

A YELLOWHEAD INSTITUTE SPECIAL REPORT

Indigenous Land-Based Education in Theory and Practice

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This report features photographs
by Jamie Stevenson Photography,
taken at a Dene Nahjo Hide
Camp located in the Mouse
Family Camp, Denendeh.
The camp was organized in
partnership with Łı́ı́dlı́ı́ Kúęę
First Nation and Dehcho First
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ABSTRACT

This Special Report considers the recent and relevant academic and other publicly available literature, including policy documents and program reports representing both Indigenous and non-Indigenous perspectives on the theory and practice of land-based programming. The review of this literature finds an extensive record of the benefits of land-based programming for Indigenous peoples' mental and physical health but also positive learning outcomes for students of Western place-based education models. Not surprisingly, then, the number of land-based programs has increased dramatically over the past ten years.¹ The specific themes that emerged from this research revolve around, 1) Indigenous Self-Determination, 2) Health and Well-Being, 3) Environmental Stewardship, 4) Reconciliation and Climate Justice, and 5) Evaluation Methodologies. Each of which is elaborated upon in the report, which land-based program providers, funding agencies, and policymakers will find useful for several purposes — namely, for understanding and explaining theory and practice but also demonstrated value and benefits of Indigenous land-based programming.

ACKNOWLEDGEMENTS

In November 2018, Hotii ts'eeda (HT), NWT Recreation and Parks Association (NWTRPA), MakeWay, and GNWT Health and Social Services hosted a workshop on the evaluation of land-based programs, which was attended by practitioners and funders. A key conclusion of the gathering was that there would be value in developing a shared theory of change for Indigenous land-based programming, which could "... help organizers to make inferences between short-term and long-term outcomes given that long-term outcomes are typically not realistic to track." A second conclusion was the need to influence public policy — and specifically to influence governments and other funders — with respect to the intrinsic value of on the land programming, to reduce the burden associated with funding applicants needing to make the case over and over again in funding applications. This Special Report is a manifestation of that collaborative work and these organizations' commitment to positive social change, public advocacy and knowledge translation in the service of making a compelling case for investment in on the land programming, has been critical.

AUTHOR BIO

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Table of Contents

p4 Introduction

p6 Conceptualizing “Land-Based”

p9 The Value & Challenges of Land-Based Programs

p10 Indigenous Self-Determination

p11 Health & Well-Being

p12 Environmental Stewardship

p13 Reconciliation & Climate Justice

p15 Evaluation

p16 A Theory of Change for Land-Based
Education & Evaluation

Introduction

SINCE TIME IMMEMORIAL, land-based education has been and continues to be a core element of Indigenous pedagogies, lifeways, knowledge creation and knowledge transmission.² The dispossession of Indigenous peoples from their lands and cultures undermined and disrupted Indigenous peoples' ways of knowing and modes of relating to the environment, resulting in the poor health indicators and outcomes we see today. Thus, Indigenous peoples reconnecting to land can regenerate Indigenous ways of knowing and knowledge systems, which many argue will lead to improved health outcomes for Indigenous peoples.³

In fact, some documented benefits of land-based programming include enhanced resiliency, increased sense of connection to culture, strengthened relationships to land, improved physical and mental health outcomes,⁴ improved educational outcomes,⁵ improved food security, and positive environmental outcomes.⁶

Relationship or connection to land supports mental and physical health and healing. In one study, Indigenous youth participants of a four-day land-based program “spoke about positive changes related to identity, belonging, well-being, and feeling free from violence in this space that engaged land-based teachings led by Elders, Knowledge Holders, and youth themselves.”⁷ In her study on land-based programming in the Yukon, Northwest Territories (NWT), and Nunavut, Juniper Redvers found, “that land-based programs increase resilience and wellness in youth by improving self-esteem, interpersonal relationships, and cultural pride.”⁸ The author of a study conducted with Moose Cree First Nation argues that “Indigenous-led programs, preferably on our lands, connect youth to their identity, community mentors, land, waters, cultural stories, traditional knowledge, and language.”⁹

On the topic of food security, a study conducted in Fort Resolution and Fort Providence found that “land-based wild food programs are useful and effective in contributing to long-term food security for Indigenous communities in the context of changing environmental conditions.”¹⁰ The NWT On the Land Collaborative’s 2022 Evaluative Review of Collaborative Reports states, “Spending time

on the land revitalizes and strengthens relations between program participants and the land that are traditional, radical, and anti-colonial.”¹¹

As someone who has organized, delivered, and participated in many land-based programs, linking on-the-land programs to positive social change is intuitive from an experiential standpoint. But empirically proving that link using standard Western methodologies is difficult. No long-term studies of formalized land-based programs exist. Part of the issue is that since it’s difficult to adequately resource consistent and long-term Indigenous land-based programming, it’s also difficult to document its long-term impacts. Few programs have been in consistent long-term operation. However, land-based programming and positive social change are very much linked according to Indigenous worldviews; the literature connects social and environmental health through the value and practice of relationality, including human relations to land, something that is taught and instilled via land-based programming.

Ultimately, land-based programming is a way to transform and restore humanity’s relationship to land, which, according to Indigenous thought, will lead to better health and social outcomes for all living beings. This philosophy has not been tested in any comprehensive Western scientific way. Nor does it have to be. Indigenous and community-based narratives and experiences attest to the positive social changes already occurring in localized contexts as a result of land-based programs.

The most relevant starting point in terms of analyzing land-based programming from Western perspectives is to review the literature on Western models of place-based education. Education theory and literature rooted in Western-European traditions and methodologies articulate and demonstrate the value and benefits of place-based education, of which land-based education is sometimes positioned as a type. Some use place-based education and land-based education interchangeably, but these terms denote different models informed by different worldviews. Those who work in the field of Indigenous land-based programming assume that the term “land-based” implies Indigenous-led or that Indigenous knowledges are meaningfully incorporated in some way under the guidance of Indigenous knowledge holders.

