might look like.

Chair Cooper asked what the next step would be after the rubric is developed. Ms. Gaffney replied she really likes the idea of bringing this workshop to the conference and having teachers workshop the rubric based on the white paper. She said once teachers have decided what to add to the rubric, it would be applied to next year's designation application, which is

solicited from OSIT. She said OSIT can assist in getting the word out about the rubric. She said schools would then apply for either a STEM designation or STEAM designation. She pointed out if the STEAM designation is applied for, those schools would be evaluated based on whatever attributes the teacher group at the conference workshop had added to the rubric. Chair Cooper asked whether applicants would be eligible as early as 2020. Ms. Gaffney replied the application coming out in Fall of 2020 could have that STEAM component included.

Ms. Schneider suggested an outline with a summary of events taking place at the conference would be helpful. Chair Cooper said she would send a short informational one-pager on the conference to everyone at the conclusion of this meeting. She said the updated schedule will be final soon and that will also be sent to everyone.

Chair Cooper said her goal is to have the website registration for the conference live by mid-December. She said this event has always been sold out within two weeks of launching it on the website. She pointed out she needs plenty of lead-time between registration and ordering materials and supplies. She further discussed some of the logistics of workshops that are new and where they will be located. Mr. Rosen commented the key-note speaker will be presenting three workshops, along with her speaking engagement. He said this will be a great opportunity for participants to engage with her. He added that every single school district has been contacted to be sure they all send delegates to this statewide STEAM conference. The goal is to have at least 2 participants from every school district in attendance. He said Chair Cooper has been working diligently to get funding to support the conference attendance. Chair Cooper said the funding she is looking to secure in the next few weeks is ideally for a team of 2 delegates from each school district, not including Washoe County, Clark County or Carson City. She is working with Ms. Dorofachuk from the Nevada Arts Council to carve out separate funding for Clark County School District to fund as many teachers who are interested in attending from the Las Vegas area and traveling from Las Vegas to Reno. She said rural district travel funding will target outlying school districts. She added that this information and registration will be found on the NV STEAM website: (https://www.nevadaart.org/nvsteam/info/)

Chair Cooper requested that all subcommittee members be sure to provide her with up-to-date names and/or logos for those organizations attending so they can be included in the website information on the conference. She added that Linda Liukas, the key-note speaker for the conference, will be providing copies of her book *Hello Ruby* on-site, and if the books are not donated, the museum will look to purchase some and have those available at a discounted price for teachers during the conference. She added that Ms. Liukas was awarded last year, the 2018 Forbes Woman in Technology, Women of the Year Award.

# 6. Discussion on Developing STEAM Policy Recommendations for Nevada (For possible action) Marisa Cooper

Chair Cooper said, as a general assessment, she is getting a lot of various questions that relate to this agenda item and feels there are three categories this subcommittee needs to pursue under this action item. She said at the last meeting, Ms. Gaffney introduced an example of a policy recommendation for STEAM and brought to the group the task of potentially creating

something for Nevada teachers on ways they could integrate STEAM into the classroom. She asked whether this might be something the subcommittee would be interested in by possibly expanding on the white paper in terms of specific classroom examples. She added, that based on conversations at the last meeting and on meetings offline, she believes there are three needs that relate, to include; 1) Policy Recommendations, which is possibly building on or refreshing the white paper by moving to some very specific policy recommendations; 2) a Teacher STEAM Certification or Seal. She said she is getting a lot of questions about teacher resources that are available nationally, which do not necessarily do justice to the approach this subcommittee has already recommended and suggested there may be need and room for the subcommittee to develop a teacher certification, where a teacher can be STEAM certified; and 3) as STEAM expands across the state, there may be a need for a "STEAM Content Stamp of Approval" directed towards STEAM lessons, programs, or conferences that are being promoted, in which this subcommittee can put a stamp on it designating it as officially STEAM approved by the State of Nevada.

Ms. Flores commented that something being recognized in Northern Nevada, through regional arts organizations that collaborate with non-profit organizations, has been reaching out as to whether they have a program, which most do, either science or STEM, and asked how they can get their program credentialed for that arts component. She added it would be nice coming from this committee, so to have the same voice on this topic. Chair Cooper agreed, and said she believes this subcommittee is the appropriate place to generate that sort of authority with advice, support and directionality for all the STEAM work happenings throughout the State. She asked Ms. Gaffney whether the subcommittee could develop something like this, or whether there is any sort of policy adoption or authority that would need to happen for the subcommittee to implement these items. Ms. Gaffney replied this is very similar to OSIT's STEMworks program in which the Governor's STEM Advisory Council has a list of recommend STEM programs. She said any program can apply for this designation, which consists of a fairly rigorous application and includes STEM and Nevadaspecific components. She said OSIT has put together a rather large group of reviewers who evaluate those programs and once a program ranks high enough to join that list of designated STEM programs, teachers can apply for grant funding offered by OSIT, to fund the purchase of those programs and related materials or training. She said those programs are also recommended to school districts throughout the State. She suggested the subcommittee follow a process similar or add a STEAM component to include STEAM specific programs to the existing list of STEM programs. Chair Cooper asked whether the STEM program rubric and accompanying documents that guide the application through the review process could be shared with the subcommittee. She said that would give the subcommittee a good place to start. Ms. Gaffney agreed. Chair Cooper commented the existing STEM infrastructure and OSIT website could be used along with the NVSTEAM.org website, which the subcommittee has access to host and promote those programs, as well.

