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Brian L. Mitchell  
Director

**PUBLIC MEETING NOTICE AND AGENDA**

Name of Organization: Informal STEM Learning Environments (ISLE) Subcommittee

Date and Time of Meeting: Wednesday, September 26, 2018 @ 1:00 PM

Place of Meeting: Get Outdoors Nevada  
919 East Bonneville Ave, Suite 200  
Las Vegas, NV 89101

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**  
Aaron Leifheit – Co-chair  
Amy Page – Co-chair

Informal STEM Learning Environments (ISLE) subcommittee was called to order by Co-chair Aaron Leifheit at 1:03 P.M. on September 26, 2018, on the above conference call line. He will be running the meeting today.

**Members Present**

Aaron Leifheit  
Amy Page  
Andy Hart  
Craig Rosen  
Sean Hill

**Members Absent**

Kristoffer Carroll  
Judy Kraus

**Staff Present**

Brian Mitchell  
Tracey Gaffney  
Debra Petrelli

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.)

There was no public comment.

**III. Welcoming Remarks and Introductions** (For information only)

Aaron Leifheit – Co-chair

Amy Page – Co-chair

Co-chair Leifheit welcomed everyone. He pointed out the subcommittee is currently working on two items to include a list of informal STEM providers in the state and the second item, creating a survey which will be sent to all informal STEM providers based on the STEMworks Change the Equation (CTE) rubric.

Co-chair Leifheit informed the group that Jessica Snaman had moved from the state and will no longer be a member of the ISLE subcommittee.

**IV. Approval of the Minutes from the July 11, 2018, ISLE Meeting** (For possible action)

Aaron Leifheit – Co-chair

Amy Page – Co-chair

Co-chair Leifheit asked if there were any corrections to the July 11, 2018 Minutes as written. None were made. Co-chair Page made a motion to approve the Minutes of July 11, 2018, as written. Mr. Hill seconded the motion. The motion passed unanimously.

**V. Approval of an Informational Question to be included in the STEMworks solicitation of STEMWorks Change the Equation (CTE) Rubric** (For possible action)

Aaron Leifheit – Co-chair

Amy Page – Co-chair

Mr. Mitchell provided the group with some background and update on the inclusion of an informal Nevada question in the STEMworks CTE rubric. He recapped that at the last ISLE subcommittee meeting the STEMworks rubric was adopted and was chosen to help provide informal STEM providers in the state with guidance on how to improve their programs. He pointed out there had been discussion on the inclusion of at least one question geared towards informal STEM education programs, and several members of the subcommittee agreed to begin work on those questions. He said the STEMworks application will be released on October 1, 2018, which requires all program information be submitted to WestEd by the end of August 2018. He said OSIT worked on a question based on suggestions received from Co-chair Leifheit, and because there was no time to call a formal meeting of the subcommittee, it was decided to submit that additional question for insertion into the rubric beyond the questions submitted last year. He referred to page 6 of the Nevada rubric questions regarding instruction relying on place-based materials. He pointed out the subcommittee can revisit the rubric for changes again next year, and added that the question submitted would allow an informal provider to demonstrate they have a program Nevada might be interested in recommending.

Mr. Mitchell informed the subcommittee the deadline for the submission of a STEMworks Program proposal is October 1, 2018 at 5:00 p.m. He added the hope is to get local programs included in addition to the many national programs. He said if a program applies and does not receive the list recognition, assistance will be offered in making necessary changes or improvements to reapply next year and be successful in getting on the list of programs at that time. He added this new question submitted on behalf of the ISLE subcommittee is reflected in the current proposal submitted by Nevada.

Mr. Mitchell said, to be clear, the Nevada specific questions will accompany other questions on the national program rubric, as with each state. He pointed out for Nevada there are three required questions, one regarding all learners, one regarding real-world application, and one regarding the interdisciplinary nature of the program. He said all programs have to answer these questions. He said beyond the three required questions are five optional questions, in which programs only have to choose one of those to respond to, therefore all programs must respond to at least four questions. He pointed out it will be the programs' choice to demonstrate if they have a solid program regarding place-based instruction, or possibly a strong program in assessment or cultural identity and student interest.