There is a major distinction between Western models of place-based education and Indigenous land-based education, which is that Indigenous land-based education is informed by a particular worldview that conceives of the land, animals, and humans as relations, while Western place-based education is informed by a worldview that positions humans as superior to the natural environment.

While the benefits of land-based programming from Indigenous and non-Indigenous theoretical perspectives are documented, this report focuses on Indigenous-led land-based programming and Indigenous cosmologies of land for good reasons. The first being that this paper draws from the literature on land-based programming in the NWT, where over half of the population identifies as Indigenous. As much as possible, this paper also centres Northern Indigenous scholars and writers.

Secondly, Indigenous worldviews and thought systems are inextricably linked to a relationship to land,¹² and land-based learning has always been and continues to be a fundamental element of Indigenous knowledge transmission. Indigenous peoples have valuable knowledge to share about relating to land and delivering land-based programming; however, Indigenous ways of knowing have been and continue to be marginalized by settler society and institutions. Even though this report centres on Indigenous writers, Indigenous theory, and Indigenous-led land-based programming, do not assume these programs are intended for or benefit Indigenous peoples only. In fact, many of the sources presented here highlight or imply the potential for Indigenous-led land-based programming to effect social change for the benefit of all people and living beings in the context of reconciliation and global climate justice.

"...our cultures have much to teach the Western world about the establishment of relationships within and between peoples and the natural world that are profoundly anti-imperialist."

- GLEN COULTHARD,
RED SKIN, WHITE MASKS, 456

Image Description:
A hide tanner cleaning the edges of a raw moosehide with a knife.



Conceptualizing “Land-Based”

AS INDIGENOUS PEOPLE continue on the path of reclamation, an emerging focus of reconnection and the revitalization of Indigenous life, the concept and practice of “land-based programming” has emerged and served to help re-establish Indigenous thought to place. Land-based programming has become a key strategy in reclamation, and hundreds of distinct programs have emerged in the past decade. There is tremendous value in land-based programming for Indigenous peoples’ self-determination, health, environmental stewardship, reconciliation, and climate change. That does not mean there aren’t challenges, which tend to revolve around the more granular issues of funding and evaluation.

While Indigenous land-based programming is considered “a highly-developed field of practice, informed by Indigenous epistemologies within Indigenous communities”¹³ and is receiving increased recognition, organizations that deliver these programs are continually challenged to find sufficient funding to meet the need and the growing demand.

The issue that seems to be under question is the amount of funding considered necessary and acceptable to invest in land-based programs since some of the outcomes of land-based programming are not easily measurable or quantifiable. Expenses like travel (e.g. boats, snowmobiles, gas), accommodations, food (three meals per day plus snacks), camp maintenance staff (e.g. cutting wood, setting up tents), skilled instructors (e.g. Elders, Indigenous knowledge holders, paddling instructors), and other specialized staff like clinical counsellors mean that land-based programs are more expensive to deliver than typical classroom or virtual learning style programs.

*Image Description:
A hide tanner softening a hide.*

In other words, there is tremendous value in land-based education and programming, though not without challenges.

But what is Indigenous land-based programming? What are the similarities and differences between Indigenous land-based programming and Western models of place-based education?

Programs fall within two categories: treatment/intervention and prevention/empowerment.¹⁴ Programs that are therapeutic and/or clinical in nature fall under the treatment/intervention category, while most other types of programs fall under the prevention/empowerment category. However, many programs incorporate a variety of methods oriented towards a wide spectrum of goals, including healing, leadership skills development, and land stewardship.

In either category, it’s important to note the centrality of land to Indigenous thought systems and how that relationship to land informs all Indigenous land-based programs and initiatives to some extent. This relationship to land is also fundamental to the themes that emerged, which will be discussed before sharing some brief recommendations for improving access to and sustainability of land-based programming in the NWT and beyond.



Juniper Redvers provides the following definitions of land-based and land-based programs:

Land-based: Relationship with the land as a central feature or concept rooted in Indigenous epistemology and pedagogy. Land-based implies a deep connection with and non-separation between human beings and the natural world. A reference to land includes all aspects of the natural world: plants, animals, ancestors, spirits, natural features, and environment (air, water, earth, minerals). The term can also be used in reference to a physical location or geographical concept.

Land-based program: A culturally defined program or service that takes place in an urban, nature-based, rural, or remote location, which involves cultural teachings and intergenerational knowledge transfer combined with any number of other activities or goals. Programs are informed by an Indigenous pedagogy wherein the land is the main source of knowledge and healing.¹⁵

Land-based programming is also sometimes referred to as On The Land (OTL) programming or land-based education, though not all land-based programs are delivered through formal educational institutions. Many are delivered by non-profit organizations, Indigenous governments, and unincorporated collectives or informal groups. Recently, land-based education has been articulated as a type of place-based education, which also includes outdoor education, experiential education, environmental education, and critical place-based pedagogy.

In the Northwest Territories specifically, the number of land-based programs and initiatives is significant, though no comprehensive review or tally of the total number of land-based programs appears to be available. The NWT On the Land Collaborative alone, for example, funded 270 OTL initiatives between 2016 and 2021. These initiatives included activities like hiking, drumming, hide tanning, harvesting and processing foods and medicines, snowshoeing, canoeing, storytelling, language learning, hand games, fishing, and dog sledding.¹⁶ Programming and training often occur alongside the establishment of Indigenous Protected Areas¹⁷ and Indigenous guardianship programs,¹⁸ which are also forms of land-based education and programming. This Report uses land-based education and land-based programming interchangeably, while place-based education is used to reference models informed by Western education theory and scholarship.

