

Outdoor Learning in Canada

OUTDOOR LEARNING IN CANADA

SIMON PRIEST; STEPHEN D. RITCHIE; AND DANIEL B. SCOTT



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LAND ACKNOWLEDGMENT

We would like to acknowledge that the land which we reintroduce as Canada is the traditional territory of many diverse Indigenous peoples, communities, and nations across the vast country. We recognize and deeply appreciate their historic connection to regional territories and their ongoing contributions to the society and culture of Canada. We also acknowledge the impact of colonization and ongoing systemic oppression and commit to working towards reconciliation and decolonization through the diverse research and practices related to outdoor learning in Canada.

PART I

INTRODUCING OUTDOOR LIVING IN CANADA

1.

REINTRODUCING CANADA!

Simon Priest and Stephen D. Ritchie

Canada is a vast country in North America and indeed the world. However, relevant to outdoor learning in Canada (OLiC), it is important to reintroduce several other distinct socio-political characteristics. Despite the vast geography, the population of 39 million (Statistics Canada, 2022a) is relatively low compared to many other nations around the world, and the vast majority of this population lives in close proximity to the southern border with our influential neighbour, the United States (aka America). As a progressive social democracy, Canada has a distributed power and governance structure with the 10 provinces and three territories responsible for education, health, social services, and resource management. For example, see the differences across education at https://www.cmec.ca/299/Education_in_Canada__An_Overview.html.

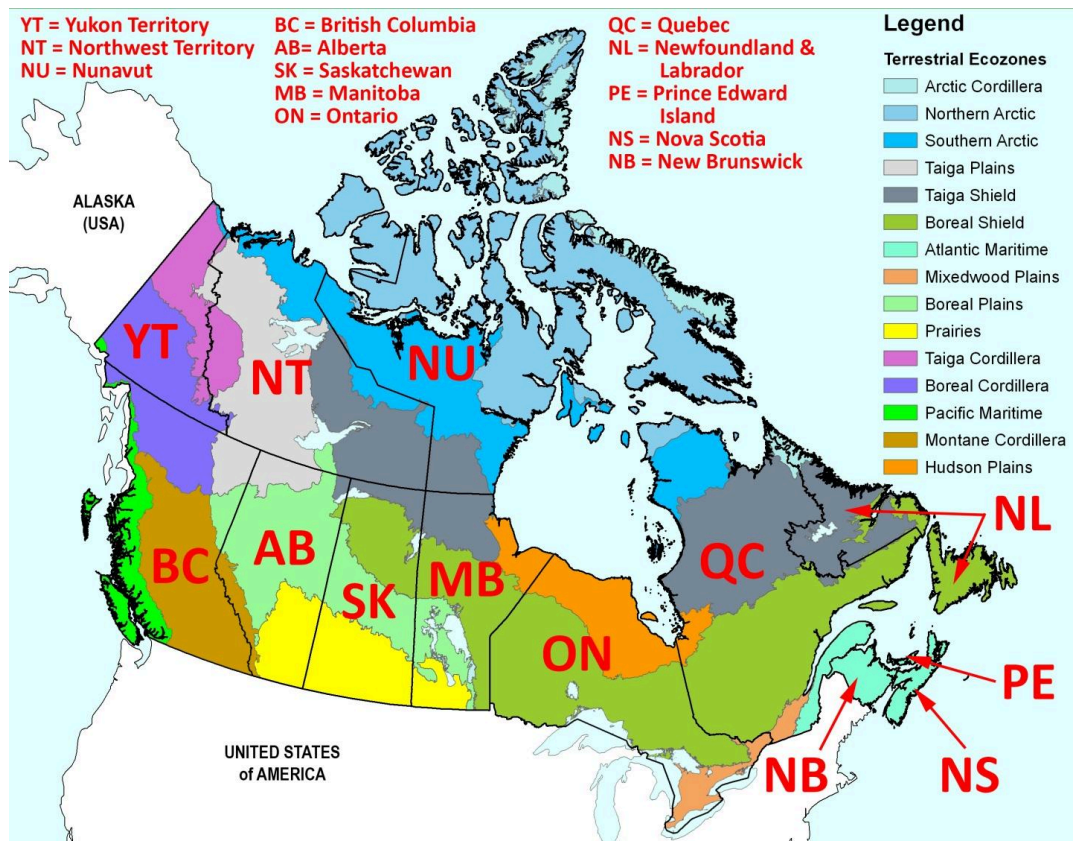
French and English are the official languages and cultures in Canada, although there are also seven million (18%) other immigrant people, who speak other languages and have distinct cultural practices (EduCanada, 2022). The 1.8 million (5%) Indigenous people in Canada include First Nations, Inuit, and Métis people (Statistics Canada, 2022b), and these populations represent hundreds of communities, dozens of distinct languages, and unique histories. These people live in geographically dispersed land territories from coast to coast, including in the far north (Government of Canada, 2022a). Thus, OLiC is as diverse as the socio-political characteristics across the nation.

However, despite being overshadowed and strongly influenced by our nearest neighbour, America, Canada does have its own unique culture and zeitgeist (Government of Canada, 2021). Canadians are heavily pressured by British, French, and American interests as indicated by our mixed spelling (colour/color, theatre/theater, or grey/gray) and mixed measurements (outside temperatures in Celsius/cooking temperatures in Fahrenheit, food weights in kilograms/body weights in pounds, and lengths in metres/heights in feet). To begin, we would like to reintroduce (or remind you of) some additional proud Canadian facts, current at the time of publication: 2023. Perhaps you already knew...

- Canada is the world's second-largest country by total area (9,984,670 km²) after Russia, but is sparsely inhabited with a population of about 38 million people (4 per km²) and 75% of these are concentrated along its southern land border within 100 km of the USA (World Atlas, 2021).
- While over 80% of Canada's land areas are uninhabited, over 27% of Canada's land mass (2,728,800 km²) is located north of the tree line (Statistics Canada, n.d.).
- Canada has some of the planet's most extensive wilderness (undisturbed by humans passing through it)

and most diverse natural and fragile ecosystems including arctic tundra, subarctic taiga, deciduous Boreal Shield woodlands, Rocky Mountains or Montane Cordillera, mixed woods, coniferous rainforest, plains/grassland prairies, wetlands, lakes, and marine ecozones (Ecological Land Classification, 2017).

- Canada has the world’s longest coastline (243,042 km), which is one-third of the world’s total and spans three oceans. Shaped by a geological history of ice age glaciations, it is composed of the abundant fiords of the Pacific, the numerous islands of the Arctic Archipelago, and the plentiful inlets of the Atlantic. These contribute to its enormous length (World Factbook, 2021).
- Given its position in the northern hemisphere, Canada tends to be a colder country than most, with plenty of snow, earning it the nickname of the “Great White North” (World Atlas, n.d.).
- Canada has received Guinness World Records (2019) for the biggest snow maze (St. Adolphe, Manitoba) and the longest winter road. At 752 km long, the Wapusk Trail is a road constructed each January atop snow and ice to reach isolated settlements in northern Manitoba.



Canada’s ten provinces, three territories, and fifteen terrestrial ecozones.

- Canada has the world’s longest land border (8,890 km), an “international boundary” with the USA, that it is “unprotected” and not militarized or defended (Statistics Canada, n.d.).
- Canada experiences the world’s fastest saltwater rapids (30 km/hr) at Nakwakto, BC, and its highest tides (average 16 m change) at the Bay of Fundy, NB/NS (Statistics Canada, n.d.).
- Canada’s largest saltwater island and the world’s fifth largest is Baffin in the Arctic, but Manitoulin in

Lake Huron is the world's largest freshwater island (Statistics Canada, n.d.).

- Canada hosts 25% of the Earth's wetlands and holds 20% of the globe's freshwater in more lakes (60%) than all other nations combined (Messenger et al., 2016).
- Canada supplies 85% of the global demand for maple syrup with 70% of this coming from Quebec (Agriculture and Agri-food Canada, 2011). The Great Canadian Maple Syrup Heist, 2011-2012, saw the gradual siphoning theft of almost 3,000 tonnes from storage in Quebec valued at almost \$19 million, the greatest cost of anything stolen in Canada to date (History 101, 2022).
- The red maple leaf design on the country's flag, first raised in 1965, had been a national symbol indicative of the Sugar Maple and other similar trees from before the 1867 Confederation of Canada (Government of Canada, n.d.).



The national flag of Canada

- Receiving official royal assent in 1975, the Beaver is Canada's iconic national animal dating back to the 1530s fur trade, which almost wiped them out. With orange buckteeth that continuously grow, they are one of the few animals, other than humans, that modify their habitat. They chew and cut saplings to build mud dams and digest the wood chips (Canadian Geographic, 2019).
- Canadians are known as a peace-loving people with an international reputation for their politeness. Sorry, but at least one province passed key legislation preventing parties from using an apology as a statement of fault or liability in court (BC Ombudsperson, 2006).
- Although Canadians love donuts more than any other nation (over a billion consumed annually), Poutine (a combination of french fries and cheese curds melted in gravy) is a uniquely Canadian dish from Quebec (la Banquise, n.d.).
- Canadians like to skate and more Canadians can skate than swim. Canada has the longest river skating (11 km) at the Forks in Winnipeg, Manitoba, and the largest manicured skating area (0.2 km²) on the Rideau Canal in the capital city of Ottawa, Ontario (Guinness World Records, 2019).
- While ice hockey is clearly the most popular sport in the country, and the official winter sport, Canada's

official national and summer sport is lacrosse, first observed by Europeans in the 1630s being played by large teams of Indigenous Algonquins in Quebec (Lacrosse Canada, 1995).

- Crossing the country, the Trans-Canada Highway #1 (7821 km) and the Canadian Great Trail (an outdoor network stretching 28,000 km) are the longest in the world (Trans Canada Trail, n.d.).
- Schitt's Creek, a TV comedy created by Canadians (father and son team, Dan and Eugene Levy) and filmed in Canada with all Canadian actors (except for one), won seven Primetime Awards and nine Emmys in 2020 to sweep the comedy categories (Bahr, 2020).
- The Canadian expression of "eh" at the end of a full or partial sentence is a real word defined in several top dictionaries and Canada is actually spelt: C-eh-N-eh-D-eh!
- Canada has an official government services toll-free phone number: 1-800-O CANADA!
- Santa Claus receives letters at the North Pole in Canada with the postal code H0H 0H0.
- In 2018, cannabis was legalized in Canada and was the second country to do so, after Uruguay (Government of Canada, 2022b).
- Canada is the second most educated country in the world after South Korea, with 99% literacy and 63% of Canadians earning a higher education/tertiary degree (OECD, 2021).
- The international Organization for Economic Co-operation and Development (OECD, 2021) recently named Canada as the best country in the world for acceptance of minorities.
- Canada was ranked highest in North America and Europe for entrepreneurial activity, ambition, and new start-up businesses, as well as being in the strongest position to economically recover from the recent pandemic (Global Entrepreneurship Monitor, 2021; OECD, 2021; Desai, 2016). The nation's culture of innovation has been attributed to a strong ethnic diversity of immigrants willing to take risks (Rideau Hall Foundation, 2019).
- Canada often receives top billing as the best place to live with the highest quality of life (US News & World Report, 2021). So far, Canadians have been living the American Dream, but with universal healthcare and without so much gun violence or innate white supremacy.
- Canadian discoveries, inventions, and creations include: the telephone (Alexander Graham Bell in Ontario and Nova Scotia), Insulin (Frederick Banting and Charles Best in Ontario), the discovery of the stem cell (James Till and Ernest McCulloch in Ontario), half of Superman (Joe Shuster in the US), the game of Trivial Pursuit (Scott Abbot and Chris Haney in Quebec), IMAX projection (Graeme Ferguson, Roman Kroitor and Robert Kerr in Quebec), the space shuttle's remote Canadarm (scientists and engineers at SPAR in Ontario), and, of course, the snowblower (Arthur Sicard in Quebec), snowmobile (Joseph-Armand Bombardier in Quebec), and Hawaiian pizza (Sam Panopoulos in Ontario).
- Canadians also invented the sports of hockey, basketball (James Naismith), football (at McGill University in 1874), and the baseball glove (Arthur Albert "Foxy" Irwin) for "bassball" first played in Britain, circa 1740 (CBC Sports, 2017).
- Canadians enjoy poking fun at Americans and pointing out the celebrities who are Canadian.

With the size of the country, its long coastline, bountiful freshwater lakes, sparse population, and rich wilderness, one can easily see how Indigenous Peoples developed unique modes of travel including the canoe, the kayak, and the snowshoe. These uniquely Canadian methods of travel have figured prominently in the evolution of Canadian outdoor learning and have been adopted by several nations, where the word “Canadian” often precedes canoe, kayak, or snowshoe to distinguish it from local variations. This Indigenous contribution to Canadiana is well documented (Newhouse et al., 2005).



Original artwork of Canada
(Indigenous styles used with permission)

This final fact makes Canada’s treatment of Indigenous people that much more shameful, especially with regard to their health and colonization history (McCallum, 2017). Like many nations, Canada apologized for lasting imperial oppression and struck a Truth and Reconciliation Commission to address the past, but failed to account for previous wrongs by not openly allowing Indigenous self-determination and not returning access to their lands (Corntassel & Holder, 2008).

- The Indigenous population is the fastest growing population in Canada, which makes it also the youngest, with nearly half under the age of 25 (Statistics Canada, 2022b).
- In Canada, there are over 70 Indigenous languages spoken across more than 600 First Nations and 50 Inuit communities, and a plurality of groups representing the Métis people (Statistics Canada, 2022a).
- First Nations governance includes Chiefs and Councils within each First Nation, tribal councils

representing several First Nations, provincial and territorial organizations, and the Assembly of First Nations representing all First Nation people in Canada (Government of Canada, 2022).

- In the Inuit language of Inuktitut, the word Inuit means “the people”, and they live in Inuit Nunangat, which means “the place where Inuit live” and it includes Inuvialuit (Northwest Territories), Nunavik (Northern Quebec), Nunatsiavut (Labrador), and Nunavut (Government of Canada, 2022).
- Métis people are defined by more than their mixed ancestry (Indigenous and Francophone); they have their own language (Michif), culture, claims to land, and a rich history in Canada (Canadian Encyclopedia, 2023).

From an Indigenous perspective, outdoor learning is often referred to as land-based learning, or simply connecting with the land. Indigenous people in Canada are known for their deep understanding and connection to the land, their passionate stewardship of natural resources, and their leadership in conservation and environmental activism. Thus, the Indigenous knowledges and teachings related to the land and all of creation are an incredibly rich resource for outdoor learning practitioners across Canada.

Native Land Digital was created by Canadians in 2018 to provide an online centralized resource (<https://native-land.ca/>) for identifying international Indigenous territories. Thus, this resource can be used by outdoor learning practitioners to identify the traditional territories, languages, and treaties associated with the region they are practicing outdoor learning anywhere across the country and around the world.

Outdoor learning has a unique opportunity to heal intergenerational trauma and contribute to further reconciliation through its inherent process of democratizing social injustice, challenging systems of privilege, and growing citizens who will solve the world’s future big problems (Priest & Asfeldt, 2022; Priest & Henderson, 2021).

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Simon Priest was a university professor of adventurous and environmental outdoor learning in Ontario. Internationally, he has been a Dean, Provost, Vice-Chancellor, Senior Vice President, President, Commissioner, and Advisor to a Minister of Education. He has received numerous awards and accepted over 30 visiting scholar positions around the world in outdoor learning. Now early retired in British Columbia, he spends his time hiking, gardening, researching, teaching, and writing.

Stephen D. Ritchie

LAURENTIAN UNIVERSITY

Stephen D. Ritchie is an Associate Professor in the School of Kinesiology and Health Sciences in Sudbury, Ontario, Canada. His current research and teaching interests are focused on: (1) understanding ecohealth promotion in the context of achieving personal growth and holistic health outcomes through outdoor learning, adventure, and contact with nature, and (2) applying diverse program evaluation approaches in outdoor learning, Indigenous health, and other contexts.

2.

INTRODUCTION: WHAT IS OUTDOOR LEARNING?

Simon Priest

Authors' note: Spirituality in this chapter refers to comprehending our place in the world—our search for satisfaction or serenity, why we were put here, and what role we were meant to play with others and nature—during our brief time on the planet, with or without religion or transcendence.

The umbrella term of outdoor learning has been difficult to define due to the wide variety of programs that exist, thrive, and survive under its cover. Figure 1 lists just a few of its synonymous labels. One of the earliest recent definitions came from **England**: “Outdoor Learning is a broad term that includes: outdoor play in the early years, school grounds projects, environmental education, recreational and adventure activities, personal and social development programmes, expeditions, team building, leadership training, management development, education for sustainability, adventure therapy ... and more” (English Outdoor Council, 2018; Greenaway, 2005).



Figure 1: The umbrella term of outdoor learning covers a wide variety of similar programming.

Another **British** organization, unfortunately, used the words “learning” and “outdoors” to define outdoor learning as “actively inclusive facilitated approaches that predominately use activities and experiences in the outdoors which lead to learning, increased health and wellbeing, and environmental awareness” (Institute for Outdoor Learning, 2021). They later substituted “nature” for “the outdoors” and “change” for “learning.” However, the learning leads to more than just wellness and environmental outcomes.

The National Curriculum of **Australia** (2020) states that “the development of positive relationships with others and with the environment through interaction with the natural world ... are essential for the wellbeing and sustainability of individuals, society and our environment. Outdoor learning engages students in practical and active learning experiences in natural environments and settings, and this typically takes place beyond the school classroom. In these environments, students develop the skills and understandings to move safely and competently while valuing a positive relationship with natural environments and promoting the sustainable use of these environments.”

In the **United States**, Americans use the term “experiential education” to emphasize the learning methods and innovative teaching/facilitating used extensively with participants in the outdoors. “Experiential education is a teaching philosophy that informs many methodologies in which educators purposefully engage with learners in direct experience and focused reflection in order to increase knowledge, develop skills, clarify values, and develop people’s capacity to contribute to their communities” (Association for Experiential Education, n.d.).

Definitions from the nations above share some common content: experiential, relationships, and nature or natural environments. In this book, the umbrella term of Canadian outdoor learning is defined using these

commonalities as “**an experiential process ... which takes place primarily through exposure to the out-of-doors [where] the emphasis for the subject of learning is placed on ... [five] relationships concerning people and natural resources**” (Priest, 1986, p. 13). Those five relationships include:

- **Intrapersonal** – participant relating to oneself (self-esteem, resilience, confidence, etc.);
- **Interpersonal** – participant relating to others (prosocial skills, trust, communication, etc.);
- **Ecosystemic** – elements of nature interacting with each other (food chains, web of life, etc.);
- **Ekistic** – humans and nature interacting reciprocally (pollution of drinking water, etc.); &
- **Spiritual** – a participant understanding their place or role in the world (Priest & Gass, 2018).

Outdoor learning involves teaching with a two-by-four: **two branches** of activities and **four types** of programs. Truly effective outdoor learning utilizes both branches of activities within each of the four program types to teach about and bring about much-needed change associated with all five relationships. In fact, practitioners may have great difficulty having an impact on spiritual relationships without first successfully addressing the other four. Participants who know themselves and how to work with others and who know an ecosystem and how they affect it and how it affects them can decide how they best fit in.



Figure 2: A 2×4 metaphoric representation of outdoor learning: two branches and four program types.

Outdoor learning has two activity sides: **adventurous** and **environmental**. Adventurous activities range from games and group problem-solving initiatives, to low and high ropes/challenge courses, to one-day excursions or multi-day expeditions (snowshoeing, skiing, bicycling, hiking, climbing, caving, canoeing, kayaking, sailing, and more). Environmental activities range from sensory immersion in nature, to mindful meditation or contemplation, to scientific or artistic ecological exercises conducted outdoors in natural surroundings (Canadian Outdoor Therapy and Healthcare, n.d.).

Outdoor learning comes in four program types depending on what the lesson is meant to change: feeling, thinking, behaving, or resisting efforts to create positive change as shown in Table 1 below. Outdoor **recreation** (including tourism) changes the way participants feel through fun, play, enjoyment, and the learning of new activity skills. Outdoor **education** changes the way participants think by gaining new concepts, reinforcing old ones, and creating an awareness of the need to change behaviours. Outdoor **development** changes the way participants behave by enhancing positive actions and increasing their

functioning. Outdoor **therapy** changes the way participants resist efforts to transform them positively by reducing negative or maladaptive behaviours in order to ease their dysfunction (Priest, 2021).

Table 1: Program types according to program intention for change and focus of learning.

<i>OUTDOOR...</i>	<i>RECREATION</i>	<i>EDUCATION</i>	<i>DEVELOPMENT</i>	<i>THERAPY</i>
<i>Intends to change</i>	<i>Feeling</i>	<i>Thinking</i>	<i>Behaving</i>	<i>Resisting Change</i>
<i>Subject matter or learning focused on</i>	<i>Having fun, playing, enjoying, learning new activity skills</i>	<i>Gaining new and old concepts or awareness of need to make changes</i>	<i>Enhancing positive conduct or actions (grow functioning)</i>	<i>Reducing negative conduct or actions (ease dysfunction)</i>

For example, adventurous activities range from guided mountain climbing or sailing with tourists, to schoolyard socialization games and corporate team-building events, to a wilderness expedition for youth with substance abuse or criminal histories. Similarly, the use of environmental activities can progress from ecological interpretation or wildlife identification with a naturalist, through high school sustainability awareness exercises and pro-environmental action inculcated by teachers, to treating stress, anxiety or depression in adults via immersion into natural greenspace with a therapist.

This chapter has provided a very brief introduction to outdoor learning. The following chapters present an overview of outdoor learning in Canada. Subsequent chapters will address various topics that practitioners may find helpful in their outdoor learning work with Canadian participants. Each chapter will define terms as these arise, but in this chapter **Canadian outdoor learning is an experiential process that takes place primarily through exposure to nature and the outdoors, where the emphasis is on one or more relationships concerning people and nature.**

Adventurous learning develops intrapersonal and interpersonal relationships, while environmental learning develops ecosystems and ekistic relationships. Employed together, these two outdoor learning approaches can develop spiritual relationships. Improving these five relationships can help participants change the way they feel, think, behave, and/or resist positive efforts to change (Priest & Gass, 2018).

Future Directions

This historic definition puts outdoor learning in a nice box that satisfies the policy and procedure makers of our society. However, in the future, we must think outside that box. In many ways Canada is behind other developed nations when examining state-of-the-art practices for outdoor learning, but we do have an advantage

in our efforts toward truth and reconciliation with Indigenous Canadians and toward partnerships with nature for change. In a solution-focused manner, we must do more of what is starting to work for us.

While honouring our past work, outdoor learning in Canada is ready for a revolution of new ideas. The ignition for some of those new ideas can be found herein with chapters on indigeneity, decolonization, ecohealth, climate collapse, nature reciprocity, trauma-informed care, racial imbalances, temporary able-bodiedness, and different ways of thinking and acting.

With the plethora of problems related to the Earth's systems as the result of previous ways of thinking and acting, what we must also begin to "do more of" is include expert voices from all genders, ethnicities, indigeneities, and orientations. Canada is a diverse pluralistic society and outdoor learning must include all of those elements. To this end, we invite and welcome additional contributions to this living textbook and especially gifts from authors who are not simply defined by an older white cis-male identity.

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About the author

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Simon Priest was a university professor of adventurous and environmental outdoor learning in Ontario. Internationally, he has been a Dean, Provost, Vice-Chancellor, Senior Vice President, President, Commissioner, and Advisor to a Minister of Education. He has received numerous awards and accepted over 30 visiting scholar positions around the world in outdoor learning. Now early retired in British Columbia, he spends his time hiking, gardening, researching, teaching, and writing.

PART II
OVERVIEW

3.

NATURE INTERPRETATION

Glen T. Hvenegaard; Clara-Jane Blye; and Elizabeth Halpenny

Authors' note: We wish to thank John Shultis and Jim Butler for thoughtful contributions to this chapter.

What Is Nature Interpretation?

One of the founders of interpretation, Freeman Tilden (1977, p. 8), defined interpretation as “an educational activity which aims to reveal meanings and relationships through the use of original objects by firsthand experience and by illustrative media rather than simply to communicate factual information.” Interpretation Canada suggests that, in fact, no single definition can capture the vibrancy of the field, but each effort provides a place in which to begin understanding. They put forth that “interpretation is any communication process designed to reveal meanings and relationships of cultural and natural heritage to the public, through first-hand involvement with an object, artifact, landscape or site” (Interpretation Canada, 1976). Based on these definitions, interpretation is different from other methods of communicating information in that it reveals meanings about that information and that interpretation seeks to provoke (Tilden, 1977) and inspire visitors (Gilson, 2020). The purpose of this chapter is to describe the characteristics of interpretation (compared to education), its history in Canada, and research on the positive impacts and effective strategies of interpretation.

Interpretation occurs in many ways and in various locales (e.g. zoos, museums, parks and protected areas, outdoor recreation landscapes, ecotourism settings), but has two basic categories. First, personal interpretation consists of direct contact between the interpreter and the visitor. Here are several instances.

1. Guided tours and hikes, led by interpreters, encourage interactions between visitors and the natural environment.
2. Outdoor theatre programs integrate acting, costumes, singing, dancing, and audience participation in an effort to entertain, educate, and inspire visitors.

3. Prop talks, using artifacts as focal points of a talk, also provide valuable first-hand involvement.
4. Point duty involves stationing an interpreter at a prominent feature or gathering place during periods of high visitation and may include exciting props or interactive activities.
5. Travelling point duty and roving duty are similar, but the interpreter moves through an area, informally interpreting sites and objects to people who are encountered.
6. Living interpretation demonstrates a historical lifestyle that is different from that of the visitors. Living interpreters in period costumes and authentic settings carry out day-to-day activities, showing visitors how people actually lived, often talking with visitors about technical information or showing authentic products.

Second, non-personal interpretation connects visitors through the use of inanimate interpretive media. Here are some examples.

1. Visitor centres (or information centres) provide visitors with important information about an area and its special features and opportunities for the visitor; at the same time, visitor centres provide opportunities for staff to engage with visitors directly.
2. Exhibits at the visitor centre or around the park or outdoor setting may include kiosks, dioramas, artefacts, reconstructions, and models.
3. Signs interpret natural or cultural features in the immediate vicinity; readers can decide what to read and how fast to read it.
4. Self-guided interpretive trails use signs or brochures to guide visitors to interesting features that might otherwise be overlooked or not fully appreciated.
5. Publications and pamphlets provide more detailed information and can be taken home as souvenirs and referred to many times after a visit.
6. Digital resources such as websites, blogs, social media groups, and e-newsletters can be referenced off-site, allowing the visitors to be better informed pre-visit and carry on being engaged and learning about conservation sites post-visit.

Effective interpretation typically embraces the following attributes (adapted from Hvenegaard and Shultis, 2016):

- Interpretation occurs on-site and emphasizes first-hand experiences with the natural environment (i.e., visitors directly see, hear, smell, and touch landscapes, wildlife, and water).
- Interpretation provides an informal form of education (i.e., interpretation does not employ a classroom-based approach).
- Interpretation involves a voluntary, non-captive audience, most often during the visitor's leisure time.
- Interpretation satisfies a visitor's expectation of gratification.

- Interpretation is inspirational and motivational in nature.
- Interpretation's goals are to provide satisfying leisure experiences, increase knowledge, shift attitudes, promote environmentally friendly behaviour, develop connections to places, and create positive memories.

Nature interpretation regularly occurs in zoos, parks and protected areas, museums, and other outdoor recreation contexts. At the same time, much nature interpretation also occurs within the context of ecotourism, a form of tourism (e.g., birding, whale watching, nature photography, and botanical study) in which visitors engage in nature-based activities that have a significant educational component and promote a conservation ethic (Weaver, 2002). In contrast, environmental education programs offered by nature-related agencies typically target K-12 children to fulfil part of their school curriculum). Overall, interpretation provides important benefits to participants through learning and enjoyment but also to the natural environment, conservation agencies, parks and protected areas, wildlife, and society in general through enlightened attitudes, changed behaviours, and connections to place.

History of Nature Interpretation in Canada

In Canada, nature interpretation began with various park, outdoor recreation, and municipal agencies. James Harkin (1957, p. 15), Canada's first Commissioner of National Parks, while reflecting back on a long career in public service, argued that Canada needs "an informed public opinion which will voice an indignant protest against any vulgarization of the beauty of our National Parks." Nature interpretation in the national parks began in 1887, two years after what would become Banff National Park was established, when a guide led interpretive walks in the lower Hot Springs cave. The first park interpretive museum was established at Banff in 1895, and interpretive tours began in the Nakimu Caves in Glacier National Park, British Columbia in 1905. The national parks hired seasonal interpreters in 1929 and permanent interpreters in 1931. In the 1940s, Hubert Green lobbied the federal government for dedicated funding for environmental education in Banff and, over the course of the next 20 years, was able to build support, funding, and policy to hire the first permanent naturalist in 1964 (Federation of Alberta Naturalists, 2005).

Outside of the national parks, interpretive programs in Ontario's provincial parks began in 1954; Alan Helmsley was hired in 1955, almost 10 years after his first summer as a seasonal naturalist in Algonquin Provincial Park. Under Helmsley's supervision, the Ontario interpretive program grew to be internationally recognized and a leader across Canadian parks, expanding from two to eleven parks and seeing participation rise four-fold from 1956 to 1964 (Killian, 1993). Other provinces and territories soon followed, with Alberta Provincial parks hiring their first park naturalist in 1968 to establish an interpretive centre in Cypress Hills Provincial Park (Alberta Parks, 2018) and continuing to expand over the past 50 years to now serve more than 450,000 participants annually (Alberta Parks, 2016).

Outside of national and provincial parks, the first Canadian Wildlife Service interpretation centre opened in 1965 at Wye Marsh, near Midland, Ontario. Interpretation Canada, the nationwide organization that promotes networking, professionalism, and hiring, was established in 1977. Many municipalities across the country now have nature interpretation centres and interpretive programs.

Interpretation in Canada has often changed in response to coordinated planning efforts, policy shifts, the hiring and training of interpreters, visitor demands, and new technologies. These changes suggest four phases (Hvenegaard and Shultis, 2016). Phase 1 concentrated on familiarising visitors with the most unique and majestic features of an area (e.g., hot springs and waterfalls) and providing explanations. As public awareness of the environment increased in the early 1960s, Phase 2 focussed on the broader landscape, the many interrelationships in ecosystems, and management issues (e.g. crowding and environmental impacts of recreation). In the early 1970s, Phase 3 saw interpretation begin to address broader ecological mindfulness among visitors by focussing more on regional ecosystems. Finally, in the 2000s and beyond, Phase 4 saw interpretive agencies move off-site to engage with people who have not visited parks and nature sites (e.g., young people, new Canadians, ethnic minorities, and urban residents), often employing rapidly improving technology such as virtual reality depictions of remote and difficult to access conservation areas and social media messaging to reach younger generations who are digital natives. While interpretation has changed over the decades, elements of stewardship and broader systems level approaches have continued throughout the phases.

Why Interpret Nature? Does It Even Work?

As humans increasingly degrade the natural environment, the need grows to effectively communicate stewardship principles and environmental ethics. While environmental education serves a similar purpose, interpretation is unique in its provocation approach and focus on free choice learning and people in leisure settings. As a result, there are many reasons for providing nature interpretation.

First, interpretation has the ability to instil passion in participants, influence values, attitudes, and behaviours towards sustainability and stewardship, and create awareness of relevant environmental and cultural issues (Stern & Powell, 2020). Research shows that interpretation generates significant improvements in the knowledge and awareness of environmental issues. For example, visitor knowledge increased from 37% correct before a white-water rafting trip in Grand Canyon National Park to 60% correct after the trip (Powell et al., 2009). Similarly, more than three quarters of participants in an “animal talk” at the Wellington Zoo (New Zealand) increased their knowledge and were able to recall the conservation message (MacDonald et al., 2016).

Second, many visitors want interpretation because it adds value to their experiences. In general, people visiting parks expect and value contact with interpretive staff. Moreover, attending interpretive programs increases satisfaction of visitors (in parks and in almost all settings) when compared to those who do not attend personal interpretative program (Ham & Weiler, 2007; Stern et al., 2011). More than 80% of visitors

to the Panama Canal Watershed area reported being highly satisfied with their overall experience and were particularly satisfied with the personal interpretation presentations and exhibits (compared to other services or non-personal interpretation). Furthermore, satisfaction (as a result of interpretive programs) increased both pro-environmental behavioural intentions and conservation attitudes of ecotourism resort visitors (Lee & Moscardo, 2005).

Finally, depending on the setting, interpretation is provided under the jurisdiction of the federal, provincial, and territorial governments or municipalities. Thus, interpretive goals and approaches are shaped by relevant legislation and policies. For example, national parks are created for the “benefit, education, and enjoyment” of the people of Canada (Government of Canada, 1990: 3). Similarly, the vision for provincial parks in Alberta is to “inspire people to discover, value, protect, and enjoy the natural world (Government of Alberta, 2009). Interpretation supports park agency goals through enhanced visitor experiences, increased stewardship behaviours, and improved awareness and education. These results allow policy and management decisions to be actioned in tangible ways (Hvenegaard et al., 2023).

Despite the many reasons for providing nature interpretation opportunities, there are also barriers for many potential participants. Participation in personal interpretive activities can be low, ranging from 10-25% of visitors (Stern et al., 2011; Hvenegaard, 2011). Constraints include the amount of time, awareness of programs, information availability, life stages of the potential participant, perceptions about programming choices, competing activities, cost, and timing (Hvenegaard, 2017).

Canadian Case Studies

There are a few Canadian studies on the effectiveness of nature interpretation that illustrate uniquely Canadian approaches. In Pacific Rim National Park Reserve, BC, Randall and Rollins (2006) examined the role of kayak tour guides in educating visitors and influencing attitudes. About 82% of guided visitors were less-experienced kayakers, whereas 71% of non-guided visitors were more-experienced kayakers. For visitors on non-guided trips, pre-trip knowledge scores (based on ten true/false questions) did not differ from post-trip scores; however, for visitors on guided trips, scores rose from 5.3 before the trip to 6.5 after the trip. For attitudes, researchers asked only guided visitors whether they supported, opposed, or were indifferent to a policy promoting visitors to voluntarily give up fishing on their trips because of potential impacts on the threatened rockfish population. When guides commented on the ‘no fish policy,’ visitors were more likely to support the policy than when guides did not comment on the policy. Overall, tour guides were influential in developing knowledge and shaping attitudes of visitors.

