

STATE OF NEVADA

GOVERNOR'S OFFICE OF SCIENCE, INNOVATION & TECHNOLOGY

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PUBLIC MEETING MINUTES

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

Date and Time of Meeting: Tuesday, July 27, 2021 at 1:00 pm

Place of Meeting: Per the Declaration of Emergency Directive 006 Section 1, the requirement contained in NRS 241.023(1)(b) that there be a physical location designated for meetings of public bodies where members of the public are permitted to attend and participate is suspended.

Members of the public may submit public comment by logging into the ZOOM webinar by accessing the following link: Join Zoom Meeting https://us02web.zoom.us/j/83954466396?pwd=TklyZG5mcDF4c2pCdGVQbGxlT0MwZz09

Meeting ID: 839 5446 6396

Passcode: 578089

To submit public participation or to participate in an agenda item or for supporting material submissions, email Debra Petrelli at dpetrelli@gov.nv.gov or by calling 775-687-0987 at least 24 hours in advance of the meeting.

1. Call to Order / Roll Call

Tracey Howard

Informal STEM Learning Environments (ISLE) subcommittee was called to order by Tracey Howard at 1:00 P.M. on July 27, 2021, at the above meeting. She will be running the meeting today.

Members Present
Caitlin Aitchison
Judy Kraus
Kristoffer Carroll
Mauricia Baca
Nancy Maldonado
Sean Hill
Members Absent
Aaron Leifheit

Amy Page Craig Rosen Tracey Howard Leigh Metcalf Debra Petrelli

Staff Present

Guests Present Katie Wade-Jaimes, Ph.D.

A quorum was declared.

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.) Tracey Howard

There was no public comment.

3. Welcoming Remarks and Announcements (For information only)

Tracey Howard

Mrs. Howard welcomed everyone. She had no announcements.

4. Approval of the Minutes from the May 18, 2021 ISLE Subcommittee Meeting (For possible action)

Tracey Howard

Mrs. Howard asked if there are any changes or corrections to the May 18, 2021 Minutes as written. None were made. Mrs. Howard asked for a motion. Ms. Maldonado made a motion to approve the May 18, 2021 Minutes as written. Mr. Carroll seconded the motion. The motion passed unanimously.

5. Discussion on the Informal STEM Program Evaluation Toolkit: Content & Design (For possible action)

Tracey Howard

Mrs. Howard said the purpose of today's meeting is to discuss the evaluation toolkit which the group began creating this summer. Since May, she added she met one-on-one with each member for individual expertise on the different evaluation topics. She said the initial accumulated information has now been compiled. She suggested further discussions today on the design, content, and next steps, with the hope of getting the toolkit out to the public within the next two months. She asked for a brief introduction from each member present today to confirm information as listed on the "Members" page.

Caitlin Aitchison – Youth Education Coordinator for Keep Truckee Meadows Beautiful (KTMB), which is a nonprofit dedicated to creating a more sustainable and beautiful region through waste reduction, education, and active community involvement by going into the classroom.

Judy Kraus- Middle school math/science teacher at Hyde Park Middle School in Las Vegas.

Kristoffer Carroll, CID - Secondary Coordinator for CCSD in the Curriculum and Instruction Division.

Mauricia Baca- State Director of The Nature Conservancy, Nevada Chapter.

Nancy Maldonado, VP of Education at PBS Reno. She said they are doing outreach in schools across Northern Nevada and Northeastern California with Ready-To-Learn workshops, which are STEM literacy-based for pre-school through 4th grade.

Sean Hill, Education Director at Sierra Nevada Journeys, which is an education non-profit based in Northern Nevada with a focus on outdoor education, specifically STEM-based, natural systems-based education, and have social-emotional development within their programming.

Mrs. Howard introduced a guest, Katie Wade-Jaimes who is an Assistant Professor of STEM Education at UNLV. She added that Ms. Wade-Jaimes has expertise with informal evaluation and STEM identity and has helped to provide much of the content within the toolkit. Ms. Wade-Jaimes said her research focuses on STEM Identity and she looks at cross context from informal to formal learning, and connections across barriers of STEM learning opportunities and context.

Mrs. Howard introduced Leigh Metcalf who is new to the OSIT office and will be the new STEM Program Manager. She was previously a science and career tech teacher for the last 13 years in WCSD and is looking forward to transitioning into her new role at OSIT.

