





Swinomish Indian Tribal Community: Developing an Informal Environmental Health Education Model

Summative Evaluation Report

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Executive Summary

In 2015, the Swinomish Indian Tribal Community (SITC) received a two-year NSF-AISL Pathways Grant (#1516742) entitled "Developing an Informal Environmental Health Education Model in Tribal Communities," designed to develop a process model and curriculum for community-based environmental health outreach, grounded in cultural values and practices. The project deliverables included a curriculum and guiding document, intended to inform and inspire other tribal communities wishing to create a culture-based environmental or public health curriculum. Native Pathways and the Lifelong Learning Group (COSI) were engaged to conduct formative and summative evaluation in support of the project's pathway. This executive summary is intended to share key findings and recommendations based on the collaborative evaluation process.

Key Findings

1) To what extent and in what ways does the traditional foods framework engage public audiences and community members in learning around environmental health and community health?

The traditional foods framework developed through the 13 Moons project was successful in engaging community members in healthful practices through a culturally-based lens. Community members experience the 13 Moons programming as a positive time for connecting and sharing time with family and community, which reflects one of the Coast Salish Community Health Indicators, or Community Connection (Campbell and Donatuto, 2015), and serves as a foundation for shared learning. Community members are also drawn to the 13 Moons programs due to their focus on traditional cultural practices and knowledge – particularly through the Medicine of the Trees workshops -- which participants see as an important component of cultural continuance, and represent another indicator of community health in Coast Salish cultures, or Cultural Practices (Campbell and Donatuto, 2015). Evaluation showed that the indigenous health indicator of Balance - which includes resilience, sense of place and identity - is also addressed by the 13 moons program, particularly through the Clam Bake activities, in which connection to place and cultural identity were frequently mentioned as positive outcomes of participation. An area for strengthening engagement in community-based health is through **Intergenerational Education**; while this transfer of knowledge between elders and youth occurred to some extent, participants typically rated these areas lower, and qualitative data suggest that accessing the knowledge of elders and engaging more youth in the 13 Moons program would strengthen the program's pathway.

2) What are the key processes, components, and guiding principles that best support the development of a local-based, tribal-specific community-based environmental health (CBEH) framework?

A series of best practices emerged from the pilot phase of the 13 Moons curriculum. First, the project team found success in **building off existing events** that have been well-attended and well-received by the community, rather than attempting to create something new. For example, including health programming at the Clam Bake and at community dinners allows the team to meet people within the community landscape, where community members are already gathering. This models an important best practice of going out into the community rather than expecting community members to come to them. The team also **involved local individuals** in facilitating evaluation to provide a safe space for including participant voice, and **used community-based**

resources to develop and strengthen their own framework (e.g. using the culturally-based 13 moons as the foundation for the CBEH curriculum). The team collaborated significantly with community members to help develop the framework and obtained **input and guidance from tribal elders**, which has been one of their main priorities, to make sure they are in line with cultural values. This is an extremely important process that has allowed the project to be **inclusive of community voice**, and thus reflects a program created *with* community rather than *for* community.

3) What are appropriate and valuable project outcomes from a community-based perspective?

Qualitative data suggest that community members hope the 13 Moons program will continue to engage the community, particularly youth, in traditional knowledge and practices to support cultural perpetuity. This includes less focus on technology and social media and more engagement with the land, with elders, and inclusive of community values. The intentions of the 13 Moons curriculum align well with what community members hope to see emerge from the program, grounded in community benefits and impacts. These center on the areas of **sustaining healthy cultural practices, intergenerational learning**, and **community connection**.

Recommendations

Based on participant feedback and evaluator review of curriculum materials, the evaluation team makes the following recommendations for strengthening the project pathway:

- Involving tribal elders more as facilitators or educators for the programming, such as through sharing knowledge and cultural stories as appropriate. This would honor Indigenous perspectives around intergenerational learning as well as better support the intended project outcome of *Increasing youth interest and engagement with elders and traditional practices*. In addition, engagement of elders would support a transfer of knowledge around what it means to have a healthy community from a culturally-based lens.
- Identifying places for highlighting the science embedded in Indigenous traditional knowledge. The 13 Moons curriculum offers multiple places for emphasizing scientific concepts and processes embedded in Indigenous ways of knowing. This is not to value one system over another but to make greater links and amplify the connection between Indigenous knowledge and western science, particularly in support of the intended outcome of *Increasing youth interest in STEM fields and careers.*
- Continuing to build on existing community events, as well as build partnerships with groups seeking similar goals. During the pilot phase of the 13 Moons program, the team was successful in engaging community members through traditional and existing events, such as the Clam Bake. Collaborating with traditional language programs, such as the Lushootseed program, also provides an opportunity for aligning goals around engaging youth in traditional cultural practices through amplifying traditional language.
- Being more intentional in developing a communication plan that uses diverse strategies to reach a broader range of community members. One of the strongest themes to emerge out of community member interviews was the need for greater communication about the 13 Moons program. In order to reach a broader range of community members, diverse strategies may be needed. For example, social media avenues

may work well for the younger populations, while elders and more traditional community members may still prefer a personal visit (e.g., going door-to-door).

• **Revisiting the stated project outcomes** and reflecting on whether these still capture the overall aims and intent of the project before moving into the full implementation phase would be helpful for the team at this stage. Since this is a pathways (exploratory) project, there is room to revise the outcome statements and make changes based on the learning that has emerged through the pilot phase.

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Introduction

In 2015, the Swinomish Indian Tribal Community (SITC) received a two-year NSF-AISL Pathways Grant (#1516742) entitled "Developing an Informal Environmental Health Education Model in Tribal Communities," designed to develop a process model and curriculum for community-based environmental health outreach, grounded in cultural values and practices. The project deliverables included a curriculum and guiding document, intended to inform and inspire other tribal communities wishing to create a culture-based environmental or public health curriculum. Through a logic model process, the team developed the following intended outcomes, which were used to guide the evaluation process:

- Increased opportunity for informal EH learning through a cultural lens
- Increased awareness and understanding of environmental health in the Swinomish community
- Gain a deeper understanding of a healthy community that encompasses physical, mental, spiritual, and environmental health
- Increased interest or motivation to implement healthy lifestyles, traditional practices and harvesting
- Increased youth interest and engagement with elders, traditional practices
- Increased youth interest in STEM fields and careers

SITC contracted the Lifelong Learning Group and Native Pathways to conduct formative and summative evaluation in support of their Community Based Environmental health (CBEH) framework. This cross-cultural evaluation team brings together best practices from both Indigenous and conventional evaluation in informal learning and museum settings, and utilized multiple cultural lenses to inform the evaluation plan, instrument design, data collection approaches, and analysis process, in a culturally responsive way. Based on conversations with the project team and the intention of the grant, the evaluation team focused on answering the following questions:

- 1) To what extent and in what ways does the traditional foods framework engage public audiences and community members in learning around environmental health and community health?
- 2) What are the key processes, components, and guiding principles that best support the development of a local-based, tribal-specific CBEH framework?
- 3) What are appropriate and valuable project outcomes from a community-based perspective?