Place-Based, Land-Based and Mainstream Education

To demonstrate the value of land-based education from both Western and Indigenous perspectives, this report draws from the Western academic field of place-based education and the work of many Indigenous scholars and writers that explain the centrality of land for Indigenous self-determination and well-being. Within Western education models, land-based programming is sometimes situated as a type of place-based education, though there are important differences between the two.

Place-Based Education

Place-based education is a term used to describe pedagogical models where curricular material is derived from a particular place and informed by the learners' lived experiences with their local ecological or community context.¹⁹ Place-based models are held up by education scholars and practitioners as successful in improving student success in secondary schools, universities, and professional development programs.²⁰ The benefits of place-based education for enhancing students' achievement and community engagement are clearly articulated in academic literature,²¹ while the concept of land-based learning is fundamental to Indigenous worldviews and education.²²

Some of the characteristic features of place-based education and Indigenous land-based education are aligned. Both models support students to learn from and about the realities of their communities, and assignments or projects are intended to contribute to the well-being of the community to which they belong and/or from which they are learning, thus fostering community engagement, reciprocity, relationality, and accountability.

The main differences between the models are that Indigenous worldviews inform Indigenous land-based education, and the goals are often to strengthen Indigenous self-determination. The stated goals of place-based educational programs vary between organizations, scholars, and educators, and can include learning outcomes related to local flora/fauna and/or political issues. Land and place-based education are aligned in some ways, yet also quite distinct.

Land-Based Education

Land-based education and programming are positioned as an Indigenous method for regenerating Indigenous lifeways and thought systems because Indigenous knowledges are relational, and land is key in the knowledge generation and transmission process.²³ One of the goals of Indigenous land-based programming is to teach Indigenous peoples how to reconnect, reclaim, and engage with Indigenous thought systems. Many land-based programmers and Indigenous theorists argue that Indigenous peoples reconnecting to land is an important part of resurgence, decolonial work, and self-determination. While many people have lived experiences that support this claim, there is no clear, rigorous, methodological approach for determining if, how, and to what effect this reconnection is occurring. Land-based programs are expensive and difficult to evaluate.

Typically, organizations that deliver land-based programs have limited budgets and resources, evaluation is not prioritized, and there's no clear path for evaluating land-based programs. Importantly, it is difficult to evaluate land-based programs to determine if and how they are reconnecting people to the land because Indigenous peoples' stories are often implicitly positioned as anecdotes rather than legitimate knowledge that should inform policy. This makes evaluation challenging because there's no standard Indigenous methodological approach for drawing from stories and peoples' experiences for program evaluation. Part of the general desire for an evaluation model that will be accepted by the government and other funding bodies is the belief that if the benefits of land-based programming are documented in a way considered legitimate by policymakers and funding agencies, then more resources will be made available for these types of programs.

**"Land-based education sustains
and grows Indigenous governance,
ethics and philosophy – and life."**

- MATTHEW WILDCAT ET AL., "LEARNING FROM THE LAND," 2

Mainstream Education

Education scholars argue that the goal of mainstream education models is to enable students to participate in and perpetuate economies that exploit the land and natural resources.²⁴ Mainstream education is based on a worldview that typically does not recognize Indigenous ways of knowing, learning, or cultural values.²⁵ Conventional classroom schooling figuratively and literally disconnects students from their local environment and community contexts. Place-based education is different because the goal is to ground students' learning in their lived experiences with their ecological, cultural, and community contexts so they can create knowledge — rather than internalize and recite information that uncritically supports oppressive systems like corporate globalization and unrestricted capitalism.²⁶



*Image Description:
A hide tanner softening a hide.*

The Value & Challenges of Land-Based Programs

LAND HAS ALWAYS been critical to Indigenous peoples' worldviews and ways of knowing and being, and access and connection to land continues to be a social and environmental determinant of health for Indigenous peoples.²⁷ Indigenous land-based education and programming have direct implications for Indigenous self-determination. Many Indigenous writers and thinkers have already documented and shared much theory and philosophy that directly links Indigenous self-determination, language, and culture to a relationship to land.²⁸ The amount of academic literature and program reports from organizations and Indigenous peoples documenting specific programs and their outcomes is significant. It's not possible to provide a thorough review of it all here.^{29 30}

Most, if not all, land-based programs are designed to result in multiple interrelated outcomes and benefits for human mental, emotional, and physical health; environmental stewardship; cultural confidence and Indigenous knowledge; technical and practical skills; and enhanced understanding of and proficiency with critical concepts like settler-colonialism, governance, and Indigenous self-determination.

Since programs are oriented around multiple outcomes, it isn't easy to separate them into categories, but themes do emerge upon analysis of the selected literature. We have identified the following five:



01. Indigenous Self-Determination



02. Health & Well-Being



03. Environmental Stewardship



04. Reconciliation & Climate Justice



05. Evaluation



Indigenous self-determination, health and well-being, and environmental stewardship emerged as themes because they are clearly articulated program goals for Indigenous participants. The fourth theme, Reconciliation and Climate Justice, emerged because of the need to transform relationships between humans and among humans and the land. Land-based programs often address both reconciliation and climate action and provide experiential knowledge on these topics for a diversity of program participants (Indigenous, non-Indigenous, newcomers to Canada etc.) directly or indirectly. Evaluation emerged as a theme because many sources included in this review identified evaluation as a challenge and a knowledge and skills gap for program providers.



01. Indigenous Self-Determination

INDIGENOUS-LED LAND-BASED PROGRAMMING supports Indigenous self-determination by enhancing participants' understandings of what self-determination means in theory and practice and by creating spaces where participants can engage in Indigenous self-determination experientially. Indigenous self-determination is the capacity and ability of Indigenous peoples to determine their lives based on their own thought systems and ways of being. Indigenous cultures and languages are informed by, regenerate, and transmit Indigenous knowledges and thought systems.