Mrs. Howard shared a view of the draft toolkit titled 'Informal STEM Evaluation Guide,' and asked the group if it appears to be going in the right direction. Mr. Hill commented it appears to be a useful tool for our purpose. Mrs. Howard discussed the process of getting to this point. She said the document begins with a flowchart that was discussed and reviewed at the last subcommittee meeting in May. She pointed out the layout of the flowchart consists of different levels and the idea is for the reader to be allowed to click on an item which takes them to the information on that topic found within the document. She said the table of contents will also contain linkable topics, taking the reader to each specific topic within the document. She said at the end of the document under References, Definitions, and Resources, links can also be provided.

Mrs. Howard pointed out that within each section of the document there is a description of that component along with resources. She pointed out the STEM content section starts out with a brief introduction then lists qualities of STEM content in the program, and lastly, items that would be evaluated, all of which are linked to different useful tools. Ms. Maldonado commented that she was not a part of the initial decision-making in this process, but believes the outcome today appears to be a very comprehensive tool and incorporates a lot of information which will be helpful in the evaluation process. Ms. Baca agreed this is a helpful guide on the concept of evaluation and helping people to understand why evaluation is important and give pointers as it takes readers down the path of understanding the process of setting up their own evaluation. Mr. Carroll said he believes the document is more robust than he expected but appreciates that it contains a variety of topics to choose from and have access with directions to follow. Mrs. Howard pointed out that with the amount of knowledge and information contributed by each member of this subcommittee during her one-on-one meetings this document did grow in size. She pointed out that each section of the document provides a high-level overview and from there allows the reader a variety of links to connect with additional research topics.

Mrs. Howard asked about the layout of the document, specifically the table of contents and whether that organization of information makes sense, or whether anything is missing. She added that the table of contents is based on the flowchart. Ms. Aitchison said she liked that everything is included from the flowchart and commented on the links making navigation

much easier for the reader. She asked if there will be links within the Appendix as well for ease of use. Ms. Kraus agreed and said she believes the flowchart will get a lot of use. Mrs. Howard said it is a good idea to link the Appendix back into the document.

Mrs. Howard referred the group to "Message from the Committee," and asked if they felt it was necessary to the document. She said if it is included, she believes a letter from the subcommittee outlining why the toolkit was created and how it was imagined to be used. She asked whether anyone would be interested in writing this letter, then send it to other members for feedback. She also invited members to share vignettes that would be appropriate for the toolkit. She referred to a vignette shared by Ms. Maldonado which included a couple of paragraphs about an evaluation that her organization had done including data from the evaluation and lessons learned. She added it may be helpful for readers to see what this document is referring to via vignettes. She then referred the group to the next five sections and asked for volunteers for each section to make revisions, (i.e. content, grammar, and clarity) within its pages. She added that once these revisions are made, she can consolidate everything to a final draft and send out to all members for input and final feedback. She said the hope is to publish the final document by late September or first week of October 2021.

Mrs. Howard suggested a section on qualitative vs. quantitative, which may not necessarily be the same layout as other sections. She said that section may be more standalone to include "More Information," or "FYI" discussing the differences between the two. Ms. Maldonado suggested they should invite contributors on these topics to be guest speakers to the group and share their information publicly. She suggested a resource giving information and/or a summary of what that type of research might look like as well. Ms. Wade-Jaimes said some of the tools being provided could very well be used in a quantitative setting and believes having a standalone section on how to use these tools might be useful. Mr. Hill said perhaps it would be helpful for SNJ to do a vignette about their community needs assessment. He added that in looking at this document there is a Cultural Relevance section within Program Evaluation and pointed out this could be a good place to add that information since SNJ's community needs assessment was equity/cultural relevance centered.

Ms. Maldonado said when she and Mrs. Howard discussed vignettes it was more of an example of a learning tool, for instance in her case study she learned many things not to do as well as what to do. She explained she does not want to share that case study/vignette as "the best or only answer," especially since that was her first attempt into evaluation and since that time has learned a lot more, mostly by just forging ahead and talking to different people. She said she would really like to express there is not only one right way or answer, and that answer may not even be found in a first evaluation, however, other ideas/information can be learned through it. She suggested having that preface prior to her vignette to put it into perspective. Mrs. Howard agreed that providing a section title or header that gives more introduction to Ms. Maldonado's vignette on behalf of PBS, to highlight the "lessons learned."