Methods

To answer the evaluation questions, multiple methods were utilized, including: 1) Written Questionnaires; 2) Thematic Wall of Impacts; 3) Observations; 4) Educator and Elder Interviews; 5) Team Reflections; and 6) Document Review.

Written Questionnaires

The written questionnaire included both open-ended questions and scaled items in order to paint a rich, multi-dimensional picture of participants' experiences. Questions focused on satisfaction with the program, outcomes or take-aways, and suggestions for improvement. After each program, an educator or facilitator invited participants to provide feedback on their experience. The educator/facilitator let participants know that the survey was completely voluntary and optional, and that the information would be used to strengthen future programs and to share impacts with the tribe, the project team, and the funder. No personal or identifying information was collected. The completed questionnaires were entered into an SPSS 24.0 database and analyzed using basic frequencies for numerical data and content analysis for the qualitative data.

Thematic Wall of Impacts

Where possible and appropriate, the program facilitator led participants in an interactive activity to document feedback on the program's impacts. Several impact statements were provided in the protocol, which were written on large poster paper or a white board. Participants were given stickers or post-it notes with numbers 1-7 (or however many statements were being used), and asked to rank the statements with 1 representing the strongest impact of the program and 7 representing the weakest impact of the program. The facilitator then led a discussion around why the participants rated the statements the way they did, what supported certain impacts more than others, and so on. The ranking data were entered into an Excel database and analyzed using basic descriptives for the numerical data and content analysis for the qualitative data.

Observations

In order to help document certain aspects of each event, including demographics and participant engagement, the project team or data collector completed an observation form after each event. Documentation areas included who attended and how many, the extent to which participants were engaged in the activity and what seemed to engage them most/least, the nature of the conversations and any notable comments from participants, as well as ideas for improving the program.

Educator and Elder Interviews

After each program (within a week or so), a project team member gathered input from the educators, invited elders or knowledge holders, and any other project team members involved. Responses were recorded by hand or typed up on a computer or laptop, whichever was most convenient. Questions were all open-ended and focused on the educator or elder's observations of the event, participant engagement, strengths of the program, alignment with intended outcomes, and areas for improvement. Notes were then entered into a Word document and analyzed using a broad content analysis to identify key themes.

Team Reflections

At key points during the project), the evaluation team facilitated a group conversation to reflect on project progress, successes, lessons learned, and future directions. These were conducted by phone or in person (at the annual project meeting); the conversations lasted about 60 minutes and were

audio recorded. Audio files were then transcribed into a Word document, and a content analysis was used to extract main patterns and themes.

Curriculum Review

The evaluation team reviewed the 13 moons curriculum and provided written and verbal feedback to the project team. This feedback focused on the extent to which the activities seemed to align with intended outcomes of the project, as well as areas of usability and clarity of activities. This feedback was shared with the project team via teleconference.

Results

Results of the evaluation are shared based on the three main evaluation questions. In keeping with the project's emphasis on honoring both Indigenous knowledge and environmental science, results are first shared through story, and then through supporting data from the observations, interviews, and written questionnaires.

To what extent and in what ways does the traditional foods framework engage public audiences and community members in learning around environmental health and community health?

In order to answer this question, the evaluation team worked with the project team to gather data at four events (two Clam Bake activities, and two Medicines of the Tree activities), which were the first activities developed and implemented for the 13 Moons curriculum. The evaluation team also conducted community member interviews to gather input on the 13 Moons project and curriculum as a whole. This section reports results based on these three areas: 1) Clam Bake; 2) Medicine of the Trees; and 3) community member interviews.

The Clam Bake

The Story

The Clam Bake provided an environment that is reflective of traditional practices of many indigenous communities in bringing community together around a culturally significant theme. Within this space, significant knowledge is shared, transmitted, and celebrated. These activities are often times spaces where community members are reminded of the importance of carrying on cultural knowledge, traditions and language, and to a deeper level the knowledge is transferred to the next generation. Additionally, these types of activities are seen as community celebrations, filled with sharing of knowledge, food, dance and song. Food is seen as one of the most important parts of cultural survival and connections to family, community, and traditional systems. Another important aspect of these celebrations is the connection to place, and often times these celebrations are held within a culturally distinctive area where the power of place emulates and transposes its own energy to the celebration.

It's a simple but profound recipe for sustaining a healthy community; that is, community engagement in these special type of events is essential for the transfer of knowledge to the next generation, and sustainability of culture. Without these types of community practices a loss of language and culture will fill these spaces. For example, one participant in the Clam Bake

commented, "I haven't been to one of these clam bakes for about 35 years, it reminded me of when I was little." For this individual and others like them, what were the missed opportunities for engaging in transfer of knowledge and language? Now that the tribe is revitalizing these types of cultural activities through events like the clam bake, community members have opportunities to reengage in the transmission of cultural knowledge and language, which impacts cultural sustainability for a healthy community.

The Data

Written questionnaires were collected at the Clam Bake in August 2016 (n=31) and August 2017 (n=32). Demographic data were not collected during the first (pilot) event, as the project team felt that anonymous comment cards would be the most appropriate way to engage the community in evaluation for this special, traditional event. Demographics were collected at the second Clam Bake event as follows: The majority of survey respondents (81%; n=25) were female, all were adults, and about half (52%; n=18) identified as American Indian, Native Alaskan and/or Native Hawaiian.

Quantitative data shows that **intended outcomes were largely achieved** during this event. Since there were adjustments made to the written questionnaire from Year 1 to Year 2 of the project, we report here the four key statements that overlapped for both years and were built around the intended outcomes of the project. Participants rated these 4 statements from 4.3 to 5.1, out of 6, on average – suggesting that they were moderately to strongly impacted in these areas. The strongest outcome areas were around **understanding what it means to live in a healthy community** and **increased interest in cultural / traditional knowledge of the environment**. There was also the most agreement by respondents around these two statements. Data showed that **connecting to elders** was also a strong outcome of the clam bake. The outcome around **understanding of environmental issues** was rated lower than the others overall, suggesting that participants saw the clam bake event more in terms of community health and cultural tradition than in terms of environmental issues. (See Table 1).

Table 1. Outcomes Statement means for Clam Bake¹

	N	Mean (1-6)	St. Dev.
Understanding what it means to live in a healthy community	62	5.1	1.191
Understanding Swinomish culture / traditional knowledge of environment	61	5.0	1.118
Connecting with Elders	61	5.0	1.226
Understanding of environmental issues	59	4.3	1.491

To supplement the quantitative data, open-ended responses were gathered around three main areas: 1) what does this event mean to you?; 2) what was the best part of the event?; and 3) what would you change or add to improve the event? Respondents shared a variety of comments in these areas, which are summarized and shared below.

¹ There was some indication that some respondents may have misunderstood the scales, and indicated where they saw themselves in these areas rather than the extent to which the clam bake event <u>increased</u> these areas.

