Sharing Intergenerational Food Stories on the Land and Online to Engage Mi’kmaw Children in Indigenous Food Sovereignty

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DOI: 10.15273/hpj.v3i1.11482

Abstract

Introduction: Within Indigenous cultures, stories about food and health have been formed and shared on the land because the land, air, water, and ice are where food naturally grows and exists. Yet, Indigenous children are increasingly using online technologies to gather knowledge and share stories with their communities. Objectives: Through analyzing a storytelling session led by a Mi’kmaw Knowledge Keeper, this paper explores how land-based learning can come together with online technology to engage children in Indigenous food sovereignty.

Methods: This study is situated within an intergenerational Mi’kmaw foods project called the Land2Lab Project and is guided by Two-Eyed Seeing and decolonial theory. We used narrative inquiry to explore a Knowledge Keeper’s storytelling session that was conducted with 14 Mi’kmaw children.

Results: Through this study we learned that we can prioritize Mi’kmaw knowledge both on the land and online. Yet, spending time on the land intergenerationally learning about Mi’kmaw foodways is imperative to maintaining Mi’kmaw food knowledge and engaging children in Indigenous food sovereignty.

Conclusion/Discussion: While online technology may seem paradoxical to land-based learning, some elements of intergenerational storytelling can happen online and on the land, and both can be used to support the protection of Mi’kmaw knowledge systems, foodways, and health for future generations.

Keywords: Indigenous Food Sovereignty; Intergenerational Storytelling; Land-based Learning; Online Technology; Two-Eyed Seeing; Mi’kmaw Knowledge

Introduction

Within Indigenous cultures, stories about food and health have been formed and shared on the land because the land, air, water, and ice are where food naturally grows and exists. Yet, there is a growing body of research indicating that Indigenous children are becoming more adept at using online technologies to engage with their communities and learn about their cultural stories and knowledges (Rice et al., 2016). As a research community, we cannot ignore the significant role of online technology in young people’s lives, and we must acknowledge it is a tool that many Indigenous children are using to gather
information and share the stories of their lives. The reality is that Indigenous children in Canada are engaging with their culture both on the land and online, and little research to date explores the relationship between online technology and land-based learning. Thus, this paper shares the findings of a study focused on land-based learning and online technology and how these two approaches can theoretically come together to engage Mi’kmaw children in Indigenous food sovereignty through Two-Eyed Seeing.

Literature Review

Indigenous Food Sovereignty

Indigenous food sovereignty (IFS) is the process of learning, reclaiming, and practising knowledge about Indigenous foodways, which are health-enabling cultural food practices and accompanying stories formed from being in relationship with Mother Nature that are passed down through generations (Counihan et al., 2018). Dawn Morrison (2011), founder of the Working Group on Indigenous Food Sovereignty, has identified four main principles that guide Indigenous communities who are striving to achieve IFS. These principles are as follows: (a) Sacred Sovereignty, (b) Participation, (c) Self-Determination, and (d) Legislation and Policy. Morrison (2011) indicates that sacred sovereignty identifies food as a gift from the Creator, meaning that Indigenous rights to food are sacred and cannot be constrained or recalled by colonial laws, policies, or institutions. Secondly, participation is central to IFS because it requires the day-to-day practice of individuals, families, communities, and nations nurturing healthy relationships with the land, plants, and animals that provide Indigenous communities with food. Self-determination refers to the freedom for Indigenous communities to respond to their own needs regarding healthy foods and their ability to make decisions around the amount and quality of food that is hunted, fished, gathered, grown, eaten, and shared. Lastly, IFS attempts to reconcile Indigenous food and cultural values with colonial laws, policies, and mainstream economic activities. It provides a restorative framework for a coordinated, cross-sectoral approach to policy reform in forestry, fisheries, rangeland, environmental conservation, health, and agriculture, as well as in rural and community development (Morrison, 2011).