Mrs. Howard referring to the section "Cultural Relevance" asked Ms. Aitchison whether KTMB would be interested in adding a vignette in this location. Ms. Aitchison responded she would be happy to do a KTMB vignette, since they are currently making improvements to their summer lessons and evaluating how they can be as culturally responsive as possible. She added she would also be happy to be on a program level revision team. Mrs. Howard said for the "Community Needs" vignette, she is also happy to accept a vignette from Mr.

Hill on behalf of SNJ. She added that she believes KTMB and SNJ both in that section would benefit the reader. She added that the "Community Needs Assessment" could also fall into the "Needs Assessment" section as a sort of a culturally responsive perspective on needs assessments. Mr. Hill agreed to draft a vignette and see where it would best fit. Mrs. Howard asked for volunteers for a message from the committee saying why this toolkit is important, why this project was worked on, key attributes of evaluation, and how to use the toolkit. Mr. Hill volunteered.

Mrs. Howard requested volunteers for the revisions on pages 1-5 to include title page, contributors, table of contents and flowchart. She also requested volunteers for pages 6-10; why, scope, needs assessment, and organization evaluation.

Ms. Baca volunteered to do a read-through for content and flow, perhaps pages 6-10 on why evaluate. Ms. Maldonado volunteered for the participant level. Ms. Wade-Jaimes. volunteered to look over participant or ecosystem level, or any other area needed. Mrs. Howard requested her eyes on the participant level and said it would be most beneficial. Ms. Kraus volunteered to proofread for clarity and punctuation where needed. Mrs. Howard suggested the front matter, pages 1 through 5, to check links which will be added to final draft. Mr. Carroll, referring to the Cultural Relevance piece, said he would like to interweave 2 articles into that section. Mrs. Howard asked that anyone wanting to contribute on either program level or participant level to feel free to have discussions with each other and share information. Mr. Carroll asked for clarification that all information is due in late August. Mrs. Howard suggested a due date of August 27, 2021. She said if she receives everything by August 27th, she can have a final draft out by September 10, 2021 for everyone to take a final look and send feedback. She added that the publish date will be October 1, 2021. She added from there the subcommittee can spread the word to get this tool in the hands of programs throughout the state.

Mr. Hill asked whether a vignette was coming from First on the ecosystem level. Mrs. Howard replied yes, and said she has a meeting set up with First in the next couple of weeks. She added that OSIT can address this topic as well.

6. ISLE Subcommittee Member General Announcements (For information only) Tracey Howard

Mr. Hill said Sierra Nevada Journeys is just wrapping up a project that was partially funded by the STEM Networks around the community needs assessment conducted in Northwestern Nevada and will be sharing a version of that work with OSIT and would be happy to share it with the rest of this team as well. He said they interviewed teachers, students, community-based organizations in an effort to not only capture community feedback as they redesign their programs focused on equity, but also to start enabling those deeper relationships with those community partners as well. This report outlines the process and goal statement, as well as the result, analysis and what they will do with it. He pointed out it is a form of program evaluation.

7. Consider Future Agenda Items for the Next Meeting (For possible action) Tracey Howard

Mrs. Howard said it is her hope that a final draft of the evaluation tool will be complete by the next meeting and suggested an agenda item be a discussion on plans for distributing it into the community.

Mr. Carrol said it had been quite some time since he heard anything about the Informal Education Conference or gathering in Southern Nevada and asked whether there is a way of rolling it out and having versions of short sessions. Mr. Hill added that those conferences have not been happening in Northern Nevada either. He commented that the Nevada State Teachers Association (NSTA) was doing workshops for a while and conferences every year, with an occasional informal strand. Mr. Carrol responded that Southern Nevada did two different versions very similar on Friday afternoons, and said the informal on Saturdays were more classroom based and they would be adding a full strand on Saturdays of informal opportunities, like fieldtrips. He added if it happens again, the NSTA conference will most likely take place at the end of January or early February and most likely be in Southern Nevada this year. Mrs. Howard suggested adding this item on the next meeting agenda to discuss strategies and opportunities.

8. 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.) Tracey Howard

There was no public comment.

9. Adjournment

Tracey Howard

Mrs. Howard adjourned the meeting at 2:00 p.m.