Programs that support Indigenous peoples to (re)learn their languages³¹ and cultures and strengthen their relationships to land, whether explicitly stated or implied, further and strengthen Indigenous self-determination.

Many land-based programs focus on leadership development. Leadership development includes education around a wide array of skills and knowledge, from decolonial critical analysis to field competencies like map reading and Indigenous knowledge and cultural skills like story-telling, harvesting, and hide tanning. Some land-based programs include or prioritize critical education component³² to teach topics like the history of colonization, treaties and modern land claims, social and environmental determinants of health, and systemic violence and racism. Programs focusing on Indigenous youth often emphasize outcomes related to culture, identity, and resiliency,³³ which are also important elements of self-determination. A range of programs fit under this theme, some intended for Indigenous peoples only and some intended for a diversity of participants.

"In the beginning we as Dene people of the Sahtu were in harmony with all aspects of our environment. It seemed as if this period of harmony was a brief moment but we remember it was very beautiful. We have a very great connection with who we are as Dene people. Way before contact the Dene people had control over their lives. They lived off the land and traveled on it to survive. They had all the values and practices to survive. They felt worthy and had a deep self-respect for what they did."

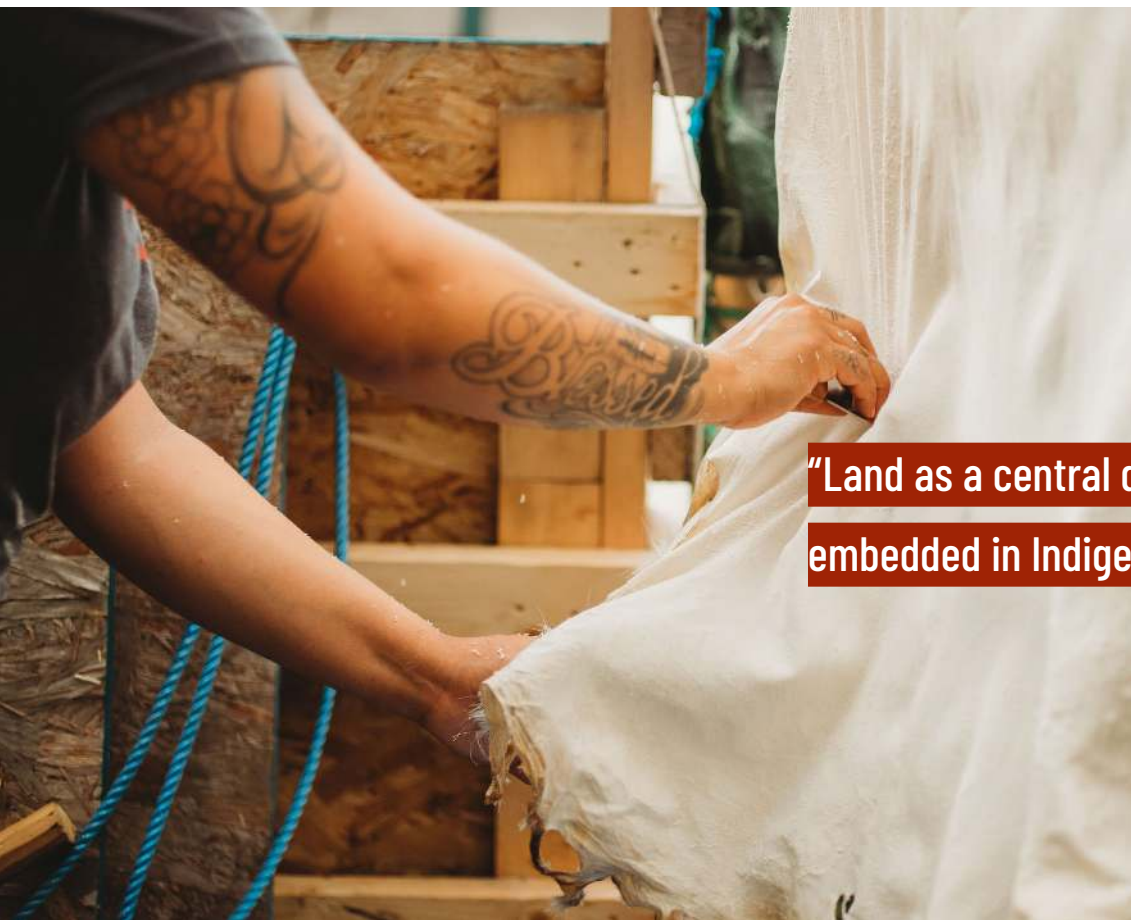
- LAURA TUTCHO, "ETS'ULAH," 8.



02. Health & Well-Being

INDIGENOUS LAND-BASED PROGRAMMING supports Indigenous health and well-being. Indigenous peoples' self-determination also depends on the physical, emotional, mental, and spiritual health and well-being of Indigenous peoples and communities. Wellness is dependent on access to healthy food,³⁴ culture, language, and community. Most peer-reviewed academic literature on land-based programming is about programs with intended outcomes related to improved physical and mental health,³⁵ often utilizing case study analysis as a primary method. Land-based programming improves health outcomes in various ways depending on the program. Some programs promote health through physical activities like paddling and hiking; some enhance mental and emotional health by facilitating meaningful experiences for participants on the land and with community; some are clinical in nature and provide counselling and coping mechanisms for managing and overcoming mental health challenges. Other programs improve access to healthy foods through harvesting or gardening.