Bueddefeld et al. (2023) developed learning materials, post-visit action resources, and defined interpretation outcomes for Elk Island National Park with a focus on human wildlife coexistence. Because of Covid-19 restrictions, the research team used innovative digital technology to produce an online interpretive video, with the goal of helping visitors understand how to safely co-exist with wildlife in the park. The video followed

dialogic-narrative interpretation methods and four stages of the Arc of the Dialogue: (1) building community; (2) sharing personal experiences; (3) exploring experiences of others; and (4) synthesizing and bringing closure. Visitors' knowledge increased significantly after their exposure to the video, as did their likelihood to engage in pro-environmental behaviours such as keeping a safe distance from wildlife. The interpretive video was a success and should inspire other interpreters to employ dialogic narrative storytelling and digital tools.

Hvenegaard (2017) examined the use and perceptions of interpretive programs at Miquelon Lake Provincial Park (MLPP) in Alberta. Among all visitors, 85% agreed that interpretive programs were important to the mission of AB Parks and 68% agreed that interpretive programs increased the value of their experience. Visitors participated in interpretive programs because they thought it would be good for members of their group, be entertaining, be educational, offer learning about a particular topic, and "it was something to do in the park." Most attendees (>80%) agreed or strongly agreed that the interpretive programs helped increase knowledge about nature in MLPP, interest in attending future programs, appreciation for MLPP, and appreciation for Alberta Parks. Cook et al. (2021) expanded this study in Bow Valley Provincial Park, William A. Switzer Provincial Park, and MLPP. Visitors again reported high levels of enjoyment/satisfaction with the programs, most indicated increased knowledge and awareness of environmental topics, and almost 80% of respondents indicated positive shifts in attitudes.

In Banff National Park, Macklin et al. (2010) examined the impact of innovative interpretation (i.e., improvisational theatre games) on children's enjoyment and perceived learning (see Hvenegaard et al., 2008). Children enjoyed improvisation theatre activities the most because they offered fun, physical activity, creativity, challenge, positive group dynamics, and novelty. However, the activities from which children learned the most were more traditional interpreter-led nature walks and talks which included sensory awareness, physical involvement, guided interaction, peer collaboration, and simple messages. Clearly, a combination of suitable approaches is needed for children.

Kath (2009) describes an education program in southern Alberta that promoted awareness of invasive species among stakeholders. The most effective component was an evening campfire program that involved handing out 'attractive' bouquets of invasive weeds to visitors; throughout the program, visitors were asked to throw the flowers into a fire to symbolically represent their efforts to "purge the park of its weeds" (p. 12).

Wolfe's research (1997) highlights a few older Canadian studies. In Kananaskis Country, Alberta, an innovative poster campaign illustrating commonly picked flowers (e.g., 'Wanted ALIVE not dead') helped to reduce by 50% the number of visitors reprimanded by park staff for picking flowers. By providing guided interpretive hikes into the restricted area of Dinosaur Provincial Park, Alberta, the number of unauthorized visitors observed within the restricted areas decreased by nearly 90% (Wolfe, 1997).

How Can Nature Interpretation Become More Effective?

In addition to using various theories to understand mechanisms at work within nature interpretation (Hvenegaard & Shultis, 2016), two recent systematic reviews highlight the value of interpretation and the need to continue expanding understanding and practices (He et al., 2022; Kidd et al., 2019). The need for innovative communication tools has been documented by scholars through gaps in current strategies and promising results of recent studies (He et al., 2022; Byerly et al., 2018; Kidd et al., 2019; Skibins et al., 2012). Opportunities to expand and improve interpretation practices include incorporating theory-based programming and messaging, audience segmentation, evoking affect and emotional impacts, providing post visit action resources, soliciting pledges and promises from visitors, and employing virtual and augmented reality. Both reviews indicate the need for more robust research and a focus on longitudinal outcomes of interpretation, as well a better understanding of diverse participants and their experiences. All of these ideas provide direction for the future and opportunities to improve. Here are some further insights into two topics for consideration.

1. **Lean into values, emotions, and ethics-based programming.** Blye and colleagues (2023) investigated the role of emotions (among other psychological factors) to better understand what influences pro-environmental behaviours of park visitors who attended an in-person interpretation program in Alberta's provincial parks. Emotions (both positive and negative) significantly influenced visitors' likelihood to engage in pro-environmental behaviour. A sense of pride inspired by positive environmental changes through action can be very motivating to people and encourage new or renewed commitment to pro-environmental behaviour (Blye et al., 2023). When people feel fearful about the future of the natural environment or guilty about the ways in which we are influencing nature (such as the rate of climate change), interpretation programs can use those emotions to support change. Consider how you feel after seeing images of wildlife tangled up with garbage. Does the sense of guilt make you more likely to dispose of waste properly? Or think about the (overly) successful Smoky the Bear campaign and the resulting fear that all fire is bad, resulting in decades of fire suppression practices that have contributed to more intense wildfires. The fear response can be very powerful. However, it is very important to ensure that negative emotions are supported with suggestions for positive changes and actionable behaviours (Whitburn et al., 2020). Otherwise, visitors will experience despair-inducing inaction and apathy. Interpretation allows for the opportunity to provoke emotion but also to educate and provide solutions, where possible.
2. **Focus on innovations and commitments (go beyond education).** Parks, conservation agencies, zoos, and ecotourism agencies have recently begun using pledges and commitments as a tool to facilitate behavioural change (Ballantyne et al., 2018). The use of pledges provides an opportunity to combine

persuasive communication with commitment actions, both of which have been effective in influencing pro-environmental behaviours (Byerly et al., 2018; He et al., 2022). Mann and colleagues (2018) had visitors to a wildlife exhibit write down “promises” of behaviours to help support penguins and their environment (e.g., use less water, choose sustainable seafood, and reduce electricity consumption). Almost half of all participants remembered their promise more than one year later and claimed to have kept it. Those who wrote more specific actions were more likely to both remember and keep their “promises” compared to those who wrote more general “care for penguins and animals” statements. Another study from Australia, New Zealand, and the USA investigated zoos’ use of specifically designed websites to support visitors after their visit (Ballantyne et al., 2018). The websites provided content based on the on-site experiences and interpretive programs while also motivating ongoing engagement and commitment to learn more about wildlife. These websites included the opportunity to make a commitment regarding specific pro-environmental behaviours (e.g., pick up at least one piece of litter each day, and use re-usable shopping bags). Participants who visited the websites described the commitment as being motivating and helpful. Those who visited the websites increased pro-environmental behaviour more than those who hadn’t visited the website (Ballantyne et al., 2018).

Conclusion

Nature interpretation enhances visitor experiences and supports effective management of sites for biodiversity conservation. In spite of these benefits, nature interpretation faces many challenges. Interpretation is often underfunded, reducing its ability to achieve its goals. In many cases, an agency cuts interpretation budgets before other sectors and restores funding to interpretation well after other sectors. Interpretive staff are often relegated to seasonal and part-time positions, as opposed to permanent and full-time positions. Furthermore, many sites offering nature interpretation poorly integrate interpretation into the planning and management of the agency’s overall operations. In addition, many agencies have not been able to fully evaluate interpretation to determine cause-and-effect relationships for particular interpretive programs and techniques. Similarly, many frontline and supervisory staff are unacquainted with published research on the effectiveness of interpretation. Moreover, many site managers in charge of budgets do not have a background in, or an appreciation for, interpretation’s potential benefits.

In order to improve the benefits from and the appreciation for nature interpretation, the field has several needs. First, nature interpreters and researchers can engage in broader research, based on sound theoretical frameworks to test for the effectiveness of various techniques. Second, nature interpreters should engage in offsite educational programs to develop new bonds between nature and current and future visitors. Third, interpreters should seek to integrate their work in all aspects of a site’s operation. In fact, all site staff are and can be interpreters in some sense. Last, nature interpreters should collaborate across all interpretation and environmental sectors to increase synergies and outcomes (Ostrem and Hvenegaard 2023).

In conclusion, nature interpretation can provide visitors, tourists, recreationists, and local residents with meaningful information and experiences that will increase their awareness and understanding of the natural environment and relate these experiences to modern life. Achieving this goal will help people to have a deeper appreciation for their area's natural and cultural heritage, desire further learning, and transfer these values and experience into their daily lives. While nature interpretation cannot be the only mechanism to transform people into engaged and caring citizens, interpretation—and the related techniques of environmental education and tour guiding—appears to be the best approaches we have for making such substantial changes at the individual and societal level in protected areas.

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4.

ADVENTURE TOURISM IN CANADA

Robert Vranich; Jerry Isaak; and James Rodger

A Brief Overview

A holiday offers a break from the routine of everyday life. For some people, the best kind of break involves the luxury and relaxation offered by a beach-side resort or a Caribbean cruise. For others, it involves an educational experience or a cultural immersion. And for many others, the best kind of holiday is one that is steeped in adventure. Not surprisingly, the commercial tourism industry has adapted over the last several decades to cater to the needs and desires of travellers searching for adventurous experiences.

People have different ideas of what makes an ideal adventure experience, and the adventure tourism sector of the global tourism industry is correspondingly diverse, offering everything from short parasailing excursions and bungee jumps to multiday river expeditions and guided ascents of Mount Everest. This diversity of offerings reflects, in part, the impressive overall size and continued growth of the global adventure tourism sector. In 2014, the adventure tourism market was estimated to be worth USD 263 billion (UNWTO, 2014). It exceeded USD 900 billion in 2020 and it is expected to reach USD 1.16 trillion by 2028 (ATTA, 2020).

The economic potential of adventure tourism is significant. Adventure tourists tend to spend more money on their adventure experiences than other tourists do on their travels and activities (ATTA, 2022). However, as global competition in this lucrative market increases, Canada is at risk of falling behind. According to the Adventure Tourism Development Index (2020), Canada ranks seventh globally among developed countries with strong potential for adventure tourism competitiveness. However, since 2016, it has fallen in its ranking in the top potential destinations for adventure travellers. New government initiatives like the Federal Tourism Growth Strategy and other provincial and municipal equivalents aim to correct this decline by increasing public and private investment in the Canadian tourism industry. The main objective of these strategies is to unleash tourism's potential to drive economic growth and job creation in all regions of the country. As one of the most lucrative and fastest-growing sectors of the global tourism industry, the adventure tourism sector will play an important role in the continued growth of Canada's tourism industry.

This chapter provides some context for understanding these recent developments. It begins with a brief discussion of what adventure tourism is and how it developed as a unique sector of the tourism economy. This is followed by a short section describing the current adventure tourism landscape in Canada and another that summarizes some of the challenges and issues the adventure tourism sector and individual operators across the country are currently facing.

What is Adventure Tourism?

There are multiple and competing definitions of adventure tourism. Most are exceedingly broad and do very little to define precisely what adventure tourism is or what it involves. For example, Destination BC, the destination marketing organization for the province of British Columbia, defines adventure tourism as “activities that present the participant with risk and challenge” (Destination BC, 2014, p. 1). They divide these activities into two broad categories: hard and soft adventure. Hard adventures like whitewater rafting and heli-skiing require more experience, better physical fitness, and a greater degree of risk and challenge than soft adventures like wildlife viewing or gondola rides. Although risk and challenge are essential components of the adventure experience, they do not in themselves adequately explain nor define what adventure tourism is and what it involves.

The Adventure Travel Trade Association (ATTA), a global lobby group for the adventure travel industry, offers another broad definition of adventure tourism. According to the ATTA, adventure tourism involves “a trip that includes at least two of the following three elements: physical activity, natural environment, and cultural immersion” (UNWTO, 2014, p. 10). While this definition requires that only two of the three components be experienced, trips incorporating all three tend to afford tourists the fullest adventure experience—for example, a trip to Peru that involves trekking (physical activity) on the Machu Picchu trail (natural environment) and genuine interaction with local residents and/or indigenous peoples (cultural immersion). However, based on the ATTA’s definition of adventure tourism, a walking tour (physical activity) of ancient architectural ruins in Rome (cultural immersion) would fall under the label of adventure tourism.

Working towards a more precise definition of adventure tourism requires first clarifying what tourism is and how different forms of tourism are categorized. Tourism generally involves the commercial organization and operation of travel for purposes of leisure and business. The tourism industry consists of five operating sectors: accommodation; transportation; food and beverage; travel services; and attractions, entertainment, and recreation (Goeldner & Ritchie, 2011). The attractions, entertainment, and recreation sector is itself comprised of five individual categories of “things to do”: cultural attractions (i.e., museums, art galleries, archaeological sites, etc.), natural attractions (i.e., national parks, beaches, northern lights, etc.), events (i.e., festivals, sports events, trade shows, etc.), recreation (i.e., golfing, hiking, sightseeing, etc.), and entertainment (i.e., theme parks, shopping malls, casinos, etc.). These categories are often used to define the type of tourism the tourist is participating in. For example, a golfing holiday may be labelled as “golf tourism,” a visit to a music festival as “festival tourism,” and a wine-tasting tour as “culinary tourism.” Based on this method of classification, adventure tourism involves a combination of recreational activities and natural attractions; or, more precisely, the commercial organization and operation of guided and non-guided tours and activities where the principal attraction is an adventurous form of outdoor recreation (Hudson, 2003; Buckley, 2006; Varley, Taylor, & Johnson, 2013; Huddart & Stott, 2020).

Set against a natural and scenic backdrop, outdoor recreational activities like hiking, dog sledding, whitewater rafting, jet boating, sea kayaking, skiing, and mountaineering provide adventure tourists with an

“extraordinary” experience (Priest, 1990; Varley, 2013). The outdoor adventure experience tends to elicit a strong emotional response in the form of the excitement and thrills that accompany an activity like tandem skydiving, or the peace and serenity that go along with kayaking on a calm and picturesque river or lake. What makes outdoor recreational activities adventurous is the heightened level of risk the participants and providers assume (Krein, 2007).

Risk involves the natural, human, and operational hazards associated with the delivery of a particular adventure product, as well as the perceived risk, or sense of danger felt by the participant. Some adventure products, like a mountaineering trip or a whitewater kayaking excursion, are inherently risky because of the hazards associated with taking tourists up remote mountains or down wild rivers. Activities like bungee jumping and canyon swinging are among the safest adventure activities because of the controlled environment in which they are offered. In the case of so-called “extreme” activities, such as tandem skydiving, the degree of perceived risk is often much greater than the actual risk involved. Whether real or perceived, however, risk must be managed, mitigated, and manipulated by the operator and guide in a way that enables the tourist to feel both safe and in danger (Holyfield, 1999; Fletcher, 2010; Urry, 2013).

The popularity of an adventure tourism product is inversely related to its level of difficulty (Buckley, 2007). The most popular commercial adventure activities by volume of participants are unskilled, low-risk, group-based tours that take place in accessible adventure destinations like Whistler, British Columbia, Banff, Alberta, and Mont Tremblant, Quebec. Conversely, as the technical difficulty and the level of prerequisite experience needed for an activity increases and the location becomes more remote, the product tends to be riskier, costlier, and of a longer duration. For example, a zipline tour in Whistler with Ziptrek Ecotours requires no prerequisite skill, lasts about two hours, takes place in large groups multiple times per day, and costs about CAD 200 per person. In contrast, a canoe trip down the Thelon River in Nunavut with Jackpine Paddle requires some paddling skill, lasts about two weeks, takes place in small groups only once or twice per summer, and costs more than CAD 10,000 per participant. Not surprisingly, more people go ziplining in Whistler in a single afternoon than descend the Thelon River in an entire summer.

Development of Canadian Adventure Tourism

Adventure tourism was not recognized as a distinct sector of the global tourism industry until the early 1990s, but its historical roots reach back over two centuries. In the late eighteenth and early nineteenth centuries, a new way of looking at and appreciating wild nature emerged out of the Romantic movement in Europe. Rather than being seen as something to be tamed or cultivated, wild landscapes became places of great natural beauty and playgrounds for the European leisure class. Mountain villages like Chamonix, in France, developed into popular tourist destinations as visitors flocked to see the Mont Blanc massif and walk on the fabled Mer de Glace glacier. This new interest in wild and sublime nature spilled over into North America, where a version of the Grand Tour that was so popular among the European elite took hold. The Adirondack Mountains, the St.

Lawrence River Valley, Niagara Falls, and the Algonquin Highlands became popular tourist destinations along the expanding railway network in eastern North America (Jasen, 1995).

The nature-based tourism frontier expanded into western Canada with the completion of the Canadian Pacific Railway in 1885. The CPR built luxurious hotels in newly established national parks like Banff (the Rocky Mountains) and Glacier (the Columbia Mountains), and it even hired a team of mountain guides from Switzerland to lead Canadian and international visitors on hiking and climbing tours throughout the mountain parks (Hart, 1983; Robinson & Slemon, 2016). Additional guiding and outfitting services developed in and around other popular and accessible tourist destinations across the country, such as the Temagami and Algonquin regions of central Ontario, but a fully formed nature-based tourism industry would not emerge in Canada until after the Second World War.

In the 1950s and 1960s, outdoor leisure pursuits gained increased popularity across a much broader demographic in Canada. The post-war period brought an unprecedented degree of personal prosperity and freedom to many Canadians: the economy was booming; new technologies and labour laws provided Canadians with more leisure time; and the automobile provided a greater degree of mobility than ever before. Consequently, Canadians started to spend more of their free time in search of leisure and adventure outside of the city. An “outdoor recreation boom” swept across Canada’s urban centres, creating a nationwide demand for “recreational resources” like national and provincial parks, campgrounds, motels, ski resorts, wilderness resorts, and guiding and outfitting services (Killan, 1993; Wilson, 1991).

Federal and provincial authorities responded to the increased demand for nature-based travel and tourism services and infrastructure by expanding the provincial and national parks systems and by dedicating more funds to tourism development and marketing. The private sector responded with the establishment of guiding and outfitting services. Many of Canada’s most successful adventure tourism outfitters to date were established in the wake of the post-war outdoor recreation boom, companies like Canadian Mountain Holidays, Mike Wiegele Helicopter Skiing, Yamnuska Mountain Adventures, Canadian River Expeditions, Blackfeather Adventures, and Wilderness Tours.

The Contemporary Landscape

Since the 1970s, the adventure tourism sector has developed with relatively little support and intervention by federal and provincial authorities in Canada. The expansion of the provincial and national parks systems facilitated the growth of private and commercial forms of outdoor recreation across the country. However, unlike in New Zealand, where federal authorities guided the development of that country’s adventure tourism sector, federal and provincial authorities in Canada have taken more of a hands-off approach. Consequently, the Canadian adventure tourism sector is mostly self-regulated. Rather than abiding by a set of federal regulations and safety guidelines, Canadian operators tend to set their own safety standards, best practices, and certification processes, often in conjunction with trade associations like the British Columbia River Outfitters Association or guiding organizations like the Association of Canadian Mountain Guides and

Aventure Ecotourisme Quebec. The trouble with this general lack of federal and provincial oversight is that it produces a wide degree of variance in the quality of adventure tourism experiences across the country, as well as in the calibre and training of guides working in the sector. Both have potentially dangerous ramifications for properly protecting people and the environment from harm.

Despite the lack of government oversight and Canada's recent descent in the world rankings table, the adventure tourism sector in Canada is thriving. However, supporting this statement with economic statistics is challenging. Not every province and territory in Canada differentiates between traditional tourism and adventure tourism spending. Further complicating the matter is the fact that different definitions of adventure tourism are used to estimate or calculate the economic impact of the sector. Calculations that include revenues generated from private travel for purposes of outdoor recreation will inevitably be greater than those calculations that focus exclusively on commercial adventure tourism activities. Global estimates of the value of the adventure tourism sector (see above) tend to include all independent travel related to private or commercial outdoor recreation activities, revenues from packaged adventure tours, revenues associated with fixed-site adventure activities (i.e., ski resorts), and most of the revenues generated by ancillary businesses linked to adventure tourism, such as recreational equipment, adventure-branded clothing and apparel, and a significant proportion of the amenity-migrant property market (Buckley, 2010). This formula has not yet been applied to calculations of the value of the adventure tourism sector in Canada. However, provincial authorities in British Columbia have used a similar formula to calculate the value of their adventure tourism economy. The last sector-wide study in BC found that annual adventure tourism revenues exceeded CAD 1.2 billion. Those revenues supported 2,200 businesses and more than 21,000 employees (Destination BC, 2014).

The success of adventure tourism in BC has much to do with the province's unique physical geography. A long coastline, multiple ranges of snow-capped mountains, hundreds of wild rivers and lakes, dense forests, and an abundance of wildlife make it an ideal destination for travellers seeking adventurous experiences. What's more, BC's geography and climate also provide the optimum natural conditions for practicing many outdoor recreational activities, such as skiing, snowboarding, mountain biking, hiking, mountaineering, rock climbing, surfing, paddle boarding, sea kayaking, white water kayaking, and rafting. In fact, the natural conditions in BC are so optimal for many of these activities that the province is often ranked by many travel publications as one of the best adventure tourism destinations on the planet.

Not surprisingly, many of Canada's so-called "adventure capitals" are situated in British Columbia. Adventure capitals are popular destinations that offer a wide variety of skilled and unskilled adventure tours throughout the year. The mountain towns of Whistler, Squamish, and Revelstoke, along with the coastal communities of Tofino and Ucluelet, are among the most popular adventure capitals in Canada. Other Canadian adventure capitals include Banff and Jasper in Alberta, Waskesiu Lake in Saskatchewan, the Muskoka, Temagami, the Algonquin regions of central Ontario, and Mont Tremblant, Quebec. Access to these popular adventure destinations is made relatively easy by their proximity to metropolitan centres and busy international or regional airports.

The economic success and popularity of Canada's adventure capitals have encouraged other popular

tourism destinations to either rebrand themselves as adventure destinations or make a more concerted effort at marketing to adventure travellers. For instance, over the last decade or so, Niagara Falls, Ontario, one of the oldest and most popular tourist destinations in Canada, has rebranded itself as an adventure tourism destination. In addition to its featured natural attractions, casinos, wineries, and theme parks, the City of Niagara Falls and the greater Niagara region now offer popular adventure activities like jet boating, ziplining, and tandem skydiving. Further east, the province of Nova Scotia recently started to market itself as a four-season adventure destination, boasting a wide range of adventure tour products from surfing, cycling, whale watching, and tidal-bore rafting, to cross-country and downhill skiing, snowmobiling, and ice-fishing. Similar rebranding and marketing efforts are being embraced by municipalities, provinces, and territories across the country.

The Future of Adventure Tourism in Canada

Now that federal, provincial, and territorial governments in Canada have recognized the economic potential of the adventure tourism sector, it is safe to assume that the sector will continue to grow into the future. Despite a positive outlook, though, the sector faces many challenges. This concluding section of the chapter highlights four main challenges facing the sector today. Some of these challenges are common to adventure tourism globally, and some are unique to the Canadian context.

The adventure tourism sector in Canada must contend with several human resource challenges. Adventure tour operators have been dealing with staffing shortages, underqualified guides, and high staff turnover rates since long before the economic implications of the COVID-19 pandemic exacerbated these issues. Low wages and seasonal work factor into the high rate of staff turnover. Many adventure guides search for “real jobs” after only a couple of summer or winter seasons working in the sector. Those who persevere for more than a couple of years are the ones who piece together year-round work, either by alternating between summer and winter seasons in the same location or by heading to an international destination to find employment in the off-season. High staff turnover rates cost operators time and money in terms of hiring and training. Further complicating matters is the recent decline in enrolment in, or outright closure of, many post-secondary leisure and recreation programs in Canada. These developments have decreased the number of qualified applicants for adventure tourism jobs in Canada so much that some employers have turned to migrant labour pools to fill vacant positions. Staff training and retention are now extremely high priorities for most adventure tour operators in Canada.

Another human resource issue facing the adventure tourism sector in Canada involves the workplace culture associated with adventure tourism. The adventure tourism workplace has long been a space dominated by white men. Women have struggled over the years to gain a foothold in this highly masculine and sometimes misogynistic environment. So too have Indigenous peoples and other racial and ethnic minorities. While many industries have adopted hiring practices and other workplace policies to promote equity, diversity, inclusivity, and decolonization, the adventure tourism sector in Canada continues to lag. Of course, many companies

are in the process of changing their workplace cultures by incorporating equity, diversity, inclusion, and decolonization principles into their organizational policies and daily practices, but much work still remains.

One challenge that has long plagued the adventure tourism sector is the threat of over-use, or over-tourism, at popular sites. This problem is often called the paradox of nature-based tourism. The more popular a natural place becomes, the more likely it will suffer environmental degradation; the more environmental degradation a place suffers, the less popular it becomes. Sustainably developing adventure tourism sites has long been a sector priority, but the problem has become compounded in recent years by the digitization of modern life and the rise of social media. Adventure tourists increasingly rely on social media to inform their travel and destination choices. A single photo on Facebook or Instagram, or a captivating tweet can offer sudden inspiration for travel and adventure. Yet, for as much as social media benefits the adventure tourism economy, it can also lead to unsustainable growth and environmental degradation as visitors flock to the latest “Instagrammable” site. Take, for example, Joffre Lakes Provincial Park in British Columbia, which features a spectacular trio of alpine lakes surrounded by snow-capped peaks and hanging glaciers. In 2015, the park experienced a 250% increase in visitation after some tourists’ photographs of the scenery went viral (de l’Église, 2019). The subsequent flood of visitors left litter and caused trail erosion. To mitigate these impacts, BC Parks revamped the hiking trail system, making it much more accessible to visitors, and, in turn, further transforming what used to be a “hidden gem” into a crowded tourist attraction. This is one reason why sustainable tourism development of any kind requires careful planning and much forethought.

A list of the challenges currently facing the adventure tourism sector cannot be complete without mentioning the climate crisis. Global heating is affecting the entire planet: sea levels are rising; weather patterns are changing; glaciers and polar ice caps are melting; coral reefs are being bleached; forest fires and hurricanes are becoming more frequent and intense; and the list goes on. Adventure tourism operators are not immune to the impacts of climate change. Warming temperatures in the Arctic and rapidly receding polar sea ice have negatively impacted polar bear tourism in Churchill, Manitoba, the polar bear capital of Canada. Warmer winters with less snowfall have taken a toll on Canada’s skiing and snowboarding sector, especially in British Columbia and Alberta. More intense and longer forest fire seasons in western Canada have limited the operating field of many regional rafting, hiking, and canoeing outfitters. Melting glaciers and warmer temperatures in the mountains have added a new level of risk to climbing and mountaineering operations in the Western Cordillera as terrain instability has increased the frequency of rockfalls in the summer and avalanches in the winter. Despite these challenges, the future of adventure tourism in Canada remains bright. As much as the effects of the climate crisis are negatively impacting the adventure tourism sector in Canada, they are also providing some new opportunities for operators and tourists. The most significant opportunity is the extension of the summer tourist season into the spring and autumn months, especially in the far northern parts of the country where frigid temperatures have long hindered tourism development. Public and private investment in adventure tourism is on the rise. So too is the percentage of tourists participating in outdoor adventure activities. The sector is already well established in provinces like British Columbia, Ontario, and Quebec, and there is plenty of room for sector expansion, not only in and around major urban centres but

also in more remote and rural areas across the country, particularly in the near and far north. As domestic and international tourists continue to seek out adventurous experiences, the adventure tourism sector in Canada will continue to grow.

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5.

A BEAUTIFUL MESSY PROCESS: OUTDOOR EDUCATION IN CANADA

Morten Asfeldt

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Outdoor education saved my life. Ok, that is an overstatement. However, saying that outdoor education (OE) changed and inspired my life is accurate. My first OE course was a month-long course in May 1981. I had no idea what I was getting myself into. I needed 3 credits to finish high-school and at the time I was attending Camrose Lutheran College which offered Grade 12 and the first two years of university. Physical Education 30 and university OE courses were taught by Dr. Garry “Gibber” Gibson and he offered me Physical Education 30 credits for completing this month-long university OE course. This sounded like a great deal to me and, as they say, the rest is history. By the end of May 1981—inspired by a remarkable group experience, new insights and perspectives on the natural world, and a great sense of confidence—my personal and professional OE journey had begun. In the past 40 years I have seen and felt the many benefits of OE as both a student and instructor.

During my nearly 30-year academic career, I have watched as universities have “discovered” active, hands-on, and group-and place-based teaching where students are more directly involved in the learning process and where instructors make connections between course content course and students’ everyday lives. As I have watched the trend for improved teaching and learning in universities unfold, I have often wondered how it could be that universities and colleges are only now “discovering” that an active classroom or outdoor space where students are interacting and engaged is a new and innovative idea? For outdoor educators, and many other educators, active engaged learning has always been our *modus operandi* and my guess is that most outdoor educators have never considered their practice new or innovative. Rather, I imagine most have known deep in their teaching souls that the traditions and practices of OE are just plain-old-good-teaching (Raffan, 1996).

This observation coupled with my ongoing professional struggle of justifying my OE teaching practices and wrestling for resources to support my OE courses—which, ironically, are well aligned with the emerging

priorities and stated goals of universities and colleges in terms of these new active and innovative pedagogical practices and learning outcomes—led a colleague and I to conduct a nation-wide study of OE in Canada. The goals of this study were to identify the guiding philosophies, central goals, and distinguishing characteristics of OE in Canada with the hope of providing a foundation for a deeper understanding of Canadian OE in order to enhance the delivery of OE. We have published findings from our study in Purc-Stephenson, et al., (2019), Asfeldt et al., (2020), Asfeldt et al., (2022a), and Asfeldt et al., (2022b).

In short, the findings of our larger study demonstrate that outdoor educators are a committed and passionate group who are educating and inspiring students guided by well-grounded pedagogical practices. In Asfeldt et al., 2020 we write: “OE in Canada is grounded in experiential learning outdoors that link academic disciplines, and includes the added benefit of helping students make connections with the land, its people, and our past” (p. 11). In Asfeldt et al., (2022a) we state that “the holistic and integrated nature of OE is well suited to prepare children and youth for the challenges of living well in the 21st century that are well aligned with the purpose and mission of K-12 education in Canada” (p. 15). And finally, in Asfeldt et al., (2022b), we claim that “OE commonly provides the type of engaged, innovative, active, and experiential group-and place-based learning that facilitates a wide range of learning objectives that colleges and universities identify as priorities” (p. 306). In many ways, OE is ahead of emerging pedagogical trends that promotes active and innovative learning.

In this chapter, I will share our findings and hope the findings affirm the good work that outdoor educators are doing and have been doing for decades, as have talented and committed educators across many disciplines. In addition, I hope these findings well serve as evidence to assist in promoting a deeper understanding of the value of outdoor education to colleagues, administrators, governments, and other stakeholders in order to help camps, K-12 schools, and colleges and universities achieve their educational visions while preparing students to live purposeful and ethical lives.

Overview of the Study

If you are interested in the details of our methodology and research process, please read Asfeldt et al., (2020), Asfeldt et al., (2022a), and Asfeldt et al., (2022b). Here, I will provide the basics. First, we wanted to sample programs from across Canada. One of our goals was to see if a distinctly “Canadian Way” or “Ways” of OE might emerge. Second, we knew we had to limit our study or it would have become unmanageable. Therefore, we choose to focus on programs in summer camps, K-12, and post-secondary OE sectors. Third, we wanted to include some site-visits and in-person interviews knowing these would provide rich data that a survey just can’t provide. Fourth, while we wanted to include site-visits and interviews, we also wanted much broader participation than site-visits and interviews allowed. Therefore, after a thorough literature review of the Canadian OE literature (Purc-Stephenson, et al., 2019) we conducted 22 site visits and interviews (six summer camps, ten K-12 programs, five post-secondary programs, and one College of General and Professional Teaching [CEGEP] in Quebec) (see Asfeldt et al., 2020). Based on these interviews, we created an online survey that resulted in 93 responses from summer camps, 100 responses from K-12 programs, and 22 responses from

post-secondary programs for a total of 215 completed surveys. The site-visits and interviews as well as the surveys focused on three specific aspects of each program: (1) the underlying program values and philosophies, (2) the central goals of the program, and (3) the common activities included in each program.

Site Visits and Interview Findings

The findings from our site visits and interviews point to OE being a method of teaching that addresses important educational, environmental, and social challenges and issues that Canada and the world face today. In 1972, John Passmore conducted a nation-wide study of OE in Canada and he concluded that:

Outdoor environmental education is certainly not the answer to all our educational problems. But there is growing recognition that it is a method of teaching that can add that other important “R” to every subject on the curriculum – relevance in what we teach about the world in which our young people live (p. 61).

Our findings point to Passmore’s insights being as true today as they were in 1972: OE continues to be a sound educational practice that is guided by robust pedagogical philosophies and results in valuable and relevant learning outcomes.

Philosophies

Based on our site visits and interviews, we identified five themes that represent the most common philosophies that drive OE programs in Canada. We titled these themes:

1. Influential Founders,
2. Hands-On Experiential Learning,
3. Holistic and Integrated Learning,
4. Journey through the Land, and
5. Religion and Spirituality.

OE programs in Canada are often initiated by influential founders such as an inspired and passionate teacher (or group of teachers) who have experienced the benefits of OE and recognized that many of those benefits aren’t being realized within the limits of traditional disciplines, classrooms, and school schedules. Now, having said that, I want to be clear that there are many inspired and passionate teachers that are doing great work within these limits and in no way are we suggesting that OE is the only solution to the challenges of education. Nevertheless, OE does address many challenges of education and the influential founders that people described during the interviews used their experience and visions for OE to make a unique contribution to lighting a learning fire in their students. Often, the people we interviewed spoke of how an influential founder was once their teacher or mentor and that they were so inspired by their work that they have now devoted their

teaching life to carrying on that founder's vision. Sadly, in many cases, once a founder retired, OE programs were often discontinued because there was no one in place to carry on the program. This points to a difference between OE programs and those of traditional disciplines such as math, biology, or English, which are well-established in schools and universities and when a teacher or faculty member retires, it is relatively easy to hire a replacement. However, because OE sits on the margins of many school and post-secondary curricula, without a passionate and inspired advocate, OE is more likely to be set adrift. Interestingly, during our site visits, we consistently observed that most OE programs at K-12 and post-secondary institutions worked from basement rooms, repurposed closets, and old garages and sheds in far corners of school property. Not once did we observe a purpose-built OE space. This lack of dedicated space suggests that OE continues to exist on the margins of Canadian K-12 and post-secondary education.

