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MINUTES

Name of Organization: Integrating Arts & Culture into STEM (IACS)
Subcommittee

Date and Time of Meeting: Tuesday, September 26, 2017 at 9:00 A.M.

Place of Meeting: Governor's Office of Science Innovation and
Technology (OSIT)
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

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- I. Call to Order/Roll Call
Aimee Allen, Chair

Chair Allen called the meeting to order at 9:01 A.M.

Members Present: Aimee Allen, Dave Brancamp, MaryJane Dorofachuk, Tia Flores, Meghan Schiedel, Laura Christian, Sue DeHart,

Members Absent: Marisa Cooper, Sarah Gobbs-Hill, Jeneane Harter, Craig Rosen, Candy Schneider, Julye Neel, and Candace Garlock

Staff Present: Brian Mitchell, Debra Petrelli

- 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. Opening Remarks and Announcements.
Aimee Allen, Chair

Chair Allen informed the subcommittee that several members not present today are attending a science event at the Desert Research Institute (DRI) in Reno.

IV. Approval of the Minutes from the July 12, 2017 meeting. (For possible action)
Aimee Allen, Chair

Chair Allen made a motion to approve the minutes of July 12, 2017. Ms. Dorofachuk seconded the motion. The motion passed unanimously.

V. New Business: (For information only)
Aimee Allen, Chair

Chair Allen requested that all members read and review the following two pieces of legislation recently introduced, SB241 and SB200.

A. Passage of SB241 and SB200 and their Impact on STEAM & the Arts.

Chair Allen commented on the Computer Science subcommittee and their involvement with this legislation. She pointed out these bills will give us a pipeline to K-12 teachers and administrators to be on the lookout internally in promoting these requirements so students can earn these credits and receive a STEM or STEAM certificate that acknowledges specific classes and credits have been taken. The subcommittee discussed public relations (PR) and what had taken place so far with information to schools on this legislation. Chair Allen said she had spoken with the Computer Science Subcommittee Chair, Mark Newburn on what the IACS subcommittee could do to assist to further these initiatives and the STEM or STEAM certificate program. Perhaps an IACS working group could get together. It was suggested IACS members could acknowledge the first cohort of students receiving the STEM or STEAM certificates by attending their graduation ceremony and acknowledging their success to include some type of press release. Ms. Flores discussed that following the passage of Education Savings Account (ESA) and Nevada Ready21, as well as SB241, there had been many conversations on social media how they relate to STEM. She suggested that STEAM should be included in these conversations, especially with SB241. She said if we are going to be the voice and talk about policy and passage of new legislation that focuses on STEM, we need to make them aware they need to include STEAM. It is important on our part to communicate this to those groups.

Mr. Mitchell clarified this program was modeled on the State Seal of Biliteracy Program, AB166, which passed in 2015. That bill was established to recognize students who could demonstrate they had

attained a high level of proficiency in one or more languages in addition to English, and thereby would receive an extra seal on their high school diploma. It had nothing to do with high school graduation requirements. With the STEM and STEAM seals legislation, college's high school graduation requirements were researched, as well as student's knowledge of skills and abilities to take a STEM major. Also examined, were current graduation requirements for both advanced and regular diplomas required by the State. The STEM and STEAM seals were built on top of those requirements. He also addressed publicity and getting the word out to students. The STEM Advisory Council has discussed putting together information and working with the Department of Education, who has jurisdiction, in order to get the word out to school counselors. The seal is not designed to burden school counselors. Students have to be intentional in getting this seal, starting with their freshman year. He said another way to get the word out is talking to our state institutions and familiarizing them with what these seals mean. A pamphlet or flyer, easy to read and understand, with information specifically for STEM and STEAM was suggested. Mr. Mitchell responded this is an excellent idea, something that lays out graphically and clearly what the requirements are so school counselors can understand it better. He proposed that the subcommittee put together a working group that can discuss what that flyer/pamphlet would look like. He said he would be happy to make an introduction to the appropriate person at the Department of Education who oversees school counselors statewide. The group agreed to this suggestion.

There was further discussion on what colleges and other institutions of higher learning are looking for when a student has received a STEM or STEAM seal. There was discussion to possibly target middle school counselors to become involved. She pointed out that since Ms. Dehart and Ms. Neel are the professionals in the field, perhaps this conversation could be rolled into the creation of a flyer/pamphlet conversation by discussing how we might set up the pipeline to help facilitate middle school counselors on information awareness. It was agreed that getting middle school counselors involved would be advantageous. Chair Allen said she would follow up with Ms. Dehart and Ms. Neel. Ms. Flores agreed to assist and commented on the growing population of charter schools and the need to inform them as well.