Land-Based Learning

Literature is showing us that land-based learning is an important way to share and celebrate Indigenous Knowledges and is an effective way of engaging children in their culture (Bagelman et al., 2016; Bartmes & Shukla, 2020; Kenny et al., 2018). This is because the land is where Indigenous Knowledges, stories, and culture have been developed across generations (Battiste, 2013). Land-based learning is often conceptualized as emphasizing the importance of learners physically spending time on the land doing outdoor activities like hunting, gathering, fishing, and trapping (Bowra et al., 2021). Although physically being on the land is an important component of land-based learning, land-based learning goes much deeper than just partaking in outdoor activities (Streit & Mason, 2017). Land-based learning emphasizes Indigeneity and the relationships that Indigenous Peoples have with Mother Nature (Styres et al., 2013). Thus, land-based education can be understood as a way of thinking about and relating to the natural world that upholds Indigenous ways of being and, as a result, Indigenous foodway practices such as hunting and gathering. Centring Indigenous Peoples and their ways of knowing, being, and thinking in land-based learning is imperative (Bowra et al., 2021).

Online Technology

Although we acknowledge that there are exceptions related to equitable access, generally this generation of children, both Indigenous and non-Indigenous, represent the first generation to have spent their entire lives surrounded by computers, cellphones, and all the other technology that we use today (Radoll, 2014). Within this study, online technologies are broadly understood as any technological platform or device that children utilize to share, engage with, and gather information that is
connected to the internet. Over the past 20 years, the internet has grown into the largest, most accessible database of information ever created (Castleton, 2018). It has changed the way people communicate, connect, and think about knowledge and learning (Prensky, 2001).

Indigenous children, artists, journalists, activists, and storytellers are using technology in innovative ways to take charge of their culture and express their voices despite colonial influences on the internet (Carlson & Dreher, 2018). In fact, the internet and social media have become important elements in maintaining Indigenous identity through the sharing of land-based food stories and photos online (Hicks & White, 2000). In Canada’s North, for example, culture and technology could be said to mutually adapt and fortify each other in the shifting circumstances of the Arctic (Hicks & White, 2000). In Castleton’s (2018) study he found that Inuit students illustrated the importance of Facebook groups in their daily lives. One student noted, for example, “[through Facebook] I learn more about old ways and how things were done before” (p. 233). The young participants of this study referred to a Facebook group called “Inuit Hunting Stories of the Day.” This type of group, which shares stories about hunting and Indigenous foodways, was acknowledged by the participants as a good way to present Inuit culture, to know their own identity, and to learn Indigenous techniques and knowledge for hunting and survival (Castleton, 2018). By sharing land-based food stories online, Indigenous children and communities are utilizing online technologies in ways that suit their identity, culture, and interactions with the wider world. Thus, online technologies could be (and are already) a part of Indigenous culture and pedagogy in ways that support and uphold Indigenous Knowledges and values (Carlson & Berglund, 2021; Castleton, 2018).

**Objective**

Land-based learning and online technologies could be envisioned as distinct and separate, when perhaps they are not. There is no research to date exploring the relationship between online technology and land-based education as a way to engage children in IFS. Thus, by bringing together both Indigenous and Western ways of knowing through Two-Eyed Seeing, this study is based on the following research question: How can online technology and land-based learning come together to engage Mi’kmaw children in Indigenous food sovereignty?

**Methodology**

The data presented in this paper was collected as part of Bujold’s master’s thesis. Her thesis provides a more comprehensive overview of this study, including perspectives from child participants, which are not highlighted in this paper (Bujold, 2022). This study was guided by Etuaptmumk (which can be translated into Two-Eyed Seeing) and decolonial theory. Etuaptmumk is a Mi’kmaw word that represents the gift of having multiple perspectives. Elders Albert and the late Murdena Marshall, along with Dr. Cheryl Bartlett from Cape Breton University, coined the term Two-Eyed Seeing to describe the metaphorical use of one eye to see Indigenous ways of knowing and the other eye to see Western ways so we can respect and utilize both perspectives (Marshall et al., 2015). Understanding and practising Two-Eyed Seeing is meant to be a co-learning journey, in which you continually learn from and with all your relations and then use these multiple perspectives to understand and see linkages among issues (Institute for Integrative Science and Health, 2017).