Because of the special nature of this event as a traditional cultural practice, the project team hoped to learn what this event meant to people who attended. Participants clearly found deep meaning in the event. The strongest themes to emerge were the **connection to traditional culture**, shared by more than half the respondents (n=26; 47%), the **connection to community** (n=20; 36%) and **connection to land or place** (n=12; 22%), as well as **traditional foods** (n=11; 20%). (See Table 2.) A few participants mentioned intergenerational learning, and a few others provided generally positive comments about the event. One difference between the two years was the extent to which community members commented on the 100th birthday celebration of Hattie Black, which was clearly impactful on many participants. Following are some representative quotes from participants from both years of the event, focused on what messages they took away from the Clam Bake event:

"Connecting back to your roots is vital. I had not been in the best spirits lately; today really lifted me up and I need to be reminded of where I came from." (2017)

"Seeing everyone together sharing food, shared the strength of the community." (2017)

"How connected we are through food, health, and community." (2017)

"Gathering, honoring, breaking bread with many relatives and friends." (2016)

"The importance of the culture and also the area." (2016)

"Bringing together the community and sharing the joys of togetherness and laughter." (2016)

"A very special time to be at one of my favorite places at Swinomish to eat and visit with friends." (2016)

"A time to gather, celebrate our way of life, be grateful for our ancestors, elders, and leaders for allowing us to be here." (2016)

"It means that our way of life and "traditional foods" are being passed down from generation to generation." (2016)

Table 2: What the Clam Bake event meant to participants (coded open-ended responses)

	Count	Percentage (n=63)
Connection to culture and history	26	47%
Connection to community	20	36%
Connection to land or place	12	22%
Traditional foods	11	20%
General / positive	4	7%
Intergenerational learning	3	6%
Other	1	2%

Totals more than 100% as multiple responses were allowed.

Participants were also invited to share what they felt was the best part of the event. These responses generally **aligned with the comments on what the event meant to participants**, suggesting that their favorite aspects were also the most meaningful. Almost half of the

respondents (n=26; 45%) suggested the **traditional foods** were the best part, sometimes mentioning specific items such as clams or fry bread. About one-third of the participants commented on the **connection to culture or history** as the best part (n=22; 38%); for the second clam bake, these comments focused on the celebration of an elder's 100th birthday. Another third of the participants (n=20; 35%) most appreciated the **connection to community** through gathering together with friends and family. Participants also greatly appreciated the **connection to land** and sense of place, with 22% (n=13) giving a response that reflected this area (See Table 3). Many of these responses also suggested a connection to family history and early childhood memories. Following are some quotes from participants to help illustrate these areas:

"Getting together, eating, sharing with co-workers & community members." (2017)

"Meeting and learning about Hattie's life" (2017)

"Listening to Addy's life journey and seeing the people connecting" (2017)

"Sharing a traditional/ healthy meal at a very special/ sacred spot with my family and community." (2016)

"Laughing with elders." (2016)

"A beautiful day of sharing and caring. Catching up with those that I don't get to see very often." (2016)

"Eating clams, enjoying the people." (2016)

"Spending time in ancestral territory, hearing old stories, reconnecting with family and friends." (2016)

"Opportunity for kids to engage with culture and history as well as environmental stewardship (filter feeder tanks in lodge to clean water were memorable...; love being on the beach!" (2016)

"The preparing of the clams and mussel and corn--it reminded me of my grandparents doing that 69 years ago in Canada. They also made sand bread." (2016)

Table 3. Best part of the Clam Bake event for participants (coded open-ended responses)

	Count	Percentage (n=63)
Traditional foods	26	45%
Connection to culture	22	38%
Connection to community	20	35%
Connection to land	13	22%
General / positive	3	5%
Intergenerational learning	1	2%
Other	1	2%

Totals more than 100% as multiple responses were included.

To help determine ways of strengthening the program, participants were invited to provide suggestions for improvement. These data are separated by year (see Table 4), as there were some specific suggestions for changes each year. For Year 1, a quarter of the participants (n=7; 25%) shared that there was nothing they would change, and 17% (n=5) provided a generally positive comment on the event, suggesting that they would not change anything. For those who did provide a response, **suggestions related to logistics were most common** (32%; n=9). This included ideas related to transportation, parking, closer bathrooms, more tents and seating, and so on. The following representative comments help illustrate this area:

"The bathrooms were not close, especially for elders with a cane or walker, hard to walk on the beach; yellow jackets were out in full force."

"Maybe start a bit later."

"Another tent for cover."

"Close-by potties for elders."

"More covered area and tables. Specifically a place for youth center kids so they are sure to hear speakers and really be a part of the work."

"Parking is hard. Not sure about a viable solution..."

"Shuttle bus from village to the beach."

"More seating and port-a-potties."

About one-fifth of responses (21.4%; n=6) related to additional or different food items. Following are a few comments from participants to help illustrate this area:

"Crab? Any shrimp? That's all. I enjoyed the whole wheat fry bread maybe make a little traditional and whole wheat option:)"

"Oysters, crab, urchins, scallops, etc."

"Everything was well planned and food was terrific."

Table 4. Suggestions for Strengthening the Clam Bake Event (coded open-ended responses)

	Year 1 (n=31)	Year 2 (n=32)
Logistics	32%	8%
Nothing	25%	57%
Additional food items	21%	0%
General / positive	18%	13%
More child friendly	4%	0%
More eco friendly	4%	0%
Other	4%	30%

Totals more than 100% as multiple responses were included.

In Year 2, more than half of the respondents (57%; n=13) indicated there was nothing they would change about the event, and another 13% (n=3) offered generally positive comments instead of a recommendation for improvement. Together, this suggests that participants were very satisfied with the experience and that the program improved from Year 1 to Year 2. Two individuals made suggestions for improvement around logistics, such as parking. Seven individuals shared comments that were coded as "other." These included suggestions such as going down to the river, recognizing all the cooks and organizers by name, having more speakers, and having more information on native history.

Educators and elders (n=6) provided additional written reflections on how they felt the Clam Bake activities went. These were focused on various activities aimed at youth, including invertebrate collection and identification, a talking circle about what a scientist looks like, decorating a lab coat, and making water filters. Educators and elders felt the youth were highly engaged in the activities, particularly the intertidal activity and lab coat decorating. For example, one educator wrote that the youth "reacted positively, especially to lab coat decorating and talking circle about what a scientist looks like, invertebrate identification, and water filters." Another wrote, "Kids were very excited about exploring the intertidal and collect(ing) invertebrates." Educators and elders also felt that there were opportunities for youth to connect to the idea of a healthy community, such as by learning about "animals that live close to their homes and why they are important." Another educator felt the stories were important: "Stories are a great way to connect with children on community and environmental health. Additionally, activities that visually demonstrate the impact of human activities on the environment help students understand the importance of a healthy ecosystem, i.e. water filters." Suggestions for improving the Clam Bake activities included having a little more history about the place and culture, adding a talk from an indigenous perspective, and having more time to do the activities.