Culture and land are social determinants of Indigenous people's health,³⁶ and Indigenous cultures are rooted in the relationship to land. The poor mental and physical health outcomes of Indigenous peoples in Canada are a result of colonial systems, practices, and policies designed to control and assimilate them and secure access to land and natural resources for settlement and exploitation. Historic and ongoing land dispossession, which limits and prohibits Indigenous peoples' access to land, combined with policies like Indian Residential Schools and the Sixties scoop, has displaced Indigenous peoples and disrupted Indigenous knowledge systems, undermining Indigenous caregiving and health practices.³⁷



"Land as a central dimension of wellness is embedded in Indigenous knowledge..."

- JENNIFER MÉTISSE REDVERS, "THE LAND IS A HEALER," 92.

Image Description:
A hide tanner softening a hide.



03. Environmental Stewardship

MANY LAND-BASED PROGRAMS oriented around environmental stewardship are meant to monitor and protect the land from industrial contamination, the impacts of tourism and recreational use, or take note of changes in the environment due to climate change. These programs are also intended to activate and strengthen participants' relationships to land and provide skills and knowledge about how to be on the land and take others on the land safely in accordance with local protocols and safety standards.

Indigenous guardianship programs are fast becoming one of the most prevalent manifestations of this type of programming. According to the Indigenous Leadership Initiative's website, there are about 30 Indigenous Guardians programs in place in Canada.³⁸ The Indigenous Guardian Toolkit explains,

"Many communities and Indigenous organizations report... that the most important benefit of guardian programs is the invaluable role they play in reconnecting people to the land, to their culture and their traditions. The very work of being a guardian, in whatever form it takes, supports the spiritual and physical well-being of the guardians and uplifts them as individuals, family members, community members, and descendants of their ancestors who also cared for the same lands. In turn, guardians support the wellbeing of the land. It is a circle of positive change that is supporting the greater well-being and strength of Indigenous communities."³⁹

Academic literature has yet to catch up with documenting and analyzing the growing numbers of these types of programs and the lessons they are generating. Most of the information about these programs is found in news and media coverage, and organizational reports,⁴⁰ much of which are compiled on the Indigenous Guardians Toolkit website.⁴¹ There is currently a significant gap in academic literature documenting and analyzing Indigenous guardian programs and land-based environmental stewardship programs, though there is a lot of readily available literature on Indigenous resource management,⁴² Indigenous perspectives on climate change and environmental conservation,⁴³ and Indigenous peoples' and food security,⁴⁴ which could all be components of land-based programs that focus on environmental stewardship.



*Image Description:
A hide tanner lacing up a raw
moosehide on a frame.*



04. Reconciliation & Climate Justice

FROM MOST INDIGENOUS PERSPECTIVES, reconciliation between Indigenous peoples and settler Canadian society and between humans and the environment on a global scale are priorities. Land-based programs are effective at supporting, promoting, and fostering the value and practice of relationality, which is beneficial to both reconciliation⁴⁵ and climate justice. Many argue that Indigenous-led land-based initiatives, or initiatives with at least some meaningful Indigenous leadership and participation, are more effective in furthering action on reconciliation and climate justice,⁴⁶ while also carefully noting the critical need for all peoples to engage in this work. The Truth and Reconciliation Commission of Canada (TRC) defines reconciliation as such:

“To the Commission, reconciliation is about establishing and maintaining a mutually respectful relationship between Aboriginal and non-Aboriginal peoples in this country. In order for that to happen, there has to be some awareness of the past, acknowledgement of the harm that has been inflicted, atonement for the causes, and action to change behaviour.”⁴⁷

Reconciliation and climate justice emerged as one theme because they must include the meaningful participation of everyone, and because of the ways in which land-based programming supports experiential understanding and action on reconciliation and climate change. For example, Indigenous Climate Action, an Indigenous-led climate justice organization in Canada, explains,

“While ongoing colonial capitalism is driving both the climate crisis and intensifying racial and gender-based inequality, Indigenous communities and Nations, often led by Indigenous women, are offering rich, diverse and urgently needed alternative values, worldviews, social organization and economic systems. To Indigenous Peoples, ‘Everything is connected in a web of relationships. Nothing exists in isolation. Indigenous people over millennia have strived to live in harmony with all living things in their environments’ (Snively & Williams, 2016, n.p). Indigenous worldviews that centre interdependence, reciprocity and respect offer alternatives and act as a counterforce and antidote to the extractivist worldviews that are driving the climate crisis (Kimmerer, 2013; Simpson, 2017; Wildcat, 2010).”⁴⁸

Reconciliation and climate justice are relational issues, and Indigenous-led action around reconciliation and climate justice are oriented toward repairing and transforming relationships between peoples and lands. Even though few land-based programs explicitly state reconciliation as one of their goals, authors and researchers state that land-based programming can be or is an effective approach to reconciliation.⁴⁹ Similarly, land-based programming connects participants to the land and facilitates relationships between people, lands, and animals — a critical component of Indigenous climate action.⁵⁰ From Indigenous perspectives, reconciliation and climate change are intertwined and interconnected issues.



Reconciliation and climate change are grouped together under one theme because land-based programming creates spaces where Indigenous and non-Indigenous people spend time together in community on the land to experientially learn about and/or discuss reconciliation and climate change.

Though land-based programs may not always directly educate on topics like Indian Residential Schools, many support reconciliation by promoting education and respectful, reciprocal relations. Indigenous land-based programs designed for multi-cultural participation can effectively facilitate opportunities for Indigenous and non-Indigenous participants to develop positive and mutually respectful and reciprocal relationships with one another and the land, whether they explicitly address the TRC or Indian Residential School System.

Effective Indigenous climate action is framed as something in which all peoples, Indigenous or not, can and must participate with the leadership and guidance of Indigenous peoples and Indigenous knowledges.⁵¹ Mutually respectful relationships are a necessary precondition to this work.