Decolonial theory informs an approach to research that aims to explore and engage in decolonization. Although definitions of how decolonization is enacted within communities may differ, there are key features that characterize the process. These include decolonization being an empowering approach to restore Indigenous Knowledges and ways of knowing through self-determination (Alfred & Corntassel, 2005; Smith, 1999), cultural preservation (Lane et al., 2002), and respect for a holistic worldview (McKenzie & Morrisette, 2003). Decolonization also calls for the
restructuring of government systems to reconcile the harm caused by past and current federal government policies designed for assimilation. Within this conceptualization, decolonial theory is grounded in Indigenous empowerment and a belief that situations can be transformed by trusting in one’s own peoples’ knowledge, values, and abilities (Wilson, 2004).

Both Two-Eyed Seeing and decolonial theory seek to restore balance in narrative and world view by considering Indigenous Knowledges as equally valid as Western knowledges (Marshall et al., 2015; Smith, 1999). This research positions Mi’kmaw knowledge systems and stories about the land and food as central to participating in IFS and achieving holistic health, and necessary for shifting the narrative about Indigenous Peoples’ health in research. For this reason, a narrative inquiry methodology was used for study.

Narrative inquiry is a process of gathering information through storytelling and the analysis of story (McCormack, 2004). Field notes, interviews, focus groups, autobiographies, and orally told stories are all methods of narrative inquiry (McCormack, 2004). Storytelling is a powerful and essential component of Indigenous research and should be respected as a way of sharing lived experiences, exploring personal beliefs and values, and discovering place-based wisdom (Cunsolo Willox et al., 2013). Indigenous storytelling enables the passing down of cultural and ecological knowledges that help maintain a sense of community among humans and ecosystems and instill spiritual values and Indigenous ways of being among storytellers and listeners (Archibald, 2008).

The Land2Lab Project

This study was situated within an intergenerational Mi’kmaw foods project called the Land2Lab Project. In 2019, community leaders from the Pqatnkek Mi’kmaw Nation and St. Francis Xavier University (StFX) developed the Land2Lab Project through a community-based participatory research approach (CBPR). The aim of the Land2Lab Project is to engage Mi’kmaw children in their community-held knowledges and foodways. More information about the Land2Lab Project can be found elsewhere (Bujold, 2022; Bujold et al., 2021), and future publications will highlight the Land2Lab Project methods and outcomes. While related to the larger CBPR project, this study was distinct from the Land2Lab Project in that it considered how land-based learning and online technology can come together to engage Mi’kmaw children in IFS.

Study Participants and Recruitment

This study received ethical approval from Dalhousie REB and Mi’kmaw Ethics Watch. All participants involved in this study were provided with invitations to participate and provided written or oral consent. The Knowledge Keeper and child participants involved in this study were recruited through a collaboration between the Land2Lab Project and Connecting Math to Our Lives and Communities Summer Camp for Mi’kmaw children. Through partnering with the Land2Lab Project and the Math camp, this study was able to engage 14 Mi’kmaw children between the ages of six and 16 from three Mi’kmaw communities (Pqatnkek First Nation, Pictou Landing First Nation, and We’koqma’q First Nation) in a storytelling session led by Clifford Paul, a Mi’kmaw Knowledge Keeper and Moose Management Coordinator at the Unama’ki Institute of Natural Resources.

Study Setting

Data for this study was collected during a day-long workshop held at StFX University, located in Antigonish, Nova Scotia, which was hosted by the Land2Lab Project and Connecting Math to Our Lives and Communities Camp.

Methods

Below we describe two narrative inquiry approaches that were used within this study: a storytelling session led by Clifford Paul and a collection of field notes written while implementing this study that help inform the research question. Perspectives of child participants were also gathered during a researcher-led Q&A session during the
workshop at StFX, and these are presented in Bujold’s (2022) master’s thesis.

**Storytelling Session**

Clifford Paul led a 40-minute storytelling session about IFS at the end of the day-long workshop at StFX. During this session, Paul shared stories about IFS and illustrated through his own experiences how connecting to food, land, and community is the way toward leading a good life as a Mi’kmaw person. Paul’s storytelling session was intended to share, inspire, and engage children in their community-held knowledges. It seemed to us that Paul was able to effortlessly engage the children and capture their attention through storytelling. The central role of storytelling in preserving Indigenous Knowledges and culture was evident during this session. This is why Paul’s storytelling session is highlighted in this paper.

