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**MINUTES**

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

Date and Time of Meeting: **Tuesday, October 31, 2017 at 9:00 A.M.**

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

This meeting will be video conferenced to the following location:

Nevada State Library and Archives  
100 N. Stewart Street, Conference Room C (2<sup>nd</sup> Floor)  
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- I. Call to Order/Roll Call  
Aimee Allen, Chair

Chair Allen called the meeting to order at 9:03 A.M.

Members Present: Aimee Allen, Dave Brancamp, Marisa Cooper, MaryJane Dorofachuk, Sarah Gobbs-Hill, Craig Rosen, Meghan Schiedel, Laura Christian, Sue DeHart

Members Absent: Tia Flores, Jeneane Harter, 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 welcomed everyone.

- IV. Approval of the Minutes from the September 26, 2017 Meeting (For possible action)  
Aimee Allen, Chair

Ms. Dehart made a motion to approve the Minutes of September 26, 2017. Ms. Dorofachuk seconded the motion. The motion passed unanimously.

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

A. IACS Position Paper: Update on the IACS Position Paper on STEAM Education (For possible action)

1. Stated Mission/Purpose/Goals of the Position Paper:
  - a. Subcommittee Assignments:
    - 1) Working Definition and Guiding Principals
    - 2) Current Research
    - 3) Examples and Best Practices

Chair Allen pointed out that Marisa Cooper has provided a framework for the IACS Position Paper based on STEAM conversations she has been involved with over the last two years. She said this framework is entirely workable and will serve the purpose as a good starting point for the IACS subcommittee. She said the framework has already been distributed to members of IACS who requested to be a part of the casual workflow group to assist in drafting language. She will send out a form with a list of questions for IACS members to fill in answers along with any feedback. She offered to compile this information for the group. She suggested the STEAM conference be a deadline to receive their feedback. Ms. Cooper said the STEAM conference may provide interesting contacts to even further polish the final position paper, in terms of getting more examples and input on best practices from others around the state, with the idea that additional valuable thoughts and opinions may come out of the conference. She suggested the position paper

be in final draft form for the conference, February 24, 2018, with the final edit following. She suggested the paper be presented as a panel discussion and build around the idea of a statewide definition, gaining some public comment, time and support for pushing out a statewide definition. Ms. Cooper agreed to organize the panel discussion at the conference.

Mr. Mitchell suggested the IACS subcommittee also designate a member to present their position paper to the STEM Advisory Council at the council's next meeting. The council will ultimately be the body that ratifies the document. He said this will give the council time to make comments or suggestions. He added the next meeting for the STEM Advisory Council will be early to mid-January 2018. He informed the IACS subcommittee they will need to get on the STEM Advisory Council's meeting agenda to present the position paper. Chair Allen agreed. She also requested copies of other subcommittee's concept/position papers. Mr. Mitchell said the Informal STEM Learning Environment (ISLE) subcommittee and Community Partnerships subcommittee are both currently working on their concept papers, as well as the Computer Science subcommittee who is preparing something similar. He pointed out that subcommittee specific webpages are currently being built on the Governor's Office of Science Innovation and Technology (OSIT) website, which will have a dedicated page for each subcommittee. He added this will be an ideal place for posting the position paper as well as informational documents and other subcommittee materials and resources.

B. Discussion on Working Group for the Upcoming Department of Education Spring Conference (For information only)  
Dave Brancamp

Mr. Brancamp updated the subcommittee on the upcoming Department of Education's (DOE) Spring Conference. He said in the past this was a Special Education Conference, it is now representative of much more and many more departments within the DOE. The dates are April 20 -22, 2018. It will be held at the Rio Hotel in Las Vegas. He suggested members of ISLE attend the event. He said the theme is Initiatives in Action – Education for Generations to Come. He said he will send out a "Save the Date" to all members of ISLE. He asked whether ISLE is interested in doing a presentation. Chair Allen asked for volunteers. Mr. Brancamp added this would be a typical 40 – 50 minute presentation, or longer if requested. He said DOE will need to know IACS's intended attendance by early January, as well as make a commitment to attend the conference.