*Image Description:
Bone tools for
fleshing moosehide.*



05. Evaluation

WESTERN METHODS OF PROGRAM EVALUATION fall short in conveying and articulating the value and impacts of land-based programming. "... [I]t is critical that land-based initiatives are not examined through a Western lens of viability, success, and sustainability, as this risks dismissing Indigenous knowledge and creating ongoing barriers to access adequate resources. Rather, they need to be examined from a social, cultural, spiritual, and historical context."⁵²

Authors of a study on an on-the-land wellness program in the Inuvialuit region explain that, "Mainstream Western evaluation methods have reinforced and (re) produced colonialism by depicting Western knowledge as superior to Indigenous knowledge; they continue to do so today."⁵³ This is a form of epistemic violence, as Western methods of evaluation "creat[e] and sustain[e] boundaries around what is considered real, and, by extension, what is unable to be seen as real (or to be seen at all)."⁵⁴

For example, that which is considered real (and valuable) by program participants and providers in the context of land-based programming is typically overlooked by Western methods. The growth of participants, including staff and volunteers, the relationships catalyzed and activated during the program between humans and the land, and the ongoing community connections and sense of community created tend to be overlooked.

Participant feelings such as enhanced cultural pride and confidence, increased feelings of safety and competency on the land, improved language proficiency, and general yet profound feelings of joy and fulfillment from spending time on the land in community are also valuable yet difficult to empirically prove.

In another applied sense, epistemic violence has implications for Indigenous land-based programming and evaluation because funders can impose ideas of success and worth on the projects being funded, which many do so unintentionally. Usually, funders are federal, provincial, territorial departments and/or private philanthropic organizations that require deliverables that the program providers, in some cases, may or may not value, but they're necessary to build their evaluations based on the metrics of the funder, nonetheless. This means programmers spend very little time developing their own evaluation mechanisms that assess what they truly value. Within the realm of mainstream academic evaluation, Indigenous peoples' stories are implicitly positioned as anecdotal, not as legitimate knowledge that can provide credible evaluation of land-based programs on which to base policy and budgetary decisions.

A Theory of Change for Land-Based Education & Evaluation

BASED ON THIS REVIEW, it is clear that land-based education has a uniquely positive impact for Indigenous self-determination, health and wellness, environmental stewardship, and even reconciliation. Yet there remain challenges. This report, then, offers some very straightforward recommendations for improving access to and sustainability of land-based programming in the NWT (and elsewhere). They revolve around providing more funding for land-based programs and more support for evaluation of land-based programs.

First, all levels of government should allocate more financial resources for land-based programming. More specifically, more funding should be available for organizations, nations, or other groups that are already delivering land-based programming. This is not a recommendation for governments to allocate more resources for themselves to copy programs and deliver their own land-based programming. The problem in terms of access and sustainability of effective land-based programming isn't the inability of program delivery bodies to write effective grant applications. The problem is the overall lack of resources available for land-based programming. Most program grants are not multi-year, so programmers must apply for the same grants over again each year. This makes it difficult to provide secure employment for program staff and to engage in long-term program planning.

Second, program providers should also be supported to develop their own evaluations. Supporting whole regions to do this work together could be an effective approach to developing shared theory of change models. This should be a multi-year research project with care taken to ensure groups, nations, or organizations are similar enough that theory of change reflects the worldviews, goals, aspirations, and pedagogical methods of those participating. Including too many groups in one theory and process of change may overgeneralize and miss important distinctions.

As has hopefully been made clear in this report, evaluation is critical to land-based education and is really the crux of ensuring that programming is Indigenous led and transformative.

Of course, evaluation is not a new practice or idea for Indigenous peoples, yet the term is coded with all the problematic, extractive, damage-centred baggage that has historically been and continues to be affiliated with academic research.⁵⁵ Indigenous evaluation and land-based program evaluation have been identified as knowledge and skills gaps in the Northwest Territories.^{56 57} One of the issues with evaluation generally is that mainstream, linear theories of change models don't often apply to Indigenous-led land-based projects. Eve Tuck's work on Indigenous theories of change and participatory action research resonates strongly here. Linear theory of change models begin by locating the damage, harm, or injury that the research or project is meant to fix.⁵⁸ This is required in funding applications for research projects and most programmatic grants, and it is problematic because it means organizations and nations must position themselves or their members as damaged in order to secure the material resources needed to deliver their programs.

So another recommendation in the path forward is instead of implementing a linear change model, Indigenous program providers could take inspiration from Tuck's work on Indigenous theories of change⁵⁹ by orienting evaluation mechanisms around the ways in which a project enables or furthers praxis (theory, action, and self-reflection) of self-determination or other concepts of meaning to the project participants or Indigenous nations. This may be an appropriate approach to take for Northern land-based initiatives.

Finally, the pressure to measure and quantify the outcomes of land-based programming are driven by the assumption that if the benefits are documented in ways that funding bodies value and understand, then more resources will be allocated for land-based programming. Despite the significant amount of literature available about the benefits of land-based programming for Indigenous and non-Indigenous peoples, some researchers still point to a gap in literature and research on land-based program evaluation.

An area of further research is a comprehensive annotated literature review of case studies of land-based programs. This would be useful because while there is a tremendous amount of theory written and recorded by Indigenous knowledge holders, including Elders and academics, that links land to social and environmental health, there is much less literature on specific land-based programs and program outcomes. Program outcomes can be documented via many different qualitative methods such as story-telling, interviews, facilitated group dialogue sessions, etc.

However, the fact that there is no university in the NWT means that academia is far outpaced by community practice. There are so many amazing land-based programs in the NWT with extremely valuable lessons and knowledge to share, but evaluating and documenting this knowledge is not prioritized because program providers lack the resources to do so.

Documenting, analyzing, and communicating these lessons in partnership with the Indigenous peoples and communities delivering effective programming is an exciting role for researchers.