Medicines of the Trees

The Story

Reflective of the story area from the Clam Bake activity, it is important to echo the importance of how indigenous communities continue to use significant community-based gatherings for sustaining culture and language. These are opportunities to bring community together to share and transfer knowledge, renew cultural activities that need continuity for assurance of survival and sustainability, and profoundly, to keep communities connected to the land.

Among some indigenous communities there are specific roles and learning of skills that are gender specific, and in some indigenous communities, it is the females that are defined as the caretakers of the plants. Perhaps, this is why there were more females that attended the Medicine of the Trees activities, in that there is a notion that care taking of plants is highly prized among the women of this particular community. Care taking of plants is also associated with healing and continuity of creating a healthy community and environment; when the plants are healthy and the environment in which they thrive is healthy, the result is a healthy community. Re-igniting the knowledge around the importance and sacredness of plants is critical to transferring and sustaining traditional knowledge systems. Invoking or reminding community members that they have a responsibility to care taking of plants will echo the importance to how they play a role in keeping the environment healthy. The Medicine of Trees workshop was successful at reinforcing this notion and importantly, creating a deeper interest in continuing to learn more about care taking of plants, interacting with

plants and being immersed in a hands-on experience is key for restoring and strengthening cultural knowledge tied specifically to plants.

In order for a community to transfer critical knowledge onto the next generation, such activities need to be inclusive of an intergenerational environment and interactive experiences. Including elders is critical to these types of activities, and without the elders being involved full knowledge will not be transferred. The notion of the elders sharing stories through an interactive space, and the younger generations internalizing these stories, is a profound example of transferring cultural knowledge and keeping the community healthy.

The Data

Based on the educator observations, approximately 20-25 people attended each of the 2 programs (the first one was held in December 2016 and the second in February 2017). Both programs drew primarily tribal community members, and included a variety of ages, from youth to elders. The programs drew either all or mostly women. Demographic data from those who participated in the written questionnaire were similar, with participants being primarily Native, female adults (See Table 5 below). More than half the participants (58%; n=14) had attended the Clam Bake in August 2016.

Table 5: Demographics from the Medicine of the Trees programs

Respondent	_	Program 1 (n=16)		Program 2 (n=9)		(n=25)
Characteristics	Count	Percent	Count	Count Percent		Valid Percent
Female	15	94%	7	88%	22	92%
Male	1	6%	1	13%	2	8%
Transgender	0	0%	0	0%	0	0%
Preferred not to disclose	0	0%	0	0%	0	0%
African-American or Black			0	0%		
American Indian or Native Alaskan			6	75%		
Asian			2	25%		
Latino/a or Hispanic			0	0%		
Native Hawaiian or Pacific Islander			0	0%		
White			0	0%		
Preferred not to disclose			0	0%		
Youth (16 and under)	6	38%	0	0%	6	25%
Adult (over 16)	10	63%	8	100%	18	75%
Attended clam bake	10	63%	4	50%	14	58%
Did not attend clam bake	6	38%	4	50%	10	42%

Across the two Medicines of the Trees programs, **intended outcomes were largely achieved**. Quantitative ratings suggest that participants were extremely satisfied with the program and found it to be important for the community. All respondents **strongly agreed that it was a good idea to have more programs like this one**, with 100% giving this statement the highest rating of 6 (see Table 6). There was also **high agreement that the program resulted in increased interest in what it takes to support a traditional healthy community**, with respondents rating this statement 5.6, on average, out of 6. Data suggested that most participants felt that the **program was relevant to their community**, with respondents rating this statement 5.6, on average, out of 6; and **most agreed that the program helped them gain understanding of what makes a healthy community**, with respondents rating this statement 5.2, on average.

Table 6. Outcomes Ratings from Medicines of the Trees, 6-point scale

	Count	Min	Max	Mean	Std. Dev.
Good idea to have more programs like this	23	6	6	6.0	.000
one					
Interest in traditional healthy community	23	4	6	5.6	.583
Program was relevant to my community	23	2	6	5.6	.945
Understanding of what makes a healthy	23	3	6	5.2	.984
community					
Understanding traditional knowledge of	23	3	6	4.9	1.164
environment					
Awareness of environmental issues	23	2	6	4.5	1.201
Connected to Elders	23	1	6	4.1	1.311

Data suggested that **participants were less impacted in areas related to environmental issues.** Respondents rated their increase in understanding traditional knowledge of the environment as 4.9 out of 6, and their increase in awareness of environmental issues as 4.5 out of 6, suggesting that the program could do more to support participant learning in these areas. The data also suggests that participants felt the program did not connect them to tribal elders as much as they would have liked, with respondents rating this area 4.1, on average, out of 6.

Based on an open-ended question, data suggested that the strongest area of learning for the Medicine of the Trees workshops was around **awareness of healthful, traditional uses of plants and trees**, with nearly half of the participants sharing a comment related to this area (48%; n=12). (See Table 7). Another third (32%; n=8) commented that they **learned a practical skill**, i.e. how to make the lip balm and chest rub. These responses suggest a close alignment with the focus of the workshop and what participants took away. Following are some example comments from participants to help illustrate these areas:

"Acknowledgement of the trees around me and how they can be used."

"What different trees in our area can be useful to our health."

"Healing and traditional items."

"Loved the education on the medicinal properties."

"That you can make medicine from only a couple of ingredients."

"How healthy our trees are for us i.e. antibacterial, antifungal, anti-inflammatory.."

"You can make medicine out of natural stuff."

"About the antibacterial/antifungal properties of cedar - healthful properties of Western White Pine and Douglass fir and their distinguishing features."

"That I can use traditional medicines to solve most issues I have with my body."
"How to use local trees for medicinal purposes; the process in which to utilize local area trees and oils."

"The basic steps to making lotion, lip balm and chest rub using coniferous trees."

Table 7: What participants in the Medicine of the Trees learned (coded open-ended responses)

	Count	Percentage
Awareness of traditional uses of plants	12	48.0%
Practical skill	8	32.0%
General positive	3	12.0%
General learning	1	4.0%
Other	1	4.0%

In another open-ended question, participants shared what they felt was the best aspect of the Medicines of the Trees program. Almost all participants (80%; n=20) mentioned the **hands-on interactive process** and/or **learning a new skill** (See Table 8) – that is, how to make the lip balm, lotion bar, and chest rub. This suggests that the hands-on, participatory model is a positive one that should be replicated in future programs. Participants also appreciate working together with family and/or community members in a collaborative process, with 20% of the participants (n=5) sharing a response in this area. Following are comments from participants around their favorite aspect of the program:

"The youth learning about the environment, communicating, teamwork and traditional (basic) Knowledge."

"Learning about the ingredients that can be used to make the various lotions, balms, and medical part."

"The hands on portion."

"Being able to learn how to make the items and uses for healing."

"Learning how to make medicines."