Mr. Brancamp commented on the Fine Arts Standards and said they are still on track moving forward. He said Theatre, Dance, Media Arts and Visual Arts Standards have all made it through the Boards, and are now a "consent" agenda item on the DOE Board of Education for approval. This designation allows school districts to start working immediately on those

standards without waiting on the Legislative Council Bureau (LCB) process for legal language. He added those four sections have already gone through the workshop phase with Dr. Steve Canavero, Ph.D, Superintendent of Public Instruction, and will now go to public hearing. He said on November 8, 2017, the process will hopefully go the same with Music and run the same course. He added that once Music clears the Academic Council on November 8<sup>th</sup>, public relations (PR) campaigns can begin.

C. Discussion on Working Group for the PR Pamphlet on STEM and STEAM Statewide Information (For information only)

Aimee Allen, Chair

Chair Allen led a discussion on the working group outreach for the PR pamphlet on STEM and STEAM certification program. She said there is not much to report on progress but opened the floor to discussion. She asked for clarification on the credit-breakout for a student working towards an advanced diploma.

Mr. Mitchell stated the Legislation requires, for the STEM seal, the following:

- 1) 3.25 GPA
- 2) 3 credits Science; 4 credits math; 1 credit in Fine Arts ; and 1 credit in any one of the following:
  - a) Computer Science
  - b) Engineering
  - c) Manufacturing
  - d) Electronics
  - e) CTE program in Information/Media Technologies (which includes all the graphics. i.e. website design)
  - f) CTE credit in Skilled and Technical Sciences
- 3) One of the following (Science):
  - a) 3 or higher on AP Science exam; or
  - b) 4 or higher on IB Science exam; or
  - c) Certain score on either SAT or ACT Science; or
  - d) B or higher on a dual enrollment science class; or
  - e) Certain score on the ACT National Career Readiness Certificate

OR

- 3) One of the following (Mathematics):
  - f) 3 or higher on AP Mathematics exam ; or
  - g) 4 or higher on IB Mathematics exam; or
  - h) Certain score on either SAT or ACT Mathematics; or
  - i) B or higher on a dual enrollment mathematics class; or
  - j) Certain score on the ACT National Career Readiness Certificate

Mr. Mitchell pointed out there had been a discussion at the last STEM Advisory Council meeting about helping, not only counselors, but also the colleges and universities to understand what this means and getting them geared up and anxious to push the STEAM certificate to students. We need a way to communicate this information to students and counselors, as well, that colleges and universities will look favorably on students with this seal. He said it may take a couple of years to get the word out and for students to cycling through the program throughout their entire high school years.

Mr. Mitchell pointed out there is only one difference between the STEM and the STEAM seal.

STEM Seal – Requires 4 credits in Science and 0 credit in Fine Arts  
STEAM Seal – Requires 3 credits in Science and 1 credit in Fine Arts

Chair Allen asked whether there is an outreach initiative to promote awareness among teachers, parents, counselors, etc., and what are the initial thoughts on workflow material IACS needs to produce as well as who they need to work with. Mr. Brancamp suggested the subcommittee put together any ideas and thoughts that may have to assist students or parents and submit them to him. He can then submit that information to Christine Nelson, Education Programs Director at the State of Nevada Department of Education.

Mr. Mitchell suggested, in going forward, IACS might consider putting together some initial materials, which might include a colorful, visual, infographic way of describing the requirements, being something fairly easy to read for parents, students and counselors, then present it to the STEM Advisory Council for feedback before presenting it to the DOE. He said with IACS working together with the STEM Advisory Council, more groups could be targeted. He said as a timeline, perhaps something could be prepared by the fall of 2018, prior to the annual school counselor summit. He suggested that the IACS subcommittee make a presentation at that summit.

It was also suggested IACS hold off on marketing and promotional material until after the position paper has been completed and approved by the STEM Advisory Council, because the group will need to rely on information within that documents to push out other materials.

Chair Allen said perhaps at the next IACS meeting a workflow can be created to include getting the position paper approved by the STEM Advisory Council and have a team, to also include counselors, in place for the annual counsel conference. She asked that the subcommittee make suggestions for counselor participation from either Northern Nevada, Southern Nevada or rural areas to be a part of that team. She also asked

whether any specific groups will need to be targeted throughout the state with this information. Mr. Brancamp suggested that IACS invite Kristine Nelson as a guest to a subcommittee meeting to speak on how they orchestrate the State of Nevada's annual counselor conference. He added he would speak with her and bring information back to the next IACS meeting.