Chair Cooper said she feels that a STEAM stamp for a content application approval process is something the subcommittee could absolutely manage. She said she is very interested in the idea of running a teacher certification program, but is also conscientious of the fact that would be a big responsibility. Ms. Schneider said she doesn't believe that is something a subcommittee would be doing when you consider the authority involved, it would more likely fall into the jurisdiction of the Department of Education. Mr. Rosen said the subcommittee could encourage Nevada System of Higher Education (NSHE) and NSHE

institutes to create some sort of certification or STEAM seal for new teachers. Chair Cooper said Jen Johanson, the subcommittee's newest member, who unfortunately was not able to join the meeting today, is a teacher in Washoe County School District and is currently pursuing her Ph.D at University of Nevada Reno, (UNR) in STEAM education. She is currently the STEAM Lab Director at a Washoe County STEAM middle school and previously an art teacher at a high school in the Washoe County School District for many years. She commented there currently is not an actual STEAM program at UNR but understands that Ms. Johanson is working very closely with Dr. David Crowther, Professor of Science Education at UNR, and possibly building that program out. She suggested a meeting with Dr. Crowther and a conversation on what UNR is doing with STEAM and how this subcommittee can support the efforts they have underway. She said this would give the subcommittee a counterpart within higher education and within the State to further circulate STEAM through other avenues. Ms. Harter said she believes there is a need for college intervention in STEAM but feels it would be simpler if specific recommendations were addressed, instead of subareas, and added that more detail about those recommendations would be helpful. Chair Cooper asked whether this needs to be addressed specifically based on the documents received from OSIT at the last meeting of the subcommittee. She added that between the NV STEAM Conference, the State STEAM seal and the content stamp of approval modeled on the STEMworks program, this may be enough for the subcommittee to focus on currently and pointed out this does not preclude any of the other topics that have been discussed from this meeting.

Ms. Gaffney said the intention of bringing this agenda item to the table was because OSIT has had requests regarding strategy to implement STEAM in the classroom. She said OSIT believes this might be helpful to publish or share something that has practical tips and strategies for teachers. She said she agrees that working on the content approval project is going to be a big project and will require much of the subcommittee's focus. She added that Mr. Mitchell, who was unable to attend today's meeting, has some ideas on a policy paper as well that he would like to share with this subcommittee at the next meeting. She said it may be best to postpone that item until Mr. Mitchell is present. The group agreed.

Mr. Rosen said that in past conversations the subcommittee discussed the eventual need for STEAM to get some kind of funding behind it. He said since there is only one state STEAM conference, perhaps the state could come together and pull some funding to support this. He added he would like to see the subcommittee move in that direction for the advocacy piece to expand the work of the subcommittee statewide. Chair Cooper commented she expects the next meeting of the subcommittee to fall after the Christmas and New Year holidays, and an agenda item could be added for discussion on the Department of Education possibly supporting work being done by the subcommittee, as well as a policy discussion with Mr. Mitchell and his priorities for how the subcommittee might refresh or adjust a new white paper and how the subcommittee might secure funding to support that. She said policy recommendations and a teacher certificate will be tabled until the next meeting.

7. Discussion on Designated STEAM School Program Similar to the Governor's Designated STEM School Program (For possible action)
Marissa Cooper

Chair Cooper said a Designated STEAM School program will largely be put into Mr. Rosen's hands for workshopping during the NV STEAM Conference in February. She added that Mr. Rosen is already very familiar with the Designated STEM School Program. Ms. Schneider commented that it is important there is representation from across the state as that workshopping takes place. Ms. Cooper suggested that when travel grants for teachers are distributed, there be a requirement or perhaps just encouragement for those teachers traveling from rural school districts to Reno, to use one of their workshops to participate in that Designated STEAM School workshop. She said each teacher will be given the opportunity to take 3 workshops, so that would give them 2 other workshops to attend.

**8. STEAM Subcommittee Member General Announcements** (For information only) Marisa Cooper

There were no announcements.

**9. Consider Future Agenda Items for the Next Meeting** (For possible action) Marisa Cooper

Chair Cooper asked for any other suggested future agenda items outside of what discussed in Item 7.

Ms. Schneider suggested a face-to-face meeting would engage more involvement of the subcommittee members. Chair Cooper asked whether the subcommittee would like the next meeting to be between now and the NV STEAM Conference on February 1, 2020, for an inperson meeting. Ms. Harter suggested a meeting in late January, even if it is a brief meeting so everyone will be on the same page when the conference takes place. Chair Cooper said she could schedule a meeting at the Museum on Friday, January 31, 2020, for the entire afternoon. She also suggested a calendar poll be sent out for a conference call meeting to take place in the first few weeks of January 2020.

Chair Cooper asked Ms. Gaffney whether the STEMworks information could be sent out to each member of the subcommittee for their review prior to those upcoming meetings. Ms. Gaffney responded the information will be sent out by OSIT. Chair Cooper requested that each member of the subcommittee review the information prior to the next meeting.

**10. 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.) Marisa Cooper

There was no public comment.

#### 11. Adjournment

Marisa Cooper

Chair Cooper adjourned the meeting at 3:34 p.m.