"Learning to make things that you could buy from the store."

"Participated in a physical hands-on way in the process."

"Making gift with other members of the community."

"Learning with my mom, sister, aunties and cousins."

"Tribal involvement, participation; active participation."

Table 8: Participant's favorite part of the Medicine of the Trees workshops (coded open-ended responses)

	Count	Percentage
Hands-on, learning new skill	20	80%
Working together, community	5	20%
Everything, all of it	2	8%
Learning traditional knowledge	2	8%
Youth engagement	1	4%
Other	1	4%

Totals more than 100% as multiple responses were included.

Participants were invited to share what they felt could be changed about the Medicines of the Trees workshops to improve the program. About one-third of participants (32%; n=9) said there was **nothing they would do to change or improve the program**, and 5 participants (18%) offered a **general, positive comment** about the workshop instead of a suggestion for improvement. While this suggests that there is not an urgent need for change from the participant perspective, survey respondents did offer a few ways to strengthen the program. Five respondents (18%) made a suggestion related to **logistics** (such as more time, more space, or more food), and four respondents (14%) suggested **more content**, such as learning how to make soap. Three respondents suggested that they would like to see **more tribal or elder involvement** in the program, such as by sharing their knowledge and stories related to the traditional uses of plants and trees. Following are a range of suggestions from participants:

"Just more of them, more often."

"There was a lot going on, pretty crowded."

"Maybe more ideas and time."

"Maybe bigger space."

"Maybe more medicine ideas."

"More measuring cups, more elder attendance; I would like to hear some of their experiences with tree medicines."

"I would really enjoy making soap also!"

"Elders from the community who has knowledge of local trees."

"Actually do tree walk; mindful harvesting; interested in nettle harvest; involve use of tribal folks; more tribal than Caucasians; Non-Indians answering questions on our uses? Why non-Indians in our program? We ought to have tribal people. No non-tribal Caucasians."

Table 9. Participants' suggestions for strengthening the Medicine of the Trees program (coded, open-ended responses)

	Count	Percentage
Nothing	9	38%
General positive	5	21%
Logistics	5	21%
More content	4	17%
More tribal and elder involvement	3	13%
More hands-on	1	4%
More opportunities	1	4%

Totals more than 100% as multiple responses were included.

Feedback from educators involved in the *Medicine of the Trees* activities helped support the findings from the survey. Educators felt that participants were generally engaged and satisfied with the activities, and that it drew a broad range of community members, from young children to elders, including some multi-generational families. Participants were supportive of the curriculum being built around the 13 moons calendar, and seemed interested in having more programming of this type. Educators felt that there needed to be more time to allow for the whole process, and they suggested having elders more involved in the programming, such as by sharing some of the traditional uses and processes for harvesting traditional plants. Educators felt this connected participants to traditional concepts of a healthy community. For example, one noted: . Today's society has gotten away from native healing plants. This was a great opportunity to bring this back."

Community member interviews

Individual interviews and one group interview were conducted on August 10, 2017, at the Swinomish Indian Tribal Community building. The participants provided thoughts on 5 questions that targeted the goals of the project, particularly around t role of the 13 Moons program in engaging community in traditional health and practices. The participants felt that this project has influenced various community members to rethink their place within their community and their connection to the environment from a traditional worldview. The project has inspired many community members to re-engage in their traditional ways of knowing. As a few individuals expressed, the project has opened up space for community members to share their knowledge again; this is one way that knowledge was transferred historically, through community gatherings. The following comments from participants help illustrate the ways in which the 13 Moons program created space for knowledge sharing:

"People started to speak out about what they were taught; so I think that it's bringing knowledge together, it's bringing teachings, and it's bringing community thoughts together on what they were told, on what their grandparents told them."

"I recall getting hurt and my grandfather putting a certain salve, or something on there that was just out of the woods. He didn't go running to the doctor; there was no doctor there anyway, because it was way up in the interior. And so it's really good to see, you know."

"I remember my grandmother and grandfather getting these nettles or ferns or bark; the medicines they had. Taking the frog leaf and putting it on my grandpas [wound]...I recall him saying "this takes all your ouwies away.""

One positive outcome of the gatherings is that individual community members are deepening their relationships to community, to traditional ecological knowledge, to the land, and understanding their place within the Swinomish worldview. For example, one participant shared this view of the 13 Moons program:

"As a Native people, we eat together, we gather together, it's that sense of learning together that brings a traditional aspect...it's a familiar setting for me."

Participants expressed that continuing to bring community together, to open up a space to share their knowledge, stories and share food, will influence working towards a stronger and healthier community. Frequent gatherings, with a traditional purpose, are important for transferring knowledge and sustaining the connection to the land. Using the land, the animals and plants the way it was used by generations before, is seen as a key to a healthy environment and a healthy community. The younger generations seem to not use the land for traditional practices as much as it was used in the past. Involving the whole family (grandparents, parents, and children) will encourage a mutual desire to learn traditional practices and maintain culture.

Participants provided the following suggestions for moving forward in continuing this project:

- It's important to have constant communication, and to use strategies that were used in the past. In many cases, this means going door-to-door to communicate about events and connect with community members;
- Engage and work with more elders is also key to strengthening the transfer of knowledge;
- Create portals to access more traditional foods (elders are hoping this will happen);
- Create more opportunities for community gatherings; host dinners; continue to provide the
 workshops and build resources for community to access through capturing stories and
 histories through media, monthly gatherings, and other ideas for sharing knowledge;
- Tribal Council members need to be involved. It is key for leadership to visually be present at the community gatherings; it sets a precedence on the level of importance of this project.

To help illustrate these areas, the following comments were shared by participants around ways to strengthen the 13 Moons project pathway:

"Reaching out to more elders that have knowledge of how it could be used. It could also be useful to the committee members that are looking for recovery, and looking for another way of life. (the wellness houses)...There are more people in the community that 13 moons hasn't touched or interviewed that have that information and knowledge and might still be using it."

"It's been a good start, and I think there's lots of growth that could still take place. I think that there's interest in the community, but it's going to be a process of getting people back to using the medicine or learning the practices, and are also hearing from other elders how and what they've done."

What are the key processes, components, and guiding principles that best support the development of a local-based, tribal-specific CBEH framework?

In order to answer this key question, a process evaluation was conducted using participantobservation and group interviews/reflections. These were guided by several key questions, which framed the analysis of the team process.