D. Update on New Arts Standards (For information only)

MaryJane Dorofachuk  
Marisa Cooper  
Dave Brancamp

There was no new information on the Fine Arts Standards. Chair Allen asked who she could contact to get a roster of those that worked on the standards at DOE, so the subcommittee could send out thank you cards for our appreciation and the great progress they have made in our state. Mr. Brancamp suggested Lisa Morigeau, Administrative Assistant III at the Office of Career Readiness, Adult Learning & Education Options, [lmorigeau@doe.nv.gov](mailto:lmorigeau@doe.nv.gov).

E. Update on NV STEAM Conference (For information only)

Marissa Cooper  
Craig Rosen

Ms. Cooper updated the group on the NV STEAM Conference. The graphic and marketing materials are in final stages of design as well as the web platform is in final design (NVSTEAM.org). She said workshops are presently about two-thirds full. She said they expect the conference platform for registration to be open within the next six weeks. She thanked MaryJane Dorofachuk who has gone out of her way to make sure grant funding is available to support teachers traveling from Southern Nevada to Northern Nevada for the conference. She also thanked Craig Rosen for putting together a field-day in Southern Nevada, which is scheduled approximately two-weeks prior to the conference. She asked that anyone interested in hosting a workshop session at the conference to contact her as soon as possible.

Mr. Rosen commented on the field-day event, which will be a tour of the Nevada Test Site on Thursday, February 15, 2018. He said he has 46 spots available for educators for the tour and he will be sending out a flyer with more information the end of this week. He expects the 46 spots to fill up quickly. He added educators will not be eligible for professional development (PD), however, educators within the Clark County School District (CCSD) will be eligible for Contact Units (CUs) for their attendance at the tour.

Chair Allen announced one of the key-note speakers who will be at the conference, Dr. Charles Falco, Chair of Condensed Matter Physics, Professor of Optical Sciences, Professor of Physics at College of Optical Sciences at the University of Arizona. Mr. Rosen announced the second key-note speaker for the conference, Robert Beckmann who is an artist and educator. His artwork has been exhibited in museums internationally from Finland to Moscow and Scotland to Canada and is noted for his Body of House series, an eight-panel piece, of a two story house destroyed in 2.3 seconds by a nuclear blast at the Nevada Test Site.

F. IACS Member - General Announcements (For information only)

Discovery Museum - Las Vegas

Laura Christian, Early Childhood Education Manager, commented on a current program in which they are partnering with the Las Vegas Philharmonic and will host 300-400 students each day this week to experience the Philharmonic concert and then cross the street to the Discovery Museum for four 20-minute art and science workshops designed around the musical compositions.

Clark County School District (CCSD)

Sue Dehart, Coordinator, Elementary Music & K-12 Visual Arts, commented on teacher experiences that are posted on their website referencing the Discovery Museum and the Philharmonic program being very positive and kids are definitely benefiting from these programs. She briefly commented on three CCSD magnet schools getting nearly \$15 million due to a new grant. The funding will go towards STEM Curriculum in the three schools over a total of 5 years.

Science Alive Community Engagement and Professional Development Administrator at Desert Research Institute (DRI) Craig Rosen, commented on computer science teacher training which will take place in December 2017, doing some coding, etc. in the computer lab at DRI.

Nevada Museum of Art

Marisa Cooper, Charles N. Mathewson Director of Education, briefly discussed their 2017 Art + Environment Conference. They were very excited about their speakers and the 60 educators from all over the country who had been in attendance. She said the following Saturday, they had a workshop for local teachers working on lesson plans from their experience at the conference. The museum will have their regular Educator Evening tomorrow, November 1, 2017 from 4:00pm to 6:00pm.

Nevada Department of Education (NDOE)

Dave Brancamp, Director of State of Nevada Office of Standards and Instructional Support, thanked all the art groups present for bringing Lisa Ford, Education Programs Professional with the Office of Standards and

Instructional Support, into their teams. She is very excited to get to experience the Las Vegas art community.

STEM Advisory Council

Brian Mitchell, Director of OSIT, commented he will notify the IACS subcommittee of the next STEM Advisory Council meeting so a subcommittee representative can be in attendance.

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

There were no suggested topics for the next meeting.

- VII. 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.

- VIII. Adjournment  
Aimee Allen, Chair

Chair Allen adjourned the meeting at 10:05 A.M.