**Field Notes**

In February 2020, Bujold began writing field notes of her experiences with the Land2Lab Project and of practising Two-Eyed Seeing while implementing this study. The storytelling session is prioritized within the results; however, the field notes provide context surrounding land-based learning and online technologies and how the two approaches can come together to engage children in IFS.

**Data Analysis**

The storytelling session was audiorecorded and transcribed. The resulting transcript was de-identified. Analysis of the transcript from the storytelling session, along with the field notes, was followed by a narrative inquiry analysis. Narrative analysis can be undertaken in three main steps beginning with reviewing the transcripts, followed by story preparation and then story creation (McCormack, 2004). The first step of narrative inquiry required full immersion in the transcript and field notes to get a sense of the stories being shared by Paul, along with our understanding of how land-based learning and online technology came together during the Land2Lab Project (O’Kane & Pamphilon, 2016). The second step in the analytical process was story preparation (McCormack, 2004). The stories shared by Paul were arranged and considered in several different ways to determine how to address the research question while still upholding the stories that he shared with the group. The third step in the analysis was story creation (McCormack, 2004). This involved creating an interpretive story of Paul’s stories alongside the field notes. The two lessons learned, which are presented in the results, were constructed by expanding on Paul’s stories as much as possible so that meaning was not lost. The second lesson learned in particular is supplemented by the field notes.

**Results**

Two lessons learned from this study are presented here: (a) We Have to Create Food Stories on the Land Together and (b) We Can Prioritize Mi’kmaw Knowledge on the Land and Online.

**We Have to Create Food Stories on the Land Together**

Clifford Paul’s story is a story about how to be Mi’kmaq: to value the land and the foods it has to offer, and to critique how Western culture has influenced the health of Mi’kmaw families and communities. He frames his story so that children can see themselves and Mi’kmaw culture as strong, healthy, and—ultimately—the best way to live. Through engaging children in storytelling, Paul encourages them to go out on the land with their communities to build their own repertoire of community-held knowledge:

*Mi’kmaw people, when we move for our food, you know, stalk moose or spear the salmon; all this activity made us into great warriors because we were using our bodies. Both men and women ... it turned them into great warriors. And the Mi’kmaq, because of our connection to the land and how we acquired our food, nobody was able to defeat us. Why? You know why? Because we love our land. We*
love our water. We love our food. The food was able to let us survive...

And you folks, you have to be the storytellers. I can’t just talk about this kind of stuff if I don’t teach it, breathe it, live it, eat it, smell it, share it. I have to do all these things. And we have to do all these things together. So, ask your Elders to take you out fishin’. Ask your Elders to take you huntin’. If the Elders are too busy, there’s other people that they have taught who can take you out. Do it safely. If we do that and start eating more natural foods, we will live longer. Things will be going better for us and our health. And our families will be stronger too because it takes a family to do these types of things...

We have to get back to the old way of families working together to prepare food, to gather the berries, to harvest the sweetgrass. And that’s what I’m here for. I do it and I teach it. It would be awful if I had all this traditional knowledge and I died with it and I didn’t share it. Traditional knowledge is what helped us survive. Traditional knowledge is something we have to share. So those of you who told me stories of when you were on the land and gathered food, you’re building your education on traditional knowledge. You’re building what we call a repertoire of traditional knowledge. So, I want you to think that way now—what am I going to do to build my traditional knowledge?

In this part of his story, Paul makes the relationships between learning on the land together with family and community and sharing stories of community-held knowledge clear. He urges the group to connect with individuals who have community-held knowledge so that the children can continue learning about Mi’kmaw foodway practices that have enabled Mi’kmaw survival for generations. He also uses himself as an example, where he says that his calling is to teach and share how to get back to Mi’kmaw ways of families and communities working together to gather and prepare food, and that if he did not do this, the crucial knowledge he has would end with him. Sharing knowledge and working together toward a common goal of balance in health is a fundamental aspect of practising Mi’kmaw foodways and engaging in IFS.