Not surprisingly, the theme of hands-on experiential learning was one of the dominant themes describing the underlying philosophies of OE programs. Just about all the people we interviewed talked about the importance of hands-on experiential learning which they described as getting students out of the classroom and engaged in an active form of learning. In addition, those we interviewed spoke of their strong belief that hands-on learning was central to their program because it promoted deeper understanding of the course content and aided in making the content interesting and relevant. A notable observation was that not very many teachers or OE leaders connected hands-on experiential learning to any particular educational philosopher or theoretical foundation such as that of John Dewey (Experiential Education) or Jack Mezirow (Transformational Learning). Generally, we came away from our interviews with the impression that teachers and leaders knew intuitively that hands-on experiential learning just made sense; it was an obvious way of teaching that didn't require an identifiable or articulated academic educational philosophy or theoretical foundation to implement. This was a bit surprising and makes us wonder what OE and other educational practices might look like if teachers and leaders had a greater understanding of some of the philosophies and theories that are often linked with OE?

The notion of OE as a means of facilitating holistic and integrated learning was also a well-defined theme. In essence, teachers and leaders believe that one of the strengths of OE is that it blurs the boundaries of traditional academic disciplines and helps students recognize the interconnected nature of life and the world. For example, OE programs can help students link knowledge from physics and physical education by using knowledge from both disciplines as they learn to paddle a canoe. Students can also link knowledge from history and literature to enrich a river or snowshoe journey by bringing the stories of the past and present alive in the land, the trees, and the water. And, the knowledge of biology, chemistry, and environmental studies can be linked with social studies as students study the impact of pollution and environmental reclamation by visiting local spaces as well as during remote travel experiences. One of our interviewees said it eloquently when they described their program as a process "where academics matter, relationships matter, the environment matters, and it's all tied together in this beautiful experience".

Journeying through the land emerged as an important element of many programs. That is, teachers and leaders believed that self-propelled small group travel experiences provide rich learning. It is easy to see that a

travel experience in remote or even local space, is a natural form of hands-on experiential holistic integrated learning. It is a beautiful synergy. Further, teachers and leaders felt that just spending time in nature was itself an important experience that in some ways needed no further structure or facilitation by the teacher: nature itself is a great teacher. However, the travel experience was linked to facilitating many of the learning outcomes that I will describe later but include personal and social development and as a means for learning about Canadian history and culture and particularly about Indigenous people. Some felt that the self-propelled travel experience is a quintessential Canadian experience.

Philosophies and values rooted in religious and spiritual traditions also shape OE in Canada. For some, traditional Christian values drive programs yet for most programs, the term “spirituality” was used to describe the idea of the world and life having a mysterious element that isn’t rooted in a defined religious tradition. Regardless, this again points to OE being a form of holistic integrated learning where many forms of knowing are encouraged. In contrast, traditional education is too often siloed into distinct disciplines in a manner that doesn’t reflect the complex (yet sometimes simple) and messy (but also beautiful) interconnections and realities of a student’s life and the world as they experience it.

Learning Goals

It is no surprise that OE programs have a variety of learning goals. OE is more than learning to paddle a canoe or light a fire or identify a specific bird song. These can all be important skills to learn but for the most part, they are not important on their own or in isolation. Rather, they are important activities that reflect the philosophies that guide OE programs and are a means of achieving specific program learning goals. Again, there is a purpose to what might appear to be messy madness or aimless recreational learning. After considering all the learning goals described by our interviewees, we boiled them down into five themes:

1. Building Community,
2. Personal Growth,
3. People and Place Consciousness,
4. Environmental Stewardship, and
5. Employability and Skill Development.

Here again we see the diverse interwoven nature of OE. Building community emerged as one of the primary goals of OE. The people we interviewed spoke passionately about the goal of promoting teamwork and fostering relationships within the groups they work with. Often, teachers and leaders expressed that they sense students today lack opportunities for genuine experiences of teamwork and honest relationships and that OE is one avenue for sharing the joy of community with students. It is easy to imagine a clear link between building community and the practice of self-propelled remote travel. That is, remote travel facilitates a sense of community as students are required to work collaboratively in most aspects of the travel experience as they

work towards a common goal or in many cases, a variety of shared goals as reflected in the diverse range of learning goals linked to OE.

Using OE as a means for promoting personal growth is just as common as building community and there is a natural relationship between personal growth and being a part of a genuine community. Awareness of personal strengths and shortcomings often bubble to the surface when we are engaged in relevant and interesting mental and physical group challenges. This link between building community and personal growth through OE was acknowledged by many interviewees and point to some common roots of Canadian OE such as the Ontario summer camp tradition (Wall, 2009) which aimed to develop character as did the British tradition of Scouting and Outward Bound which have also both influenced OE in Canada. These early influences reflect the notion that “education is essentially a social process” (Dewey, 1938, p. 58) which is revealed today in the themes of building community and personal growth.

Enhancing people and place consciousness reflects the goal of teaching about a specific location, people, and their historical significance. As Henderson (2005) has so often said: “Every trail has a story.” Henderson’s point is that when we paddle a river or hike a trail, we are paddling a particular river and hiking a particular trail. These are not just anonymous undiscovered rivers and trails. Rather, these rivers and trails have unique and particular pasts and stories. Central to Henderson’s idea of “every trail has a story” is that to know these pasts and stories provides a much richer river and trail experience which presents an opportunity to understand Canadian history and culture, which is sometimes deeply troubling. However, understanding our troubled past that has resulted in generations of harm and broken relationships with Indigenous Canadians and resulted in many environmental abuses is an opportunity for deep learning. As Meerts-Brandtsma et al., (2020) point out, OE is well positioned to address many such issues of privilege that need urgent attention.

Environmental stewardship also emerged as an important learning goal. Interviewees spoke particularly about the importance of educating students for sustainable futures and giving students the knowledge and skills for implementing sustainable practices in their daily lives. During expeditions, sustainable environmental camping and travel practices were commonly taught. The environmental concerns of the 1960s and 70s were a significant influence on the emergence of OE in Canada. OE continues to be a means for educating students about lingering concerns of the 1960s and 70s but also current issues particularly as we wrestle with accelerating climate change.

The final learning goal addressed issues related to preparing students for employability in outdoor related fields. This generally included a focus on skill development leading to certification in outdoor skills such as canoeing as well as safety training such as first-aid.

Activities

As a part of our interviews and site visits, we were interested in getting a sense of activities that are commonly included in OE programs. There is a long list. After combining all the activities that are included in summer camps, K-12, and post-secondary programs, we composed a list of 33 different activities. To better understand

these activities, we funneled these 33 activities into seven broad categories: outdoor-living skills (e.g., cooking and fire-building); sport and recreation activities (e.g., canoeing and kayaking); work experience and certification (e.g., job shadowing and first aid training); environmental education activities (e.g., nature walks and birdwatching); games (e.g., group games for fun and to promote personal and social development); reflection (e.g., journaling and group discussions); and arts and crafts (e.g., paddle and moccasin making). On average, programs offer 14 different activities. The most common activities were those from the outdoor-living skills and sport and recreation categories.

Survey Findings

As mentioned earlier, once we completed the literature review and interview stages of this project, we created three unique surveys, one for each sector: summer camps, K-12 programs, and post-secondary programs. The goal of the surveys was to see how well our findings and themes from the interview stage mapped across Canada and across our three target sectors. While each survey collected data specific to each sector, they also collected data regarding guiding philosophies, central goals, and distinguishing activities. This allowed us to present data specific for each sector. Here I will present an overview. More in-depth research findings for K-12 programs can be found in Asfeldt et al., (2022a) and for post-secondary programs in Asfeldt et al., (2022b).

Philosophies

Figure 1 displays how summer camps, K-12, and post-secondary programs rated the influence of seven underlying philosophies and values. You will notice there are seven themes here rather than five as in the interviews. This is because we subdivided some of the original five themes in order to obtain a more nuanced understanding (i.e., we added educational philosophy, renamed journey through the land to self-propelled wilderness travel and split religion and spirituality into two distinct themes). Respondents were asked to rate how much they agreed or disagreed that a specific philosophy or value influences their programs. That is, the higher the mean rating of a particular philosophy or value, the more that philosophy shapes a program. For example, given our findings, a reasonable division would be low influence (0.00 to 2.5), neutral influence (2.6-3.5), and strong influence (3.6-5.0).

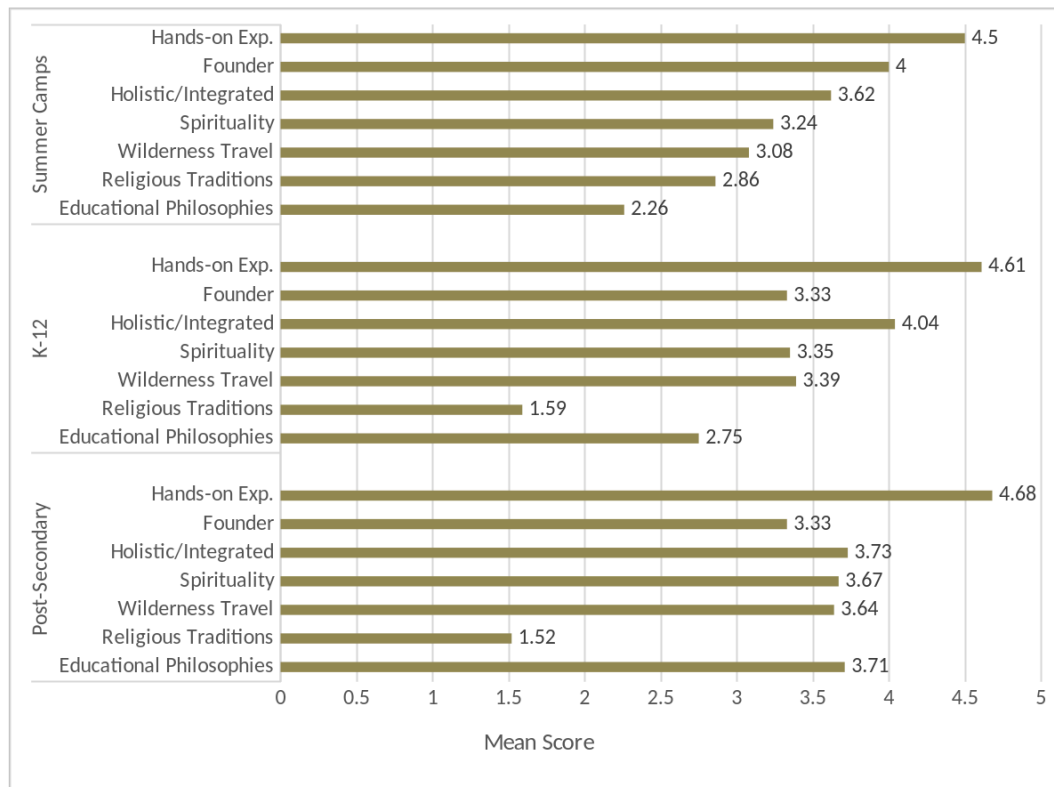


Figure 1: The Importance of Philosophies and Values in Three Sectors of Outdoor Education

Overall, the pattern of influence remained much the same as that revealed through the interview study. For example, hands-on experiential learning, holistic integrated learning, and the impact of influential founders remained dominant. However, some sector differences exist. For example, summer camps are the least influenced by educational philosophies and have the strongest religious tradition influence. Given that many summer camps are supported by churches and other religious organizations, this finding makes sense.

Religious traditions have just about no influence in K-12 and post-secondary programs, yet spirituality does influence K-12 and post-secondary programs. This finding likely points to the fact that K-12 and post-secondary are often publicly funded and therefore have a broader approach to spirituality versus a specific denominational approach. Holistic integrated learning has the strongest influence in K-12 programs which supports the notion that OE is a common means for blurring the boundaries of traditional academic disciplines. The influence of ideas directly linked to specific educational philosophies is greatest in post-secondary programs. This is not surprising given that academics are typically more immersed in the academic literature where educational philosophies are more commonly discussed and examined.

After asking respondents to rate the influence of these seven philosophies and values on their programs, we asked them to identify which two philosophies are most essential to their program philosophy (Figure 2). Greater variation among sectors was found for these data. However, hands-on experiential learning is clearly the most influential philosophy that drives programs across all three sectors. Given the recent push for more experiential learning in K-12 and particularly post-secondary education in Canada, this finding points to OE being ahead of emerging pedagogical trends; OE is a leader of the pack, one might say. Other notable

findings include affirmation of the strong influence of religious traditions in summer camps and holistic integrated learning in K-12 programs. Self-propelled travel was most influential in post-secondary programs where influential founders had the least influence.

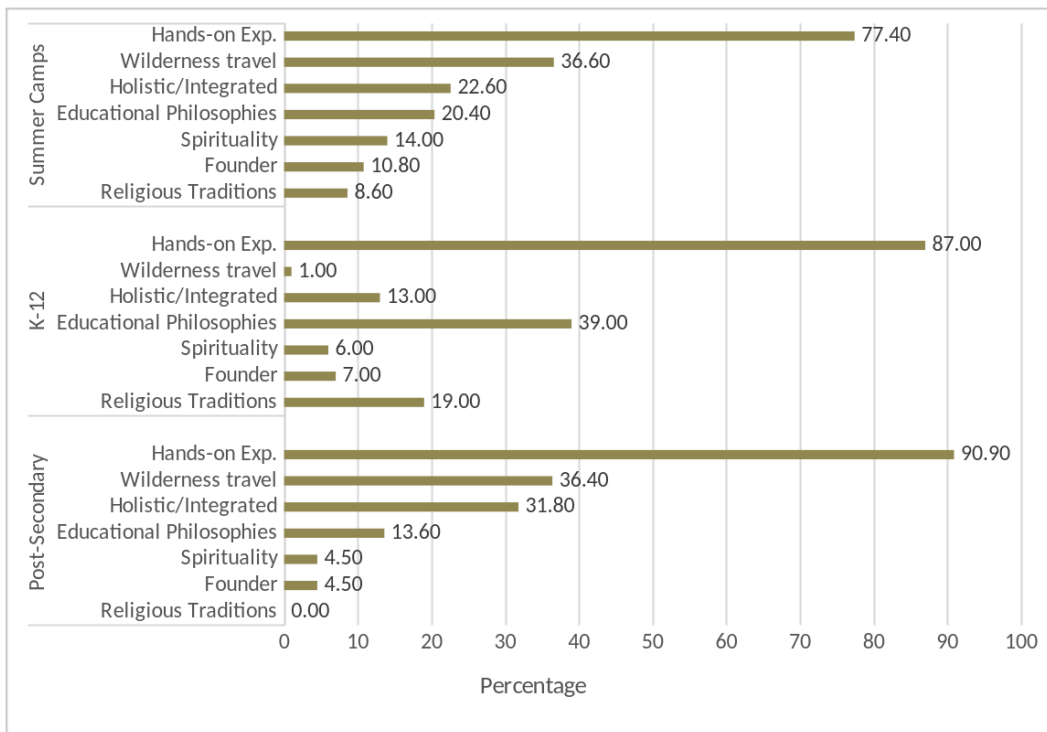


Figure 2: The Most Essential Program Philosophies and Values in Three Sectors of Outdoor Education

Learning Goals

The data regarding learning goals reveal that OE programs generally include a number of important goals. The inclusion of a range of learning goals makes sense given the importance of OE as a holistic integrated form of learning (Figure 3) where the boundaries of traditional disciplines are blurred in order to enable connections between these disciplines that reflect the reality of life as students experience it. This is well aligned with the Deweyian idea that “education, [...], is a process of living and not preparation for future living” (Dewey, 1981, p. 445) which is one of Dewey’s key ideas that shapes his educational philosophy of experiential education. Dewey was a leader of progressive education movement in North America in the early 20th century and, in the academic world, is often seen as one of the founders of experiential education which has shaped modern day outdoor and adventure education.

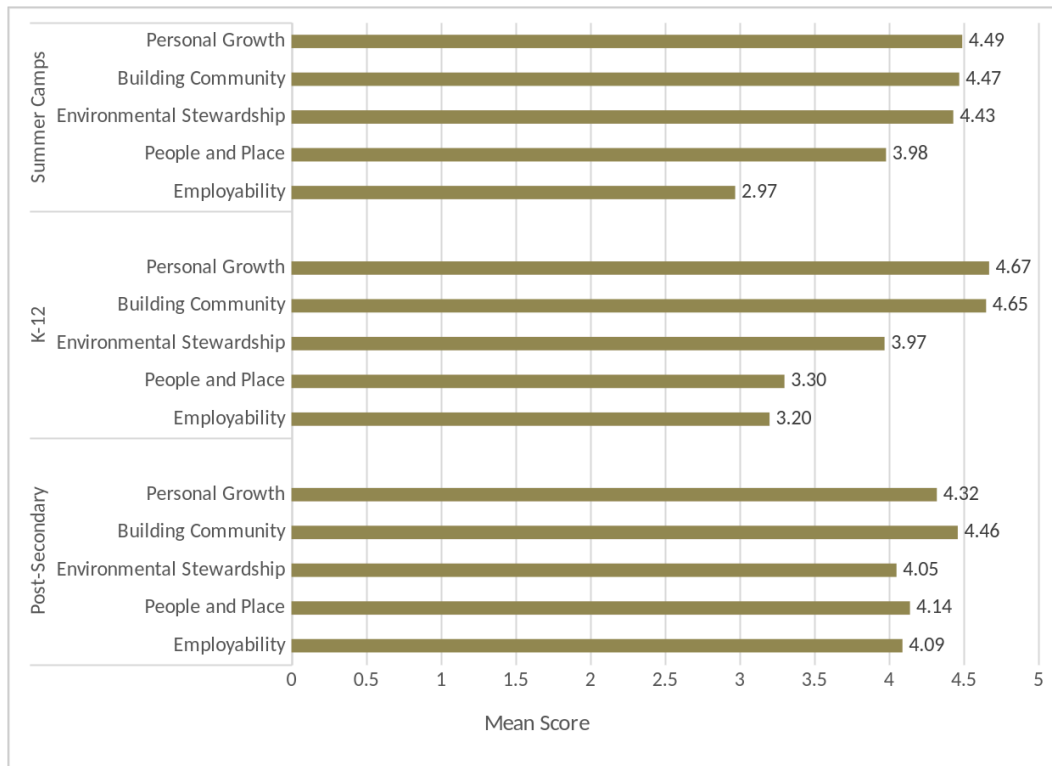


Figure 3: The Importance of Learning Goals Across the Three Sectors of Outdoor Education

As with philosophies and values, we asked respondents to identify the two most important learning goals from our list (Figure 4). Again, some variance among sectors was found, but overall, the two most important OE learning goals are personal growth and building community. This may point to outdoor educators recognizing that the social process of learning is critical to effective education. That is, as my mentor Gibson often said: “You aren’t teaching outdoor education; you are teaching people” (personal communication, 1992). From this perspective, these findings may point to outdoor educators recognizing that a critical role of education is to help students learn about themselves and that creating a safe and affirming community setting facilitates not only learning about themselves but also provides a foundation for learning about, in this case, environmental stewardship and people and place consciousness. For certain, it appears that outdoor educators are more likely to see education as a transformational process versus a transactional process of knowledge transfer. A transactional process of knowledge transfer is one where the primary goal is to have students learn specific disciplinary content (e.g., numerical literacy) and little attention is paid to how that knowledge might impact, or transform, the students. In contrast, a transformational perspective aims to not only have students learn specific disciplinary knowledge but equally, to have the process of learning disciplinary knowledge change, or transform, the students’ understanding and perspective of themselves, others, and the world they live in. One might say that a transactional approach is a clean and neat efficient process while a transformational approach embraces the messy and unpredictable nature of learning that values effectiveness over efficiency (Asfeldt & Beames, 2017). From this perspective, OE is a beautiful messy process.

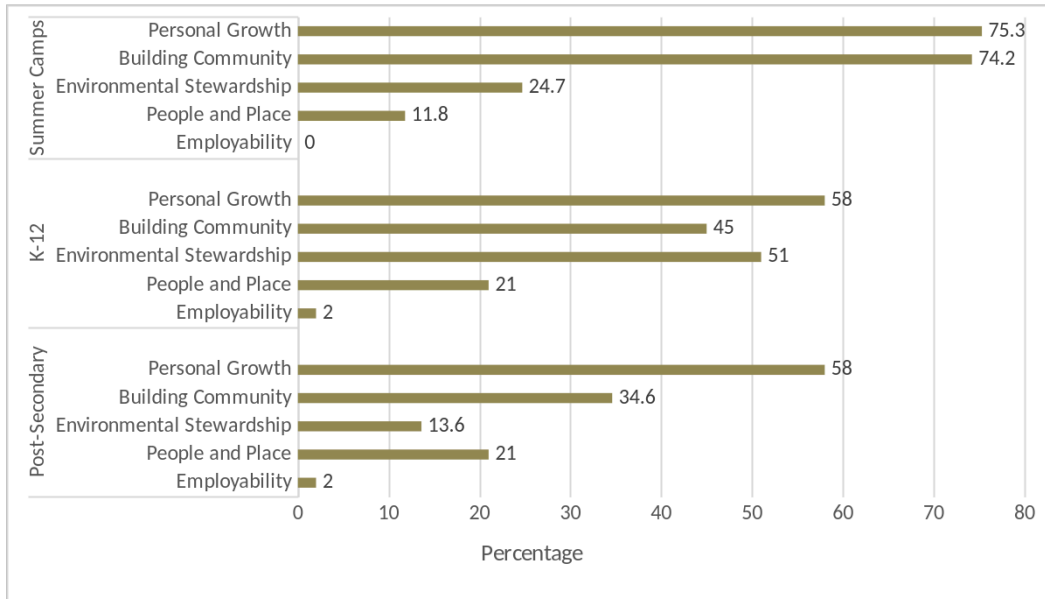


Figure 4: The Most Essential Learning Goals Across the Three Sectors of Outdoor Education

Table 1: Number and percentage of providers offering activities across three sectors of outdoor education.

RANGE	Summer Camps n=93		K-12 n=100		Post-Secondary n=22	
80-100%	n=86, (92.5%) n=82, (88.2%)	Campfires Games		No activities reported.	n=20 (90.9%) n=19 (86.4%) n=19 (86.4%) n=19 (86.4%)	Camping Campfires Canoeing Hiking
60-79%	n=76, (81.7%) n=70, (75.3%) n=69, (74.2%) n=67, (72.0%) n=66, (71.0%) n=66, (71.0%) n=66, (71.0%)	Canoeing Camping Archery Hiking Nature Studies Orienteering Swimming	n=79 (79.0%) n=77 (77.0%) n=77 (77.0%) n=70 (70.0%) n=70 (70.0%) n=69 (69.0%) n=65 (65.0%) n=62 (62.0%) n=61 (61.0%)	Camping Games Campfires Nature Studies Orienteering Hiking Cooking Snowshoeing Canoeing	n=17 (77.3%) n=16 (72.7%) n=16 (72.7%) n=16 (72.7%) n=15 (68.2%) n=15 (68.2%) n=14 (63.6%) n=13 (59.1%) n=13 (59.1%)	Journal Writing Safety Training Orienteering Nature Studies Cooking Snowshoeing Certification Climbing Skiing
40-59%	n=59, (63.4%) n=57, (61.3%) n=54, (58.1%) n=48, (51.6%) n=42, (45.2%)	Climbing Ropes Service Learn Kayaking Cooking	n=52 (52.0%) n=50 (50.0%) n=43 (43.0%)	Journal Writing Skiing Climbing	n=12 (54.5%) n=11 (50.0%) n=11 (50.0%) n=10 (45.5%) n=10 (45.5%) n=10 (45.5%)	Kayaking Games Biking Solos Service Learn Work Exp

RANGE	Summer Camps n=93		K-12 n=100		Post-Secondary n=22	
20-39%	n=36, (38.7%) n=35, (37.6%) n=35, (37.6%) n=32, (34.4%) n=28, (30.1%) n=25, (26.9%) n=23, (24.7%) n=19, (20.4%) n=19, (20.4%)	Journal Writing Biking Work Exp. Safety Training Snowshoeing Certification Fishing Gardening Horse Riding	n=37 (37.0%) n=36 (36.0%) n=36 (36.0%) n=35 (35.0%) n=32 (32.0%) n=31 (31.0%) n=30 (30.0%) n=29 (29.0%) n=24 (24.0%) n=24 (24.0%) n=21 (21.0%) n=20 (20.0%)	Archery Safety Training Certification Service Learn Biking Swimming Ropes Fishing Kayaking Gardening Skating Winter Tenting	n=8 (31.8%) n=6 (27.3%) n=5 (22.7%)	Ropes Winter Tenting Fishing
0-19%	n=17, (18.3%) n=14, (15.1%) n=14, (15.1%) n=13, (14.0%) n=8, (8.6%) n=6, (6.5%) n=2, (2.2%) n=1, (1.1%) n=1, (1.1%) n=0, (0%)	Skiing Skating Yoga Solos Rafting Caving Winter Tenting Dogsledding Hunting Indigenous Act.	n=19 (19.0%) n=17 (17.0%) n=13 (13.0%) n=8 (8.0%) n=8 (8.0%) n=7 (7.0%) n=6 (6.0%) n=5 (5.0%) n=0 (0%)	Work Exp. Yoga Solos Horse Riding Hunting Rafting Dogsledding Caving Indigenous Act.	n=4 (18.2%) n=4 (18.2%) n=3 (13.6%) n=3 (13.6%) n=2 (9.1%) n=1 (4.5%) n=1 (4.5%) n=0 (0%) n=0 (0%) n=0 (0%)	Rafting Swimming Dogsledding Gardening Hunting Skating Yoga Horse Riding Caving Archery Indigenous Act.

Activities

In order to understand the breadth and frequency of activities offered as a part of OE programs, we asked two questions. First, we asked respondents to identify all the activities that are offered in their programs. Second, we asked them to identify the three most common activities in their programs. Table 1 shows the number of programs and percentage of the sector that offer each of the 33 activities from our list which was developed

based on the interviews and site visits. A total of 86 out of 93 (92.5%) summer camps included campfires, 79 of 100 (79%) K-12 programs involved camping, and 20 of 22 (90.9%) post-secondary programs offered camping.

Table 2: The most common activities in each outdoor education sector.

SECTOR	n (%)	ACTIVITY
Summer Camps n=93	n=27 (29.0)	Ropes Course
	n=25 (26.9)	Canoeing
	n=24 (25.8)	Swimming
	n=20 (21.5)	Climbing
	n=18 (19.4)	Archery
K-12 n=100	n=40 (40.0)	Hiking
	n=27 (27.0)	Canoeing
	n=24 (24.0)	Camping
	n=23 (23.0)	Nature Studies
	n=18 (18.0)	Games
Post-Secondary n=22	n=10 (45.5)	Canoeing
	n=7 (31.8)	Camping
	n=5 (22.7)	Hiking
	n=4 (18.5)	Skiing
	n=3 (13.6)	Kayaking

Table 2 identifies the most common activities offered by programs in each sector. Ropes courses were identified as one of the three most common summer camp activities by 27 of 93 (29%) summer camp respondents.

Similarly, hiking was identified by 40 of 100 (40%) of K-12 programs as one of the three most common activities. And, 10 of 22 (45.5%) post-secondary programs identified canoeing as one of the three most common activities in their programs.

One particularly interesting finding regarding activities is that no respondents identified including Indigenous activities in their programs. This needs further investigation to better understand. We added Indigenous activities to our list of activities because many programs identified Indigenous learning as a program learning goal in the interview stage. One explanation for this finding may be that Indigenous learning is an emerging learning goal and not yet tied to a particular activity. Alternatively, it could be that our expectation that Indigenous learning goals would be directly tied to an activity is incorrect. Rather, it could be that the Indigenous learning goal is woven throughout all aspects of the program and therefore not linked to a particular activity.

Key Takeaways

While these findings regarding philosophies, learning goals, and activities are interesting on their own, our primary goal for this project is to deepen the understanding of OE in Canada so that we might enhance the delivery of OE. Therefore, here are some key takeaways that we hope are helpful in achieving that goal. Those of you from different sectors and unique political and cultural settings may have additional and perhaps different takeaways. If you do, I encourage you to share them in order to continue the development and understanding of OE in Canada.

Undervalued and Misunderstood

Dyment and Potter (2021), writing about post-secondary OE internationally, claim that one reason OE programs are often abandoned and poorly supported is because OE is frequently undervalued and misunderstood. In addition, the authors suggest OE is often seen as lacking pedagogic rigor by non-OE colleagues and administrators. One of our interviewees described the educational philosophy of their program as “a mess of stuff!” Their point was that OE is not just one philosophy or one value or aimed at achieving one learning goal. Rather, OE is more akin to a synthesizing discipline and method that provides a more organic form of education that is messy and difficult to neatly describe and define but at the same time beautiful. As K-12 and post-secondary institutions continue the never-ending quest to improve student learning, the messy integrated interdisciplinary hands-on nature of OE that makes it so difficult to describe, define, and neatly package may, ironically, be one of OE’s primary strengths.

This strength can be an important model for how to educate our children and youth. However, it is much easier for administrators and governments to neatly package education into tidy disciplinary units with precisely identified learning outcomes that present well in vision and funding documents but perhaps don’t reflect the reality of how students learn best or how to prepare students for the challenges and complexities

of the lives they are living. Therefore, one utility of this research is that it provides evidence of OE having well-grounded pedagogic roots in hands-on experiential learning that is holistic and integrated in nature and highlights that many OE programs are designed to achieve a variety of interdisciplinary learning goals. These philosophies and goals are well aligned with emerging pedagogies that aim to be more experiential and interdisciplinary, to develop social and emotional skills, and prepare students to creatively address pressing environmental and social issues. One suggestion for outdoor educators is to review the goals and missions of your provincial education ministries, local school boards, and individual colleges and universities and use this data to provide evidence for how OE can help these bodies achieve their stated goals and missions.

It is easy to imagine that some colleagues and administrators might perceive OE as pedagogically adrift because of the recreational nature of the primary activities associated with OE such as outdoor-living skills and sport and recreational activities. This perception is likely heightened because OE is not a well-established discipline such as English or History or other core disciplines. However, this research demonstrates that OE activities are more than enjoyable recreational activities. Rather, the activities of OE are intentionally used to achieve specific and important learning goals using active methods that enhance student engagement.

Discipline or Method

A debate has been going on in some OE circles about whether OE is a discipline or a method of teaching (Dyment and Potter, 2015; Potter and Dyment, 2016). On the one hand, it doesn't matter. On the other hand, maybe it is critical. My sense is that outdoor educators have been trying for decades to distinguish OE as a discipline similar to traditional well-established disciplines. If the most important outcome of this debate is to provide children and youth with the types of learning opportunities that OE affords, perhaps we should consider framing OE as a method of teaching where we can achieve the goals of a wide variety of emerging and traditional disciplines. In this way, we are promoting an active innovative pedagogy that aligns with emerging trends, rather than continuing the battle to establish OE as a stand-alone discipline. This strategy has and is working in some places such as integrated high-school programs and a number of university programs.

As these findings reveal, Canada has no single template for OE. While there are similarities and common philosophies, learning goals, and activities, there is also great diversity. The notion of OE as a synthesizing method that is molded to each unique camp, K-12, and post-secondary setting (e.g., geographical, cultural, historical) may be a “Canadian Way.” In other words, a “Canadian Way” that is guided by the philosophies, learning goals and activities identified in the study, but at the same time, this “Canadian Way” is shaped and molded to local geographies, histories, and cultures which results in not one specific “Canadian Way” of OE but many “Canadian Ways.” From this perspective, to the untrained eye, OE might look like a messy process, while to the trained eye, it is a “beautiful messy process” with purpose. Therefore, it may be more accurate to situate OE as a method rather than a discipline as Passmore did in 1972.

Reconciliation, Racism, and Privilege

Canada and Canadians have made a commitment to reconciliation with Indigenous Canadians as reflected in the recent *Truth and Reconciliation Report* (Truth and Reconciliation Commission, 2015). Considering the philosophies and values that drive OE coupled with OE's common learning goals, OE is well positioned to address reconciliation as well as racism and privilege more generally. For example, having students work together in diverse groups during self-propelled remote travel experiences on traditional lands while learning about the history and culture of the travel route or local spaces is already contributing to the process of reconciliation. Engaging students in such hands-on experiences of diverse people and places can be a powerful learning experience. While this can be intimidating and challenging work, there are increasing resources being developed and available to assist us in this task. Here are some resources that have been helpful for me (Erickson & Wylie Krotz, 2021; Henderson & Blenkinsop, 2022; Lowen-Trudeau, 2014; Lowen-Trudeau, 2019; Meerts-Brandtsma et al., 2020).

Revisiting Humility

Dyment and Potter (2021) encourage outdoor educators to be less humble. We need to believe in what we do and we need to be willing to advocate for support of our OE programs. This can be exhausting work. However, one clear observation from our interviews and site visits is that outdoor educators are a committed and passionate group of teachers and leaders who are providing profoundly meaningful experiences for students and campers. And, as we all know, there are easier ways to keep our jobs as teachers and faculty members than taking students on off-campus learning journeys. Furthermore, as I hope you have recognized, while some colleagues and administrators may undervalue our work and question the pedagogical substance of OE, this data tells a very different story. Outdoor educators are doing great work as many K-12 schools and universities are playing pedagogical catch-up as they aim to implement more experiential integrated learning that achieve interdisciplinary learning objectives. Of course, there is room for OE to improve, but we have been and continue to be on a good path!

Finally, I encourage you all to support your local, regional, national, and international OE and educational organizations in order to continue the development of an informed and united voice for OE. It is important that we are able to articulate the many benefits of OE and to demonstrate how OE can contribute to the achievement of the goals and missions of our camps, K-12 schools, and colleges and universities. There are many benefits beyond those revealed in this study. However, this research does provide additional words and evidence to support your program, inspire your teaching, and encourage you to remember that you are doing important work. OE is not the magic bullet that will solve all our educational challenges or address all our environmental or social issues. However, it has many strengths and benefits that can make an important contribution towards those goals.

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6.

CANADIAN ADVENTURE THERAPY

Steve Javorski

Adventure therapy (AT) has been difficult to define in the literature. While general agreement exists that AT is commonly practiced in therapeutic camping, wilderness therapy, or activity-based psychotherapy settings (Alvarez & Stauffer, 2001; Bandoroff & Newes, 2004; Gass, 1993; Gass et al., 2012), a formally agreed upon definition of AT has proven problematic due to the diversity of practices internationally. In fact, the international AT community has resisted a singular definition in order to remain widely inclusive and choosing only to note two core components: engagement in challenging activities with therapeutic intent (International Adventure Therapy, 2022).

