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Brian L. Mitchell
Director

PUBLIC MEETING MINUTES

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

Date and Time of Meeting: Wednesday, July 11, 2018 @ 1:30 PM

Place of Meeting: Get Outdoors Nevada
919 East Bonneville Ave, Ste 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 1:32 P.M. on July 11, 2018, on the above conference call. He will be running the meeting today.

Members Present

Aaron Leifheit
Amy Page
Andy Hart
Sean Hill
Jessica Snaman

Members Absent

Craig Rosen
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 that today the subcommittee may possibly vote on the adoption of the STEMworks rubric as ISLE's best practices, as proposed at the last meeting. He said the ISLE logic model, which is the subcommittee's work plan, may be adopted today as well. He said the topic of new members will also be discussed. Mr. Mitchell introduced Tracey Gaffney, the new STEM Program Manager for the Governor's Office of Science, Innovation and Technology (OSIT). He said she comes to us from the Washoe County School District where she was a STEM Coach and STEM coordinator.

IV. Approval of the Minutes from the May 31, 2018, ISLE Meeting (For possible action)

Aaron Leifheit – Co-Chair

Amy Page – Co-Chair

Chair Leifheit asked if there were any corrections to the May 31, 2018 Minutes as written. None were made. Amy Page made a motion to approve the Minutes of May 31, 2018, as written. Sean Hill seconded the motion. The motion passed unanimously.

V. Overview of Best Practices and Possible Vote to Adopt STEMworks Change the Equation (CTE) Rubric (For possible action)

Aaron Leifheit – Co-Chair

Jessica Snaman

Ms. Snaman gave an overview of ISLE's best practices from the last meeting. She said by looking at ISLE's white paper she was able to identify key words and phrases that outlined high-level informal STEM education, then compared those to the STEMworks CTE rubric. She said she felt the two were not dissimilar enough to start from scratch with an entirely new document creating ISLE's best practices. She recommended the CTE rubric outlining best practices and STEM learning be applied to informal learning. Co-Chair Leifheit said the rubric they are proposing would not be to create a new rubric, but rather adopt the STEMworks CTE rubric as ISLE's Best Practices. Mr. Mitchell agreed that is a good idea. He said many of the programs in the National STEMworks database are informal programs and would work well there. He commented that the STEMworks subcommittee added a couple of Nevada-specific questions to the CTE rubric so that in addition to meeting CTE's rubric, potential programs would also have to meet those Nevada-specific questions. He said the Nevada-specific questions referenced English-language learners, the ability of the program to work in both an urban and rural area, real-world applicability of what was learned and careers. Co-Chair Leifheit asked for suggestions and whether the group was prepared to adopt the STEMworks CTE rubric as ISLE's Best Practices. He pointed out this would be in

lieu of creating a new document, using the STEMworks CTE rubric to adopt those programs advocating for informal STEM learning best practices in Nevada.

Co-Chair Leifheit asked whether the group felt they should include Nevada-specific questions. Mr. Mitchell clarified that by including Nevada-specific questions, in order to get on the Nevada-recommended STEM programs list, a program would have to meet the standards established by both the STEMworks rubric, as well as the Nevada-specific additional questions. He pointed out in the Nevada-specific rubric there are two questions that every program had to answer which revolved around special populations and career applicability, along with three or four optional questions. He said through collaboration with the STEM Advisory Council's STEMworks subcommittee, ISLE could suggest an informal STEM education question as an optional question for informal programs. He said at this time the group can adopt the STEMworks program that Nevada is currently using, which is a combination of the CTE rubric and the Nevada-specific questions that have been added. He said if the subcommittee would like to suggest an additional informal STEM question be added, he believes it would be very welcome. He added he will send a copy of the current additional Nevada-specific questions to the group for their review.