## **VI. Discussion on the Development and Dissemination of a Needs Assessment Survey (For possible action)**

Aaron Leifheit – Co-chair

Amy Page – Co-chair

Co-chair Leifheit pointed out two topics are included in the development and dissemination of a needs assessment survey for informal STEM providers. He said the first topic is the subcommittee's attempt to create a database (provider list) that includes contact information for all informal STEM providers in the state, and the second topic involves the needs assessment survey, that once the provider list is completed, the subcommittee will send to each provider.

### **1) Database**

Co-chair Page, who has been drafting the database, was acknowledge and thanked. Co-chair Leifheit informed the group that work has been done on the database for a couple of months and currently consists of 76 organizations. He said, with exhausted resources, the progress of the database has been difficult. He asked the subcommittee for advice on how to move forward. Co-chair Page said the latest additions to the list came from Southern Nevada to include Connecting Hands Offering Lifelong Learning Adventures' (CHOLLA), which is a regional network of informal educators, and the Las Vegas Science Festival.

Mr. Mitchell asked whether individual contact information was missing from the organizations on the list or additional organizations need to be added to the list. Co-chair Leifheit said additional organizations, outside of the networks of the individuals, are still needed. Co-chair Page asked whether the subcommittee could approach other STEM Advisory Council subcommittees to assist in identifying additional organizations. Mr. Mitchell asked how it is being determined that organizations are missing from the subcommittee's current list. Co-chair Page replied that Southern Nevada is, for the most part, included but other areas of the state may not be. Mr. Mitchell stated he would reach out to the Washoe County School District (WCSD) and check for a list of informal STEM

education providers they currently work with. He said he could also reach out to several individuals from rural areas in the state. He asked if anyone was aware of any umbrella organizations around the state that provide informal education. It was discussed there is a Nevada Museum's Association, which is active and holds a convention each year, which this year will be in Boulder City in October 2018. Mr. Hart said he would reach out to their network for anyone not on the subcommittee's list.

Co-chair Leifheit asked Mr. Hill for an overview of GREENevada. Mr. Hill explained that GREENevada stands for Growing Resources for Environmental Education in Nevada. Their mission is to foster sustainability through environmental education and leadership and includes many organizations and agencies in Northern Nevada. It was discussed there is not much in informal education providers in rural areas, mostly due to their size. The question was asked whether museums that may not run active programming, but may teach through exhibits, should be included on the list of providers. Mr. Hart said he would pursue contacts in Elko. Co-chair Leifheit suggested including as many programs as possible to the list to be sure that no person is missed who wants to become involved. There was further discussion on whether the Nevada Mining Association could be added to the list, and possibly getting assistance from the STEM Advisory Council's Evaluation subcommittee. Mr. Mitchell said, as previously pointed out, the ISLE subcommittee is a bit over-represented in environmental or outdoors education, but with the inclusion of some of the museums in the area that are undertaking STEM education, not necessarily environmentally focused, could also be a component.

Mr. Mitchell said if the subcommittee feels everyone possible is already on this list, the subcommittee should make it a complete and final list. Co-chair Leifheit agreed the list is mostly complete with very little follow up needed. He said with the assistance of Mr. Mitchell following up with WCSD and Mr. Hill following up with the Nevada Museum's Association, it should be complete. Co-chair Page said she will contact Cheryl Wagner at the STEM Advisory Council's Community Partnership subcommittee, who may know of some additional organizations to add to the list.

## **2) Needs Assessment**

Mr. Mitchell pointed out that a needs assessment survey is not necessarily a random vote with only opinions on a subject, but rather a gauge this subcommittee can use to determine how and where to be helpful in providing their practices and resources to informal STEM educators across the state. Co-chair Page has been working on a draft survey based on the STEMworks CTE design principal's rubric, which will be sent out to all members of the subcommittee for review. Co-chair Leifheit said this (developing) draft ties into the overarching principal questions within the rubric. The group had a discussion on self-reporting and its accuracy. Co-chair Leifheit mentioned the latest draft of the survey takes specific samples and evidence from the over-arching principals and helps to determine whether they are being developed. He discussed other elements and specific models used within the survey questions. He added he believes this latest draft will help the subcommittee to key into the specific topics by being very clear and defined, hopefully promoting people to be more truthful, and thereby making the assessment more accurate.