Birthered in the United States, AT has been defined broadly as “any intentional, facilitated use of adventure tools and techniques to guide personal change towards desired therapeutic goals” (Alvarez & Stauffer, 2001 p. 87) and narrowly as “the prescriptive use of adventure experiences provided by mental health professionals, often conducted in natural settings that kinesthetically engage clients on cognitive, affective, and behavioral levels” (Gass et al., 2020, p. 1). In Europe, AT has been identified as “a combination of experiential learning and personal or individually different therapeutic approaches” employing challenge, nature, and reflection (Vossen et al., 2017, p. 2). In Australia, AT combines nature, small groups, “adventure and outdoor environments with the intention to achieve therapeutic outcomes” (Australian Association for Bush Adventure Therapy, 2008), and includes “healing, journeys, and relationships in attempting to articulate the means, methods and aims of practice” (Carpenter & Pryor, 2004, p. 237).

In Canada, AT uses experiential challenge activities, usually conducted in small groups, to engage with the therapist, for the varied purposes of empowering, building resilience, lowering stress, developing coping strategies, improving pro-social skills, resolving trauma, transforming behavior, reducing resistance to change (Priest, 2021) and enhancing overall ecohealth (Ritchie et al., 2022). Globally, AT is differentiated from other adventure fields by the use of the usual outdoor challenges in nature, but by adding “advanced facilitation techniques that offer beneficial alternative behaviors or augment what is already done well” so as to reduce client resistance to healthy change (Priest & Gass, 2018, p. 418).

Therapy or Therapeutic?

Central to these definitional arguments is the attempt to delineate between the concepts of “therapy” and

“therapeutic.” Early on in the historical evolution of AT, Gass (1993) suggested that adventure programming exists across a continuum of depth of intervention, with recreational programming occupying the shallow end of the spectrum, educational programs somewhere in the middle, and adjunctive (developmental) and primary (therapy) treatment interventions considered “deep.” This continuum is further developed in the opening definitional chapter of this textbook (Priest, 2023a).

In order to delineate between developmental (therapeutic or adjunctive) programs and therapy (primary treatment) programs, Williams (2004) proposed a six-factor model. This model required that in order for an intervention to be considered therapy, it must include:

1. A diagnosed presenting problem
2. Specific treatment goals
3. A targeted intervention specific to the presenting problem
4. Theory-informed program planning
5. Systematic research and evaluation of process and outcomes
6. Facilitation by trained clinicians (Williams, 2004)

Therapeutic programming may still have beneficial client outcomes, but not necessarily include the core components of therapy or the presence of a practitioner with a clinical license (Williams, 2004). In summary, AT typically involves several elements: a small group of clients, with individual needs, engaged in challenges involving risk, conflict, or exercise, with nature immersion followed by reflection under the facilitation of an outdoor leader in a psychotherapeutic process guided by a supervising therapist (Priest, 2023b). The last two elements delineate therapy from therapeutic programming.

Adventure Therapy in Canada

Significant AT growth has occurred during the last 25 years, especially in the United States, Australasia, the United Kingdom, and Europe (Norton et al., 2015). However, growth in Canada has been much slower (Ritchie et al., 2016). Starting in the 1970s, therapeutic adventure programs designed as diversion interventions for youth at risk of engagement with the juvenile justice system became common in British Columbia, reaching a peak of 26 funded programs. Yet, by 2014, only 2 programs remained active (Barnett & Howell, 2014), and by 2019, these two had closed. These two programs did not include mental health services from licensed clinicians and were more accurately described as developmental programs than therapy. These BC programs aimed to support skill development that increased the quality of participants’ daily lives rather than address resistance to change or processing of trauma (Priest & Gass, 2018). While these developmental programs did not meet the previously described definition of AT, wilderness programming affiliated with juvenile justice was quite common across Canada and served as a steppingstone towards AT programming.

One such program was Project Dare, which started as an open custody wilderness-based program in 1971. Wendigo Lake Expeditions took control of the program after the government privatized it, providing services from 2000-2021. Wendigo Lake Expeditions differed from its Western counterparts in that their program included licensed mental health professionals (Russell, 2006).

Enviros Wilderness Camp Association, currently based in Calgary, AB, started as a single wilderness program developed by social workers in 1976 and has grown to a large wrap around agency that provides a variety of mental health, addiction, and social services (About Enviros, 2023). Enviros' Shunda Creek wilderness-based addictions treatment program partnered with Gillis and Russell (2017) in 2010 to create an outcomes monitoring program with a specific focus on assessing the added value of including AT components in substance use treatment, eventually leading to the development of the Adventure Therapy Experience Scale (ATES). Shunda Creek continues to operate its 90-day treatment program under supervision of licensed mental health professionals near Kananaskis, AB.

Canadians have attended all nine International Adventure Therapy Conferences (IATC), and the Third IATC was hosted in Victoria, British Columbia, in 2003. At the Fourth IATC in Rototura, Aotearoa/New Zealand in 2006, a group of Canadians met to discuss the current state and development of AT in Canada, leading to a series of the Canadian Adventure Therapy Symposia or CATS (Ritchie et al., 2016). Since the first 2009 CATS, held in Victoria, BC, seven more CATS have convened in Canadian locations including Quebec, Ontario, Alberta, Nova Scotia, and the Yukon (Cornell, 2019). CATS events were intentionally held in distinct regions of the country to encourage participation from a breadth of educators, clinicians, researchers, students, Indigenous communities, and program providers across the nation; about 50 percent of CATS event participants identified as providing therapy or therapeutic services, while the remainder identified with other primary service domains (Cornell, 2019). This diversity in attendance has resulted in focusing conference conversations on the potential benefits of AT and AT-related practices across multiple sectors.

Many Indigenous communities across Canada have long histories of land-based healing practices to support health, well-being, and culture. While a full description of land-based healing practices is beyond the scope of this chapter, land-based healing practices in Canada have been described as:

...a health or healing program or service that takes place in a non-urban, rural or remote location on a land base that has been intentionally spiritually cultivated to ensure the land is honoured and respected. The land is understood to be an active host and partner to the people engaged in the healing process. The cultivation of a land base under the stewardship of First Nation people is usually done through the development of an intimate spirit-based relationship through ceremony, offerings, expression of gratitude and requests for permission from the land to enter and use it for healing purposes. (Hanson, 2012, p. 2)

On the surface, there may be some similarities between traditional land-based healing practices and AT; both practices aim to support mental health and well-being and occur outdoors. Despite these similarities, it is important the two practices are not conflated. Canadian adventure therapists should be careful to avoid cultural appropriation of traditional practices in their work, but there is value in western and Indigenous practitioners coming together to share, learn, and support each other in a good way. An example of such

collaboration occurred at CATS 7 in Whitehorse, YT. Grand Chief Peter Johnston gave a keynote about the value of engaging with land for health, wellbeing, and moving forward as a society, as well as on Yukon First Nations treaties and self-governance (Cornell, 2019). Future meetings of Canadian AT professionals should continue to invite Indigenous voices to the table to deepen conversations about how all parties can support each other's healing work outdoors.

A recent census of Canadian AT providers found that while there are a few larger programs offering AT services across the country (e.g. Enviro in Alberta, Pine River Institute in Ontario, Le Grand Chemin in Quebec), the majority of AT providers across the country offer services through smaller private practices (Priest & Javorski, 2021). AT programming tended to be adjunctive to more traditional mental health services and includes shorter nature-based counselling in local natural spaces, day trips involving facilitated rock climbing, canoeing, kayaking, hiking, or sailing, and shorter-term (2-10 day) wilderness expeditions (Priest & Javorski, 2021). While formal training or post-secondary education in AT is sparse in Canada (Ritchie et al., 2016), a Master's degree in AT was recently launched at the University of Quebec at Chicoutimi. AT services are also expanding in agency-based services in Newfoundland. While there does not seem to be the market to support longer-term AT programming, popular in the United States and European nations, interest is growing in and for the need of AT-based mental health support across Canada.

The Essential Elements of Adventure Therapy

AT engages clients in challenges (experiences with unknown outcomes) to provide opportunities for the client to experiment with different thoughts, feelings, and behaviors (Priest & Gass, 2018). The challenges include taking risks, resolving conflicts, enduring difficult exercise, and immersing in nature. Interactively, these provide intrapersonal, interpersonal, and physical and mental health benefits (Priest, 2023b; Ritchie et al., 2022). These challenges are normally facilitated using reflection techniques adapted from Kolb's (1984) experiential learning cycle; and adventure therapists present an activity designed to require clients to employ thoughts, feelings, or behaviors in line with a therapeutic goal, help clients reflect on the experience, and ask clients to consider how they can transfer learnings from the experience back to their everyday life (Priest & Gass, 2018). Beyond this general framework of challenges and reflection, and regardless of activities undertaken, the essential elements of AT can be best expressed using the alliterative acronym SUPRA: saturated solutions, unique universe, purposeful programming, reduced resistance, and authentic adventure.

S = Saturated Solutions

In contrast to traditional talk therapies, which employ predominantly cognitive-based pathways to work toward therapeutic goals, AT interventions actively engage clients through cognitive, behavioral, and affective pathways (Gass et al., 2020). AT interventions are immersive; whether they be short AT sessions, half day or

full day experiences, or longer wilderness-based AT programs that keep clients engaged in therapy 24 hours/7 days a week for several weeks (Gass et al., 2020). Adventure therapists employ advanced facilitation skills including isomorphic framing, frontloading, and funneling to develop transformative activities supportive of client growth toward therapeutic goals (Priest and Gass, 2018).

In the North American context, the AT process has been described as therapists and clients co-creating a goal, participating in an adventure experience alongside the therapist, and then processing the experience to help the client transfer the skills, knowledge, and/or insights gained from the adventure experience to their daily lives (Alvarez et al., 2020; Gass et al., 2020). While Dobud and Natynczuk (2022) argued that learning goals should not be introduced before the adventure experience (specifically nature-based experiences), the rest of their solution-focused model for outdoor therapies followed a similar process. Gass et al. (2020) also argued for a solution-focused component to AT interventions, where AT practitioners help clients identify strengths highlighted in adventure experiences. A similarity across all models is the belief that adventure experiences provide a safe environment for clients to experiment with different ways of being in the world; this allows participants to test out novel solutions to challenges they face in their daily lives in the context of an adventure activity, explore the pros and cons of each solution with the AT practitioner and the rest of the group, and think about which option may serve them best beyond the container of the AT program (Alvarez et al., 2020; Dobud & Natynczuk, 2022; Gass et al., 2020).

U = Unique Universe

Drawing on the work of Satir (1972), Walsh and Gollins (1976), and (Whitaker, 1978), AT interventions typically involve groups that are large enough to allow for reciprocity, diversity, and conflict yet small enough for members to unite around an objective, avoid the formation of cliques, and manage conflict in a healthy way. The active nature of AT interventions supports physical health by providing clients healthy eating, regular sleep routines, and frequent exercise. AT interventions, regardless of context, are screen-free and provide clients the opportunity to develop trusting relationships with peers, clinicians, and themselves free from negative health outcomes (poorer physical health, quality of life, and family relationships) associated with screen-based media consumption (Iannotti et al., 2009).

The use of unique environments has been central to the AT process through over five decades of literature (Alvarez et al., 2020; Carpenter, 2008; Deane & Harré, 2014; Gass et al., 2020; Jansen & Pawson, 2012; Nadler, 1993; Priest & Gass, 1997; Schoel et al., 1988; Walsh & Gollins, 1976). Novelty, through either setting (e.g. nature) or activity choice, provides enhanced assessment opportunities. Client projections onto both the novel environment and novel activity provide adventure therapists with deeper opportunities to observe client behaviours than would be typical during a talk therapy session in an office (Priest & Gass, 2018). In addition, the use of unfamiliar prescribed physical environments (often in nature/wilderness) that contrast with clients' daily lives helps: 1) enable clients to gain a new perspective on their usual behaviors (Gass et al., 2020); and 2) create adaptive dissonance (Walsh & Gollins, 1976) that can motivate clients to explore healthier ways of being

within the unfamiliar environment through the support of their peers and the facilitator (Gass et al., 2020). The use of contrasting, unfamiliar environments is supportive of client autonomy; the drive to become more comfortable in the novel setting requires participants to develop internal motivation to think about change (Gass et al., 2020).

P = Purposeful Programming

AT practitioners work alongside clients to develop treatment goals and plans, generally participating in the adventure experiences with clients (Alvarez et al., 2020; Gass et al., 2020). This places the therapist in a unique position to work towards goal consensus, collaboration, and alliance factors intensely over a shorter period of time than talk therapies through shared mutual experience. An early meta-analysis of psychotherapy outcomes including 375 evaluations of psychotherapy against no treatment control groups found that while on average, therapy clients were better off than 75 percent of untreated individuals, there were negligible treatment differences based on psychotherapeutic modality (Smith & Glass, 1977). Instead, the quality of the therapeutic alliance had the largest effect on positive client change through treatment (Smith & Glass, 1977). More recent meta-analyses on treatment outcomes for youth specifically found similarly negligible differences in treatment effect sizes by modality (Weisz et al., 2017; Weisz et al., 2019). Wampold and Imel's (2015) book presented a contextual model for therapy based on a comparison of the effect sizes for positive client change found in a literature search for psychotherapy outcome trials. The authors found that while treatment differences were the most commonly studied factor across the psychotherapy literature, psychotherapeutic modality was associated with a small effect size overall (Wampold and Imel, 2015). Their findings further supported Smith and Glass's (1977) conclusion that therapeutic alliance was more strongly associated with positive outcomes; empathy, alliance, positive regard/affirmation, and congruence/genuineness all showed medium effect sizes for positive client change through psychotherapy (Wampold and Imel, 2015). Most interestingly, Wampold and Imel (2015) found that goal consensus and collaboration between the therapist and the client, though studied the least, demonstrated the strongest effect sizes for positive client change through treatment.

AT interventions offer prescriptive challenges designed so that in order for a client to be successful, they must generate and apply adaptive thoughts, behaviors, and/or feelings targeted as goals in their treatment plans (Alvarez et al., 2020; Gass et al., 2020). Activities often require that clients engage through affective, behavioral, cognitive, social, or kinesthetic domain to navigate challenges in the present moment and experience eustress, the conscious application of personal competence to overcome perceived risks (Priest & Gass, 2018). Whether adventure activities are designed to allow clients to address specific treatment goals (Alvarez et al., 2020; Gass et al., 2020) or nature-based experiences are used to allow more emergent outcomes (Dobud & Natynczuk, 2022), AT practitioners strive to help clients transfer learning focused around co-created goals from the adventure experience to their daily lives.

R = Reduced Resistance

AT interventions engage clients through processes associated with the experiential learning cycle (Kolb, 1984). These processes support clients through activities, reflection on these experiences, integration or identifying learnings from experiences, and continuation or commitment to applying those learnings in the future through specific changes in thinking and behavior. Adventure therapists often practice from a solution focused orientation, helping clients to “do more” of what is working for them and “do less” of what is not (Gass et al., 2012). Activities are selected to engage with and build upon client strengths and interests, further reducing the likelihood of client resistance to treatment (Bandoroff & Newes, 2004). Furthermore, AT interventions are designed to support client autonomy, competence, and relatedness, the three basic psychological needs described by self-determination theory (Ryan & Deci, 2000). Ryan and Deci (2000) believed that when these needs were met, clients were more likely to develop intrinsic motivation to change, thus reducing resistance to therapy. The deliberate use of reciprocity (Walsh & Gollins, 1976) in AT interventions also serves to reduce client resistance.

Participating in group experiences that require attention and effort from all members in order to meet an objective can engage those clients who may be otherwise resistant to learning and growth (Bruner, 1966). Fetterman et al. (2016) found that cueing study participants to write about negative life experiences and depressive symptoms in metaphorical terms led to greater reductions in negative affect and depressive symptoms over time compare to participants who were cued to write in literal terms. Furthermore, they found that metaphorical processing could be taught to participants who were more pre-disposed to thinking literally (Fetterman et al., 2016).

AT interventions are often designed to be isomorphically connected to the clients’ treatment goals; the activity itself is a metaphor for an issue the client is seeking to resolve, and successful resolution of the activity becomes a parallel process to achieving a treatment goal in real life. Addressing a client issue through the structured metaphor of an activity is often met with less resistance than occurs while speaking about the issue directly (Priest & Gass, 2018). The process for creating isomorphically framed AT interventions and facilitating direct or indirect transfer of learning from the adventure experience to clients’ daily lives has been well described in the literature (Bacon, 1983; Gass, 1993; Gass et al., 2012; Gass et al., 2020). Therapeutic metaphors can act to reduce client resistance to functional change and enhance the efficacy of therapeutic interventions (Erikson, 1980) as they can often communicate complex or abstract concepts in a more understandable way (Hayes et al., 1999). Metaphors require clients to conduct a transderivational search of all of their past experiences, values, and beliefs in order to make sense of the current metaphorical experience (Bacon, 1983). This unconscious process bypasses the conscious resistance to change clients may have and allows the client to create their own meaning (Gass, 1993). Gass (1993) further explained that properly formed metaphors in AT build upon their application in traditional therapies due to: 1) clients’ tendency to exhibit self-motivating responses to properly formed AT interventions; and 2) the orientation of AT interventions towards successful resolution.

A = Authentic Adventure

North American literature over the last five decades has shifted considerably in how ethical and effective AT is practiced, however, the core elements of AT interventions have always included concrete physical experience. Walsh and Golins (1976) described the essential role of a characteristic set of physical problem-solving tasks as core to the AT change process. Schoel et al. (1988) provided a framework to use experiential group problem-solving challenges and challenge course activities (e.g. high and low ropes courses) to facilitate social, emotional, and behavioral change, while Nadler (1993) detailed how kinesthetic engagement in challenging activities could cause disequilibrium in clients leading to behavioral change. Norton (2010) found that physical challenge was essential to positive change in wilderness therapy clients, and Bowen and Neill's (2013) meta-analysis found learning through meaningful physical engagement in adventure activities and the associated positive use of stress (eustress) was essential to the change process.

AT interventions are concrete, straightforward, and produce feelings of choice for clients (Priest & Gass, 2018). AT experiences involve real or perceived risks appropriately matched to the clients' competence in a given area, and clients must use their existing skillsets or develop new ways of being to successfully complete the activity. They are organized with the intent of collectively achieving clients' treatment goals and structured in a manageable way such that client confidence is built through solving incrementally more challenging problems (Priest & Gass, 2018). The activities are consequential; clients receive natural feedback on their mental, emotional, social, and physical performance, and adventure therapists help clients reflect on this feedback to identify ways to improve (Gass et al., 2020). AT interventions foster reciprocity between members, such that client groups must make use of the varied strengths of each member to overcome challenges that would be impossible to achieve as an individual (Gass et al., 2020).

Becoming an Adventure Therapist

Adventure therapy interventions require practitioners to have expertise in a variety of domains: outdoor activities and leadership, facilitation and therapy, knowledge of clientele and culture, and personal qualities and qualifications (Priest & Gillis, 2023). Acquiring these skills requires an individual to train themselves in two or more professions: as a licensed mental health clinician and a credentialed instructor for any outdoor activity they wanted to lead as part of their AT practice. This involves earning a masters' degree in a mental health field (e.g., counselling psychology, social work, marriage and family therapy, and child and youth care), earning a clinical license in the province they want to work in, maintaining wilderness first responder qualification, and earning and maintaining an instructor credential for any applicable outdoor activities (e.g., canoeing, kayaking, rock climbing, cycling, etc). Earning and maintaining these credentials as an individual requires a significant investment of time and resources. As noted by Priest and Gillis (2023), it is also possible to create facilitation

teams with multiple practitioners, each bringing a unique skillset to ensure the leadership team has expertise in all domains required to provide ethical and effective AT programming.

Several recent publications have detailed the essential elements of good AT practice (Borroel et al., 2020; Borroel et al., 2021; Priest & Gillis, 2023). While they are not identical, the fundamentals of AT described in each overlap closely (see table 1), and they serve well as a guide for new practitioners interested in developing the skills required to facilitate AT programming as an individual or as part of a team. In 2018, 24 AT practitioners from 11 nations met for three days in the Blue Mountains to the west of Sydney, Australia, to discuss the essential elements of adventure therapy and practice in an international context (Borroel et al., 2020). One of the outcomes of the meeting was a list of 16 essential elements of safe and effective AT practice, displayed in the “Think Tank” column of table 1. The Association for Experiential Education (AEE) began offering the Certified Clinical Adventure Therapist (CCAT) credential in 2021 (Borroel et al., 2021). The CCAT credential is US-Based and requires expertise in 10 competency categories. More recently, Priest and Gillis (2023) presented the tri-competent adventure therapist, describing four domains of expertise essential to AT practice in North America.

Note: The international AT community does not require a masters' degree or clinical licensure, but training requirements vary based on local cultural context

Table 1: Essential Elements of Adventure Therapy

Certified Clinical Adventure Therapist: AEE (Borroel et al., 2020)	Tri-Competent Adventure Therapist: c. 2000 (Priest & Gillis, 2023)	Think Tank IATC-8: Eighth International AT Conference (Borroel et al., 2021)
1 Technical Skills 2 Organization/Administration MISSING: instructional and meta skills, but may already be inherent in a licensed mental health practitioner	Experience (Technical, Safety & Risk Management, Environmental, Planning, Meta Skills, Instructional)	Risk Assessment and Crisis Management Technical Outdoor Skills Adventure (as central to change)
3 Facilitation & Processing 4 Conceptual Knowledge 5 Therapeutic Alliance Building 6 Assessment	Reflection (Theoretical, Transformative, Psychotherapy, Facilitation, Metaphors, Alliance, Trauma-Informed)	Group Work (holistic facilitation and processing) Nature-Based Interventions (Nature as teacher and healer) Trauma-Informed Practice Counseling Theories and Models Therapeutic Alliance (relationships and communication)
7 Interventions (designed specifically for clients) 8 Socio-Cultural/Environmental Considerations	Clientele (Concerns, Tailoring, Indications, Contraindications, Cultural, Indigeneity, Social Justice, Empowerment, Socialization)	Indigenous/Cultural Awareness Holistic Well-Being Interventions/Tool kit (mindfulness, metaphors, initiatives, etc) Client Specific Knowledge
9 Therapeutic Monitoring 10 Documentation 11 Professionalism PREREQUISITES: possession of a graduate degree, verification of licensure, analysis of prior learning and experience under supervision, etc.	Personal (Graduate Degree, Self-Awareness, Intentionality, Overall Comfort, Professional Ethics, Prosocial Teamwork, Holistic Attitude, Pervasive Resilience, Willingness to Learn, Evaluation, Traits)	Safe, Ethical, Effective Practice Personal Self-Awareness Professional (reflective/reflexive practice and supervision) Evaluating Effectiveness

While the three descriptions of essential competencies for AT programming vary slightly, the core elements are all similar. Based on these, in order to provide safe, ethical, and effective AT interventions in Canada, providers should have expertise as an individual or collective facilitation team in:

1. Activities/outdoor pursuit expertise for all activities being offered as part of an AT intervention with instructor qualification where available and appropriate wilderness first aid training
2. Administrative expertise including physical, social, emotional, and behavioural risk management, insurance, waivers/assumption of risk documentation, logistics, environmentalism, outcome monitoring, and critical incident response

3. Clientele expertise including social justice issues, culture and Indigeneity, language, tailoring interventions for individual needs, holistic well-being, and indications/contra-indications for specific activities/interventions
4. Counselling expertise with a master's degree and clinical license, including knowledge of models of change, psychotherapy models, metaphors, nature-based interventions, therapeutic alliance and trauma-informed care
5. Facilitation expertise in delivering activities and processing to transfer client learning from the activity to their daily lives, managing groups, and group leadership

Conclusion

Adventure Therapy in Canada is still a developing field, but it holds great potential as an alternative form of mental health and well-being treatment. In order to provide safe, ethical, and effective care, Canadian AT providers should have the activity, administrative, clientele, counselling, and facilitation expertise necessary to offer any activities included as part of an AT program. Canadian AT providers should participate in program evaluation and client outcome research to evaluate the efficacy of AT interventions for a variety of populations; the findings of this work could be used to advocate for additional access to AT programming through provincial health and social service networks and insurance providers. The work of CATS should be continued, with a focus on bringing together AT providers, Indigenous communities, and government stakeholders to continue conversations about the value of connecting in and with natural places, conservation, land access, knowledge sharing, and how AT programming could help to address some of the 94 calls to action from the Truth and Reconciliation Commission (TRC, 2015). Finally, the next iteration of CATS should bring together AT practitioners, past clients, developing practitioners, and academics to discuss AT training in Canada. Sharing the experience of practitioners and clients may help academics create training opportunities in the form of micro-credentials, diplomas, and/or graduate degrees to help train the next generation of Canadian AT practitioners.

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PART III
CLIENTS

7.

ACCESSIBLE, ADAPTIVE, AND INCLUSIVE OUTDOOR RECREATION

Carinna Kenigsberg and Jason Cole

A person's life can change in an instant. An avid explorer can acquire an injury that prevents them from hiking; a parent with a neurodiverse child may need to become aware of sensory supports while camping; a child could develop an illness that requires them to only engage in supervised activities. To move forward and continually evolve, our profession needs to understand that anyone at any time may require support to connect to nature and be active in the outdoors. Practitioners need to stay relevant in their skills and be ready to support all types of people in a way that suits them best and creates optimal experiences.

I could have never gone on the camping trip by myself. I slept outside and heard the sound of the river. Staying in nature was a whole new level of connection: (more) than just a few hours that I was used to experiencing – Power To Be Participant.

Developing and delivering outdoor programs for people with diverse abilities requires a blend of person-centered and interpersonal approaches with technical skills and competencies. To design and deliver a quality outdoor experience, one must consider multiple perspectives, including how to best engage participants while keeping everyone safe: this is where practitioners look to and learn from those with lived experiences along with the outdoor sector's industry standards.

Introduction

Our organization, Power To Be, believes that access to nature is a fundamental right. We believe that everyone belongs in nature and “nature belongs in everyone” (Child, 2022). Power To Be works with community members and partners in different sectors, including people with many different lived experiences. Our goal is to change outdated narratives surrounding inclusion and accessibility so that we can connect more people to the beauty of our natural surroundings through attitudinal, behavioural, and organizational change. This chapter covers our overarching views, approaches, and perspectives around accessible and adaptive outdoor programs.

Championing inclusion is everyone's responsibility, and all outdoor program professionals should see each participant as the expert of their own experience. Using their guidance will help ensure that offered adaptations

are authentic. We also share experiences, observations, and insights from other like-minded partners who run inclusive and accessible outdoor programs in Canada.

At Power To Be, we believe that developing and delivering outdoor programs for people with diverse abilities is mutually rewarding. We know nature adapts all the time and humans can too. The guidelines we share in this chapter have helped position Power To Be as a leader in the outdoor industry, helping us maintain standards of excellence while upholding our philosophy and approaches to facilitating adaptive recreation experiences. We know that when you can create opportunities for people to develop relationships with themselves and others, there is a significant ripple effect of change.

For example, we have seen participants with autism develop their social skills and outdoor knowledge through our programs and subsequently heard that this also helped these individuals in school settings, at other camps, and in their family dynamics. We witnessed an individual with a fresh spinal cord injury go paddling on the lake with his family, and he shared that he hadn't imagined they would be able to do something together like this again.

Doing this type of work (going beyond the activity and looking at the person holistically) requires an approach that blends interpersonal, person-centered, and technical skills and competencies. We look at outdoor-sector industry standards, but we also cross-reference those standards of practice with different social sectors and partners. The Executive Director of Rocky Mountain Adaptive, Jamie McCulloch, follows similar standards of practice and philosophies to Power To Be. Jamie states that Rocky Mountain Adaptive's philosophy is about "No Limits":

...we see limitless possibilities, not limitations. This philosophy propels us to do all we can to provide access and inclusive settings to our outdoor natural environments through sport and recreation. By working with individuals' unique abilities and strengths, and providing specialized adaptive equipment, certified instructors, and trained volunteer support, we try to remove the barriers to participation.

We welcome everyone to join the movement, and together creating a future where all individuals have access to outdoor sport and recreation, in the many incredible natural environments our country has to offer, from coast to coast to coast (McCulloch, 2022).

Power To Be uses the guidelines below to maintain high standards and procedures while implementing a variety of inclusive outdoor experiences. The following chapter will break down how to run inclusive programs through four principles: Approaches, Attitudes, Accesses, and Adaptations.

Approaches and Attitudes: Principles to Expand Practices Around Adaptive and Accessible Programs

Inclusive and adaptive programs start with the first point of contact: how people are treated when they arrive at a location, how they envision themselves when they are researching a program, and how they are supported

to register for a program. These considerations are part of the initial stages of running inclusive, adaptive, and responsive programs. You can add systems and protocols to organizational standards, but those standards need to be matched with a service approach that welcomes people in an authentic way by focusing on their interests, strengths and lived experiences. This can include:

- Having clear, essential eligibility requirements that view the person holistically, and identify their need, fit, and desire to be in the program before the registration begins.
- Having referral options for people who may want or need a different type of support than your organization can offer.
- Creating goal-oriented registration packages and processes that consider the physical, social, and emotional goals and abilities of the individual joining the program.

The ACE philosophy is one of the first concepts we teach our groups, regardless of age and ability. ACE is helpful because it is broken down into three different components and is often used in conjunction with a group contract, goals, or expectations to set everyone up for success.

- **Accept All Abilities:** This means encouraging participants to respect and accept the differences in all of us. For example, understanding and respecting that someone may fear heights or may need to hike at a slow pace.
- **Challenge Yourself:** We want our programs to be a safe space – where participants feel supported and cared for – so they can reach outside their comfort zone. Whether that is making a new friend or trying a new activity, we want our programs to be a place where participants are learning and growing.
- **Encourage Others:** Participants should be free of negativity when joining programs. We want staff and participants to bring a culture of care and support to programs. We are building community together, so we want it to be inclusive and supportive.

We feel that ACE is an important way to frame a group and to set the stage for positive and inclusive interactions. We like to say that “everyone carries an ACE card” and we help metaphorically bring it out and use it. We believe that everyone should have access to nature. To create this access, there needs to be an approach that views people as people and focuses on their abilities first. It is through this perspective that we can form authentic connections and be creative, adapt, and offer an optimal experience. Designing programs that focus on people’s abilities, strengths, and experiences includes more than physical access. Ability-centered programs must include:

- **Sense of inclusion:** This is key in order to support the independence, comfort, and self-esteem of people with diverse needs and create deeper connections to places, people, and spaces.
- **Equal participation:** People with diverse needs should have equal access to opportunities, and programs

should adapt as needed based on the varying supports.

- Universal language: e.g. clear, concise language and activity classification and clear visuals on signage.

When you meet a person where they are at by putting aside your own expectations, respecting the other person's perspective, and focusing on the things they enjoy doing, you can find moments within programs to co-create that sense of satisfaction, independence, and love for being out in nature.

Kayaking with Power To Be allowed my husband and I to go kayaking with our son. Kayaking gives him the freedom to enjoy being on the water while leaving his wheelchair on the dock. –Power To Be Participant

This is a shift in mindset and practice, and it's easier said than done. Our society naturally gravitates toward assessing challenges and deficits instead of meeting people with authentic curiosity and respect. An ability-centered perspective should be carried out in all areas of an organization: in this way, there is shared leadership and practice, and individuals engaging with you will feel a sense of consistency, which builds trust.

Here is an example of this mindset and practice in action. In Power To Be kayaking programs, we typically incorporate all ages and abilities into all groups. Upon first contact, we greet everyone and begin assessing their ability, comfort, and experience with kayaking. We have many different paddle aids, pontoons, seats, and gloves. We discuss with each person what they would need to feel comfortable by building on their experiences, and we try to respond to their unique abilities and passions. For example, when one of the adults with a visual impairment expressed how he loves the sounds of the paddle hitting the water and the way the voices echo on the water as he paddles, we thought about how we could enhance that experience. We knew that in previous sessions when he was in the kayak, he was a very strong paddler, so we decided we would place him in the front of a double kayak with someone who was skilled at navigation but had less upper body strength. That way, he could be in control of his speed, and it would give him a chance to enjoy the sounds and rhythms of his paddling. Similarly, when a youth with autism was asking many questions about where we were paddling, we saw this as an opportunity for education and engagement rather than a hindrance, so we showed him the route chart and invited him into the navigation conversations. These examples of specific pairings by strengths and abilities allowed us to remove day-to-day barriers people face and create tailored experiences that leave lasting impressions.

The Challenge by Choice philosophy (Rohnke, 1989) strives to give each participant the opportunity and choice to challenge themselves to the limit of their personal comfort level. All programming is designed to be participant-centered and respects individual choices by placing value on safety, comfort, and participation to maximize learning and connection. Participants are encouraged to take part in all activities but always reserve the right to pass or choose another role within the activity.

When creating programs for people who are new to an activity, offering clear choices about what they “can” do vs what they “cannot” do is helpful. For example, when facilitating a rock-climbing program for a group of youths with autism, one of the participants was very cautious. He was nonverbally (through sounds and gestures) expressing worry about climbing and putting the harness on. We showed him two harnesses and asked

which one he wanted to put on. Rather than asking him if he wanted to put on a harness, we showed him two and asked him which one he preferred: this tactic empowered his leadership, made him feel in control, and ensured he was wearing the safety equipment. Over the session, he became more comfortable with the activity and wearing the harness, and by the following session, he understood the steps he needed to do to go rock climbing. Both of his climbing sessions were successful in their own way and empowered participation through choice. By meeting people where they are at in the beginning of every program, we can help build trust and develop the structure of the program in ways that develop skill progression over time.

Being prepared is a guiding principle to achieving quality programs. It involves checking in with yourself, your co-staff, and participants. It also involves facilitating the intake and registration of the people who are part of the program, reviewing the pre-program checklist, and making sure the appropriate steps are followed to run the activity. Being present in the program allows staff to fully engage with participants and focus on the success and safety of the program. Being playful with the program contributes to the overall success of the program, and playfulness is often what is most remembered by participants. Here are some questions to consider:

- What is outside of your control that you will need to understand and manage to ensure the experience is optimal? These are referred to as precipitating factors, and they include weather, sleep, food, experiences that are happening personally, medication people are on, how overcrowded a location is, the moon cycle, crisis in the community, etc.
- What is the state that people are in emotionally? How does everyone process socializing and respond to stimulus? This can affect group cohesion and the type of facilitation techniques needed. It is useful to assess where people are at through engaging with the individual and/or their caregivers ahead of time, and through experiential questions in the moment such as “What is your weather report?” (i.e. encouraging people to share if they’re feeling metaphorically “sunny” or “stormy”). In this way, we can learn what state people are in so we can adapt the activity as necessary.
- What are the expected and unexpected outcomes of the program? How will things be adapted in the moment?
- What is the best way to create an inclusive experience from the first point of contact to the moment people arrive, both from an individual and group perspective?