1. How does the team collaborate, particularly around roles and decision-making?

There was strong consensus among the partners around the collaboration being strong and inclusive of diverse voices and perspectives. The team operated from a place of honoring relationship, which for some had been built over many years prior to the start of the current NSF Pathways grant. This created the initial trust and respect necessary for collaboration, especially those built on diverse cultural backgrounds and perspectives. The team also felt that everyone's skill sets and knowledge were honored, acknowledging that everyone had something valuable to contribute. Other important components that helped support a strong, mutually respectful collaboration were identified by team members as follows:

- The project was co-created by partners (Swinomish Indian Tribal Community and Oregon State University) from the beginning
- The project team members honored both indigenous and western science, and utilized best practices for bringing together western science and Indigenous ways of knowing
- The project team was flexible with communication venues, meeting in person when possible, but also utilizing videoconferencing to account for long distances
- Everyone was a quick learner and open to working collaboratively, being flexible and supportive of one another
- The team worked in a way that was always mindful of and sensitive to Swinomish protocols
- The collaboration maintained the integrity of each knowledge system without trying to "merge" or blend them

2. What are key successes and positive outcomes?

The team saw the collaboration as a positive learning environment, inclusive of shared voice, team work, embracing of community, and grounding in community-based knowledge. The team felt that among the greatest successes was building a strong team and developing a positive, culturally appropriate learning environment, both for the team and community members. The programming itself was well received by community members, and helped to develop a positive program model grounded in traditional foods principles. All the team members felt very pleased with the curriculum and suggested that it was even better than they had hoped for. The team also felt some momentum from outside the program, including other tribes and government agencies. The team expressed that the project had generated excitement from multiple stakeholders, including a broad interest and synergy around the area of Indigenous science, first foods, culture, and environmental health; interest in the opportunities afforded by informal learning contexts; support from government agencies and funders for this type of work; and potentially strengthening connections to other departments within the tribe. Overall, the community is supportive of the 13 Moons curriculum and hoping that the work will continue and be deepened.

3. What are lessons learned?

Many important lessons emerged from the 2-year pilot phase of 13 Moons. These primarily related to the following key areas:

- Strengthening the theme of health communities from a cultural, environmental, and spiritual perspective;
- Engaging more elders to share their traditional knowledge and language, particularly with youth from the community;
- Building more holistic processes into the activities, such as harvesting plants before using them to make medicines;
- Focus on aligning programs and activities with community events or gatherings that are already in place.

The team also learned the importance of building off of the participants' knowledge and experiences as a way to enrich learning. The team still struggled with learning how to balance community needs and interests with the needs of the funding agency, as well as balancing conventional and indigenous environmental health.

4. What are some possible next steps along this pathway?

The team identified multiple next steps in order to strengthen and continue to build the 13 Moons curriculum, as well as engaging with other tribes interested in developing a community-based environmental health curriculum. Next steps shared by team members included the following:

- Refining the 13 Moons curriculum to include more holistic processes and inclusiveness of elders;
- Creating more opportunities to engage tribal youth;
- Exploring opportunities for collaboration within the tribe, including growing the network among existing tribal programs and departments;
- Focusing on ways to ensure sustainability of the 13 Moons curriculum; and
- Building more capacity within the community around the curriculum, such as using a "train the trainer" model.

What are appropriate and valuable project outcomes from a community-based perspective?

This question was addressed qualitatively through community member interviews and an open-ended question on the written questionnaires related to what community members felt was most valuable about the 13 Moons activities. Collectively these data suggest that community members value **connection and re-engagement with traditional knowledge and practices,** particularly through knowledge shared by community elders with the younger generations, and **connecting to other community members**, particular at cultural meaningful places such as Lone Tree Point. Community members expressed some concern around youth focusing on technology and social media, and losing the more traditional ways and core cultural values; the heavy reliance on western medicine and losing the traditional medicinal knowledge; and the dependence on unhealthy processed foods instead of local, traditionally-based foods. Data suggests that community members saw 13 Moons as a way of connecting youth to traditional cultural practices, continuing cultural knowledge and language, and grounding youth in core values and healthier lifestyles. This suggests that community members' hopes for the project align well with the intentions of 13 Moons.

Conclusions

1) To what extent and in what ways does the traditional foods framework engage public audiences and community members in learning around environmental health and community health?

The traditional foods framework developed through the 13 Moons project was successful in engaging community members in healthful practices through a culturally-based lens. Community members experience the 13 Moons programming as a positive time for connecting and sharing time with family and community, which reflects one of the Coast Salish Community Health Indicators, or **Community Connection** (Campbell and Donatuto, 2015), and serves as a foundation for shared learning. Community members are also drawn to the 13 Moons programs due to their focus on traditional cultural practices and knowledge – particularly through the Medicine of the Trees workshops -- which participants see as an important component of cultural continuance, and represent another indicator of community health in Coast Salish cultures, or Cultural Practices (Campbell and Donatuto, 2015). Evaluation showed that the indigenous health indicator of Balance - which includes resilience, sense of place and identity - is also addressed by the 13 moons program, particularly through the Clam Bake activities, in which connection to place and cultural identity were frequently mentioned as positive outcomes of participation. An area for strengthening engagement in community-based health is through Intergenerational Education; while this transfer of knowledge between elders and youth occurred to some extent, participants typically rated these areas lower, and qualitative data suggest that accessing the knowledge of elders and engaging more youth in the 13 Moons program would strengthen the program's pathway.

2) What are the key processes, components, and guiding principles that best support the development of a local-based, tribal-specific community-based environmental health (CBEH) framework?

A series of best practices emerged from the pilot phase of the 13 Moons curriculum. First, the project team found success in **building off existing events** that have been well-attended and well-received by the community, rather than attempting to create something new. For example, including health programming at the Clam Bake and at community dinners allows the team to meet people within the community landscape, where community members are already gathering. This models an important best practice of going out into the community rather than expecting community members to come to them. The team also **involved local individuals** in facilitating evaluation to provide a safe space for including participant voice, and **used community-based resources** to develop and strengthen their own framework (e.g. using the culturally-based 13 moons as the foundation for the CBEH curriculum). The team collaborated significantly with community members to help develop the framework and obtained **input and guidance from tribal elders**, which has been one of their main priorities, to make sure they are in line with cultural values. This is an extremely important process that has allowed the project to be **inclusive of community voice**, and thus reflects a program created *with* community rather than *for* community.

3) What are appropriate and valuable project outcomes from a community-based perspective?

Qualitative data suggest that community members hope the 13 Moons program will continue to engage the community, particularly youth, in traditional knowledge and practices to support cultural perpetuity. This includes less focus on technology and social media and more engagement with the land, with elders, and inclusive of community values. The intentions of the 13 Moons curriculum align well with what community members hope to see emerge from the program, grounded in community benefits and impacts. These center on the areas of **sustaining healthy cultural practices, intergenerational learning**, and **community connection**.