Mr. Mitchell agreed this is a good direction to go, as it may provide more specific feedback. He said the goal of the survey is to define areas where a program is weak or strong, then use

that information to provide assistance in the weakest areas. He added he does agree that surveys should be short in order to keep the results very high. Co-chair Leifheit said he feels once the draft is complete it can be refined to a much shorter version and suggested the subcommittee may require assistance from the STEM Advisory Council's Survey subcommittee to review the final survey. Mr. Mitchell suggested that upon circulation of the document to each member of the subcommittee, everyone can assist in paring down the amount of questions by identifying the most relevant and important question for each overarching principal, which will help to narrow down the survey. The group agreed and suggested getting the document down to 20 or 25 questions.

**VII. Discussion on ISLE Member Recruitment (For possible action)**

Aaron Leifheit – Co-chair

Amy Page – Co-chair

Co-chair Leifheit stressed the importance of the subcommittee to include several more active people as members who are willing to take on some of ISLE's workload. Co-chair Page pointed out that all suggested new members from the subcommittee are welcome. Mr. Mitchell asked whether the group is looking more for informal provider committee members or for providers who are not informal educators. Co-Chair Leifheit suggested individuals from a school district would be ideal. He said he recently spoke with ISLE subcommittee member, Kris Carroll, with the Clark County School District (CCSD), who expressed his interest in staying in the subcommittee, but that he was unable to devote his full time. Mr. Mitchell commented that another member from CCSD, Judy Kraus, has had difficulty making the subcommittee meetings due to meeting times. He pointed out that school teachers are typically not available until after school hours, approximately 3:30 p.m. Mr. Mitchell said he may know of several STEM teachers interested in joining the subcommittee who are not informal educators.

Co-chair Page asked if there is a formal process for new members to join the subcommittee. Mr. Mitchell responded there is no formal protocol. He said as long as all members of the subcommittee agree, and there is no overwhelming objection for any particular person to join. He added that new members can be added by informing the OSIT office and those individuals will be added to the subcommittee email list and members roll-call. Mr. Hill said he knows of two people he would like to invite, one from the Discovery Museum and one from the Nevada Outdoor School in Winnemucca. Mr. Hart said he would also like to invite the Program Director of Nevada Outdoor School in Elko. The group agreed.

**VIII. Consider Agenda Items for the Next Meeting (For possible action)**

Aaron Leifheit – Co-chair

Amy Page – Co-chair

Co-chair Leifheit asked for any suggestions to be considered for the next ISLE meeting agenda. Co-Chair Page suggested an approval of the draft Needs Assessment Survey, which should be completed by the next meeting. Co-chair Leifheit proposed an item to include the approval of the finalized database list of contacts the survey will be sent to. Co-chair Page pointed out the survey still requires context and asked for any volunteers to assist with the draft, which will hopefully give participants the incentive to take the survey. Mr. Mitchell commented on a previous survey sent to teachers, which included a brief paragraph of

context at the beginning of the survey stating; “who they are,” and “what they are looking at doing with the information.” He added that OSIT will be happy to send out the survey on behalf the ISLE subcommittee.

Co-chair Leifheit said another item to consider is whether the subcommittee should entertain the idea of having a prize or gift for filling out the survey, possibly a gift certificate. There was discussion of budget and other gift ideas. Mr. Mitchell suggested another item for consideration would be a discussion on other uses of ISLE’s Informal STEM Educators and Programs list. He pointed out the list could be used for the purpose of getting the word out on upcoming events within the broader informal STEM community and on the important platforms ISLE subcommittee members and their individual organizations are working on. There was discussion on the value of the list and its uses that would be beneficial to the State. Co-Chair Leifheit suggested the next ISLE subcommittee meeting should be in mid-November 2018 and he would send a Doodle Poll.

**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 Leifheit adjourned the meeting at 1:58 p.m.