We have a model, shown in Figure 1, that is part of our pre-program process: to be Prepared, Present and Playful. As staff, we ask ourselves what our own comfort with the activity is, assess the group and the terrain, and then we ask what the comfort and experience of the group is. We aim to plan a program that is not beyond the skillset of our staff so that we can manage the expected and unexpected circumstances that may occur. This model assists with understanding where an individual’s scope of practice is and how much room there is to adequately manage the unexpected.

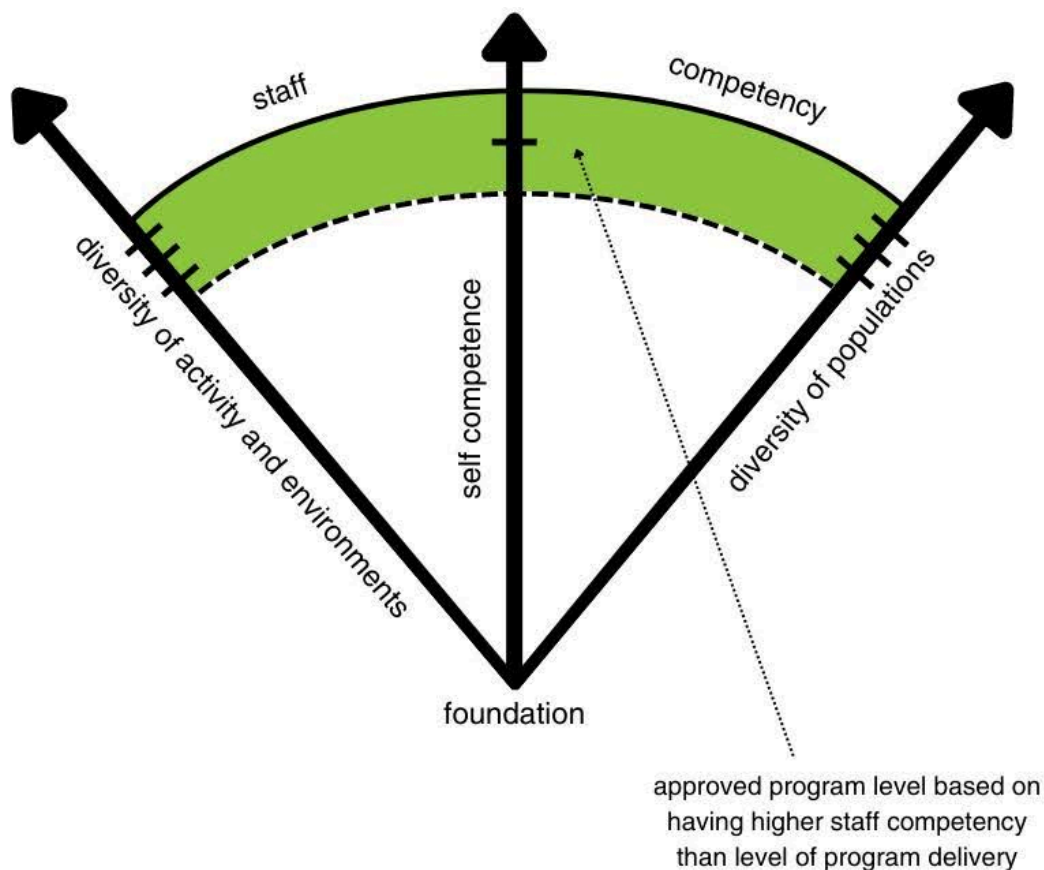


Figure 1: Program Divergence Model (Cole, 2013)

An example of a time when we adapted to unexpected circumstances was on a Power To Be kayaking expedition. A newer guide was leading the trip, and the weather and conditions had changed quickly. The staff member was not experienced in larger swells and strong winds, so as a result, they focused more on group safety than creating a unique kayak experience, as they had to guide more conservatively than originally planned.

In addition to assessing the staff and scope of the program, it is also important to have a baseline understanding of people's behaviours. At Power To Be, we follow The Mandt System. Mandt is an interpersonal training system that illustrates how to manage dynamic behaviour by understanding the root cause, like what a person needs or is trying to communicate.

One of the Mandt models Power To Be uses regularly to be Prepared, Present, and Playful is RADAR. Radar stands for: Recognize, Assess, Decide, Act, and Review Results. The RADAR model, shown in Figure 2, helps staff develop situational awareness and make good decisions in situations that can sometimes be risky (The Mandt System, 2017).

Figure 2: The RADAR model



There is so much complexity in our work and conditions are always evolving. RADAR gives staff the ability to recognize that things are changing and make the appropriate adaptations. Further, by understanding where the staff competency lies within the activity, and by understanding staff comfort and experience in supporting different abilities and learning styles, the activity can be tailored so that the staff are prepared to manage the unexpected and feel ready, willing, and able to modify as needed.

To be ability-centred is to view a person and their potential, not their limitations. Keeping the experience fair for everyone may include the need for adaptations based on participant needs. This results in full participation. To effectively deliver fun, fair, and authentic program experiences for participants, facilitators need to consider the following (Kunc, 2012):

- A person needs to be treated like a person and viewed as the expert of their own experience.
- A person who lives with a barrier is likely more innovative than their able-bodied support staff.
- Participants know best and can tell you how they can best be supported.
- Be curious, suspend judgment, and ask questions.

- Be flexible.
- Avoid over-adapting, which takes away the authentic experience for the individual.

At Power To Be, we aim for a balance of enjoyment, healthy risk, and safe procedures, and we keep authenticity at the forefront. For example, if the goal of canoeing is to feel the sensation of being on the water and we have too many ways to adapt the activity, then participants may miss out on the benefits of the experience. At times in the past, we have used too many adaptive devices to make people feel safe, and in the end, they felt too secure and did not enjoy the experience. Now, we set people up initially with adaptive supports and bring a few items with us in the canoe so we can check in along the journey and make sure to adapt and adjust as needed.

Merging the skills of outdoor leaders and therapeutic professionals invites an opportunity to look at individuals through a holistic perspective. This helps practitioners understand how the experience and the activity can also play a larger role in improving ability, knowledge, skill, and increase independence.



Accesses: Removing Barriers, Inviting Opportunity, and Creating Deeper Connections to the Outdoors

Before we can fully create access, we need to understand the barriers that participants are facing when engaging

in outdoor programs and activities. As professionals, we must recognize that programs are one way to connect to nature, but to fully create access, we have to work in partnership with other sectors that are also trying to connect people to the outdoors. For example, Power To Be works closely with the local parks sector to provide workshops on how to work with people with diverse needs. We have offered suggestions for equipment and technology to use, infrastructure upgrades, specific signage that works for people with different abilities, and have reviewed sites and spaces and offered modifications to create more universal spaces.

For example, with some of our parks sector partners, we have suggested practices like ‘quiet hours’ and collaborated on projects like a welcome sign that BC Parks created to ensure that, upon first arrival to the parks, people of all backgrounds, cultures, and abilities feel welcome. We have partnered with outdoor tourism organizations to look at their service approach, imagery, signage, and activities to provide feedback and examples of how they can be more adaptive and expand their reach to people who otherwise would not be able to visit that tourist attraction. We have worked with municipalities on understanding their community goals to support people with disabilities and underrepresented populations and provided guidance to increase access to participation in recreation and access green spaces.

To remove barriers, we need to listen to the people who are facing barriers and see them as the expert of their experience. Table 1 is a list of barriers that participants with different lived experiences have encountered as they go about their lives, which they shared with Power To Be as part of consultancy sessions. When reading these, ponder whether the participants in your programs are facing similar barriers. Are there opportunities you can collaborate with other partners on and sectors to remove any barriers and create more access collectively?

There may be many barriers that people are facing in your community. It is innate for humans to jump toward quick and reactive solutions that try and solve many issues at once. However, by focusing on one aspect at time, you can look at options that could become long-term solutions instead of performing continuous reactive problem-solving.

Table 1: Current Barriers to Access Natural Places and Spaces

<p>Social</p> <ul style="list-style-type: none"> • Lack of feeling welcomed at first point of contact • Website information and imagery is not clear or representative of themselves • Unwelcoming service upon arrival. • Staff experience is limited 	<p>Economic</p> <ul style="list-style-type: none"> • Cost of clothing and gear required for participation • Cost of transportation • Price of adaptive equipment • Cost of permits • Cost to bring a support staff or family member
<p>Physical</p> <ul style="list-style-type: none"> • Lack of or limited transportation • Excess crowds in the parks and trails • Limited/no adaptive equipment onsite • Lack of descriptive signage or wayfinding • Challenging activity location, terrain, and grade • Facilities limitations 	<p>Emotional</p> <ul style="list-style-type: none"> • Unclear choices and options • Language that focuses on the barriers and limitations • Unavailability of staff support • Daunting and lengthy registration or permitting process • Inconsistencies between agencies

For example, Power To Be was working with a regional park partner who was trying to create more access to their parks and increase opportunity for people with physical access challenges. When they began considering how they were going to fix some of the challenges, they first bought a piece of adaptive equipment and identified two trails that would be suitable for different physical abilities. We supported them in a discussion to identify the assets, resources, and staff expertise they had so we could understand how to broaden the park use to those with varying abilities. Then we categorized the list of ideas into four concepts, shown in Figure 3 and summarized in Table 2, called the four P's of Access and Inclusion: Purpose, People, Place and Practice. Power To Be was working with parks-sector staff who wanted to purchase some adaptive equipment to enhance access to their trails. Before we recommended certain types of equipment, we asked which people would be interested in using the adaptive equipment. They explained that there were some local community organizations working with people who had experienced spinal cord injuries who would love to access the trails, and there were a few places that they wanted to take participants they felt would be suitable to increase park access. When we discussed the expertise among the regional parks staff, we identified areas of practice and skills they had internally, and expertise they would need to outsource. For example, their search and rescue team knew the trail back routes and had cabins that could house extra adaptive equipment and tools for repairs and modifications. We also spent time with park rangers to explore how their flora and fauna education could be taught in different ways, including hands-on visuals, sensory activities, discussion of infographics, wayfinding visuals, and symbols. We also discovered there is a volunteer group who cares for trail maintenance and hiking sessions.

Figure 3: The Four P's of Access and Inclusion.



Table 2: Access and inclusion concepts.

<p>Purpose</p> <ul style="list-style-type: none"> • What are the goals and intentions of creating more access to natural spaces and places? • What are the outcomes you are hoping to achieve, and what are the outcomes that others are hoping for? • How does creating access connect you to your core values and organizational purpose? 	<p>People</p> <ul style="list-style-type: none"> • Who are the people that your programs are working with, and who are the people for whom you are trying to increase access? • Are there people who are part of other community organizations who support the demographics to whom you want to provide services and opportunities? • Are there people or groups that are typically underserved that your organization can support?
<p>Place</p> <ul style="list-style-type: none"> • Where are the places that you want to expand your access? • Are there trails that are underused? • Are there spaces that are overcrowded and you would like to support those who typically cannot go? • Who is able to go to these remote and local places, and is there an opportunity to explore transportation ideas to create more access (e.g. with bus companies or tour companies)? • Are there people who know these trails and natural spaces well who may be able to share ideas and create a deeper connection? 	<p>Practice</p> <ul style="list-style-type: none"> • What training and new practices need to be learned in order to feel confident in running programs and opportunities for people with diverse needs? • What are some new standards and procedures that need to be integrated to create alignment among your team? • Who has the expertise that you are looking for? • Can you partner or hire them to train your team? • Are there skills amongst your staff that can be repurposed in another way?

The staff were thrilled with the idea of sharing the trails with more people. We explored all the aspects above separately with their staff, and then we tied all the pieces together so they could see how to move their practice as a team and perpetuate their purpose and goals within their region.

The following are some activities you can consider starting to engage with Purpose, People, Place, and Practice and gain a deeper understanding of emerging needs and opportunities. Consider these activities to increase access and inclusion:

- **Research:** Explore what other organizations are doing and learn about what is being created and provided in other regions.
- **Accessibility audit:** Invite consultants in who have different lived experiences (e.g. a wheelchair user, someone with low vision, neurodivergent people, etc.) to guide you through your facility and identify areas of opportunity to increase inclusion. Always honour their time and expertise.
- **Speakers' Series:** Invite representatives from community organizations to give a talk on issues of importance to the community, ways to partner to reduce isolation, and hear what the current emerging needs are.
- **Directory of Services (or Referral Services):** Ensure that staff and volunteers have up-to-date information

about the range of agencies and organizations within the community.

- **Partnership Programs:** Collaborate with local partners who have experience working with people with diverse needs and knowledge around emotional and physical adaptations and modifications, adaptive equipment, and mental health considerations. For example, you could plan an inclusive hike, facilitated in partnership with other organizations offering the use of a TrailRider for participants who may require one.
- **Brainstorm:** Find possible community partners and develop strategies for building relationships to enhance knowledge around places to explore, people to work with, and the practices and skills needed to create safe and enjoyable outdoor adventures.



Adaptations: Equipment Technology, Program Modifications, and Attitudinal Adjustments to Influence Change

Adaptations begin in the pre-program planning stages. This includes learning about the group's makeup and what the individual and group goals are. What are the aspects of the program that are fixed and cannot

change, and what are the aspects that can be altered? Being able to adequately adapt means that you have lots of options, choices, different gear, and backup plans. It means having a team that is in tune with their surroundings, has experience managing and developing groups, and is competent at facilitating the activities.

When you are using adaptive equipment, it is important to look at the emotional and physical safety of the participants. We break this down into three areas: comfort, mobility and stability, as shown in Figure 4. For example, is the device being used comfortable for the individual using it? Do they feel restricted, or can they move around? Do they feel stable and secure? Then there is the emotional side: Do they trust the staff to help them use the equipment? Do they feel safe, and are they being checked in with? If modifications need to be made, is this done by viewing the participants as the expert of their experience? When does technology assist with accessing natural spaces, and when does it hinder connection to natural spaces?

An example of technology that can help is assisted communication devices, which can be used to support wayfinding and learning about flora and fauna. Assisted communication devices create access for someone who communicates non-verbally or through sound or images. Some people may always need adaptive equipment that is managed by others, and some people may want to work towards more independence. This involves trying a variety of options. By being willing to adjust, adapt, and modify, you can support others to build competency and confidence, whether they are looking for a supported social experience or an independent experience.



Figure 4: Physical and Emotional Adaptations.

Tips and tricks with technology and equipment

- Don't assume one technology is going to work for everyone.
- Progression and developing competency may involve multiple types of equipment.
- Participants need options.
- Outdoor equipment is also an adaptive tool (e.g. maps, walking sticks, compass, charts etc.)
- When supporting someone transferring from one type of equipment (e.g. their wheelchair) to the outdoor equipment (e.g. a kayak with pontoons on it), ensure a proper lift and transfer can be facilitated.
- Adaptations and modifications can involve trying things several times.
- Ensure adaptations do not impact the safety of the participant or support staff for the sake of participation.

Some types of adaptive equipment:

- TrailRiders and other All-terrain devices (BowHead, It's Not A Wheelchair, Mountain Trike, Action Trackchair, Beach Chair etc.)
- Access Tracks and/or Mobi Mats to create access on trails and beaches
- Items like noise-cancelling headphones, iPads, and communication boards
- Geocaching Tools like maps, charts, examples of things they will find, and examples of different containers for the geocache
- Cushions, mats, foamies
- Extra clothing, blankets, rain gear
- Gloves for different grip strength
- Repair kits and spare parts
- Information about the local history, flora, and fauna through stories, images, and tactile objects
- Walking sticks
- Wayfinding mapping technology like apps, picture or sensory boards, or landmarks
- Pontoons, adaptive seats, specialized cushions, devices that can be operated with a single arm
- Transfer benches
- Sensory activities like gardens, touch stations, spaces that change seasonally

Adaptations have the potential to remove a level of isolation and dependence, offering people a chance to feel in control and a part of their holistic experience.

You think some activities are just [in] your past life, but to be empowered to be able to do what I used to enjoy is amazing. –Power To Be Participant



Conclusion

All of us can naturally connect to the benefits of time spent in the great outdoors. Nature has been a co-facilitator for experiences in everyone's lives. However, those living with barriers or disabilities have limitations

to access some wild and natural places. When we work to remove those barriers and bring people with disabilities into nature, there is the opportunity to develop personal skills that improve health, aid in stress management, and gain socialization skills. “Many outdoor education programs focus on the development of personal skills, such as building self-esteem, personal fitness, and stress reduction,” (The Social Planning and Research Council of B.C., n.d.) which is why it is valuable to develop practices and approaches that broaden the notion of inclusion and access in the outdoors.

Inclusion begins in the first stages of any program or event. It starts through exploring the concept of welcoming approaches, creating access, and involving adaptations. These concepts can help to create more inclusive nature-based programs and opportunities and influence organizational strategies, approaches, and procedures and in a purposeful way these concepts can achieve social change.

Nature adapts all of the time, and humans can too. Adaptations should be fun, fair, and authentic and should always see the person as the expert of their own experience. Inclusion is everyone’s responsibility, and together, we shift the narrative in the outdoor sector and promote access for all.

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Jason Cole is the Co-CEO at Power To Be. Jay's fabric is sewn from the love of the outdoors and he seeks the restorative qualities of the natural environment through his work. His appreciation for key mentors has contributed to his values of community responsibility, integrity, self-worth, leadership, and compassion. He holds a BA in Outdoor Recreation, enjoys working in partnerships, and aims to make this world a little better than when he came into it.

8.

UNIVERSAL DESIGN AS A FRAMEWORK TO INCREASE DIVERSITY, INCLUSION, EQUITY AND BELONGING IN CANADIAN OUTDOOR LEARNING

TA Loeffler, PhD

Outdoor learning (OL) in Canada needs to continue to evolve to become truly diverse and inclusive. It is only through individual and organizational change that true equity and belonging can be realized across the landscape of Canadian OL settings and contexts. This process of change requires well-informed and innovative leadership as well as new models of outdoor pedagogy and practice. In this chapter, I suggest that the principles of Universal Design (UD) may be a useful framework for promoting this movement towards greater diversity, inclusion, equity and belonging (DIEB) in Canadian OL.

UD is a planning process that is used to enable and empower diverse populations through the facilitation of access and participation (both physical and social) by all people regardless of their ability, age, or size (Steinfeld & Maisel, 2012). While UD is often situated as a process for the design of accessible infrastructure, it has been adopted for use in educational and OL settings as Universal Design for Learning (UDL) (Harte, 2013; Kelly et al., 2022; Wilson, 2017). Educators from the Center for Applied Special Technology (CAST) sought to reduce barriers faced by learners by applying the principles of UD to the design of learning environments. Through their goal of designing educational environments in which all learners could engage in learning that is accessible and meaningful to them, CAST educators recognized that it was learning environments that must change rather than the learners (Wilson, 2017).

Darder et al. (2009) described a need for critical pedagogy that is “fundamentally committed to the development and enactment of a culture of schooling that supports the empowerment of culturally marginalized and economically disenfranchised students” (p. 10). More than a decade later, Scully (2020) noted that there is still “a distinct absence of attention to crucial elements of Place such as gender, race, class, and ability that have been called for by eminent theorists for decades” (p. 230). Many in the Canadian OL academic community have made similar calls for change. Kennedy and Russell (2020) consider it critical that the field of OL examine the role that hegemonic masculinity plays in addressing gender inequity while others call for centering the voices of all marginalized populations (Gray et al., 2020; Russell et al., 2008). Laurendeau

et al. (2020) have called for critical thought by those in the outdoors to “ask ourselves which histories, people, and ideas are brought to light, and which are kept in the shadows and to what effect?” (p. 127).

Returning to UD, Steinfeld and Maisel (2012) believe that conventional (i.e., non-universal) design excludes and stigmatizes many people by not recognizing that the diverse and broad range of human ability and experience is ordinary and not special. They created the “Goals of UD” to assist practitioners and educators to apply the principles of UD and UDL across settings. This chapter uses the goals of UD (awareness, understanding, cultural appropriateness, body fit, comfort, personalization, wellness, and social integration) to frame a discussion of how they can be used by OL organizations in Canada as they seek to deliver programming that is more responsive to all learners’ needs (Steinfeld & Maisel, 2012).

Having set the scaffold of this chapter, I begin by positioning myself under the umbrella of OL. I research and teach OL and gender studies at Memorial University in St. John’s, Newfoundland and Labrador, Canada located on the ancestral homelands of the Beothuk. As well, I acknowledge the diverse histories and cultures of the Beothuk, Mi’kmaq, Innu, and Inuit of this province. Along with being an outdoor academic and educator, I see myself as an outdoor adventurer who has had the privilege of participating in remote expeditions across Canada. I identify as White, middle-class, agender, lesbian, and settler-Canadian living in a physically literate, middle-aged, straight-sized, and aging body that currently allows me to do almost anything I would like to do or instruct outdoors.

With my background in gender studies, I (and many others) have advocated for the elimination of sexism, racism, and classism in OL throughout my career. Pivotal experiences working with persons with disabilities outdoors and travelling on Indigenous lands propelled me to examine the fundamental tenets of my OL pedagogies and practices, seek additional training, and deepen my understanding of how oppressions and biases intersect to prevent equitable access and learning for some students and privilege the participation of others. Parallel to Kelly et al., (2022), this chapter is built on an unwavering belief that all Canadians should have equitable access to the outdoors and outdoor learning, and the acknowledgement that there is still much work to do on the path to this goal.

Using the Goals of UD as a Framework for Designing OL

Throughout the introduction above, my goal was to set the need to query the design of OL learning programs in Canada, so that going forward, we can purposely adopt UD as a framework that will guide the field to become more socially just. In the next section, I propose the adoption of Steinfeld and Maisel (2012) “Goals of UD” as a design framework to use in this collective reflection on OL practices in Canada.

Awareness and Understanding

Building awareness and understanding of the need for universal design in OL is often an early step in the design process. Practitioners of OL in Canada need to ask themselves this question, “What will it take before OL programs become genuinely accessible to all who want to participate?” (Warren et al., 2014, p. 98). As we embark on conversations about national OL curricula, certifications, and program accreditation, we need to advocate for professional development training and standards that center on accessibility, adaptive outdoor learning, cultural competence, and social justice.

Progressing from there, OL programs are directed to examine their participant recruitment, staffing, programming, and communications practices through the lens of the Accessible Canada Act which came into force in 2019 with an overarching goal of a barrier-free Canada by 2040 (Government of Canada, 2019). Using UD elements such as large text options, described and captioned videos, sign language interpretation, and visual and textural wayfinding, we need to ensure that participants and staff can navigate our facilities and program documentation such as forms, policies, and websites. Along with ensuring our text-based communications are accessible, the imagery we use in marketing and promotions needs to be accessible, authentic, and representative of the students we serve or wish to serve.

Warren et al. (2014) suggest that the OL field also needs to query the language we use to identify and shift away from using terms or nomenclature that can be hurtful, exclusionary, and oppressive. Feminist outdoor leaders have called for the terms “hard” and “soft” skills to be changed to technical and interpersonal skills for decades, yet the use of hard and soft persists (Warren & Loeffler, 2006). Similarly, others have identified the need to examine first ascent naming conventions in climbing and other outdoor pursuits since there is a long history of overt objectification and sexualization of women, racism, settler colonialism, and other discriminatory practices in these practices. (Laurendeau et al., 2020; Loeffler, 1996; Wigglesworth, 2021). Additionally, it is vital to check with OL participants and staff about language preferences related to their identities such as their race, ethnicity, gender, and ability. For example, in Canada, many people with disabilities favour person-first language (e.g., a person with a disability or person experiencing a disability) while others prefer being identified as a disabled person. Beginning with building awareness of and the understanding that past programmatic designs and practices may have excluded others, sets the foundation for a deeper exploration of culture in OL in Canada.

Cultural Appropriateness

Given the Calls in Action made in response to the Truth and Reconciliation Commission (Truth and Reconciliation Commission of Canada, 2012), it is critical that Canadian OL practitioners engage in a process of reflection, evaluation, reconciliation, and decolonization in regards to our educational design, settings, and practices. Without this redesign, OL programs will likely continue to fail their Indigenous participants (Friedel, 2011). OL programs must recognize the indivisible relatedness of land, culture, and language for Indigenous

peoples (Cajete, 1994) and accept that the decolonization of OL requires the involvement of Elders, centers Indigenous voices, knowledges, and pedagogies, and deeply considers the places and land where programs occur (Battiste, 1998; Lowan, 2009; Madden, 2015; Tuck et al., 2014). Wallin and Peden (2020, p. 248) sum it so well:

Place/land provides a common, integral connection between settler society and Indigenous peoples, even if that connection is framed from two very different worldviews and experiences. Place/land has been the site of struggle in the relationship between Indigenous and non-Indigenous peoples, and it will, therefore, be place/land that can help us heal and work towards reconciliation.

In keeping with UD, reconciliation processes will not only benefit Indigenous students but others as well in that outdoor pedagogies that facilitate deep connections to a place can assist students in examining their white privilege (Flynn et al., 2010). Rose and Paisley (2012) have challenged White practitioners to recognize that White privilege is woven into the fabric of OL and as such, is always there even in the absence of racialized participants or staff.

In their qualitative investigation of Canadian outdoor learning, despite vast geography and diverse programmatic foci, Asfeldt et al., (2021), concluded that there were some shared values across programs. These values included hands-on experiential learning, holistic and integrated learning, travel through the land, and religion and spirituality. Similarly, these researchers grouped OL programmatic goals into five themes: building community, personal growth, people and place consciousness, environmental stewardship, and employability and skill development. Pertinent to this chapter and perhaps indicative of the need for reflection in Canadian OL, there were few findings reported that addressed DIEB or social justice. That said, Asfeldt et al., (2021), in describing the theme of people and place consciousness, related that 14 participants (out of 22) did identify that their programs addressed topics of history, culture, Indigenous traditions, and the specific uses/users of the land on which their programs existed. One research participant described her program's goal as follows: "to incorporate the two ways of knowing to be able to say understand the [Indigenous] culture and how important it is and how it fits with western science" (p. 304).

Lowan (2009) suggests that OL programs question and critique the unexamined use of OL models "such as the 'Outward Bound Model' that evolved within a European perspective" (p. 43). Ideally, we transition away from prioritizing narratives and experiences that focus solely on self-reliance, conquest, and individualism, instead turning towards reconciliation and decolonization (Laurendeau et al., 2020; Tuck et al., 2014). In the Canadian OL context, we must admit that the lands and waterways on which we host our programs were most likely stolen from Indigenous peoples (Laurendeau et al., 2020). We can do this by forming humble and truth-seeking relationships with Indigenous leaders, Knowledge Keepers, and Elders—this is especially critical if we are designing OL programming for Indigenous peoples (Scully, 2020)—and by adopting and using authentic land acknowledgments throughout our communications and programming.

Historically, much OL programming has appropriated Indigenous ways of being and knowing without acknowledgment or consent, and this must practice must stop (Root, 2010). Many authors have called on OL

practitioners to become intimately familiar with the origins of many of our programmatic philosophies and practices including gathering in circles, challenge by choice, and leave no trace, to name a few (Mitten, 1994; Rose & Paisley, 2012; Warren, 1998). Furthering this thought, Asfeldt et al. (2021) found that OL program founders continue to heavily influence program philosophy and delivery in Canada. The researchers described a topography of the OL field that grew organically from passionate educators/founders passing on program philosophies and knowledge to students or participants who later became leaders themselves.

Given the potential dynamics of homologous reproduction, (Kanter, 1977), whereby a dominant group systematically reproduces itself through hiring and other practices, we need to question from whom and through whom Canadian OL has developed and who has been and continues to be excluded through this origin and design. Finally, Tuck and Yang (2012, p. 5) remind us that:

Social justice education—whether or not we continue to use those words to define it—is the crux of the future of our field. Social justice is not the other of the field of education, it IS the field. There is no future of the field of education if it cannot meaningfully attend to social contexts, historical and contemporary structures of settler colonialism, white supremacy, and antiblackness. Social justice is not the catchall; it is the all.

Staring up at this “crux move,” I argue that Canadian OL needs to reflect on its program design and ask learners if they can access our programs and the necessary outdoor clothing and equipment to participate, including those who live with disability, those who live in/with bodies whose size or ability do not conform to current design requirements, those who are racialized, those who practice particular religions, those who are under-resourced, and those who are marginalized in a multitude of other ways (Russell et al., 2013; Warren et al., 2014).

Body Fit, Comfort, and Personalization

Wilson (2017) suggests that UDL advises that we design for inclusion, ideally from the beginning, so that we transform the learning environment rather than expecting the learner to do so. Rather than a “rote” and “one size fits all” OL pedagogical approach that perpetuates a certainty that “generic methods work for everyone,” Warren (1998), like the tenets of UDL, implores that we as a field stop treating our “learning communities as homogenous groups of students with similar needs”(p. 22). Instead, we need to personalize our approaches to ensure that all can avail of the benefits of outdoor learning.

As a field, we must ask ourselves: “What sort of bodies and identities are being produced in this pedagogical space?” (Newbery, 2003, p. 205). Furthering the call for re-examining our core design assumptions, Warren (1998) noted the influence of the field’s early focus on individualism and rugged physicality in OL programs. Traditional OL program design, based on a “rugged outdoorsy nationalism” (Laurendeau et al., 2020, p. 127) that focuses solely on human-powered travel through remote landscapes, privileges the participation of those who inhabit “able” bodies and often requires a high degree of strength, fitness, technical skills, and other abilities. These types of programs have tended to be longer, more expensive, and require greater up-

front financial investment before participating, and have been a staple offering and program design mode for Canadian outdoor education programs (Asfeldt et al., 2021). Learners whose bodies, genders, or abilities haven't fit this design requirement have largely felt unwelcomed, been absent, or are expected to participate in a specialized program (Gray et al., 2020; Laurendeau et al., 2020). As one way forward, Dahl et al., (2019) ask that we consider utilizing simpler forms of natural contexts and local places and include a variety of skills, equipment, and experiences.

OL programs must redesign their learning environments and curricula to ensure that we eliminate ableism, heteronormativity, binary gender normativity, and other potential harms that frequently arise where bodies, race, gender, and sexual orientation intersect (Allen-Craig et al., 2020; Russell et al., 2008; Warren et al., 2014). Additionally, the field of OL and the outdoor industry in general have only recently begun to pay attention to body size diversity—indeed, at times, both entities have perpetuated the dominant fatphobic discourse through both unexamined practices, program design, and erasing people's participation much like has happened with race, gender, and class (Laurendeau et al., 2020; Newbery, 2003; Rose & Paisley, 2012; Russell et al., 2013; Warren et al., 2014). As a result, OL programs haven't always had a wide spectrum of sizes in the clothing and equipment that they had to offer participants to use, rent, or buy. Larger learners may not have easy access to a PFD, climbing harness, or rain shell layer that fits them well.

As we turn our focus on individual learners' needs, abilities, bodies, and identities, we can see that they exist at the nexus of these, and as such, are unique. We must continually remember that these intersecting identities, and the socioeconomic realities that accompany them, impact everything about learners' ability to access, participate, and feel belongings in OL programs (Maina-Okori et al., 2018). Furthering the UD goal of personalization, it is critical to meet “students where they are and prioritize their goals, rather than focusing solely on the leader's [or programs] goals” (Rogers & Rose, 2019, p. 44). This will likely require a greater breadth of learner choice that goes well beyond the field's traditional implementation of “challenge by choice” (Mitten, 1994). With a focus on furthering access and inclusion through personalization, we explore the UD goals of social integration and wellness next.

Wellness and Social Integration

Marginalized learners in OL likely do not reap the benefits of widespread representation of role models and heroes across social and print media platforms, as the long history of Indigenous and other equity-deserving groups has been largely erased through eons of colonization and White dominance of conservation and environmental movements (Finney, 2014; Grue, 2016; Laurendeau et al., 2020; Tuck et al., 2014). OL in Canada cannot simply “add diversity” and stir; instead, we must begin again and redesign our programs to ensure true social integration and wellness for our learners.

In critiquing Labistour's (2018) MEC social media statement, “Do White people dominate the outdoors?” Laurendeau et al., (2020) problematized MEC's diversity campaign by stating:

By bringing attention to the representation of marginalized bodies, larger structural barriers to the outdoors (set aside, for a moment, structural problems beyond outdoor sporting) go unquestioned: classed and ableist barriers to accessing parks, the not-so-micro-aggressions, racial profiling, the policing of gendered bathrooms and their use for only the temporarily, deliberately, and affluently unhoused, for example.

We must fearlessly examine the multiple pasts which brought us to our present programming moment and address design thinking to move the OL field forward toward greater DEIB and away from the harms caused by marginalization and exclusion (Finney, 2014; Gray et al., 2020; Mitten, 1994; Tuck et al., 2014). Imagine the benefits for learners having the choice of participating in OL in a fully inclusive setting or with shared identity group members with teachers or leaders who share the same identity based on their needs, goals, and skills (Finney, 2014; Warren et al., 2014).

Conclusion

To reach the eight goals of UD and to run OL programs that truly support DEIB, we must continue to examine our most overt and hidden OL practices, such as the information we collect during health screening, how we communicate with participants, and how we assign participants' sleeping arrangements (Warren et al., 2019). From the moment we first have contact with learners, we can create welcoming OL educative spaces, or we can instantly prevent many learners from benefiting from OL. Whichever result occurs is ours to make happen by how we design everything about our programs. Just like individual participants, each OL program is unique and will be at a different part of the DEIB spectrum, with some well past what I have suggested throughout the chapter and others just beginning. What's most important is to recognize the impetus to start or to continue to work for necessary changes in our programs. It's not good enough anymore for Canadian OL to answer the question of "Why do we do things this way?" with "That's how we've always done things" (Asfeldt et al., 2021). We must instead support innovative inclusive OL programming that progresses DEIB in every part of what we do. There will be much learning and unlearning we need to do along this path, but I hope you will join me along the way.

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9.

ENHANCING SUPPORT FOR INDIGENOUS LAND-BASED PROGRAMMING IN THE NORTHWEST TERRITORIES

Debbie DeLancey and Sabrina Broadhead

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Recognition and understanding of the importance of land-based programming in Indigenous cultural contexts is growing in Canada. Land-based programs may be designed and delivered to achieve a variety of objectives in Indigenous communities, and provide a range of benefits including intergenerational connection, transmission of traditional knowledge, and healing opportunities (McDonald 2023; Redvers, 2020; Walsh & Sommerfield, 2018; Wildcat, McDonald, Irlbcher-Fox & Coulthard, 2014; Zoe, 2018). A land-based program is:

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 (Redvers, 2020, p. 90).