Recommendations

Based on participant feedback and evaluator review of curriculum materials, the evaluation team makes the following recommendations for strengthening the project pathway:

- Involving tribal elders more as facilitators or educators for the programming, such as through sharing knowledge and cultural stories as appropriate. This would honor Indigenous perspectives around intergenerational learning as well as better support the intended project outcome of *Increasing youth interest and engagement with elders and traditional practices*. In addition, engagement of elders would support a transfer of knowledge around what it means to have a healthy community from a culturally-based lens.
- Identifying places for highlighting the science embedded in Indigenous traditional knowledge. The 13 Moons curriculum offers multiple places for emphasizing scientific concepts and processes embedded in Indigenous ways of knowing. This is not to value one system over another but to make greater links and amplify the connection between Indigenous knowledge and western science, particularly in support of the intended outcome of *Increasing youth interest in STEM fields and careers*.
- Continuing to build on existing community events, as well as build partnerships with groups seeking similar goals. During the pilot phase of the 13 Moons program, the team was successful in engaging community members through traditional and existing events, such as the Clam Bake. Collaborating with traditional language programs, such as the Lushootseed program, also provides an opportunity for aligning goals around engaging youth in traditional cultural practices through amplifying traditional language.
- Being more intentional in developing a communication plan that uses diverse strategies to reach a broader range of community members. One of the strongest themes to emerge out of community member interviews was the need for greater communication about the 13 Moons program. In order to reach a broader range of community members, diverse strategies may be needed. For example, social media avenues may work well for the younger populations, while elders and more traditional community members may still prefer a personal visit (e.g., going door-to-door).
- **Revisiting the stated project outcomes** and reflecting on whether these still capture the overall aims and intent of the project before moving into the full implementation phase would be helpful for the team at this stage. Since this is a pathways (exploratory) project, there is room to revise the outcome statements and make changes based on the learning that has emerged through the pilot phase.

Appendix A – Logic Model

- 1) To what extent and in what ways does the traditional foods framework engage public audiences and community members in learning around environmental health and community health?
- 2) What are the key processes, components, and guiding principles that best support the development of a local-based, tribal-specific CBEH framework?
- 3) What are appropriate and valuable project outcomes from a community-based perspective?

With Whom?	What will they	What will they take away/learn?	How will we	How will we
(Audiences)	experience?	(Outcomes)	know?	document?
	(Program Activities)		(Indicators)	(Methods)
Swinomish youth and their families (intergenerational, Swinomish community)	 Activities based on the 13 moons Immersive, place-based, environmental health framework Engage with local environmental health through traditional, cultural, First Foods framework 	 Increased opportunity for informal EH learning through a cultural lens Increased awareness and understanding of environmental health in the Swinomish community Gain a deeper understanding of a healthy community that encompasses physical, mental, spiritual, and environmental health Increased interest or motivation to implement healthy lifestyles, traditional practices and harvesting Increased youth interest and engagement with elders, traditional practices Increased youth interest in STEM fields and careers 	What are indicators for these outcomes? What would community members say? How would we know if these are happening?	Exit interviews, questionnaires with participants (families, students) and facilitators (educators, elders); thematic wall of impact; 30-40 per activity (LLG/NaPs will collect data for 2 activities; we can train local data collectors and/or support analysis for additional activities)



Final Evaluation Report

Collaboration / Process Evaluation

With Whom? (Audiences)

- SITC Pathways project team
- Educators
- CBA/HESS committee

What do we want to document?

- How does the project team collaborate; different roles that each partner plays; how decisions are made
- Successes, lessons learned



How do we want to document?

• Quarterly team reflections (or at key points) – through group conversations or written reflections based on team preference



Appendix B – Instruments and Protocols

Swinomish Indian Tribal Community NSF-AISL Pathways Formative Evaluation Instruments

Prepared by:
Jill Stein, M.A. / Lifelong Learning Group
Dr. Shelly Valdez / Native Pathways

June 2016

Overview

In May 2015, the Swinomish Indian Tribal Community (SITC) contacted the Lifelong Learning Group and Native Pathways to serve as external evaluators for their two-year NSF-AISL Pathways Grant (#1516742) entitled "Developing an Informal Environmental Health Education Model in Tribal Communities." Based on discussions with the project leadership, the evaluation team understands that SITC is seeking evaluation support in both the development and implementation of their Community-Based Environmental Health (CBEH) model, with a focus on identifying and documenting measures of success and lessons learned in a culturally responsive way. Evaluation questions include:

- 1. To what extent and in what ways does the traditional foods framework engage public audiences and community members in learning around environmental health and community health?
- 2. What are appropriate and valuable project outcomes from a community-based perspective?
- 3. What are the key processes, components, and guiding principles that best support the development of a local-based, tribal-specific CBEH framework?

In order to answer these questions, the evaluation team will collaborate with the project team to develop and implement the following data gathering methods: 1) Exit interviews with program participants; 2) Thematic wall of impacts (as appropriate to the event); 3) Semi-structured interviews with educators, elders, and program staff; and 4) Project team reflections (focus group). The evaluation team will also provide an initial 1-day evaluation training for educators who will support with data collection throughout the project evaluation. The current document provides instruments and protocols for the evaluation methods. Note that different evaluation approaches will be used with different audiences in order to find a process that is most natural and appropriate for each audience group and context. The evaluation team will consult with the project team and advisors to determine which approaches work best, in what settings, and for whom. For the first event (Clambake on August 25), the project team will try out multiple methods to see what works best.

Method #1 - Exit Interviews

During the program, data collectors (e.g. educators, youth volunteers, etc.) will approach the participants and invite them to provide feedback on their experience after the event. As a reminder, the data collector can give the visitor a card or part of the questionnaire to return after the event, or

simply make verbal contact during the event. Where appropriate, the team can post large posters of the interview guide so that participants are aware of the evaluation and the questions that will be asked. The data can be recorded in multiple ways: 1) one data collector can take notes on the forms using a clipboard, while the other conducts the interview; 2) the interviewer can have a conversation with the participant, and then take notes afterwards on the main/most important ideas, or share these ideas verbally with the project team; or 3) the participant can fill out the form themselves. The data collector should ensure that participants know that the interview is completely voluntary and optional, and that the information is used to strengthen future programs and to share impacts with the tribe, the project team, and the funder. No personal or identifying information will be collected.

Introduction: Hi, my name is (data collector) and I'm working with the Swinomish Indian Tribal Community to get feedback on this program. Would you be willing to answer a few questions? It should only take about 5-10 minutes and we use your input to improve our programs and share impacts with the tribe, the project team, and the funder (the National Science Foundation). We won't collect any personal or identifying information. Are you okay with us using your feedback in that way? (If yes), Great, let's begin! I can jot down some notes or you're welcome to complete the survey on your own.

ies), n.	Great, let's begin! I can jot down some notes or you're welcome to complete the survey on your
1.	(Optional) How did you hear about this event today? (if applicable \Rightarrow Why did you decide to come?)
2.	What did you experience or get out of today's event?
3.	What was the best part of this event for you and why?)
4.	Is there anything you would add or change to improve this program/event for next time?
5.	(Optional) For this question, the team can put up poster paper of the outcomes statements and have community members rate which one impacted them the most by using stickers or other objects. Please rate the extent to which this event impacted you , with 1 being "none" and 6 being "very much"

Statement	No	Not at all			Very	y much	Please explain your rating
My <u>understanding</u> of traditional cultural knowledge	1	2	3	4	5	6	
My <u>awareness</u> of environmental issues in my community	1	2	3	4	5	6	
My <u>connection to elders</u> or traditional knowledge holders in my community	1	2	3	4	5	6	
My <u>understanding</u> of what supports a healthy community and lifestyle	1	2	3	4	5	6	
My or my child's <u>interest</u> in science or technology fields and careers	1	2	3	4	5	6	
My knowledge of (specific topic for that program)	1	2	3	4	5	6	
My <u>interest</u> in (specific topic for that program)	1	2	3	4	5	6	

6. Please rate yourself on the following statements about today's program (with 1 being "none" and 6 being "very much")

Statement	Not	at all	Ver	Very much		
I <u>enjoyed</u> participating in this program	1	2	3	4	5	6
I <u>realized or learned</u> something new in this program	1	2	3	4	5	6
The program related to myself and my community	1	2	3	4	5	6
I would like to participate in more programs like this one	1	2	3	4	5	6

Finally, just so we know who this program is reaching, do you mind sharing a few things about yourself?