Paul further demonstrates the importance of this intergenerational teaching when he shares a story of a time when he was talking to a Mi’kmaw woman about food:

She said, “Me and my mother and my grandmother used to go on a canoe and go to the islands on the Bras d’Or and pick gooseberries, and we would make all these jams and stuff with them.” So, I said, “What about your daughter or your grandkids?” She says, “I never took them.”

I told her the story is going to end with you because the kids are going to say, “Mom how did you pick these berries?” We have to have you guys say instead, “I went with my mom,” or “I picked with my mom—I went with my family and I picked these berries and we made this!” The stories have to continue, and it is your job, your parent’s job, your grandparent’s job, or people in your community’s job who are good at harvesting food to pass it on, because once you stop being involved … the stories end.

Building a repertoire of community-held knowledge is enabled through intergenerational land-based activities. When we bring together multiple generations, the knowledge that is shared spans hundreds of years and has the potential to span hundreds more as the stories continue through the youngest generation. The stories are not only informed by foodway practices done on the land, but through the
relationships developed and strengthened while on the land. Creating food stories on the land with all relations is intricately connected to Mi’kmaw community health.

We Can Prioritize Mi’kmaw Knowledge on the Land and Online

Teaching Mi’kmaw children how to bring balance to their life and health through their culture is a key element of IFS. Paul shares with the children his perspectives on how to achieve health by prioritizing being on the land and developing their own repertoire of community-held knowledge:

Those of you who told me stories of when you were on the land, and gathered food, you’re building your education on traditional knowledge. You’re building what we call a repertoire of traditional knowledge. So, I want you to think that way now, what am I going to do to build my traditional knowledge? Am I going to... go sit on a TV screen and go like this? [plays with imaginary phone/game system]. You get killed and you go slamming [throws imaginary phone/ controller], you get mad, you waste the human emotion on artificial means. Or are you going to go out and learn something that our ancestors had done?

Paul is encouraging children to start thinking in ways that will support their repertoire of community-held knowledge, and to think about their actions and choices as supporting their health, culture, and community.

We acknowledge that online technologies like social media and gaming have become an issue of contempt within many households (Procentese et al., 2019), especially when we consider the overuse of the platforms we use today and how online technology potentially impacts all aspects of health (Chen & Nath, 2016; Pontes, 2017). Paul speaks to this above, highlighting how the use of online technologies may take time away from engaging in other activities that bring children closer to their culture. The habits that individuals—and in particular children and young adults—have acquired, surrounding the amount of time spent sitting in front of a screen and type of content consumed, is time taken away from other important learning activities. If we are not mindful, overuse of social media has been shown to contribute to deterioration of psychological health by increasing levels of depression, anxiety, and stress (Pontes, 2017). To prevent this, Paul encourages children to get outside to spiritually connect with their ancestors and environment, and to imagine themselves doing the same things their ancestors would have done hundreds of years ago.

Paul further illustrates the need for spending time on the land, rather than online, when he discusses how stories are formed when children engage in land-based learning:

[You can say] I am now part of this story. I can tell this story and I am included in that. So, it’s all about the stories, and our stories are connected through our relationship with Mother Earth.

Being on the land is necessary for learning Mi’kmaw foodways and for story formation, which benefits health in a myriad of ways (Auger et al., 2016; Bartmes & Shukla, 2020; Battiste, 2000). Having an online presence, however, can also potentially benefit children in forming their stories if used alongside land-based experiences in a way that upholds and centres Indigenous Knowledge Systems (Bujold et al., 2021).

Discussion

Building on the results, this discussion emphasizes storytelling as a necessary way to engage children in IFS on the land and online. We also discuss how land-based food experiences can support adults in engaging children in IFS and indicate that online
technology can assist us in this knowledge sharing.