Value and Benefits

Human beings are happier and healthier when they experience connection with the natural world. There is

an increasing body of scientific literature rooted in western knowledge systems that validates this assertion, as summarized for example by the Canadian Parks Council's 2014 Report, *Connecting Canadians with Nature*, which highlighted the importance of contact with nature as a factor in personal and societal well-being (Canadian Parks Council, 2014).

A recent report published by the Yellowhead Institute provides a comprehensive overview of the current literature related to the value and benefits of Indigenous land-based programming, noting that:

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 (McDonald, 2023, p. 9).

Indigenous authors distinguish between outdoor learning or place-based programs, where curricula may be informed by local environmental contexts but are based on a western approach to learning and Indigenous land-based programming, which is grounded in Indigenous pedagogies, informed by Indigenous world views, and often includes a goal of strengthening connection to land, culture, and Indigenous self-determination (Cluderay, Mainville, Simpson & Wrightson, 2022; McDonald, 2023). Cluderay et al. (2022) note that, while outdoor learning and land-based programming share many of the same characteristics, "Outdoor education is not land-based education, because it does not centre Indigenous epistemologies and pedagogies. Simply taking people outside for activities like canoeing, hiking, or skiing, does not make those activities 'land-based'" (Cluderay et al., 2022, p. 52).

This chapter focuses on programming that is land-based as described by Redvers (2020, p. 95), i.e. grounded in "...a lived connection built over generations, shared through the oral tradition, and understood only through direct practices or experiences."

The value of Indigenous land-based programs is widely recognized as a contributing factor to individual and community well-being as well as to Indigenous cultural resurgence. Its importance has been highlighted in numerous academic articles and reports commissioned by various government agencies (DeLancey, 2023; Government of Northwest Territories, 2013; McDonald, 2023; Redvers, 2020; Walsh & Sommerfeld, 2018). In the Northwest Territories alone, several major government reports in the past decade have highlighted the critical role that land-based programming plays in individual and community well-being. As examples, a 2013 report on the results of a citizen-led panel on Addictions and Community Wellness focused on increased investment in on-the-land programs as the single most important response to combatting addictions (Government of Northwest Territories, 2013), while a 2022 review of child and family services found that territorial residents saw land-based programming as the most highly rated resource for families in need of support (Northwest Territories Legislative Assembly, 2022).

Land-based programs are often cited in Canadian media as evidence of Indigenous cultural resurgence and resilience. (e.g. Galloway, 2018; Johnson, 2019). As Broadhead (personal communication, 2023) explains, Indigenous peoples in the north lost opportunities to engage in and experience what was once a traditional way

of life due to colonization. Engaging in land-based programming results in “bringing back pieces of ourselves that are lost,” connecting people to their families and history and rebuilding connection to land, culture, and way of life after generations were deprived of that experience.

In spite of the widespread recognition of the importance and effectiveness of on-the-land programs, Indigenous groups and organizations struggle to build such programs, primarily due to funding and capacity issues. Land-based programming represents “...an intricate, cross-disciplinary, and highly developed field of professional practice” (Redvers, 2020, p. 95), and delivering land-based programs in a contemporary context requires investment in infrastructure, transportation, program staff and support staff, and insurance, among other costs (Wildcat et al., 2014; Jensen, Andrew & Simmons, 2021). Due to the multi-generational legacy of colonization and dispossession from land, many Indigenous people today lack not only the experience and skills but also the basic equipment required for land-based activities. Program delivery agencies are thus often required to outfit participants, including providing, for example, appropriate winter clothing, tools, tents, life jackets, etc.

Most programs rely on external funding support from government agencies or philanthropic organizations, which creates an additional administrative burden associated with preparing funding submissions, and meeting evaluation and reporting requirements. Programs are usually delivered by community-based Indigenous governments, or local or regional non-profit groups, with limited capacity to meet these demands. A further challenge is that Indigenous communities view land-based activities as having inherent value, while mainstream funding agencies tend to target a specific desired outcome or activity, such as supporting at-risk youth, offering Indigenous language instruction, or providing healing for addictions. Thus, local organizations may have to access funding through a variety of sources in order to deliver integrated programming that meets the needs of community residents (Dotto, 2020; Redvers, 2020).

In response to these challenges, institutional supports for Indigenous land-based programs are emerging across Canada. For example, the federal government’s recent announcement of a national network to streamline funding and capacity-building for Indigenous guardian programs, funded in large part by the Government of Canada (Wood and Cruikshank, 2022). This chapter describes collaborative policy work and focuses on two innovations in the Northwest Territories (NWT) that are designed to address these challenges and provide enhanced support for Indigenous organizations and communities seeking to provide access to on-the-land programs. Discussed later in this chapter, these two innovations are the NWT On The Land Collaborative and Supporting Wellbeing.

Collaborative Policy Development

In 2018, a workshop was convened in Yellowknife NWT that brought together on-the-land practitioners from across northern Canada to discuss culturally appropriate and effective evaluation approaches for Indigenous-led on-the-land programs. The workshop was a collaboration among the Government of the Northwest

(GNWT) Department of Health and Social Services (HSS), Tides Canada (now MakeWay), the Sahtú Renewable Resources Board, Hotù ts'eeda, and the NWT Recreation and Parks Association (NWTRPA). Meeting organizers hoped to begin the work of developing common approaches to evaluating land-based programs, setting the stage for the development of a set of tools and methods that could be used by on-the-land program practitioners across Canada's North. Participants shared existing experience with evaluating and reporting on their programs, and explored what external supports could help with this work.

The meeting resulted in agreement that it would be useful to further work to provide on-the-land programs with evaluation tools and support. Another key outcome was that participants identified a gap in the available literature on land-based programming and felt that having access to a shared resource which brings together evidence about the effectiveness of on-the-land programs would be a useful support for program providers. Participants expressed frustration about the amount of administrative time and effort that their communities and organizations had to put into “making the case” for the value of on-the-land programming in funding submissions, especially as most rely on a variety of external funding sources to deliver their programming. A single, compelling document that can serve as both literature review and narrative description of the impact of land-based programming could not only ease the administrative burden on program deliverers but could also help to influence government and philanthropic funders.

The idea was not forgotten, and in 2021, four of the workshop sponsors (MakeWay, NWTRPA, HSS and Hotù ts'eeda) allocated funding and in-kind support for this initiative and began the process of identifying an Indigenous scholar with extensive experience and expertise in planning and delivering land-based programming to take on the challenge. Their efforts resulted in the recent publication of “Indigenous Land-Based Education in Theory and Practice,” a Special Report made available through a partnership with the Yellowhead Institute (McDonald, 2023). The report draws on recent academic and publicly available literature to outline the benefits of land-based programming through five specific themes: Indigenous Self-Determination, Health and Well-Being, Environmental Stewardship, Reconciliation and Climate justice, and Evaluation Methodologies. Though several years in the making, this seminal document is now available as a public resource to support land-based program providers and to provide a policy touchstone for funding agencies and policymakers who wish to better understand the importance of investment in on-the-land initiatives.

NWT On The Land Collaborative

The Northwest Territories On The Land Collaborative (OTLC) is a partnership among governments, charitable and non-government organizations, and corporations which provides a mechanism for them to combine efforts and make it easier for Indigenous governments, communities, and community-based organizations to access money and other resources for on-the-land projects. In 2014, TIDES Canada (now MakeWay) and the GNWT's Department of Health and Social Services (HSS) convened a workshop that

brought together representatives of government, corporate, and philanthropic funders to hear directly from organizations involved in delivering land-based programs about how best to support them. Participants concluded that collaboration among funders could result in benefits to both funders and program providers by increasing the amount of funding available, increasing efficiency for funders, minimizing administration for applicants, and providing shared opportunities for learning. Out of that discussion, the OTLC was born.

The initial OTLC partners included TIDES Canada and the GNWT, who jointly led the development of the fund, along with Dominion Diamond Ekati Corporation, the NWT Recreation and Parks Association, TNC Canada, the Indigenous Leadership Initiative, the J.W. McConnell Family Foundation, and seven regional Indigenous Governments (Inuvialuit Regional Corporation, Gwich'in Tribal Council, NWT Métis Nation, Dehcho First Nations, Tẖcẖ Government, Sahtú Secretariat Inc., and Akaitcho Territory Government), each of whom appointed a Community Advisor to participate in OTLC meetings. Collaborative partners spent 2015 designing the structure and operations of the Collaborative, with partners meeting frequently to explore models from other jurisdictions, and designing a funding process that would be user-friendly and straightforward. Discussions focused on the following key design elements.

- Governance and decision-making processes
- Role of the Community Advisors
- Roles and responsibilities of funding partners
- Details of a user-friendly inquiry and proposal submission process
- How to effectively communicate the call for applications

By late 2015, the partners were ready to test a pilot of the Collaborative, and the first call for applications was issued. The application process was designed to be simple and straightforward, reducing the administrative burden on applicants. The pilot intake was intended to help focus and refine the application and decision-making processes, but a few guidelines were developed – for example, partners decided to give priority to projects that actually got people out on the land, as opposed to investing in equipment or infrastructure, and set a minimum threshold of \$1,000 for eligible projects. A key role for the Community Advisors was to answer questions and support applicants in their respective geographic regions in the development of their proposals.

For the first funding call, the OTLC had just over \$380,000 to allocate. The call for applications was issued in November 2015, with an application intake period of two months. When the application period closed, more than 200 applications had been received from across the NWT, with requests for funding totalling almost \$9 million. Reviewing this first batch of applications provided guidance for further development of decision-making criteria, including excluding any projects that resulted in personal financial gain for the proponents.

Twenty-seven projects were funded in 2016 at a total value of \$385,000, which was slightly more than the original amount that partners had put on the table. This increase highlights an unanticipated benefit of the OTLC process, which is that partners sometimes choose to top up their contribution to support a specific project that fits well with their organization's funding priorities. Another benefit to applicants is that partners

may be able to use their networks and expertise to direct applicants to other funding sources or connect them with local resources to access infrastructure or equipment. For example, when community applications include a request for outdoor leadership training in their proposals (e.g. wilderness first aid, or canoe safety), the NWT Recreation and Parks Association is often able to cover this portion of the funding request from within its existing funding streams.

Since that initial call in 2016, the NWT OTLC has increased the amount of funding available on an annual basis, refined its funding processes, and increased the number of contributing partners. From 2016 through 2022, the OTLC has funded 323 projects in all regions of the NWT, allocating total funding of \$5.9 million to Indigenous organizations and governments, schools, non-government organizations, community governments, and individuals to deliver land-based projects. Grants ranged in size, with an average per-project amount of \$18,000. An in-depth review of 132 projects show that activities supported by the Collaborative include a wide variety of outdoor and traditional skills, including camp set-up, Indigenous food preparation, wildlife harvesting, plants and trees, sewing, drumming, snowshoeing, outdoor safety, learning Indigenous languages, and sharing oral history (Dotto 2021).

All but one of the original partners remained active (although some organizations have evolved and changed their names); and new partners have joined, including RBC, the Gordon Foundation, and several additional departments of the Government of the Northwest Territories. Annual funding available has fluctuated somewhat from year to year, due to the occasional time-limited injection of special project funding, but generally sits between \$900,000 and \$1 million. Over time, the OTLC vision has crystallized and is described on their website:

Today, the NWT On The Land Collaborative provides funding, resources, and support for programs that centre land-based education and cultural revitalization. Youth engagement is a very important component of these programs as is the development of skills and knowledge that enhance community strength and resiliency. We support projects that restore traditional ways, foster justice, and build better economies. Grants also help with environmental monitoring and stewardship programs that ensure the health of the land for future generations. Mental health, addictions, healing, and family wellness are concerns in communities across the NWT; they are also priorities for the Collaborative (NWT On The Land Collaborative, n.d.).

The OTLC's administrative processes have been refined over time, evolving into an annual decision-making process that begins in September of each year with an open call for applications, with a submission deadline of early November. OTLC partners then engage in an intensive three-day review process, with Community Advisors meeting first to assess all applications and rank them into three categories for consideration by funders. The next day, all OTLC partners meet, and Community Advisors provide a summary of their review to the funding partners, who then convene the next day to decide among themselves how to allocate the available funding to the recommended projects. The process works by consensus – every member of the OTLC has an equal voice at the table, regardless of their contribution to administrative support or to the actual funding pot.

In 2019, the OTLC commissioned a retrospective summary report to assess the impact of their work and

guide future programming, and the report was updated in 2021 to encompass findings from 132 individual project reports received from 80 different grant recipients. That review summarized the impacts of on-the-land programs, as evidenced by the project reports, as follows (Dotto, 2021, p. 4-16):

- Spending time on-the-land revitalizes and strengthens relations between program participants and the land that are traditional, radical, and anti-colonial...
- On-the-land programs create diverse opportunities in all seasons for community members, but particularly youth, to learn land-based skills and connect with Indigenous culture and way of life...
- On-the-land programs bring Elders together with youth and other community members, strengthening intergenerational relations and giving Elders the opportunity to share knowledge, skills, and language...
- On-the-land programs foster self-esteem, perseverance, confidence, leadership, and cooperation...
- On-the-land programs provide communities and community members with vital resources like traditional food and firewood...
- On-the-land programs foster attitudes of stewardship amongst participants, who subsequently work to conserve and improve the well-being of the land itself.

First and foremost, the OTLC's very existence is grounded in the belief that inherent value exists in land-based programming and that Indigenous communities are the experts in understanding what programs will best fit their needs. This removes the onus from applicants to make the case for why on-the-land programs are valuable and should be supported. From a practical perspective, aggregating available funding into one pot with one application process also lessens the workload for applicants, who might otherwise be preparing several funding requests for several agencies, all with slightly different application forms and eligibility criteria.

One key design principle differentiates the OTLC from almost all other funding opportunities for Indigenous land-based programs: it allows applicants to describe their proposed programs from their own perspective, emphasizing what they believe to be the value and benefits without requiring programs to fit a pre-determined category of anticipated outcomes. Redvers (2020, p. 96) describes the "unfortunate irony" of the tendency to silo activities into programs, noting that land-based practitioners feel "they now have to tailor their way of life into the Western concept of a 'program' in order for this way of life to continue." Giving applicants this space allows funding organizations to respond to community priorities and needs rather than expecting communities to adapt their programs to fit funder priorities. Long-time OTLC members note that as representatives of funding agencies join the OTLC, they often want to push OTLC to establish program streams that better fit their organizational priorities, but OTLC has resisted this pressure and remained true to its underlying value of privileging Indigenous perspectives.

The way in which the OTLC is structured, with funding partners sharing administrative processes, provides enhanced flexibility and allows the Collaborative to leverage the full range of funding tools available to all partners. Both government and philanthropic funders are constrained by financial policies and regulations that limit their ability to support some applicants, but by working together, funders are able to use the most appropriate tools for each situation. Government accountability requirements may create an administrative burden for community programs, so the majority of OTLC funds are channeled to MakeWay, who is able to

provide funding to successful applicants in the form of a grant, with very limited reporting requirements. But as a registered charity, MakeWay can only provide funding to organizations that are categorized as qualified donees by the Canada Revenue Agency. If a successful applicant does not meet the CRA test, then their funding is provided through a Contribution Agreement with the one of the participating departments of the GNWT.

Another innovative feature of the Collaborative is that applicants receive benefits beyond program funding. Community advisors appointed by regional Indigenous governments are extremely knowledgeable on-the-land leaders, and not only act as a first point of contact for funding proposals but also provide advice about a range of topics related to program development. Community advisors also work with community applicants to identify gaps or weaknesses in draft proposals, giving them the opportunity to revise and expand applications based on this feedback prior to submitting them. Community advisors are often able to put program proponents in touch with other local or regional groups who may be able to share infrastructure, knowledge, training, or other resources. Funding agencies who sit at the OTLC table often agree to fund specific proposals that have not been recommended for funding by the Community Advisors but fit within other funding streams. Finally, the structure of the OTLC provides a forum for sharing perspectives and learnings, and for funders to develop a more nuanced understanding of the importance of land-based programming.

The success of the OTLC concept and approach is evident. In eight years of operation, the Collaborative has maintained a stable membership, attracted new funders, and more than doubled the amount of funding available for community-driven on-the-land programs through this unique approach. Collaborative members have resisted the pressure to revert to a more traditional funding model where success is tied to funder priorities, and through active in-kind administrative contributions by funding, members have been able to keep the operation administratively lean and avoided siphoning off available funds for administrative purposes.

As Community Advisors have developed their networks and supported local and regional organizations with their program proposals, OTLC members have seen a gradual increase in the quality of submissions and the capacity of local organizations to deliver effective, well-organized land-based programs.

This success has received recognition at the territorial and national levels. The OTLC was awarded the Government of the Northwest Territories' Premier's Award for Excellence in 2017-2018, which is given to partnerships that "demonstrate, excellence, innovation and dedication" (Government of Northwest Territories, n.d.); and in 2021, it received the Canadian Parks and Recreation Association's Partner Award, which recognizes partners "whose collaboration, creativity and innovation enriches individual health and community well-being and enhances the parks and recreation community in Canada" (NWT OTLC Annual Report, 2022, p. 6).

The growth of the OTLC has not been without challenges. There continues to be discussion about what constitutes "On-the-land" programming, as described here:

Determining what qualifies as "On-the-land" continues to be an area of discussion for the Collaborative. In general, the Collaborative would like to see projects that take place beyond municipal limits. However, we

recognize there are a number of factors (i.e. safety, type of group, equipment, and funds) that can restrict organizations from doing this. Understanding “On-the-land” in the context of the applicant and the people they are serving is essential (NWT OTLC Annual Report, 2017, p. 4).

The Collaborative has focused on learning through experience, starting with a fairly limited set of policies and requirements and developing guidelines over time. After nearly 10 years of operation, members recognize that it may be time to codify more of their guidelines and operational assumptions and practices, especially as new funding partners are encouraged to join.

As is the case with many organizations and projects, the past few years have provided limited opportunity for outreach: networking and growth as activities were constrained by the Covid-19 pandemic restrictions. Recently, the OTLC has attracted three new funding partners – Transport Canada, Google.com, and BHP Foundation – and as operations return to normal, they hope to once again engage in active outreach and recruitment to attract more.

An opportunity for existing funders to increase their contributions is available. Currently, there is significant variation among funder contributions, ranging from \$10,000 per year to \$300,000 per year. To date the OTLC has not set a minimum contribution and has granted an equal voice in decision-making to all funding agencies. While some funders have increased their annual contribution over time as the Collaborative has proved its value, others have not, and some members believe that it may be time to set minimum requirements for funders who have the capacity to contribute more.

Other jurisdictions are taking note of the success of the OTLC model and seeking information from partners about its operations. Based on the success of the OTLC, plans are under way for a future workshop to share the successes and lessons learned with interested parties in other territories.

Supporting Wellbeing

Supporting Wellbeing is a training program that provides tools and resources for people who deliver land-based programming to prepare them to mitigate and respond to mental health challenges of program participants while on-the-land. The program grew out of the experience of several land-based program leaders in the NWT, who came together in 2018 in a workshop sponsored by the Northwest Territories Recreation and Parks Association (NWTRPA) and the Sahtú Renewable Resources Board to discuss challenges they faced in their programs. A common theme at that workshop was “...that many program participants and staff struggle with trauma, and program leaders were calling for made-in-the-north training on trauma-informed care and responding to mental health challenges” (Supporting Wellbeing website, n.d.).

Staff representatives from the NWTRPA, Inuvialuit Regional Council (IRC) and Dehcho First Nations (DCFN), all of whom are recognized leaders in supporting Indigenous land-based programming in the NWT, subsequently joined forces in 2020 to establish a Steering Committee and begin the work of developing

a comprehensive made-in-the-north training curriculum grounded in Indigenous ways of knowing and pedagogy.

Steering Committee members were drawn from across the NWT and included representatives from Indigenous governments and organizations as well as committed individuals with experience in delivering land-based programs. Seed funding for the project came from a number of sources, including Rio Tinto, the Dechinta Centre for Research and Learning, MakeWay, Nature United, Hotù ts'eeda (the NWT SPOR SUPPORT Unit), the Inuvialuit Regional Corporation, and the NWT and Nunavut Lotteries (Supporting Wellbeing website, n.d.). The Steering Committee established some early ground rules for training:

1. Supporting Wellbeing training would be made in the North, rooted in Indigenous experiences and expertise.
2. The curriculum would be modular, allowing facilitators to adapt it to the needs of communities and specific groups.
3. Training would be culturally competent – as an act of decolonization, and to promote cultural safety, the training would centre Indigenous approaches to preventing, responding to, and healing from trauma.
4. Training would be trauma-informed (Supporting Wellbeing, 2022).

These early decisions informed the project's Values, as posted on the website:

- **Reciprocity:** With oneself, the Land, and each other.
- **Inclusiveness:** Accepting, welcoming, and being intentional about diversity, and celebrating one's strengths.
- **Accountability:** Mutual accountability to each other, the Land, our partners, and ourselves.
- **Wellbeing:** Mental, physical, emotional, and spiritual facets are balanced and nurtured together to create a holistic level of wellbeing in which all four areas are strong and healthy.
- **Indigenous self-determination:** Supporting Indigenous sovereignty, rights and the value of Indigenous knowledge and ways of being (Supporting Wellbeing website, n.d.).

Through staff support located in the NWTRPA, the Steering Committee issued a request for proposals to begin the work of developing the training curriculum, and by the end of 2021, a draft training program was completed under the leadership of an experienced Indigenous counsellor and on-the-land program leader, working in partnership with a northern adult educator with expertise in curriculum development. The Supporting Wellbeing training modules blend clinically researched practices in mental health group work with Indigenous practices and expertise. In March 2021, the first pilot training session was held on-the-land near Inuvik NWT, at a camp maintained by the IRC 17 on-the-land program leaders, and Elders came together

with the Supporting Wellbeing Steering Committee and curriculum consultants for seven days, during which they undertook training in the Supporting Wellbeing skills while also providing feedback on the curriculum.

Through 2021, although somewhat constrained by pandemic restrictions, the initial cadre of trainees used their new-found skills while delivering programs on-the-land across the NWT. Meanwhile, the administrative structure for the program continued to develop, and in early 2022, the project was awarded \$500,000 from the Arctic Inspiration Prize. This investment has enabled the project to establish itself as an independent project on the MakeWay Shared Platform.

Supporting Wellbeing's original five-year plan included not only developing the training curriculum for on-the-land program leaders but also developing a train-the-trainer curriculum for program leaders who have taken the Supporting Wellbeing training and want to become trainers themselves, capable of delivering the program in their regions. The Supporting Wellbeing Facilitator's Guide was completed in early 2022, and in the fall of 2022 the first group of potential trainers gathered on-the-land near Fort Simpson NWT for a week-long pilot test of the new curriculum. Consistent with the project philosophy, learning activities were interspersed with land-based learning opportunities, including a trip on the Mackenzie River to visit the traditional homesite of local families, gathering plants and making medicine with local Elders, and learning skills such as setting up a tent frame and making dry meat. The project will continue to deliver Supporting Wellbeing for on-the-land program leaders in all regions of the NWT and plans to hold another train-the-trainer opportunity in late 2023 or early 2024.

Supporting Wellbeing has demonstrated significant success in its first two years of operation, drawing on the resources of committed partners and dedicated individuals to establish a governance structure, obtaining funding and delivering products on a timely basis. Supporting Wellbeing's curriculum contents and training approach respond to the unique needs, capacities, and social infrastructure of remote northern Indigenous communities. Although some land-based healing programs are able to include western trained mental health professionals in the agendas, this is not the case for the vast majority of on-the-land programs for two reasons: many programs are not designed to focus on a siloed concept of mental wellness but are holistic in nature, with connection to land and culture the primary focus; and there is a serious shortage of trained counsellors in the NWT, making it a challenge even for programs with resources to find this kind of expertise.

The modular curriculum design allows the training program to be adapted to the needs of local communities and organizations, both with respect to timing of delivery and to what components are prioritized. The training materials are also designed to be customized so that knowledge holders and Elders in each region can provide a culturally appropriate perspective. In addition to being successful in its application for the Arctic Inspiration Prize, in 2022, Supporting Wellbeing was selected by Canada's Premiers as the NWT winner of an award for innovation in mental health and addictions care.

This success has not been without its challenges, as noted in the project's 2022 interim evaluation report. Like any new organization, the administrative leads have run into policy gaps that require continual adjustment and development of a policy framework. For example, some Steering Committee members are supported to participate through their jobs with Indigenous organizations, while others are consultants who require some

form of compensation to dedicate time to the project, so a compensation policy was required. The transition to the administrative mechanisms of the MakeWay Shared Platform have also required an investment of staff time and effort. Another challenge is that the excitement generated by the project has led to a demand for the training that, in the short term, exceeds the organization's capacity.

Conclusion

In the Northwest Territories, organizations with a commitment to promoting land-based programming have joined forces in a number of unique collaborations specifically intended to build community capacity, streamline administration, increase the resources available, and influence government and philanthropic policymakers. These innovations respond to an identified priority of northern Indigenous communities and governing organizations and are tailored to leverage the strengths of northern communities and respond to shared capacity challenges across the north.

These collaborations have common themes. All of the initiatives described start from a place of recognizing the inherent value of land-based programming for Indigenous communities and the critical role it plays in fostering individual and community well-being, strength, resilience, and success. All the participating organizations seek to support Indigenous community priorities and needs rather than requiring compliance or congruence with their own organizational mandates. All seek to support community-driven programs by streamlining and reducing administrative requirements while building capacity for the delivery of effective land-based programs. While the underlying philosophy of valuing being on-the-land as an outcome in itself, without focusing on siloed program objectives, may be considered an innovation for government and philanthropic funders, for Indigenous communities it represents a return to traditional practices and values that have always existed to support learning, physical or mental well-being, and connection to culture.

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Resources

- The Hunter/Harvester/Guardian Evaluation Toolkit. <https://makeway.org/northern-well-being/new-toolkit-to-support-community-led-hunter-harvester-guardian-programs-in-the-north/>
- Collaboratives supported by Make Way. <https://makeway.org/solutions/collaboratives/>
- NWT On The Land Collaborative Annual Reports 2016–2022. <http://www.nwtontheland.ca/reports.html>

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Debbie DeLancey has lived in northern Canada for more than 40 years and worked with Indigenous communities and governments and the Government of the Northwest Territories. She is a self-employed consultant focusing on health policy in remote regions, with a special interest in evaluation of Indigenous land-based programming. She was an original sponsor of the NWT On The Land Collaborative and has worked

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Sabrina Broadhead

Sabrina Broadhead comes from a large Metis family with strong connections to land and Indigenous culture. Born and raised in Fort Smith, she returned to work in the north upon completing university in southern Canada. Recently retired, Sabrina spent almost 40 years serving the people of the Northwest Territories, including participating in the NWT On The Land Collaborative. Her love of land and culture guided her work in community development. She now enjoys time with her three grandchildren!

10.

COLLABORATING WITH COMMUNITY PARTNERS TO DEVELOP SPECIALIZED PROGRAMS FOR UNDERSERVED POPULATIONS

Jessica L. Spooner

Author's note: Names of participants have been changed to protect their privacy.

Do what you do best, and partner for the rest! – Nancy Arsenault

“This is magic,” sighed Asal as she gazed upon the glimmering Atlantic Ocean from a cliffside. Asal and her young family moved to Canada only 3 years ago. She is the primary caregiver to her two children, both under the age of three. Asal does not have a driver’s license and her husband works full-time to support the family. She spent most of her days tending to the children and had not been able to meet others or explore her new home. She had reached out eagerly in the hope of claiming a spot in a free hiking program being offered. For Asal to participate, a lot of logistical planning was involved from both her side and that of the program coordinator.

Project Hike was a 6-week guided hiking program developed in partnership with Memorial University’s Office of Public Engagement, the St. John’s Women’s Centre (SJWC), Eastern Academy College, and Rewild Wellness. It was due to community collaboration that we were able to offer an outdoor adventure program which provided transportation and childcare at no additional cost to the participants. Community collaboration helped us to reach a diverse group of women, many of whom live at the margins of society and are frequently an underserved population in outdoor learning programming. This article will explore the benefits and barriers to outdoor learning through community collaboration using Project Hike as an example.

Community collaborations or network structures, as Mandell defines, “consist of public, private, and not-for-profit organizations and/or individuals in an active, organized collaboration to accomplish some agreed upon purpose or purposes” (Mandell, 1999, p. 45). By combining resources, individuals, organizations, non-profits, and government agencies, are able to deliver programs which resolve a problem or move a shared vision

forward (Carmichael & McCole, 2014). Partnering with others is particularly beneficial when challenging financial needs exist, such as decreased budgets, which also lower the human capacity to provide exceptional services.

Additionally, two types of collaborations are common: transactional, which are more project-based, and transformative, which are long-term and require deep reflection (Sweatman, 2020). Collaborations can be advantageous since they can add additional support through funding, promotion, policy-making, reaching new audiences, and developing infrastructure such as outdoor education centres. Equally, collaborations have disadvantages. For example, organizations may have different objectives which hinder forward movement, collaborations tend to have less hierarchical structures which is in conflict with traditional management practices, and individuals may experience overwhelming burnout from an already overloaded work schedule (Carmichael & McCole, 2014). For these reasons, when developing a new outdoor program, it is important for all individuals to understand the scope of the project, how they are going to be of service, and what the expectations are for moving forward.

A growing body of research shows how impactful physical activity, social connection, and nature connectedness can be for our health and wellbeing (Berman et al., 2008; Bosteder & Appleby, 2015; Capaldi et al., 2014; Mitten, 1992; Morris et al., 2019; Pretty et al., 2007). Canada's Health Act's primary objective is "to protect, promote, and restore the physical and mental well-being of residents of Canada and to facilitate reasonable access to health services without financial or other barriers" (Health Canada, 2001).

Yet, compared with men, women disproportionately suffer from mental illnesses such as depression and anxiety (World Health Organization, 2000). A total of 1,809,200 Canadian women reported having a mood disorder (Statistics Canada, 2021). While the number of women accessing the outdoors has increased in recent years, a high need for women's outdoor programming remains. Research shows that women have been socialized to fear the outdoors, feel as though they do not belong in this traditionally masculine domain, do not have the knowledge to participate in outdoor programs, and they merge their leisure time with that of their families (Henderson & Allen, 1991; Mitten, 1992; Woodward et al., 1989). Community collaboration can be a powerful tool to providing outdoor programming for underserved populations such as women.

To establish the ideal partnerships for program delivery, it is important to understand the population you are hoping to serve. Consider that the many barriers to accessing outdoor learning include: financial constraints, language barriers, geographic location, and ability differences. These barriers are exacerbated when layered with multiple marginalized identities. When working with underserved populations, using an intersectional lens is integral for both program and partner development. Intersectionality is a concept commonly understood as the interconnected nature of social identities such as class, ability, race, sexuality, and gender and how these identities, when combined, are impacted by power which furthers inequality and disadvantage (Hill Collins & Bilge, 2016). Underserved populations are those such as racially diverse populations, immigrants, refugees, the homeless, LGTBQ2+ persons, low-income, seniors, and those living with a disability. Programs which focus solely on people within a certain category run the risk of homogenizing a group of people and discounting the complexity which comes with multiple identities (Colley et al., 2022). By considering the dynamic nature of

humans in program planning, a richer experience can be created which keeps people at the center. This chapter specifically discusses the features of Project Hike and generally describes the process of building community and nature connection for women who are in vulnerable situations.

Design

Building connection to self, community, and nature for women who were in vulnerable situations was the focus of the program. Therefore, all features of the program were developed with women in mind, and only women were invited to participate. Fifteen women registered for the program from the St. John's area in Newfoundland and Labrador of Canada. The women ranged in age from 25 to 71 years. We provided childcare through a partnership with Eastern Academy's Child and Youth Care with Addiction Support Worker program. Their students would receive work-term hours for providing childcare for the women in the program. Although this program was not designed for research or data collection, we were able to gather anecdotal evidence. Of the women who participated, there were single moms, seniors, new Canadians, transgender women, hearing-impaired, survivors of domestic violence, homeless and low-income women, and those with substance use and mental health disorders. Women were asked to commit to the full 6-week program and, in order to retain their participation, they were able to miss one hike in order to receive a certificate of completion.

The program was designed so that participants would meet at a central location, the SJWC, to drop off children and meet the bus transportation. If needed, they could take a taxi (costs reimbursed) to and from the meeting spot. From there, a bus would transport them to a different trailhead each week. All trails were chosen based on level of difficulty, beginning with an easy level to give confidence to the women and to provide staff with knowledge of their abilities in the group. The difficulty increased each week as the women's confidences and drives to challenge themselves grew. The trails were also within a 40-minute drive from the city limits. An orientation session and six subsequent hikes were offered over a total of 9-weeks, accommodating for two inclement weather days and a pre-scheduled appointment for staff on another day.

The hikes were scheduled on Thursdays from 10:00am to 2:00pm. This length of time provided the necessary space for the mothers to ensure their children were comfortable with the child minders. The hikes were scheduled on weekday mornings so as to meet the needs of the community partners who would be participating in the program as support staff. Plus, the facility for childcare was only available during the week. Each hike was planned for the women to spend two hours on the trail. The intended outcomes were to:

1. Enhance social wellbeing by removing barriers to participation
2. Improve physical activity through the hiking program
3. Enhance mental health by developing and strengthening coping skills
4. Improve sense of belonging through communal exploration of nature

5. Reduce fear associated with wilderness areas.

Conducting a needs assessment is a foundational tool for program development. It is important to consider the needs of the people you are hoping to serve as well as the needs of the partners you are seeking. Take Me Outside (n.d.) provides a wide variety of assessment tools and resources for this.

Location and Transportation

Transportation is a consideration for rural areas as well as urban areas (Johnson et al., 2001). There are many urban dwellers who do not have access to a vehicle and rely on public transit. In our program, five of the women utilized taxi cabs, as the more affordable public transit was not as reliable and would take a lot more time to reach a destination, especially with young children. Time is often cited as one of the main constraints to participation in outdoor learning (Henderson & Allen, 1991; Woodward et al., 1989). Navigating public transit schedules and connections can be the difference between 1.5 hours by bus and a 20-minute car ride. For Project Hike, having the women and their children meet at a central location and bussing from there was the most efficient and effective solution. Additionally, we knew that it would be impossible to pay for taxi cabs to each of the trail locations, and providing carpool brings a host of liability concerns. Women could choose public transit or a taxicab which was paid for by the SJWC. From the SJWC, a bus would take us to the trailhead and bring us back.