Chair Leifheit asked whether the group was comfortable in going forward with adopting the STEMworks CTE rubric in lieu of creating a new document, as ISLE's Best Practices for Informal Learning in Nevada and then having further discussion on additional informal education-specific questions at the next meeting. Mr. Hill agreed and clarified that the motion is to adopt the Nevada version of the STEMworks CTE rubric, which already has a couple of Nevada-based questions, as ISLE's Best Practices for Informal Learning in Nevada. It was unanimously agreed in favor to adopt The STEMworks CTE rubric in lieu of creating a new document, as ISLE's Best Practices for Informal Learning in Nevada. None were opposed.

Chair Leifheit suggested that a discussion on the addition of Nevada-specific informal STEM education questions be included in the Nevada-specific rubric at the next ISLE meeting. Mr. Mitchell said the end of August 2018 is the target to have another solicitation for STEMworks and pointed out he could definitely add another question by that time. He suggested that ISLE have another meeting prior to the end of August 2018 for the group to further discuss this item.

VI. Update of ISLE's Logic Model and Possible Vote for Adoption (For possible action)

Aaron Leifheit – Co-Chair
Sean Hill

Co-Chair Leifheit gave an update on ISLE's logic model and suggested a possible vote on the outputs of the logic model, which would become ISLE's work plan over the next two years. He pointed out the logic model is meant to be an agreement between all members of the subcommittee on what these tasks will include and what they will accomplish.

Mr. Hill gave an overview on the logic model's outputs. He said these are the actual activities developing with the contacts of informal STEM education (ISE) providers, as well as designing and getting out a needs assessment survey by identifying the needs and strengths of our fellow providers in Nevada, by focusing on curating a list of resources to address those

needs. He said item 5 discusses creating the rubric for informal educators by creating a regional set of standards they agree to adhere to, relevant to shared priorities, which has been done here today with the adoption of the STEMworks CTE rubric. He said item 6 pertains to coordinating committee efforts between statewide groups to include Connecting Hands Offering Lifelong Learning Adventures (CHOLLA) in Southern Nevada and GREENevada in Northern Nevada.

Co-Chair Leifheit asked the subcommittee for any additional comments or suggestions on ISLE's logic model. There were none. Co-Chair Leifheit ask all in favor of adopting ISLE's logic model as presented today. It was unanimously agreed in favor to adopt the ISLE logic model as presented. None were opposed.

Mr. Mitchell commented that all the listed outputs on the ISLE logic model will benefit all informal STEM education providers in the state. He recommend the subcommittee collaborate with another subcommittee of the STEM Advisory Council, the Survey subcommittee, in conducting output number 2 of the ISLE logic model, "Develop and disseminate a needs assessment survey for ISE providers and recipients in Nevada with respect to the proficiency's identified in STEMworks CTE rubric. He said the Survey subcommittee will be able to assist in disseminating information and putting together an analysis of the results. He pointed out the STEMhub website can also be used for creating and curating resources based on the needs identified in the survey. He said as resources are created, meeting the definition of the high quality resource, they can be added to the STEMhub website. He added that OSIT can also assist in helping to create ISE resources.

VII. Discussion on Upcoming Strategies for ISLE (For information only)

Aaron Leifheit – Co-Chair

Amy Page – Co-Chair

Co-Chair Leifheit said, for upcoming ISLE strategies, it is necessary that timelines be established for each output of the logic model by possibly designating break-out groups to work on different items. He said the first output, creating a contact list of ISE providers in Nevada, would greatly assist the subcommittee with the details with a contact person from each of those organizations. It was suggested to develop a master document in Google Docs to be share with all members of the subcommittee, giving each an opportunity to add information. Co-Chair Page agreed to be the lead person for completing the Google Doc and then distributing it to all members allowing them to populate it with information. She added the contact information on the Google Doc will require a name, title and email.