1.	Have you attended the Clam Bake event before? ☐ Yes ☐ No ☐ Not sure
2.	Which of the following age groups do you belong to? ☐ Under 16 (youth) ☐ 16 or older (adult)
3.	Are you male or female? Male Female Transgender I prefer not to answer
4.	How do you prefer to describe your cultural background? (check all that apply) ☐ African American/Black ☐ American Indian/Native Alaskan Which tribe(s) are you affiliated with?
	☐ Asian / Asian American ☐ Latino(a) or Hispanic ☐ Native Hawaiian/Pacific Islander ☐ White ☐ I prefer not to answer

Method #2 – Comment Cards

To allow for participants who may prefer to anonymously provide feedback to the project team, the team can set up boxes at the event with notecards, pencils, and pens. The team can provide colorful paper and markers to make the experience more fun and appealing. If possible, the boxes should be placed in an area where people might be exiting the event, as the questions are meant to capture the individual's experiences during the event. There should be one box for each of the three key questions, which can be printed on large posterboard paper as follows:

- 1. What did you experience or get out of today's event?
- 2. What was the best part of this event for you and why?
- 3. Is there anything you would add or change to improve this program/event for next time?

Method #3 - Thematic Wall of Impacts

The evaluator or educator will introduce participants to the Thematic Wall of Impacts, describing the activity and what we are asking participants to do. This activity will include two parts: 1) Ranking the impacts; and 2) Discussion of rankings.

Ranking the impacts – The evaluator will explain the ranking activity as follows, improvising as necessary to clearly convey the information:

The activity we will engage in is to obtain a sense of where you were most impacted during this 3-day event. There are 7 areas (headings) on our wall. Using the round stickers you were provided with, number them 1-7. Next, we would like for you to rank these areas according to where you were most impacted. We'll ask you to utilize the following scale (1-7; 1= most impacted area; 2= second most impacted area, and so forth). For example: I saw building relationships and making connections to other institutes as where I was impacted the most, so I would place my sticker with a 1 there.

Note that there is also a place for 'other'. If you were impacted most in an area that is not on this wall, then you can opt to use your sticky notes and add to the comment area. Or if you would like to make comments on any of the areas you have ranked, that perhaps provide detail on your reasons for ranking, then please use the sticky notes. Afterwards, we will have a conversation around why the group ranked items in certain ways.

Does everyone understand? Are there any questions?

The Wall will have the following header and sub-headers (explain each header):

In which of these areas were you influenced the most?

- My understanding of traditional cultural knowledge
- My <u>awareness</u> of environmental issues in my community
- My connection to elders or traditional knowledge holders in my community
- My <u>understanding</u> of what supports a healthy community and lifestyle
- My knowledge of (specific topic for that program)
- My <u>interest</u> in (*specific topic for that program*)
- Other: (participants can write down other impact areas not included above)

Discussion of rankings – After all participants have completed their rankings, the evaluator will bring everyone together again to discuss the rankings. The evaluator will ask participants what they notice (e.g. which impact areas seem stronger or less strong) and then prompt them to discuss WHY they made the choices they did using the following types of questions:

- → Why did you rank these impacts higher than others?
- → Why did you rank these impacts lower than others?
- → What about the workshop do you think led to higher impact in these areas?
- → What could have been done to increase impact in these lower areas?

Method #4 – Observation Tool

In order to help document certain aspects of each event, including demographics and participant engagement, the project team or data collector will complete an observation form. This may also help provide reflections for a follow-up interview with the evaluation team (see Method 5). The observation sheet can be completed during or just following the event or program, so that ideas and impressions are still fresh.

Demographics

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2. How would you describe the participants in this event? (e.g., were there elders, youth, mostly intergenerational families; if there were youth, what age range? Were the participants mostly community members, staff/employees, etc.)

Program Experience

- 3. How engaged were participants in the activities? Which activities were most/least popular?
- 4. What were the nature of the conversations you overheard? Were they talking about the event or activities? What types of questions did people ask?
- 5. What did you feel could be added or changed to strengthen this program?

Notable comments or feedback from Participants

Method #5 – Educator and Elder Interviews

After each program (within a week or so), we will gather input from the educator, invited elders or knowledge holders, and any other project team members involved. The evaluation team can interview the main educator/coordinator, while elders, knowledge holders, and others can be interviewed by the main educator. Responses can be recorded by hand or typed up on a computer or laptop, whichever is most convenient.

Introduction: Hi, I'm working with the Swinomish Indian Tribal Community to get feedback on this Would you be willing to answer a few questions? It should only take about 5-10 minute ıd

we the	ogram. Would you be willing to answer a few questions? It should only take about 5-10 minutes and use your input to improve our programs and share impacts with the tribe, the project team, and if funder (the National Science Foundation). We won't collect any personal or identifying formation. Are you okay with us using your feedback in that way? (If yes), Great, let's begin!
1.	From your perspective, how did participants react to the program and how engaged were they? (please provide some examples, if possible)
2.	Did you learn or realize anything new through your participation in this event?
3.	What did you think were the most/least engaging aspects of the program for the participants? (→What worked well, what didn't work so well?) What was the nature of the conversations and questions?
4.	What opportunities do you think there were for participants to gain a deeper understanding of a healthy community that encompasses physical, mental, spiritual, and environmental health?
5.	What changes would you make to strengthen the program? (to the curricula, event, etc.)

Method #6 – Project Team Reflections

In order to document the project process, and share learning with the field through the guiding document, evaluators will lead a reflection process / focus group 3-4 times during the course of the 2-year project. While the guiding questions may evolve as the project unfolds, we propose the following questions as a starting place:

- 1. What have you learned through this collaboration process so far? What are the main successes and lessons learned so far?
- 2. What have you found to be effective ways for the team to collaborate? What have been strengths and challenges to this type of collaboration?
- 3. Did the team gain a deeper understanding of how to engage community members in learning around healthy community environments that encompass physical, mental, spiritual, and environmental health, and how this is integrated into activities?
- 4. What questions do you still have about this work?
- 5. What do you see as the next steps along this pathway?