As land-based education and specific programming continues to grow in Canada — and in the North specifically — resources, knowledge, and appropriate evaluative frameworks are required to fully realize the benefits of land-based education for Indigenous health and well-being, self-determination, effective environmental stewardship, and reconciliation.



*Image Description:
A hide tanner scraping
a moose hide.*

Endnotes

¹See the NWT On the Land Collaborative's Annual Reports 2016-2022 to learn about many land-based programs in the NWT at <http://www.nwtontheland.ca/reports.html>

²Cajete, *Look To The Mountain: An Ecology of Indigenous Education*; Cajete, Native Science.

³Ahmed, Zuk, and Tsuji, "The Impact of Land-Based Physical Activity Interventions on Self-Reported Health and Well-Being of Indigenous Adults"; Thunderbird Partnership Foundation, "Land for Healing: Developing a First Nations Land-Based Service Delivery Model"; Redvers, "The Land Is a Healer."

⁴Thunderbird Partnership Foundation, "Land for Healing: Developing a First Nations Land-Based Service Delivery Model."

⁵Redvers, Nadeau, and Prince, "Urban Land-Based Healing: A Northern Intervention Strategy," 323.

⁶Social Ventures Australia, "Analysis of the Current and Future Value of Indigenous Guardian Work in Canada's Northwest Territories."

⁷Fast et al., "Restoring Our Roots: Land-Based Community by and for Indigenous Youth," 120.

⁸Redvers, "The Land Is a Healer," 92.

⁹Gaudet, "Project George: An Indigenous Land-Based Approach to Resilience for Youth," 189.

¹⁰Wesche et al., "Land-Based Programs in the Northwest Territories," 25.

¹¹NWT On the Land Collaborative, "Evaluative Review of Collaborative Grant Reports."

¹²Teves, Smith, and Raheja, Native Studies *Keywords*, 59.

¹³Redvers, "The Land Is a Healer."

¹⁴Thunderbird Partnership Foundation, "Land for Healing: Developing a First Nations Land-Based Service Delivery Model," 13.

¹⁵Redvers, "The Land is A Healer," 90.

¹⁶NWT On the Land Collaborative, "Impacts of the NWT On the Land Collaborative & Land-Based Programming."

¹⁷Indigenous Circle of Experts, *We Rise Together*; Thaidene Nene, "Land of the Ancestors"; Edézhíe - Dehcho First Nations."

¹⁸Simmons, "Canada Commits \$340 Million to Indigenous Protected Areas, Guardians Programs"; Indigenous Leadership Initiative, "A National Indigenous Guardians Network"; Gignac, "10 Indigenous Guardian Programs, Including Yukon's Kluane First Nation's, Get Federal Funding."

¹⁹Woodhouse and Knapp, *Place-Based Curriculum and Instruction*; Gruenewald, "The Best of Both Worlds: A Critical Pedagogy of Place"; Smith, "Place-Based Education."

²⁰Gruenewald and Smith, "Making Room for the Local"; Gruenewald, "The Best of Both Worlds: A Critical Pedagogy of Place"; Gruenewald, "Foundations of Place"; Alagona and Simon, "The Role of Field Study in Humanistic and Interdisciplinary Environmental Education"; Takano, Higgins, and McLaughlin, "Connecting with Place"; Powers, "An Evaluation of Four Place-Based Education Programs."

²¹Smith, "Place-Based Education"; Gruenewald, "The Best of Both Worlds: A Critical Pedagogy of Place"; Gruenewald, "Foundations of Place"; Gruenewald and Smith, "Making Room for the Local"; Knapp, "The 'I - Thou' Relationship, Place-Based Education, and Aldo Leopold"; Powers, "An Evaluation of Four Place-Based Education Programs."

²²Little Bear, "Jagged Worldviews Colliding"; Battiste, *Decolonizing Education: Nourishing the Learning Spirit*; Deloria, *God Is Red: A Native View of Religion*; Simpson, "Land as Pedagogy: Nishnaabeg Intelligence and Rebellious Transformation."

²³Simpson, "Land as Pedagogy: Nishnaabeg Intelligence and Rebellious Transformation"; Little Bear, "Jagged Worldviews Colliding"; Deloria, *God Is Red: A Native View of Religion*.

²⁴Gruenewald, "The Best of Both Worlds: A Critical Pedagogy of Place."

²⁵Barnhardt and Kawagley, "Indigenous Knowledge Systems and Alaska Native Ways of Knowing," 10; Battiste, *Decolonizing Education: Nourishing the Learning Spirit*.

²⁶Smith, "Place-Based Education," 586

²⁷Ahmed, Zuk, and Tsuji, "The Impact of Land-Based Physical Activity Interventions on Self-Reported Health and Well-Being of Indigenous Adults"; Thunderbird Partnership Foundation, "Land for Healing: Developing a First Nations Land-Based Service Delivery Model."

²⁸Tatti, "The Wind Waits for No One"; Tutcho, "Ets'ulah"; Coulthard, *Red Skin, White Masks*; Simpson, "Land as Pedagogy: nishnaabeg Intelligence and Rebellious Transformation"; Simpson, *Lighting the Eighth Fire*, Deloria, *God is Red: A Native View of Religion*; Little Bear, "Jagged Worldviews Colliding"; Barker, *Critically Sovereign*.

²⁹Redvers, Nadeau, and Prince, "Urban Land-Based Healing: A Northern Intervention Strategy"; Lines, Yellowknives Dene First Nation Wellness Division, and Jardine, "Connection to the Land as a Youth-Identified Social Determinant of Indigenous Peoples' Health"; Fast et al., "Restoring Our Roots: Land-Based Community by and for Indigenous Youth"; Redvers, "The Land Is a Healer"; Ollier et al., "Promoting a Culturally Safe Evaluation of an On-the-Land Wellness Program in the Inuvialuit Settlement Region"; Cornstassel and Hardbarger, "Educate to Perpetuate."