Childcare

Another barrier to women participating in outdoor learning is having adequate childcare (Henderson & Allen, 1991). Women are predominantly the primary caregivers and will envelop their leisure into their children's or family's leisure time (Henderson & Allen, 1991). It was important for the women to have the time and space away from their children to recreate and build social connections. Mitten (1994) argues that "being away" is a prerequisite for women to enjoy restorative environments. Locating a community partner for childcare can be quite difficult. Childcare centres are overwhelmed with demand, and having the funds to adequately compensate childcare staff can be limiting. Our efforts to source appropriate childcare saw us reaching out to over 15 different programs and centres. It was through networking and asking others that we found a unique partnership in the Child and Youth Care with Addiction Support Worker program at Eastern Academy. This partnership was a reciprocal one, where the students received practicum hours to build their knowledge and experience while we received childcare support from excited and energetic students. Reciprocity is important in collaborative partnerships, especially for programs where the provided service is essential and requires specially trained people to perform the role or where the budget is severely limited.

Funding

One of the largest barriers for individuals, organizations, and non-profits is funding and resource capacity. Partnerships provide relief as they decentralize the funding model, allowing for creative solutions. Additionally, funding organizations frequently require partnership for grant application eligibility (O’Farrell & Liu, 2020). Project Hike received a small grant from Memorial University’s Office of Public Engagement QuickStart program, which provided funds for most of the transportation and trip coordination. As a student at the university, I had access to this funding with the support of a faculty supervisor. This funding allowed for a transactional partnership, where the program would be evaluated and used as evidence to support future programming. The SJWC offered in-kind support by providing an additional staff person for hiking assistance, funds for taxis to and from the SJWC, childcare space, trail snacks for the hikers, and promotion. Childcare was provided by students from Eastern Academy. Additionally, a local micro-brewery donated funds to generally support the program. The transportation company sponsored one of the weekly trips. Finally, a local nursery provided flowers for each hiker at their final hike. There is a saying that “it takes a village to raise a child.” In this case, it took a village to bring this program to fruition.

Communication and Promotion

The importance of communication in community collaborations as well as program development and delivery cannot be overstated. Ensuring that all partners understand their contribution and are kept apprised of the status is paramount to successful program delivery. Project Hike had a coordinator to oversee the program and act as the main point of contact. This role was responsible for communicating with the transportation company to ensure proper dates and times were scheduled and to ensure payment. Additionally, this role worked with the contact at Eastern Academy to ensure childcare needs could be met with the appropriate number of childminders as well as to meet the diverse needs of the children involved.

The coordinator ensured promotional materials were designed and distributed with the appropriate language. For example, the program focused on women in vulnerable situations, but the term “vulnerable” could not be used in this context. Aside from inappropriately pigeonholing people, this word may not have been identified or well received by potential participants. Instead, alternative language was employed that would resonate with women, such as “social isolation, hardship, and feeling down,” as shown in Figures 1 and 2. Due to the global COVID-19 pandemic, most women could connect with these terms without feeling shame or guilt. We first sent Figure 1 to service-based organizations to share with their communities. From there, the SJWC posted Figure 2 on their social media and the group was filled within one day.

A high level of interpersonal skill was necessary to engage with the intake calls, since potential participants could feel isolated and lonely. By having a listening ear, they were made to feel comfortable when disclosing their personal issues. When working with vulnerable populations, having empathy and understanding can go

a long way, so an experienced or trained professional can be ideal for meeting intake, program delivery, and facilitation with a trauma-informed view.

Looking for women who want to HIKE!



PROGRAM INFO

- 01 Weekly Hikes**
6-weekly guided hikes for beginners
- 02 Free Bus to Hikes**
Free transportation to/from the Women's Centre
- 03 Free Childcare**
Free childcare available while on the hike
- 04 Nature & Fun!**
Connect to nature on the trails and forests around St. John's

MORE INFO

We are looking for 15 women who want to learn how to hike!
Program begins Thursday, May 26th
Program ends Thursday July 14th
Each week from 10am - 2pm



TO REGISTER

Call [redacted] at 705-[redacted] or email hello@rewildwinnipeg.ca

Supported by:



Figure 1: Promotional Flyer Sent to Specific Service-Based Organizations

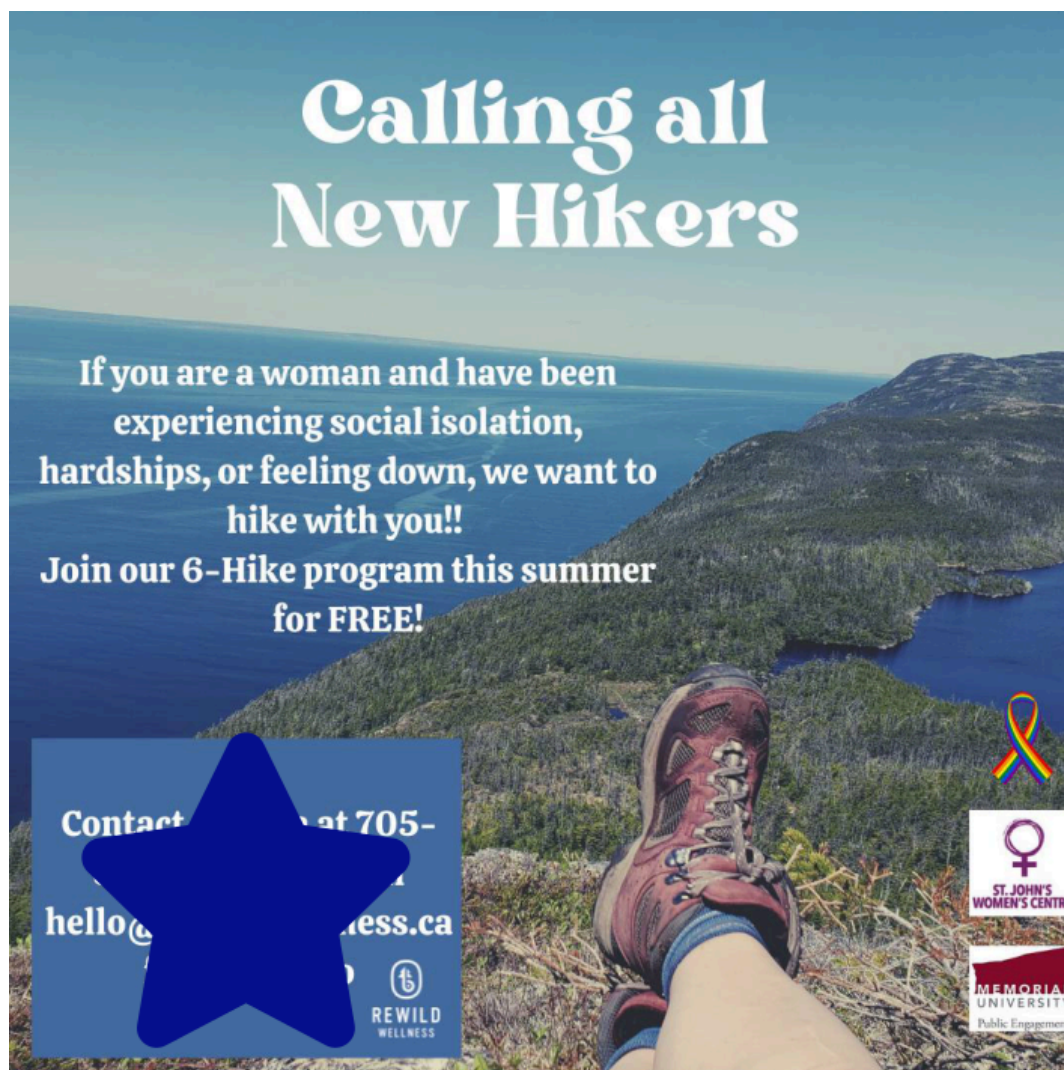


Figure 2: Social Media post.

For example, during the hikes, conversations surfaced which could have been triggering for some women. Communicating the expectations for these potential situations with the group in advance was important. Oftentimes, marginalized people have experienced trauma, and it was important for our program to offer a space of acknowledgement and understanding. As well, this group was not a wilderness or adventure therapy group. We made this clear to all participants at our orientation session, acknowledging that we could assist in finding the right supports for them, if needed.

Adaptability

As with most of life, things rarely go as planned. Oftentimes, programs are set with the best intentions, and inevitably something will go amiss. Being adaptable and flexible is crucial to successful program delivery. Project Hike met numerous challenges throughout the program. However, with open communication, quick troubleshooting, and laughter, we were able to make it through. Here are some examples.

The SJWC had offered their downstairs space for childcare throughout the program. Due to unfortunate timing, a flood happened, and within two days we were forced to find an alternative location in proximity for the children and childminders to be accommodated. Luckily, staff from the SJWC connected with a nearby community center and they opened their doors for two weeks.

Additionally, due to unforeseen circumstances, the support person on the hikes from the SJWC could not participate. This meant that we would need to find an alternative support in a brief amount of time and to ensure they were capable of the physical demands of hiking while also acting in a support role. Thankfully, someone from the organization was more than happy to participate in this program.

The bus transportation proved challenging, as there was miscommunication between the dispatch and drivers on multiple occasions. While waiting, the group used the opportunities to share stories and laughter. There were many challenges along the way, but through determination, trust, and communication, we were able to meet them.

Conclusion

Outdoor learning tends to draw people who are passionate about their work and the people they work with. Collaborating with equally passionate community partners can open opportunities that were previously out of reach. Working with others who share a vision and support one another to bring this vision to fruition can have powerful impacts on the participants as well as the community partners.

While there are challenges to working with others who have limited time or resources, there are also wonderful benefits to community collaborations. The goal of this chapter was to share some of the experiences of developing Project Hike through community partnerships, provide insight into some of the innerworkings, and offer inspiration to providing programs for underserved populations.

The final hike took place in a large urban park where the children and childminders could play while the group hiked their last trail together. I watched with pride as a group member, Meredith, sang out “To the right guys, move to the right!” when people were hiking towards us. On the first hike, Meredith was quiet and a bit nervous about her abilities. To see her leading the group with a smile on her face was beautiful to witness.

We finished by meeting the children and childminders for a finale celebration. Each hiker received a certificate of completion with a flower. One group member had collected sea glass each week and gifted these pieces to everyone, while another made heart shaped key chains with “I love to hike” written on them. As I sat back and watched the joy before me, I couldn’t help but agree with Asal: this was magic.

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PART IV
SETTINGS

11.

FOREST BATHING

Tara L. Brown

Shinrin-yoku, translated as “forest bathing,” is a self-directed practice that engages the five senses for immersive experiences in forested areas or other natural environments (Hansen et al., 2017). This practice embodies various activities, including leisurely walks, breathing in the air, akin to natural aromatherapy, and appreciating the forest scenery. On the other hand, shinrin-ryoho, or “forest therapy,” evolved from forest bathing by integrating evidence-based research and employing guided therapeutic activities (Kotte et al., 2019). Both practices serve as non-invasive, preventative, complementary, and non-pharmacological approaches to wellness.

Forest bathing emerged in Japan in the 1980s in response to increasing urbanization and the consequential detachment from natural environments (Akiyama, 1982). The simple practice has gained popularity globally due to the easily accessible activity and positive impact on health and well-being. Forest bathing has been extensively studied for its health benefits. It is even considered the most widespread activity associated with forest and human health (see also “Nature Prescription in Canada: Why and How?”). In Canada, with its extensive and diverse forest ecosystems, these practices offer an enriched dimension to outdoor learning experiences, both from wellness and pedagogical perspectives.

The kanji characters depicting shinrin yoku, 森林浴, are 森 (mori), translating to “forest” or “woods,” and 林 (hayashi), translating to “grove” or “woodland,” and are typically used in forestry to convey a landscape dominated by trees. The kanji 浴 (yoku), translating to water and valley, is more commonly used in words like 日光浴 (nikkōyoku), meaning sunbathing, which captures the essence of immersion or bathing. Therefore, shinrin-yoku can be understood as “forest bathing,” representing immersing oneself in a forested environment for therapeutic and holistic well-being.

Historical and Cultural Roots

During the 1980s, Japan emerged as the world’s second-largest economy, primarily fueled by high-technology

industries. This period was marked by migration to urban centres, a decline in the birth rate, and an aging population, affecting the labour force and leading to a shortage of young workers (Statistics Bureau of Japan, 2023). Simultaneously, the increased use of computers in the workplace resulted in various health problems among office workers. This phenomenon was termed “technostress,” a form of adverse psychological effects stemming from the rapid technological changes and the “always-on” culture (Brod, 1982; Song et al., 2016).

Shinrin-yoku was introduced in 1982 by Japan’s Forestry Agency as part of a broader public health strategy. The article titled “bathing in the scents of the forest to train body and soul” (Akiyama, 1982) initially served as a marketing tactic to attract urban dwellers to rural areas to boost local economies and improve their health (Imai, 2013; Miyazaki, 2018, p. 10).

The Forestry Agency’s initiative was rooted in the hypothesis that engaging all five senses in a forest environment and inhaling natural organic compounds known as phytoncides could have therapeutic impacts (Tokin & Keizou, 1980). This premise, initially based on the work of Soviet chemist Dr. Tokin and Japanese professor Dr. Keizou, garnered significant governmental attention, establishing a research grant in 1988. This grant facilitated the formation of the Forest Therapy Research Group (Segami, 2022), with Dr. Yoshifumi Miyazaki conducting the first empirical study on Yakushima Island in 1990 to validate the therapeutic effects of forest atmospheres (Li et al., 2013; Miyazaki, 2018).

Shinrin-yoku is inspired by Japan’s cultural and spiritual traditions, notably Buddhism and Shinto, which advocate for a harmonious relationship with nature (Asquith & Kalland, 1996; Rots, 2017; Statistics Bureau of Japan, 2023). These traditions have been incorporated into the spiritual dimensions of shinrin-yoku (Hansen & Jones, 2020).

Shinto is an indigenous religion that originated in Japan, embodying a reverence for Kami, spiritual entities encompassing natural objects and elements such as trees, mountains, lakes, and rivers (Asquith & Kalland, 1996). This belief system is entwined with the cultural fabric of Japan, finding expressions in various traditional Japanese arts and rituals. Shinto manifests in tea ceremony, calligraphy, and flower arrangement.

The practice of shinrin-yoku, which emphasizes sensory immersion in forest environments, reflects the Shinto ethos of nurturing a relationship with the natural world. The therapeutic and spiritual dimensions of forest bathing reflect the Shinto appreciation for the restorative and transcendent qualities inherent in nature. Moreover, Japan’s Forestry Agency initiative to introduce shinrin-yoku can be perceived as a modern-day endeavour to revitalize and uphold the age-old Shinto tradition of harmonious co-existence with nature amidst the burgeoning technostress and urban-centric lifestyle.

Internationally, shinrin-yoku has gained considerable recognition, inspiring research, and public health initiatives worldwide. The concept is gradually gaining traction in Canada, especially among outdoor educators (Mathias et al., 2020) and healthcare professionals (Gallagher, 2020).

Although existing research supports the benefits of shinrin-yoku, the spiritual dimensions of the practice complicate its scientific quantification. Dr. Miyazaki asserts that our comprehension of the practice is still in a developmental phase and calls for further investigation to elucidate its full range of effects. Miyazaki emphasizes that the practice yields the greatest benefits in untouched natural settings, characterized by lush

moss and towering ancient trees. These unspoiled environments evoke a sacredness and connection to nature, akin to the atmosphere in Shinto shrines (Miyazaki, 2018).

Scientific Evidence in Forest Therapy

Forest therapy, as conceptualized by Miyazaki (2003), represents a scientifically validated form of forest bathing designed and validated by certified experts to achieve therapeutic outcomes (Kotte et al., 2019; Segami, 2022). This conception significantly drew upon the notion of evidence-based medicine conceived by Canadian researcher Gordon Guyatt, emphasizing clinical expertise with the best available external clinical evidence from systematic research to make conscientious, explicit, and judicious decisions for individual patient care (Guyatt, 1991).

Distinct from green exercise, forest therapy does not aim for aerobic activity or track physical performance (Barton, 2016). Unlike mindful meditation, which often involves interoception – awareness of internal bodily sensations, forest therapy fosters exteroception – outward engagement with nature. This intentional, multisensory approach to engaging with the natural environment has been scientifically shown to protect against mental illness and enhance overall well-being (Clarke et al., 2021).

Certified forest therapy guides offer a range of activities tailored to foster a deep connection with the natural environment. Participants may engage in mindful walking, gentle stretching or yoga, and reflective journaling. The formalization of this approach came through Japan's Forest Agency, which mandated the backing of scientific evidence to substantiate the health benefits of forest therapy, leading to the establishment of Forest Therapy bases and roads across Japan (Imai, 2013).

Approximately 65 Forest Therapy Bases and Roads have been institutionalized in Japan to promote public health and foster environmental sustainability. Strategically situated in recreational forests proximate to major urban areas, these wellness centers aim to provide accessible wellness solutions while encouraging ecological stewardship (H. Li et al., 2022).

Regional Variations in Canada

The diverse landscapes of Canada, analogous to the environmental variety found in Japan's Forest Therapy Bases from Hokkaido to Okinawa, provide a broad spectrum of settings for forest therapy. Each distinct landscape, from the rainforests of British Columbia to the boreal expanses in Quebec and the Maritimes, offers a unique assortment of flora, fauna, and sensory experiences, which could enrich the practice of forest therapy.

Across Canada, several cities and parks are embracing the concept of forest therapy trails (Siddiqi, 2023). These self-guided paths are designed to immerse users in nature, engaging all their senses. Despite the growing interest, it is noteworthy that, unlike in Japan, forest therapy in Canada is not regulated, and certifications provided by forest therapy organizations are not grounded in rigorous scientific validation.

Under the Healthy Parks Healthy People initiative, visitors to the Gros Morne National Park in Newfoundland are encouraged to immerse themselves in the park's natural settings. In collaboration with local healthcare professionals, the park staff have devised a list of health-promoting activities that visitors and residents can engage in within the park. These activities span a broad spectrum of outdoor experiences, including forest bathing, where visitors are encouraged to immerse themselves among the trees in designated trails (Parks Canada, 2019).

Ontario Parks has established a self-guided forest therapy trail at MacGregor Point Provincial Park, marking the first of its kind in Ontario. This initiative, also stemming from the Healthy Parks Healthy People directive, aims to promote the restorative health benefits of nature immersion. Collaborating with the Global Institute of Forest Therapy and Nature Connection (GIFT), this project encompasses a designated trail with mindfulness prompts to foster a deeper connection with nature (Porchuk & LeGros, 2022).

Markham, Ontario, has integrated forest bathing by establishing self-guided trails across several locations (City of Markham, n.d.). These trails in Pomona Mills Park, Rouge Valley Trail, Springdale Park and Valley, and Toogood Pond Park facilitate gentle sensory-based interactions with the forest environment. The aim is to foster a deeper connection between individuals and the natural forested surroundings.

Recently in Western Canada, Metro Vancouver Regional Parks and Vancouver Parks Board have been offering forest bathing activities to the public (Metro Vancouver, 2022; Vancouver Board of Parks and Recreation, 2022).

Therapeutic Benefits

Forest bathing, or *shinrin-yoku*, provides many health benefits, primarily categorized into psychological and physiological domains. These encompass stress alleviation, enhanced cognitive functions, improved cardiovascular health, and fortified immune system.

The psychological benefits of forest therapy and forest bathing have been substantiated through various studies, demonstrating their positive impact on healthy individuals and those diagnosed with certain medical conditions. The benefits are alleviating anxiety, depressive symptoms, and negative moods, enhanced relaxation, and cognitive restoration (Antonelli et al., 2021; Park et al., 2022). The theoretical foundations of these benefits can be traced back to two key theories, namely the Stress Recovery Theory (Ulrich, 1981; Ulrich et al., 1991) and Attention Restoration Theory (Kaplan & Kaplan, 1989; Kaplan, 1995).

Stress Recovery Theory and Wilson's (1984) biophilia hypothesis are rooted in the evolutionary theory of natural selection, suggesting that humans, having evolved in natural environments, are more attuned to nature than urban environments. Ulrich posited that exposure to natural environments facilitates recovery from stress and fatigue, serving as a survival mechanism to replenish cognitive resources (Kellert & Wilson, 1995; Ulrich, 1981; Ulrich et al., 1991). On the other hand, Attention Restoration Theory, emanating from psycho-functional theory, posits that humans are predisposed to attend to and respond favourably to natural

settings that were beneficial to survival throughout evolution. Such engagement with natural settings is linked to reduced mental fatigue and enhanced concentration (Kaplan & Kaplan, 1989; Kaplan, 1995). Alongside these theories, anticipatory effects also play a significant role in the psychological benefits of forest bathing.

The physiological benefits of forest bathing have also garnered significant attention. Research indicates a notable placebo effect associated with cortisol levels when individuals anticipate forest bathing. It has been observed that merely planning and visualizing a forest bathing session can lower cortisol levels compared to anticipating a visit to an urban area (Antonelli et al., 2021). This phenomenon underscores the intrinsic psychological affinity individuals may have towards forest environments, further bolstering the therapeutic assertions of forest therapy and forest bathing.

An investigation to determine the physiological benefits of forest bathing was spearheaded by Yoshifumi Miyazaki in 1990, whose preliminary findings measured a reduction in blood pressure and cortisol levels during a forest walk (Miyazaki, 1993). Subsequent research has extended the understanding of health benefits to include enhanced cardiovascular and respiratory health due to cleaner air intake, strengthened immune system marked by an increase in natural killer cells and anti-cancer proteins, a significant reduction in inflammatory responses, and diminished cortisol levels signifying stress reduction (Li et al., 2008). As global health dynamics shifted with the onset of the COVID-19 pandemic, a renewed focus emerged regarding forest bathing's potential to bolster immune system defense against the virus (Charnock et al., 2021).

Given that a significant portion of Canadians over 65 have been diagnosed with hypertension, the mechanism by which forest bathing mitigates stress and promotes cardiovascular health is of particular interest (Canada, 2016). Stress, characterized by physiological arousal in response to various stimuli, triggers the release of cortisol. This hormonal response activates the sympathetic branch of the autonomic nervous system, elevating heart rate and blood pressure: both indicators of cardiovascular function. Engaging with serene natural environments during forest bathing can induce a relaxation response. This response is marked by a shift in autonomic nervous system activity by decreasing sympathetic and increasing parasympathetic activity, which, in turn, lowers heart rate and blood pressure. The relaxation response is further evidenced by reductions in salivary cortisol levels and heart rate variability (Song et al., 2016). The impact of these physiological responses extends to the broader spectrum of benefits offered by forest bathing, which vary in duration.

Forest bathing has been shown to offer a wide array of benefits, affecting mental well-being, cognitive function, and physical health (Han, 2017; Keniger et al., 2013; Sandifer et al., 2015). However, the ideal duration for these positive effects remains inconclusive, ranging from 5 minutes to 30 days (Kobayashi et al., 2021; Liu et al., 2021; Shanahan et al., 2016; White et al., 2019; Yeon et al., 2021). Notably, even short exposures to nature can yield measurable positive impacts, making forest bathing a flexible and accessible form of therapy (Barton & Pretty, 2010; Meredith et al., 2020). Moreover, the comparative efficacy of forest bathing in alleviating depression underscores its therapeutic potential. A review of randomized controlled trials found forest therapy to be a more effective short-term intervention for alleviating depression in adults than conventional treatments (Rosa et al., 2021). These findings seem to be broadly applicable across various

demographics, although the role of cultural and geographical factors can influence outcomes (Joye & van den Berg, 2011; Yeon et al., 2021).

Environmental Measurements

The migration trend towards larger urban centers in Canada is accompanied by notable environmental degradation (Government of Canada, 2022). The therapeutic practice of forest bathing serves as one nexus between urban dwellers and forest environments, known for mitigating urban heat, filtering pollutants, and augmenting overall urban ecosystem services crucial for counteracting the adverse health impacts of urban living (Rajoo et al., 2020).

Forest bathing offers an immersive experience that primarily engages the senses of sight and sound (Wilson, 1984). This sensory interaction with the natural environment, including water streams, wind rustling through leaves, and bird songs (Li et al., 2013), has been scientifically associated with enhanced physiological relaxation and emotional well-being (Buxton et al., 2021).

Forest bathing also facilitates a beneficial interaction with phytoncides, or biogenic volatile organic compounds (BVOCs), which are released by plants to deter pests and pathogens (Tokin & Keizou, 1980). These chemicals, emanating from various plant parts including leaves, flowers, and roots, have been identified in over 1000 different types, with coniferous trees like pines, cedars, and spruces being the primary producers in temperate forests (Antonelli et al., 2020; Ohira & Matsui, 2013). Since BVOC production can be influenced by both biotic and abiotic stressors (Ohira & Matsui, 2013), the health benefits may vary with different tree species (Morita et al., 2007; Oishi et al., 2003). Research underscores their potential to boost immunity, reduce mental fatigue, and enhance mood via antioxidant and anti-inflammatory effects (Antonelli et al., 2020). However, the mechanisms and optimal BVOC concentrations for these benefits warrant further exploration, given the environmental changes, emission variations, and different plant species (Antonelli et al., 2020).

A Canadian Context

The worldwide popularity of forest bathing for public health initiatives has significantly grown, marked by a surge in research since the first English-language article was published in 2007 (Li et al., 2007), media coverage such as a New York Times article (O'Connor, 2010), and the release of seminal English-language books (Li, 2018; Miyazaki, 2018). Despite this global recognition, the majority of research studies continue to be conducted in Japan and other Asian countries (Payne & Delphinus, 2018) with awareness and interest in the practice only recently emerging in Canada for the public (Hennig, 2019).

While forest bathing is a practice centred on individual health and well-being, achieved through sensory immersion in natural settings (Hansen et al., 2017), it should not be conflated with Indigenous land-based practices. The latter is deeply rooted in specific cultural traditions and philosophies, often extending far

beyond the individual to address broader social, cultural, and political dimensions, such as settler colonialism and Indigenous self-determination (DeLancey & Broadhead, 2023). Forest bathing also sets itself apart from green exercise and mindful meditation. The practice isn't about elevating the heart rate or achieving a meditative mind: it's an intentional engagement with the natural world. Participants immerse all their senses – sight, sound, taste, smell, and touch – in an environment perceived as safe and restorative (Hansen et al., 2017).

Certified guides often lead what are known as forest therapy sessions. These sessions involve guided activities such as mindful walking, meditation, gentle stretching or yoga, and reflective journaling, all aimed at fostering a deeper connection with the natural environment (Kotte et al., 2019). Across Canada, 10,000 health practitioners, registered for nature prescriptions, may recommend forest bathing as a therapeutic intervention to their patients and offer free access to parks and botanical gardens (B.C. Parks Foundation, n.d.).

How to Practice Forest Bathing

During a forest bathing session, individuals are encouraged to immerse themselves fully within the natural surroundings, tapping into human's intricate multisensory perception capacities. Choosing a suitable forested area is crucial for effective forest bathing. Ideal settings should be rich in diverse vegetation, have calming natural sounds, and be relatively free from human disturbances (H. Li et al., 2022). Perceived and physical safety is paramount. Participants should be educated about potential risks and precautions, and effective group management is crucial for a safe and fulfilling experience (Imai, 2013, p. 20). Health risks, such as exposure to harmful particulate matter from wildfires, highlight the possible dangers of forest environments (Aguilera et al., 2021; Government of Canada, 2021).

Visually absorbing nature's diverse colours, shapes, and movements can provide a calming effect and maintain arousal, as illustrated by Ulrich (1981) and Horiuchi et al. (2014). Tuning into the natural sounds of the forest, like rustling leaves, flowing water, and bird songs, as suggested by Song et al. (2021), can offer physiological relaxation and reduce stress. The olfactory dimension can be explored by breathing in the forest's unique scents, such as the aroma of pine or other essential oils from trees, which Ikei et al. (2015) found to induce physiological relaxation. Touching the bark of trees, walking barefoot on the forest floor, or feeling the texture of leaves and stones can further deepen the multisensory experience and induce a state of relaxation (Ikei et al., 2017; Ikei & Miyazaki, 2020). Activities such as guided breathing exercises and body awareness exercises, as illustrated by Balban et al. (2023), can assist in grounding the individual, lowering physiological arousal and enhancing mood. Moreover, tasting, where safe and guided, could be a part of the experience, perhaps in the form of a tea ceremony using local herbs. This holistic engagement using multiple senses facilitates a deeper connection between the individual and the forest environment, thereby amplifying the therapeutic benefits of forest bathing.

Limitations

Forest bathing's therapeutic potential has spurred research and interest, albeit with criticisms rooted in methodological limitations such as small sample sizes, a focus on healthy volunteers, and a geographic concentration in Asian countries (Kobayashi et al., 2018; Payne & Delphinus, 2018; Yu et al., 2017). Methodological concerns due to inconsistent forest bathing protocols, lack of standardized measures, and frequent use of convenience sampling undermine the reliability of health outcomes (Kamioka et al., 2012). An umbrella review emphasizes the need for robust evidence before integrating forest therapy into mainstream medical practices (Antonelli et al., 2021).

Most phytoncide (BVOC) research focuses on Japanese cedar and cypress trees, which constitute 42% of Japan's forested land due to artificial plantations, leading to a public health issue of cedar pollen hay fever affecting 40% of the population (Otake, 2023). This narrow research focus could mislead individuals about the universal benefits of forest bathing. Furthermore, the literature often omits environmental factors like vegetation type and BVOC data (Antonelli et al., 2021; Barnes et al., 2019). Lastly, the scarcity of long-term, cross-disciplinary research indicates a gap in comprehending forest bathing's lasting impacts and the interplay between forest environments and health.

Future Outlook

Expanding evidence supporting the benefits of forest bathing necessitates extended geographical research, interdisciplinary collaboration, and methodological standardization to improve this practice's global understanding and application. Given the concentration of forest bathing research in Japan and other Asian countries, it's imperative to diversify geographical settings to enrich the understanding of forest bathing effects across different cultural and environmental contexts (Wen et al., 2019). Engaging interdisciplinary teams comprising medical, environmental, psychological, and social science experts can strengthen research methodologies, reduce biases, and provide a more holistic understanding of forest bathing's impact. An up and coming Canadian study of forest bathing in Metro Vancouver, BC, aims to address some of the identified gaps in the literature and will contribute insights for the global understanding of forest bathing's therapeutic potential as well as its application in different geographical and cultural settings (Innes & Brown, 2022).

Standardizing forest bathing protocols and measurement metrics is crucial for enhancing the comparability and validity of findings across different studies. Establishing a consensus among the research community on the definitions, methodologies, and measurement instruments will foster a more cohesive body of evidence.

Increasing public awareness and education on the potential benefits and limitations of forest bathing is essential for fostering informed public engagement. This includes understanding the safety considerations, especially for individuals with specific health conditions, and the importance of guided forest bathing sessions for maximizing therapeutic benefits.

Integrating the findings from forest bathing research into public health policies and urban planning can contribute to creating healthier and more sustainable living environments. Collaborations between researchers, policymakers, and practitioners will be crucial for translating scientific evidence into practical solutions that promote public health and well-being.

Conclusion

Shinrin-yoku, or forest bathing, presents an accessible and non-pharmacological approach to enhance health and well-being. Its evolution into a scientifically substantiated practice, known as forest therapy, showcases the bridging of traditional knowledge with empirical validation. The practice's emergence in Canada reflects a global recognition of nature's role in health promotion, albeit within a different cultural and environmental context.

Methodological and geographical limitations in current research highlight the necessity for standardized protocols and diversified study locales to integrate forest therapy into mainstream medical practices. A pending Canadian dissertation will address some of these gaps and contribute to a more holistic understanding of forest bathing. The initiative to integrate forest bathing into public health strategies, underscored by policy considerations and public education, exemplifies a multidimensional approach to health promotion. Through a standardized research framework, forest bathing could transition from a complementary practice to a recognized therapeutic intervention, fostering a harmonious interplay between nature and human health.

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12.

LEAVE NO TRACE: PRINCIPLES FOR ETHICAL OUTDOOR LEARNING

Ryan Stuart

Editors' note: Some of the American originated guidelines presented here utilize feet as a unit of measurement. The editors have converted these minimum distances from feet into metres.

A growing pool of research connects time spent in nature and green spaces with better physical and mental well being (Wicks et al., 2023). And we are listening. Outdoor spaces have never been busier (McDonald et al., 2022). However, as the popularity of outdoor activities grows, so does the potential for negative impacts on the environment. This is where the concept of Leave No Trace (LNT) comes into play. LNT, symbolized by the logo in Figure 1, is a set of principles designed to guide outdoor enthusiasts in minimizing their impact on natural spaces (Cole, 2018). This chapter will explore the value and ethics of LNT, including the concept of “authority of the resource.” Additionally, it will delve into each of the seven LNT principles, providing practical examples of how to integrate them into adventurous and environmental outdoor learning.

Figure 1: The Leave No Trace logo



The Value and Responsibility of LNT

One of the fundamental reasons behind the development of LNT principles is the recognition of the delicate balance within natural ecosystems. From towering mountains to serene lakes, these landscapes are interconnected networks of life, and any disruption can have far-reaching consequences (Shrader-Frechette & McCoy, 1995). We're not just talking about wilderness areas. City parks, neighbourhood paths, and wilder areas are all susceptible to unsustainable use practices. By practicing LNT, individuals show respect for the intricate relationships that sustain these environments and for the experience of the people that will come after them.

The ideas of LNT extends beyond mere practicality; they embody a sense of responsibility towards the places we visit. Imagine a scenario where every outdoor enthusiast left a trail of trash, disturbed wildlife habitats, and scarred landscapes. The result would be irreversible damage to the very environments we cherish. LNT is about making choices that protect these environments for current and future generations under the

premise that each user is a responsible person outdoors who can always learn new ways to reduce or minimize their impact.

At the core of LNT is the concept of “authority of the resource.” This principle acknowledges that the land and its resources hold a certain level of authority over how they should be treated. In essence, the environment sets the rules. As stewards of the land, it’s our duty to listen and adhere to these rules, respecting the intrinsic value of the natural world.

The Scientific Background of LNT

The LNT guidelines are not just rooted in common sense. They are firmly grounded in scientific understanding. As such, they are living things. Their scientific foundation is continually scrutinized and refined.