**Sharing Intergenerational Food Stories**

Food is the link to our relationship with the natural world. We owe it not only to ourselves, but also to future generations to heal the relationship we have to food. To heal, we can become intimate with the parts of ourselves that have been stifled by Western civilization—our deep-seated connection to Mother Nature. Through this process we can all learn how to make meaning from our food, the land, the water, the air, the ice, the trees—whatever speaks to you. We can learn from Indigenous communities how to listen to what these relations can teach us, and how we can contribute to, and be in balanced relation with, the cycles and rhythms that exist in nature.

When we do this, we must also share our experiences and the knowledge we have gained with children in order for these stories to continue on. As adults we can reflect on our experiences and share them with children on the land, online, in the classroom, and in our cooking spaces to support their own story formation and repertoire of community-held knowledges. Through our stories we can nourish children’s minds and encourage them to get on the land. Furthermore, we can share intergenerational food stories that we formed from the land through online platforms and uphold knowledge within communities. It is our collective responsibility in reconciliation to listen to, engage with, and uphold Indigenous world views and narratives, and to share stories that have been silenced due to Canada’s colonial history.

**Indigenizing Technology**

There are complexities surrounding how technology and culture are intertwined; technology is not easily categorized as good or bad, Indigenous or Western. It is simultaneously all of the above. Through Two-Eyed Seeing, we see technology as a tool, and how this tool is used will determine how beneficial it will be in supporting land-based learning and engagement in IFS. Using technology with a Western world view that does not inherently value the natural world could further remove us from it, whereas using technology with an Indigenous perspective that encourages us to seek out information relating to the land could enable our connection to nature and encourage us to get outside and experience the natural world. Through Two-Eyed Seeing, we can see technology as not being inherently Western, but as a way to communicate that any community, culture, or society can benefit from, depending on how it is used.

We have come to believe that the experience of being on the land, and the feeling of being in nature, cannot be formed from spending time online. Yet, online technologies in many ways have become a tool of activism and resistance toward colonization, whereby children are reclaiming their knowledge systems both online and on the land. Indigenous children are simultaneously technology users and the Knowledge Keepers of tomorrow. Utilizing technology with a Two-Eyed Seeing perspective that upholds and prioritizes Indigenous world views and stories may help ensure that Indigenous children are able to preserve the knowledges that Elders pass on to them, as well as providing the means to share and pass on their culture with future generations. The Mi’kmaq have always found their strength in their connection to the land and how they acquire food as community, and as Clifford Paul stated, these stories and relationships cannot end.

**Conclusion**

Food stories on the land need to be shared intergenerationally, as these stories are key to engaging children in IFS and connecting them to Mi’kmaw culture. The integration of land-based and online pedagogies acknowledges that both the land and technology
are important aspects of children’s identity and, together, can enable them to explore their community-held knowledges (Bujold et al., 2021; Rice et al., 2016). This study leads us to indicate that we can share intergenerational food stories and Mi’kmaw knowledge online, as it is the storyteller that matters in terms of how they share their stories and how they have engaged in IFS themselves. Sharing food stories and experiences rooted in Western knowledges and pedagogy, however, should be approached with caution when engaging Mi’kmaw youth in IFS, as Western perspectives alone do not recognize or uphold the knowledge or relationships that Indigenous communities have with the natural environment and its foods.

Stories about Mi’kmaw foodways need to be formed from the land, and the ideal way to learn, share, and teach Indigenous Knowledges is in person, on the land with others. Yet, as Paul alludes, we need to share what we know, and we cannot keep our stories to ourselves. If this means sharing online, then this is a valid approach in maintaining and celebrating Indigenous Knowledges and culture. Through prioritizing Mi’kmaw knowledge systems, intergenerational storytelling about IFS can engage Mi’kmaw children both on the land and online, supporting the protection of Mi’kmaw knowledge systems, foodways, and the health of future generations.

Acknowledgements

Thank you to the participants who took part in this study. We would like to extend a special thank you to Clifford Paul for sharing his stories with us at StFX, and to the Land2Lab Project, Connecting Math to Our Lives and Communities Camp, the Confederacy of Mainland Mi’kmaq, and StFX for helping us facilitate this study. Funding for this study was provided by the StFX Centre for Employment Innovation and Mitacs through their Mitacs Accelerate Grant.

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