³⁰For a comprehensive review of land-based programming in the NWT, Yukon and Nunavut see Redvers, "Land-Based Practice for Indigenous Health and Wellness in Yukon, Nunavut, and the Northwest Territories."

³¹McIvor, Napoleon, and Dickie, "Language and Culture as Protective Factors for At-Risk Communities."

³²See Dechinta Centre for Research and Learning's for their roster of land-based university-accredited programming at dechinta.ca

³³Gaudet, "Project George: An Indigenous Land-Based Approach to Resilience for Youth."

³⁴Fox, "Pilot Study: Reclaiming the Role of Full-Time Hunter in an Inuit Community."

³⁵Fox; Lines, Yellowknives Dene First Nation Wellness Division, and Jardine, "Connection to the Land as a Youth-Identified Social Determinant of Indigenous Peoples' Health"; Sommerfeld, Danto, and Walsh, "Indigenous Grassroots and Family-Run Land-Based Healing in Northern Ontario"; Ollier et al., "Promoting a Culturally Safe Evaluation of an On-the-Land Wellness Program in the Inuvialuit Settlement Region"; Auger, "Cultural Continuity as a Determinant of Indigenous Peoples' Health"; Ahmed, Zuk, and Tsuji, "The Impact of Land-Based Physical Activity Interventions on Self-Reported Health and Well-Being of Indigenous Adults"; Kant et al., "Social, Cultural, and Land Use Determinants of the Health and Well-Being of Aboriginal Peoples of Canada"; Stelkia et al., "Letsemot, 'Togetherness': Exploring How Connection to Land, Water, and Territory Influences Health and Wellness with First Nations Knowledge Keepers and Youth in the Fraser Salish Region of British Columbia"; Thunderbird Partnership Foundation, "Land for Healing: Developing a First Nations Land-Based Service Delivery Model"; Kwanlin Dün First Nations, "Companion to the Youth Program Model"; Redvers, Nadeau, and Prince, "Urban Land-Based Healing: A Northern Intervention Strategy."

³⁶Black and McBean, "Increased Indigenous Participation in Environmental Decision-Making"; Auger, "Cultural Continuity as a Determinant of Indigenous Peoples' Health."

³⁷Thunderbird Partnership Foundation, "Land for Healing: Developing a First Nations Land-Based Service Delivery Model," 5.

³⁸Indigenous Leadership Initiative, "A National Indigenous Guardians Network."

³⁹Indigenous Guardians Toolkit, "What Are the Benefits of Indigenous Guardian Programs?"

⁴⁰Indigenous Circle of Experts, *We Rise Together*; EPI EcoPlan International, Inc., "Valuing Coastal Guardian Watchmen Programs: A Business Case"; Social Ventures Australia, "Analysis of the Current and Future Value of Indigenous Guardian Work in Canada's Northwest Territories."

⁴¹See the Indigenous Guardians Toolkit: <https://www.indigenousguardianstoolkit.ca/>

- ⁴² Burgess et al., “Healthy Country: Healthy People? Exploring the Health Benefits of Indigenous Natural Resource Management.”
- ⁴³ Ford, Smith, and Wandel, “Vulnerability to Climate Change in the Arctic: A Case Study from Arctic Bay, Canada”; Furgal C and Seguin J, “Climate Change, Health, and Vulnerability in Canadian Northern Aboriginal Communities.”
- ⁴⁴ Kenny and Chan, “Estimating Wildlife Harvest Based on Reported Consumption by Inuit in the Canadian Arctic.”
- ⁴⁵ Arellano, Friis, and Stuart, “Pathways to Reconciliation.”
- ⁴⁶ Indigenous Leadership Initiative, “Indigenous-Led Conservation in the Boreal Is Key to Climate Leadership”; Indigenous Climate Action, “Decolonizing Climate Policy in Canada.”
- ⁴⁷ Truth and Reconciliation Commission of Canada, *Honouring the Truth, Reconciling for the Future*, 6–7.
- ⁴⁸ Indigenous Climate Action, “Decolonizing Climate Policy in Canada,” 8.
- ⁴⁹ Ray, Cormier, and Desmoulins, “Fish Fry as Praxis: Exploring Land as Nexus for Reconciliation in Research.”
- ⁵⁰ Indigenous Climate Action, “Decolonizing Climate Policy in Canada”
- ⁵¹ Sepulveda, “Our Sacred Waters: Theorizing Kuuyam as a Decolonial Possibility.”
- ⁵² Gaudet, “Project George: An Indigenous Land-Based Approach to Resilience for Youth,” 189.
- ⁵³ Ollier et al., “Promoting a Culturally Safe Evaluation of an On-the-Land Wellness Program in the Inuvialuit Settlement Region,” 314.
- ⁵⁴ Hunt Sarah, “Ontologies of Indigeneity,” 29.
- ⁵⁵ Kovach, *Indigenous Methodologies: Characteristics, Conversations, and Contexts*; Tuck, “Suspending Damage”; Hunt Sarah, “Ontologies of Indigeneity”; Fraser and Todd, “L’Internationale - Decolonial Sensibilities: Indigenous Research and Engaging with Archives in Contemporary Colonial Canada.”
- ⁵⁶ Planit North, “On the Land Evaluation Workshop Report of the Meeting”; Canadian Evaluation Society, NWT Evaluation Symposium; Redvers, “The Land Is a Healer,” 92.
- ⁵⁷ See the NWT On the Land Collaborative’s website page for more information on the efforts of the Collaborative to respond to the gap in knowledge on evaluation and Indigenous evaluation for land-based programs <http://www.nwtontheland.ca/evaluation.html>
- ⁵⁸ Tuck, “Re-Visioning Action,” 413.
- ⁵⁹ Tuck, “Re-Visioning Action.”

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