VI. New Business:

Aimee Allen, Chair

A. IACS Position Paper: STEAM Education for Nevada: A 21 Century Framework for Integrated, Project-Based Learning (*working title*) (For possible action)

1. Stated Mission/Purpose/Goals of the Position Paper:
 - a. Subcommittee Assignments:

- 1) Working Definition and Guiding Principles
- 2) Current Research
- 3) Examples and Best Practices

Chair Allen said it is time to put down on paper what this group knows about STEAM and arts integration. We need a working definition of STEAM, how arts integration fits in, as well as a set of guiding principles. Along with the guiding principles would be examples as well as a framework for what STEAM is not. She announced that any and all members of IACS are welcome to take part in this endeavor as a working group. She added that Ms. Cooper has provided us a great starting point along with other resources now collected for our position-paper. Hopefully we can set a meeting date in the next four weeks. She added she would really like for us to share our work at the Nevada STEAM Conference on February 24, 2018. This would be a good opportunity to share our work with other professionals. We should be able to leverage this event so that we get direct feedback from the arts and science education community on what we have developed. Ms. Dorofachuk stated part of the IACS's role is to fit into the State Strategic Plan. This position-paper will ultimately feed into that plan. It is one of our responsibilities as a STEM Advisory Council subcommittee. Ms. Dorofachuk, Ms. Schiedel, Ms. Gobbs-Hill and Mr. Brancamp agreed to be a part of the working group for discussion on the project of drafting language and meeting outside of IACS. Chair Allen said she would follow up with Mr. Rosen, who is absent from today's meeting.

B. Approved State Plan (For information only)
Dave Brancamp

Mr. Brancamp updated the group on the approval of the State Plan and how it impacts arts education in Nevada. The State Plan does affect how the standards are rolled out. The State Board of Education, at their September meeting, took a step forward to add two standards in which fine arts will be a consensus agenda item to approve "teacher friendly" standards. Arts Standards should be rolled out this fall, giving all school districts a year to make changes. Once they go to the State Board of Education for approval, they have to wait for legal language to be approved before they are officially released to the school districts. He further discussed the Fine Arts Standards and music, theatre and dance, visual and media arts. Chair Allen asked whether there is a most-current version of the approved Nevada Fine Arts Standards, an easy link or access. Mr. Brancamp pointed out that once the October State Board of Education meeting has taken place, they will be placed on the department's website under "Standards."

C. Update on New Arts Standards (For information only)
MaryJane Dorofachuk, Marisa Cooper, Dave Brancamp

There were no additional comments after discussion on Item B. (above) "Approved State Plan."

D. Update on NV STEAM Conference (For information only)
Marissa Cooper, Craig Rosen

Chair Allen updated the subcommittee on the annual NV STEAM Conference in the absence of Ms. Cooper and Mr. Rosen. The theme this year is "Nevada's Nuclear History." She asked that anyone presenting at the conference on February 24, 2018, contact Ms. Cooper as soon as possible with their program summary. Chair Allen said the IACS subcommittee is a formal partner in this year's program. This year it will take place in Northern Nevada and next year in Southern Nevada with a related event in the opposite part of the state each year. Many of the professionals within this subcommittee will not only be attending, but will also be presenting at this conference. Ms. Dorofachuk said she will update a flyer with all the education opportunities offered by the Nevada Arts Council, which she will be bringing with her to the conference. Ms. Dehart, talked about Nevada's Desert-Valley Chapter (NDVC), arts education event taking place the same day as the NV STEAM Conference. She explained this event requires an additional membership fee or workshop fee to attend the event. She added professional development (PDE) credit is available if all four sessions are taken of which two of those have already passed. It does offer Clark County School District (CCSD) teachers credit toward their professional growth plan. Chair Allen encouraged her to introduce and make the NDVC aware of IACS's platform as well as the NV STEAM Conference event.

1. Professional Development Grants (For possible action)
MaryJane Dorofachuk

Ms. Dorofachuk said grant funding has been put aside specifically for attendance at the NV STEAM Conference in February. Teachers can use the portal for Professional Development Grants that already exists on the Nevada Arts Council website. These are professional development grants for teachers to attend workshops even if they are in an organization. Ms. Dorofachuk pointed out she has been working with Marissa Cooper at The Nevada Museum of Art to provide funding for in-state and out-of-state travel. Ms. Cooper will be sending out additional details on that grant. Chair Allen clarified there are three separate opportunities for Arts Integration Professional Development through the Nevada Arts Council that relates to STEAM, to include the following:

- 1) Artists in Schools and Communities New Roster
- 2) Opportunities to get funding for STEM educators to teach in schools

3) Opportunities for individuals to attend the February 2018 STEAM conference

E. Update on Artists in Schools and Communities New Roster (For information only)
MaryJane Dorofachuk, Nevada Arts Council

Ms. Dorofachuk discussed their New Roster for teaching-artists that go through an application and jury process for working in schools, communities and arts organizations. There is approximately 74 artists in all disciplines, including folk arts, currently on the roster. She explained it is opened every three years, and this year she is looking for teaching-artists that have some experience with arts integration and STEAM. She will send out the guidelines to members of the subcommittee and asked they be passed along and encourages any known teaching-artists to apply. There is an October 30, 2017 deadline for applying. She explained they are trying to build a network with artists who can present and provide workshops, as well as professional development. She said they have a \$1,200 Artists Residency Express grant, with no matching funds. She said 90% of the time their grants only go to organizations or schools, however if you are a Roster Artists you can apply for this grant to do your program and have a relationship with those schools or organization and do a project and get paid. This grant is paid directly to the Roster Artist. It would be great to have IACS members help in spreading the word on this program.