Co-Chair Leifheit said the second output of the logic model, "Develop and Disseminate a needs assessment survey..." actually consists of two parts. He said one is a survey for ISE providers of programs, and the second is a survey for recipients of programs. Mr. Hill suggested preparing a survey based off of the STEMworks CTE rubric, which could then be used to identify strengths and weaknesses in the state and providing a place to begin the development of resources. Mr. Mitchell agreed it would be a good idea to survey the program recipients as well and asked whether the main recipients of the surveys will be schools. Co-Chair Leifheit responded that recipients of these survey will mainly be school districts in Nevada. Mr. Mitchell said he believes that OSIT can assist in getting ISLE's survey out to schools, and may even consider combining ISLE's survey with an existing

survey already in the pipeline, thereby limiting the number of surveys being sent out. He suggested that he and Co-Chair Leifheit have a separate discussion once ISLE has decided on the survey information the group is requiring.

Co-Chair Leifheit said with this survey, ISLE will be able to use the information for fund raising, in particular with grants because they are often based on findings from statewide surveys. He asked if any ISLE member would be interested in taking the lead on this item and preparing draft surveys. Mr. Hart suggested that expertise may be required on this item. Mr. Mitchell suggested another meeting, making the survey a topic for the subcommittee, as a whole, and he will invite the Survey subcommittee to that meeting specific to this one item. Co-Chair Page suggested a timeframe on this item be a meeting by September 2018 and a completion date by January 2019. Co-Chair Leifheit pointed out this item will be the most important item that ISLE will be working on for possibly the next nine months. He said the surveys will have to be developed, be implemented by sending them out, the results collected and then analyzed. Co-Chair Page suggested waiting to make a deadline until they get an opinion from the Survey subcommittee. Mr. Mitchell suggested having another ISLE subcommittee meeting in either September or October 2018, once the list of contacts from ISE providers in Nevada is received. The group agreed to this timeline.

Co-Chair Leifheit suggested the group concentrate on items 1 and 2 on the logic model outputs before beginning work on items 3, 4, 5 and 6. The group agreed.

VIII. Discussion on ISLE Member Recruitment (For information only)

Aaron Leifheit – Co-Chair

Amy Page – Co-Chair

Co-Chair Leifheit said the idea of ISLE member recruitment for the group is to assure the subcommittee has appropriate committee members, for example, by increasing school district personnel participation, especially when preparing a survey for school districts. There was group discussion on different school district personnel. Mr. Mitchell suggested inviting others members from GREENevada. Mr. Hill asked how many new members the group is looking to add. Co-Chair Leifheit replied he believes a smaller, concentrated group is more effective than a larger group, and suggested no more than five new members. Co-chair Page suggested waiting for the results of the survey, as it may indicate more of what the upcoming needs will be for the subcommittee. Mr. Mitchell said he is aware of several school district individuals who have expressed an interest in joining a STEM Advisory Council subcommittee and offered to reach out to them. He asked that information on the position be sent to him and he could forward to those potential members. He said perhaps an individual from Northern Nevada, Southern Nevada and rural Nevada would be ideal. The group agreed. Co-Chair Leifheit offered to email Mr. Mitchell and Mr. Hart the ISLE new membership information requested, and said he will also reach out to Kristoffer Carroll, who is not present today, for additional membership suggestions.

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

Aaron Leifheit – Co-Chair

Amy Page – Co-Chair

Mr. Mitchell said the group could meet in the next 3 or 4 weeks to develop an informal question to be included in the STEMworks solicitation, which would not necessarily need to be a formal meeting, but could be done by sharing ideas with each other via email. He suggested the following meeting in September or October 2018, could then be focused on the survey. He added the Survey subcommittee would also be invited to that meeting. Co-Chair Leifheit said an update on membership recruitment could also be added. The group agreed.

X. Next Meeting Date Will be Determined at this Meeting (For possible action)

Aaron Leifheit – Co-Chair

Amy Page – Co-Chair

Co-Chair Leifheit suggested the next meeting be in either September or October 2018. Mr. Mitchell suggested sending out a calendar poll to each member to select the next meeting date. Co-Chair Leifheit agreed and will send it out. Mr. Mitchell suggested that to expect members who are teachers to attend these meetings, they would have to be conducted at 4:00 p.m., which would be after school hours.

XI. 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.

XII. Adjournment

Co-Chair Leifheit adjourned the meeting at 2:31 P.M.