F. IACS Members General Announcements (For information only)

Discovery Children's Museum, Las Vegas – Laura Christian

Ms. Christian said their biggest project currently being worked on is with the Institute of Museum and Library Services (IMLS), Museums for America Grant. It involves inquiry to learning and arts and science integration. They will have visiting museum professionals the first week of October to start the inquiry-based training, followed in November with Art and Science Integration Training.

Nevada Discovery Museum, Reno - Meghan Schiedel

Ms. Schiedel said they are headed to a national conference. It should be very interested to see the Association of Science Technology Centers (ASTC) and how STEAM is playing out nationally. It is a networking and professional development event for everyone who works in and with science centers and museums.

Clark County School District (CCSD) – Sue Dehart

Ms. Dehart said the CCSD will be offering a PDE course to their visual art teachers with a book-study on a book called *Interdisciplinary Approaches to Teaching Art in High School*. It will focus on high school teachers to reach out to other content areas and find ways that curriculum can be

integrated together. The information on this course is shared at district conferences and school conferences where it is shared between staff. A flyer with all information has gone to all teachers within CCSD.

Sierra Arts Foundation (SAF) – Tia Flores

Ms. Flores reported the Foundation is half-way through the first of a three-legged program, “Literacy through Arts Integration.” She said they have hired teaching-artists, who have gone through rigorous training on arts integration using strategic teaching methods on how to approach core subjects using the arts methods in theatre, movement, and visual arts. Hopefully next year they will include music. They have also had a telephone conference with representatives from the John F. Kennedy Center for the Performing Arts on this integration program. She commented that during this process, imperative data for the literacy program will be collected. SAF is currently working with first and second grades in 4 different schools. We are looking at non-participating schools that have similar demographics and student population and expect to see significant growth in those schools participating in the program. She pointed out that because literacy is the number one priority in our state, we are very exciting to move forward with this project. She added how important it is, when students enter the third grade, they have an understanding of how to read and write, because after third grade it becomes very difficult and challenging for them in any subject matter. She pointed out that with much of the research already done, some topics may interest and even benefit IACS, especially the terminology and data on literacy already collected. Possibly the approach, format and language would be most helpful or beneficial in the writing of our position paper. She agreed to get that information for the next IACS meeting.

Nevada Department of Education (NDOE) – Dave Brancamp

Mr. Brancamp pointed out the Department of Education has an annual spring conference. In past years it has always had a very strong emphasis for the special education population. It may open doors for others to recognize IACS. He suggested the subcommittee may want to present the new standards at that conference. Perhaps IACS can put a working group together.

STEM Advisory Council – Brian Mitchell

Mr. Mitchell commented on some of the mandates by the legislature for the STEM Advisory Council to hold two recognition events for students that do excellent things in STEM. Last year we held two events (Northern and Southern Nevada), one at University of Nevada, Las Vegas, (UNLV) and one at Truckee Meadows Community College (TMCC), which both highlighted a lot of really great projects. He pointed out that last year the projects were based on traditional STEM subjects, very science weighted or engineering focused. Perhaps for next year’s events, this subcommittee could suggest some categories that are arts-focused or projects that are

influenced by the arts. These events take place each year in the springtime. He commented on the Nevada Strategic Plan and the IACS subcommittee using it as a guide to inform school districts and informal educators on how to successfully integrate the arts into STEM and incorporate design thinking.

Chair Allen commented, as a parent volunteer, she is going to Chair a reception and art contest at Twitchell Elementary School in Henderson, which is a Parent Teacher Association (PTA) sponsored event. This event will be in the spring of 2018.

VII. Consider Items for Next Meeting (For information only)
Aimee Allen, Chair

The next meeting is scheduled for Tuesday, October 31, 2017 at 9:00 A.M. and will be video conference between the Grant Sawyer Conference Room #5100, in Las Vegas and the Nevada State Library Conference Room C, in Carson City. For those unable to attend in person, a telephone conference line will be available. Mr. Brancamp suggested a discussion on putting a group together to present the subcommittee's new standards at the upcoming spring conference put on by the Department of Education. Chair Allen said the IACS position paper is a priority for the next agenda, as well as discussion on the NV STEAM Conference. She also suggested further discussion on the working group for the pamphlet/flyer providing specific STEM and STEAM information.

VIII. 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

IX. Adjournment

Chair Allen adjourned the meeting at 10:16 A.M.