The LNT principles – such as minimizing campfire impact, disposing of waste responsibly, and respecting wildlife – are not arbitrary. They are designed to align with ecological principles, environmental psychology, and the cumulative insights from various scientific disciplines. For instance, studies on soil compaction, vegetation growth, and animal behaviour contribute to our understanding of how human presence affects ecosystems (Cole, 2004).

Yet, the science underpinning LNT is not static. As our understanding of ecosystems deepens, culture and social norms change and new technologies emerge. The principles are subject to ongoing evaluation and adjustment (Simon & Alagona, 2009). Reconciliation with Indigenous groups demands we rethink the idea of “leave what you find” with traditional food-gathering practices in mind (North et al., 2023).

In essence, LNT is a testament to the dynamic relationship between science and outdoor ethics. It underscores the importance of staying informed about the latest scientific discoveries, which in turn informs the evolving guidelines for responsible outdoor recreation. By embracing this evolving scientific basis, outdoor enthusiasts can ensure future generations will enjoy the same nature and outdoor experiences.

The History of LNT

The concept of LNT has evolved over time, reflecting humanity’s changing relationship with the environment and our growing awareness of the impacts of outdoor recreation (Simon & Alagona, 2009). The history of LNT is a testament to the shift from exploitation to preservation, guided by principles that emphasize responsible enjoyment of natural spaces.

The roots of LNT can be traced back to the mid-20th century, when a surge in outdoor recreation raised concerns about environmental degradation (Marion & Reid, 2001). The 1960s saw the emergence of environmental movements that advocated for the protection of wilderness areas. During this era, the “pack it

in, pack it out” philosophy gained momentum, marking a shift towards greater responsibility for managing one’s own waste and treating the environment with sensitivity and concern (Morton Turner, 2002).

The 1970s marked a pivotal period in the development of LNT. Organizations like the National Outdoor Leadership School (NOLS) in the United States started promoting wilderness ethics and minimum-impact camping techniques (Marion & Reid, 2001). These efforts culminated in the publication of the first official LNT manual by NOLS in 1979 (Marion & Reid, 2001). This manual introduced the foundation of LNT principles, such as minimizing campfire impact, disposing waste properly, and respecting wildlife.

The 1980s and 1990s witnessed the widespread adoption of LNT principles by outdoor enthusiasts, educators, and land management agencies (Priest & Dixon, 1990). The LNT Center for Outdoor Ethics, founded in 1994, further formalized LNT education and outreach. The organization’s research and collaboration with land management agencies led to the establishment of seven core LNT principles, which were first published in 1999 (Cole, 2018).

In the 21st century, as outdoor recreation continues to surge in popularity, the importance of LNT remains as critical as ever (Alagona & Simon, 2012). The history of LNT is a testament to the evolution of human attitudes towards nature, from conquering landscapes to coexisting with them. It stands as a reminder that our collective responsibility is not only to enjoy the outdoors but also to ensure its preservation for future generations.

The Seven LNT Principles

1. **Plan Ahead and Prepare.** Thorough planning is the foundation of responsible outdoor recreation.

Consider the following ways to practice this principle:

- Research the area you’ll be visiting, including regulations and weather forecasts.
- Obtain the necessary permits and follow group size restrictions.
- Prepare a detailed itinerary and share it with someone who won’t be joining the trip.
- Pack appropriate gear and clothing to minimize the need for altering the environment.

2. **Travel and Camp on Durable Surfaces.** Minimize your impact by staying on established trails and campsites. Here’s how:

- Stick to existing paths to prevent soil erosion and the creation of new trails.
- Set up camp at least 200 feet (61 metres) away from water bodies to protect fragile riparian areas.
- Use designated camping spots whenever possible to reduce trampling of vegetation.

3. **Dispose of Waste Properly.** Managing waste responsibly is crucial for preserving the wilderness.

Follow these practices:

- Pack out all trash, including food scraps and toilet paper.
 - Use established bathroom facilities if available; if not, dig a small hole at least 200 feet (61 metres) from water sources for human waste.
 - Strain dishwater and scatter it at least 200 feet (61 metres) away from water bodies.
4. **Leave What You Find.** Respect the environment's natural beauty and cultural artifacts. Consider these actions:
- Avoid picking plants, disturbing historical sites, or removing rocks.
 - Leave natural and cultural features as you found them for others to enjoy.
 - Capture memories with photographs instead of taking physical souvenirs.
5. **Minimize Campfire Impact.** Campfires can scar the land and leave lasting damage. Follow these guidelines:
- Use a camp stove for cooking instead of building a fire.
 - If fires are allowed, use established fire rings and keep fires small.
 - Use only small sticks and twigs found on the ground; do not break branches from living trees.
6. **Respect Wildlife.** Observing wildlife from a distance ensures their safety and the integrity of their habitats:
- Do not approach or feed wild animals; respect their space and behaviors.
 - Use binoculars and cameras to view animals without disturbing them.
 - Store food securely to prevent attracting wildlife to campgrounds.
7. **Be Considerate of Other Visitors.** Promote a positive outdoor experience by being courteous to fellow adventurers:
- Yield the trail to others and maintain a reasonable noise level.
 - Keep pets under control and clean up after them.
 - Share popular destinations, allowing others to enjoy the beauty of the outdoors.

Conclusion

LNT is more than just a set of guidelines: it's a philosophy that speaks to our role as custodians of the natural world. By embracing the principles of LNT, we ensure that the awe-inspiring landscapes we explore

today remain vibrant and unspoiled for generations to come. Through ethical responsibility and the acknowledgment of the authority of the resource, we can all play a part in preserving the delicate balance of our planet's ecosystems. So, the next time you venture into the great outdoors, remember: Take only pictures, leave only footprints.

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Resources

- <https://leavenotrace.ca/services/1-plan-ahead-and-prepare/>
- <https://leavenotrace.ca/services/2-travel-and-camp-on-durable-surfaces/>
- <https://leavenotrace.ca/services/3-dispose-of-waste-properly/>
- <https://leavenotrace.ca/services/4-leave-what-you-find/>
- <https://leavenotrace.ca/services/5-minimize-campfire-impacts/>

- <https://leavenotrace.ca/services/6-respect-wildlife/>
- <https://leavenotrace.ca/services/7-be-considerate-to-other-visitors/>

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Ryan Stuart is on the board of Leave No Trace Canada. He has practiced Leave No Trace ethics during his outdoor adventures for more than 25 years ago and taught Leave No Trace principles as an outdoor educator at wilderness programs and while guiding school groups.

PART V
PSYCHOLOGY

13.

EXPLAINING KEY FEATURES IN OUTDOOR THERAPY

Virginie Gargano; Justine Pellerin; and Roxanne Létourneau

Editors' note: This chapter focuses on the more researched field of outdoor learning known as outdoor therapy (OT) that includes nature therapy, adventure therapy, wilderness therapy, and other modalities.

Over the last fifty years, outdoor therapies (OTs) have been the subject of extensive research, which has revealed their positive influence on multiple facets of general well-being (e.g., self esteem, self-efficacy, leadership), as well as social, academic, and family functioning (Gargano, 2022; Harper & Dobud, 2021). Only recently, researchers have begun investigating the factors contributing to these effects. Today, nature exposure, adventure, group experience, physical activity, transfer, and the relationship between facilitators and the participants are recognized for their importance in OTs (Priest, 2023; Russell et al., 2017; Sheffield & Lumber, 2019; Van den Berg et al., 2019). However, research is limited on how to implement these features within OT programs, which diminishes their application efficacy in existing OT practice.

This chapter aims to address this situation by discussing the definition of OTs, identifying the key features, and considering the implementation of each. The impact of key element and their sub-dimensions are further examined and theoretically explained for their contributions to beneficial outcomes. The elements required to operationalize each feature and the challenges associated with incorporating these into professional practice are highlighted. Finally, a reflection tool is presented to assist facilitators in planning OT programs.

Various synonyms have been offered to describe programs taking place in an OT context. For example, these include “wilderness therapy” (Davis-Berman & Berman, 1994), “bush adventure therapy” (Pryor et al., 2005), or “adventure therapy” (Gass et al., 2020). This chapter uses the term outdoor therapies (OTs) to maintain a broad perspective of nature and adventure as an intervention modality, as proposed by Harper and Dobud (2021). This term covers a range of psychosocial practices conducted in natural settings, with or without adventure, aimed at promoting overall health and conducted from an egalitarian perspective emphasizing equality between humans and nature.

Key Features

Since 2000, the lack of scientific understanding about the processes at work in OTs, known as the “black box phenomenon,” has sparked the interest of various groups of authors (Fernee et al., 2019; Gargano, 2020; McKenzie, 2000; Newman et al., 2023; Norton et al., 2014; Russell et al., 2017). Different labels were attached to important program elements, described as “key components” (Norton, 2010), “key factors” (Norton et al., 2014), “key features” (Gargano, 2020), “process factors” (Russell et al., 2017), and “facilitative practices” (Newman et al., 2023). The term “key-features” will be used here to encompass nature exposure, adventure, group experience, physical activity, transfer, and the participant-facilitator relationship as listed in Figure 1.

Before examining the impact of each key element in OTs, it is important to consider two steps in program planning: determining the purpose to be achieved and recognizing the characteristics of the participants. These steps will have a direct influence on the implementation of key features.

Regarding the targeted objectives, these must be broken down into a single purpose (Turcotte & Lindsay, 2019), since this will guide the intervention process, both in design and during delivery. As for participant characteristics, these considerations are central to program success. Learning about their physical, psychological, emotional, and social abilities, as well as their strengths and needs, are critical to establishing guidelines to select group members and define inclusion and exclusion criteria. Although these considerations come from the literature on group intervention (Turcotte & Lindsay, 2019), each is just as relevant with respect to OTs (Gargano, 2021).

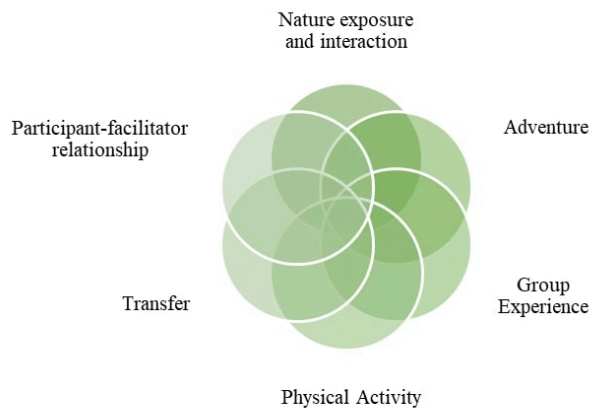


Figure 1: Key features in outdoor therapies.

Nature

Several definitions for nature have been developed in the literature. In this chapter, nature refers to all elements and phenomena originating from the land, water, or biodiversity, including fire, weather, and geology,

influenced by humans or not, from a potted plant to untouched wilderness, as suggested by Bratman and colleagues (2012).

Whether resulting from human intervention or not, natural environments have the potential to promote and support overall health (Hartig et al., 2014). Different hypotheses and theories have been proposed to explain how these effects occur, including the Biophilia Hypothesis, Stress Reduction Theory, and Attention Restoration Theory. The sensory experience is an important piece of nature immersion and can be added to all of these theories, since the use of human senses transversally extends across various interpretations of nature as in Figure 2.

Biophilia is defined by the innate human instinct to connect with everything related to nature (e.g., animals, Earth). Used for the first time in 1964 by the psychoanalyst Fromm (1964), this term was developed in opposition to the term “necrophilia” or the “love of life in contrast to love of death. [It] represents a total orientation, an entire way of being. It is manifested in a person’s bodily processes, in his emotions, in his thoughts, in his gestures” (p. 45).

In the 80s, sociobiologist Wilson (1984) put forward the biophilia hypothesis, which states the belief that humans are genetically predisposed to be attracted to nature and “the innate tendency to focus on life and lifelike processes” (Wilson, 1984, p. 1). To date, some studies have suggested that a lack of connection with nature induced by modern lifestyles leads to a sense of disconnection in humans, resulting in a stress response (Darcy et al., 2019). Despite the abundant literature on this concept, the hypothesis has not yet been validated and remains the subject of much criticism (Gaekwad et al., 2022; Joye & De Block, 2011; Scopelliti et al., 2018). While research has yet to support the biophilia hypothesis, the idea does carry considerable public interest and highlights the benefits of nature on human health.

Stress Reduction Theory states that in the absence of a genuine threat (e.g., animal attack, storm), nature promotes the reduction of stress and favors cognitive restoration (Kaplan & Kaplan, 1989; Rogerson et al., 2019; Ulrich, 1981). This is defined as: “The process of renewing, recovering, or reestablishing physical, psychological, and social resources or capabilities diminished in ongoing efforts to meet adaptive demands” (Hartig, 2004, p. 273).

Attention Restoration Theory suggests that the ability to direct voluntary awareness decreases with use, particularly because it requires cognitive effort to ignore distractions. Finding oneself in a situation that does not require voluntary attention would then promote the recovery of cognitive resources (Staats, 2012). To achieve this, different parameters come into play (Calogiuri et al., 2019; Kaplan, 1995; Menardo et al., 2019; Schertz & Berman, 2019), including the state of soft fascination. According to Kaplan & Kaplan (1989), this state is favored by the natural environment, as it requires minimal cognitive resources, particularly when it focuses on the natural elements present in the environment. Three psychological components influence this state: the feeling of being in the right place, the degree of coherence with the environment, and the distance from the obligations of daily life (Calogiuri et al., 2019).

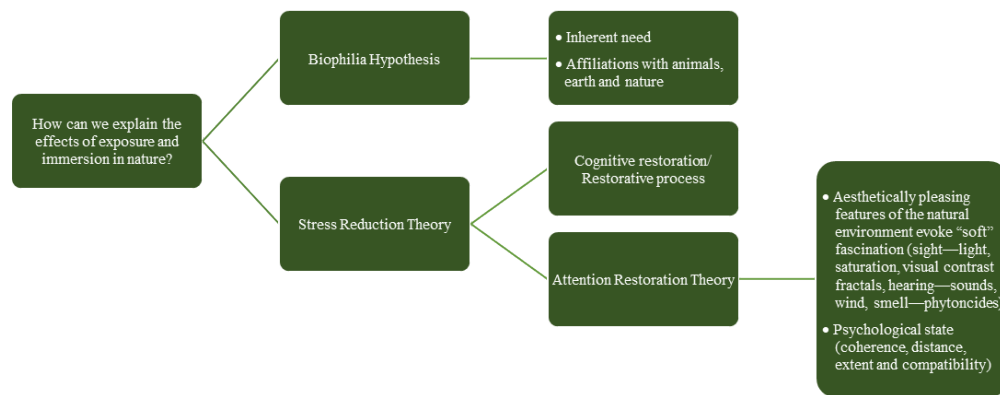


Figure 2: Hypotheses and theories supporting the effects related to immersion in nature.

Sensory Experience

In the literature, the term “kinesthetic experience,” the conscious perception of the body’s position and movements in space (Larousse, 2022), is commonly used to describe the sensory experience related to OTs. However, a more accurate terminology is “sensory experience” to represent all the senses involved in OTs and not just the body. Closely linked to the theory of soft fascination, sensory experience, the mobilization of the senses such as sight, hearing, smell, touch, taste, also plays a role when experiencing nature and is thought to promote cognitive restoration and general well-being (Shin et al., 2022).

With respect to eyesight: the high degree of brightness, contrast, light saturation points (Beckmann et al., 2019), the luminous colors found in nature, such as green (Lohr, 2010). Fractals or complex shapes found naturally in clouds, waves, leaves, or flowers, favor these benefits (Taylor, 2021; Zosimov & Lyamshev, 1995). According to Seuront (2010, p. 1): “A fractal set tends to fill the whole space in which it is embedded and has a highly irregular structure, while it possesses a certain degree of self-similarity [and] appears to be the union of many ever-smaller copies of itself.”

As for hearing, the singing of birds, the wind, the sound of water flowing down a river are just a few examples that promote states of calm and general well-being when in contact with nature (Ratcliffe, 2021; Van Hedger et al., 2019). On the olfactory level, volatile organic derivatives emanating from many plant species, called phytoncides, are also considered to positively influence physiological and psychological health (Li et al., 2006; Rogerson et al., 2019).

To summarize, despite studies inventorying the relationships between Stress Reduction Theory, Attention Restoration Theory, and the involvement of the senses in OT outcomes, recent work emphasizes methodological limitations associated with these. Therefore, a further deepening of understanding and a better comprehension of cognitive phenomena that occur during human contact with nature is necessary (Menardo et al., 2019; Ohly et al., 2016; Schertz & Berman, 2019).

The level of immersion in nature is certainly one of the most complex parameters for facilitators to configure among other reasons because this depends on the personal conceptions and previous experiences of each individual. Whether deliberate or circumstantial, experiences in nature can be tainted by people’s life

trajectories and their sociocultural, economic, and geographic contexts (Bratman et al., 2019; Keniger et al., 2013). In addition, considering the personal characteristics of the participants, certain parameters inherent to OTs can guide the facilitator's choices, such as quality of contact, duration, frequency, and type of environment, such as being in the forest or on the open ocean (Shanahan et al., 2015).

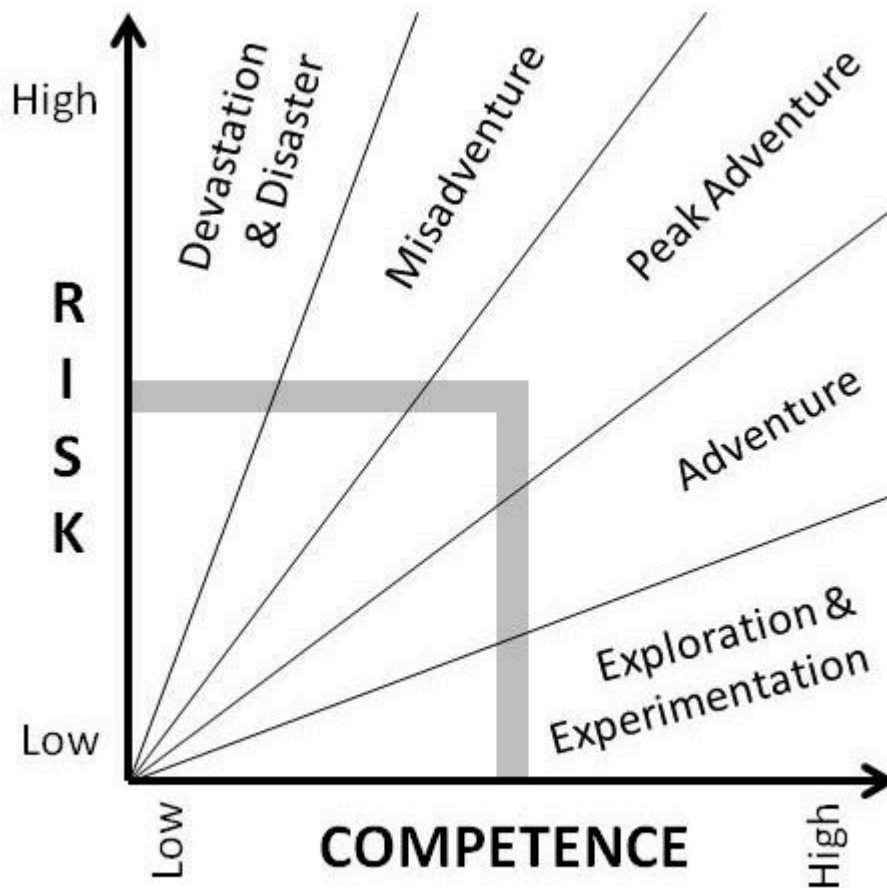


Figure 3: The Adventure Experience Paradigm (Martin & Priest, 1986), used with permission.

Adventure

An adventure situation is generally defined as a new experience marked by uncertainty and novelty. It is influenced by the state of mind, attitude, and perceived competence to undertake a challenge (Priest & Gass, 2018). In OTs, for some, adventure comes from experiencing the group, while for others, it comes through experiencing nature or being active outdoors. To configure this, two sub-dimensions can guide the facilitator's decisions regarding the activities to select: the level of adventure and the amount of dissonance induced by the experience.

In the context of OT programs, the interaction between differing amounts of risk and competence creates

various challenges (Priest & Gass, 2018). As proposed by Martin and Priest (1986), the balance between these two variables will allow different levels of adventure to be experienced as in Figure 3. For a challenge to be experienced positively, it must represent a certain level of technical difficulty adapted to the physical and psychological skills of the participants (Martin & Priest, 1986; Priest & Gass, 2018). In this way, they will be more inclined to face and overcome the challenge, which will then allow them to better perceive their strengths and limits (Priest & Gass, 2018; Prouty et al., 2007). However, this sub-dimension of adventure cannot be configured without considering the level of dissonance experienced by individuals.

Dissonance is related to the gap between a person’s everyday environment and the new conditions in which they find themselves (Festinger, 1957). Adapting Vygotsky’s learning theory (1985), various works from the 1980s approached dissonance from the concept of proximal zone of growth as in Figure 4. When the degree of dissonance is slightly higher than the usual degree of physical, emotional, psychological, or social comfort, the person must mobilize their strengths and coping strategies or develop new ones in order to learn or grow (Festinger, 1957). This leaning and growth promotes intrapersonal and interpersonal relational benefits.

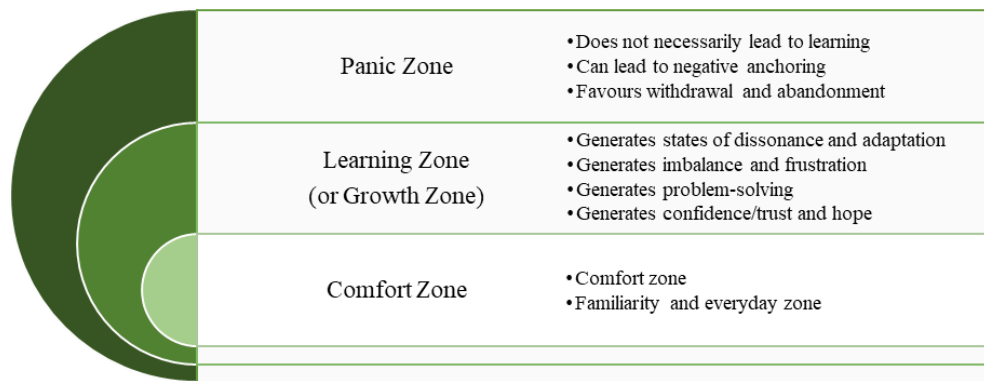


Figure 4: The Proximal Learning Zone.

The complexity of configuring the adventure level in OTs arises from the various destabilizing factors inherent in adventure. The key to proper use requires a comprehensive understanding of participants’ characteristics. On one hand, different types of activities can be used to achieve this. In fact, beyond the use of technical activities, all kinds of generic activities, i.e. tasks related to living in the natural environment (e.g. setting up tents, building a fire), as well as experiential activities can help to meet these objectives. On the other hand, adventure can be experienced through physical, emotional, psychological, or social aspects, either individually or in a group.

Choosing which aspect to focus on is therefore important, especially with respect to activity choice and sequencing. In this manner, participants will be able to minimally regain the external boundaries of their habitus or the way they perceive and respond to the adventure. If the level of discomfort with the risks surpasses their abilities, the experience could have a negative outcome (Gargano, 2020). Therefore, assessing the adventure dimensions based on the purpose set by the OT program is crucial to success.

Group Experience

On the one hand, while OTs are not limited to group settings, their history has been shaped by classic adventure programs (e.g., Outward Bound schools) and holiday camps (White, 2020) that have influenced the role of groups in OTs. On the other hand, socially engaged adventures have existed for millennia in ancient and Indigenous societies, where groups were formed naturally in order to meet life challenges (Leclerc, 1999). No alternatives existed, other than being in the community one was born to and contributing through work to survive and provide for one's family necessities (Anzieu & Martin, 1982). This vision of the group has gradually evolved with the needs of modern societies and cultures.

Today, group experience responds to needs for affiliation, affection, and recognition, which are fundamental to all human beings (Leclerc, 1999; Turcotte & Lindsay, 2019). The context of nature and adventure, to a certain extent, naturally provides opportunities to meet these needs. However, the group can have both favorable effects, like a sense of belonging, and adverse effects, like a feeling of rejection.

Several factors related to the context of intervention are likely to influence the quality of relationships. For instance, factors such as uncertainty and destabilization in the experience, the harshness of the context, the quantity and complexity of technical tasks, such as navigating a river in a canoe or climbing a mountain while roped together, and skills related to living in nature, such as setting up a camp, cooking, or building a shelter, foster interdependence among group members. These factors contribute to explaining the role of interdependence in generating benefits (Dimmock, 2009; Gargano, 2020).

The group is strongly connected to other pivotal factors, particularly the dissonance concept, which alters interpersonal relationships. On the one hand, outdoor tasks promote interaction. On the other hand, the context facilitates unlocking individuals' strengths (Gargano & Turcotte, 2017). Consequently, this fosters collaborative relationships based on the interdependence of the tasks at hand (Gargano & Turcotte, 2017). OT facilitators must convey values of respect and inclusion in order to address the needs for belonging, acceptance, and affection that may emerge in group settings. These values must be reflected in their interventions to ensure meaningful and productive experiences for all of the participants (Mirkin & Middleton, 2014; Shooter et al., 2009). Finally, facilitators must be attentive to the group dynamics that are inherent in any group experience so as to intervene appropriately (Turcotte & Lindsay, 2019).

Physical Activity

Between the years 470 and 324 BC, Aristotle, Socrates, and other philosophers emphasized the importance of uniting body and mind and having experiences fostering this union for the benefit of holistic development (Ewert & Sibthorp, 2014). Although this recognition is not new, it is only in the past two decades that OT research has increasingly focused physical activity's impact on health (Donnelly & MacIntyre, 2019; Hartig and al., 2014). Several authors have highlighted that engaging in physical activities in a natural environment

can have positive effects on psychological health, such as reducing anxiety, physical health by increasing fitness, and social health, including promoting cohesion and support (Lawton et al., 2017; Perry, 2009; Shanahan et al., 2016). The intensity and duration of the activity are factors that influence these benefits.

In addition, the environment in which physical activity occurs, including blue and green spaces, are acknowledged for their potential to predict physical activity behavior (Donnelly & MacIntyre, 2019). Certain studies highlighted the impact of living near green spaces and its influence on the frequency of physical activity (Flowers et al., 2016). In addition to the activity setting, emphasizing that physical activity engagement in natural environments essentially acts to mediate the effects on social health (Home et al., 2012).

While physical activity does stimulate the release of hormones like endorphins, dopamine, and adrenaline that are associated with improved overall well-being (Legrand et al., 2023), its level must still be adapted to the capacity and level of each participant's physical fitness. As with other key features, the level of exercise must be modulated according to the desired purpose and the abilities of individuals. If properly adjusted, participants can maintain their availability for the intervention, whereas a misalignment may hinder the fulfillment of the desired objectives. Factors to be considered include the perception of being immersed in natural surroundings (Mackay & Neill, 2010), duration (Perry, 2009), intensity, and frequency (Shanahan et al., 2015).

Transfer

The aim of transfer is to consolidate the learning. It is a process that facilitates the retention of learning and its integration into individuals' lives (Gass, 1999). Having received extensive attention for several years, the concept of transference stems from the principles of experiential learning (Priest & Gass, 2018). It is a key feature and must be configured prior to the implementation of OTs in terms of planned periods to promote transfer and retention (e.g., before, during, and after the activities). Different schools of thought have influenced the way transfer occurs in OTs. According to Priest and Gass (1999), their integration has changed over the decades, initially starting from an educational perspective.

First, in the 1940s, participants were given the freedom to reflect and learn from their own experience without external influence. This philosophy was based on the idea that learning is initiated by the natural environment itself. This perspective evolved in the 1950s to focus on a transfer method that included feedback from the activity instructor at the end of the activity. The 1960s marked a paradigm shift, inviting participants to reflect on the relationships between lived experiences and to articulate them in terms of the program purpose. The decade that followed was characterized by transfer methods that incorporated them in advance of the experience, with the aim of directing the learning achieved during the activity. In the 1980s, facilitators began to introduce activities by structured metaphors or isomorph, in order to facilitate a more direct learning experience. Finally, during the '90s, techniques were intentionally used prior to the experience to reduce resistance to change.

Although transfer is among the key features to configure, various studies emphasized the complexity

associated with integration, surpassing the mere implementation of these techniques (Brown, 2010; Gass & Seaman, 2012; Sibthorp, 2003). Furthermore, central to reflection on this key feature are the planned promotional periods (e.g., before, during, and after), the preferred techniques, and the means, such as metaphors, impact techniques, logbooks, solo contemplation, and group discussions. Indeed, the techniques selected should align with the pursued objectives during program planning. Among all the key features, this aspect remains one of the most concrete to orchestrate.

Table 1: Six generations of facilitation (Priest & Gass, 1999).

Decade	Generation	Explanation
1940s	Letting the experience speak for itself	Learning and doing
1950s	Speaking on behalf of the experience	Learning by telling
1960s	Funneling or debriefing the experience	Learning through reflection
1970s	Frontloading (by direct method) the experience	Direction with reflection
1980s	Framing (by isomorphic method) the experience	Reinforcement in reflection
1990s	Frontloading (by indirect method) the experience	Redirection before reflection

Relationship Between Facilitator and Participants

In the context of nature and adventure, various conditions contribute to the quality of the relationship between the facilitator and the participants (Ewert & Sibthorp, 2014; Gass et al., 2020). First, the nature of OT activities tends to stimulate the facilitator involvement, which alters the authoritative dynamic (Russell & Phillips-Miller, 2002). The diverse climatic conditions and the nature of challenges provide facilitators with unique opportunities for modeling and promoting collective values such as cooperation and mutual aid (Gass et al., 2020; Mirkin & Middleton, 2014). Moreover, these conditions also give them the opportunity to observe the participants from different angles and to intervene as need in particular situations (Bandoroff & Newes, 2004; Gass et al., 2020).

Certain qualities are required to intervene adequately in OTs and foster the quality of this relationship. These include integrity, benevolence, demonstration of technical proficiency, and interpersonal skills (McKenzie, 2000; Shooter et al., 2009). However, different groups of authors recognize the complexity of the knowledge required to perform this task (Gass et al., 2020; Priest & Gass, 2018; Schumann et al., 2009). They highlight the importance of technical skills in this type of intervention, as well as the need to establish work teams with diverse skills to ensure the success of the program. This includes proficiency in technical skills, related natural environment, and group dynamics (Bunce, 1997; Priest & Gass, 2018). One solution is to create multidisciplinary teams (Priest & Gillis, 2023).

Proposal for a Planning Tool

In this chapter, we delineated the key features necessary to plan OTs. To further understand them, we explained their sub-dimensions and suggested ways to integrate them in practice. Ultimately, this knowledge can be converted into practice to optimize the impact on participants. However, despite this knowledge, a certain complexity remains.

In fact, guidelines to plan OTs beyond the recognition of the theoretical foundations to derive and define key features are unavailable. According to the literature, the mere incorporation of knowledge is not sufficient to guarantee the success of the intervention (Gargano, 2021). Combining the key features of OTs requires judgment and skill on the part of the facilitators. To assist in the planning of OTs and to enable the practical integration of key features, an OT planning tool is offered for consideration. This tool is designed to serve anyone seeking to explain the OT plans, whether to students or novice or experienced facilitators.

To create this exploratory planning tool, the following methodology was used but has not yet been validated. It involved the first author generating a list of questions based on the descriptions of the five key features. These questions stemmed from a blend of theoretical expertise and extensive observational and pragmatic knowledge in establishing and conducting OTs. Two co-authors analyzed these questions, enabling them to sort and rephrase the list into a questionnaire. A final version of the planning tool resulted in Table 2.

Table 2: A Planning Tool for Outdoor Therapy.

Support Grid for the Planning of Outdoor Therapy
Gargano, Pellerin, & Létourneau (2023)
Answer each of the statements.
Initial Questions
What is the purpose of the program?
What are the needs of participants?
What are the strengths of the participants?
What are the characteristics of the participants at the: <ul style="list-style-type: none"> • Physical level? • Psychological level? • Emotional level? • Social level?
Are there exclusion criteria to consider depending on the intended purpose?
Nature Immersion
Where to perform the program? What means of transportation and accommodation are available?
At what time of year and season should this program be offered?
What is the average level of comfort in nature for these people?
What degree of immersion is desirable to achieve the objectives?
Which activities make sense with the objectives and will allow participants to experience sufficient sensory contact with nature?
Is this sensory contact desirable for these people or not? If so, how can we engage the senses in the experience?
Adventure
What is the most relevant technical activity for achieving the targeted objectives?
If we can't achieve our objectives by implementing technical activities, what generic and experiential activities could we put in place?
What is the average level of competence (physical, emotional, psychological, and social) of people towards the activities selected?
What aspect (physical, emotional, psychological, and social) and degree of dissonance is desirable to achieve the objectives? What adventure activities could help to achieve these objectives?
How to scale the level of challenge before, during, and after the program (e.g., technical preparation before departure)?
If environmental conditions are moderate or difficult, will this influence the level of challenges associated with the activity?

Support Grid for the Planning of Outdoor Therapy
Gargano, Pellerin, & Létourneau (2023)
What resources are necessary to implement so that participants can regain a certain zone of stability after having met the planned challenges (e.g., cabin, heat source, camp, alone time, free time)?
Group
How will the group experience achieve the desired objectives?
What is the group's contribution to the process?
What is the ideal group size?
What is the usual level of social skills and comfort of these people when in groups?
What are the challenges related to the group experience and what means will be implemented to address them?
How will participants enjoy individual moments and is this desirable?
Physical Activity
What is the total duration of the program?
What are the physical and psychological capacities of these people? Is the duration of the program and its intensity sustainable for the people taking part?
How can the level of physical activity in the program be graduated to support the achievement of objectives?
Would it be necessary to physically prepare the participants to perform the activities (e.g., prior meetings)?
If the environmental conditions are favourable or challenging, will they impact the level of physical effort required and the achievement of goals?
Will participants be psychologically available for discussions or exchanges if this is planned and desired in the program in addition to physically demanding activities?
Transfer
What activities will be used to facilitate the transfer?
Are the program objectives clearly stated to the group?
What will be the preferred transfer technique? Should the relationship between objectives and activities be explicit or not in order to achieve the intended objectives?
Who will be responsible for this aspect of the program and for which activities?
What tools are recommended to make the planned transfers a reality (e.g., logbooks)?
Are the techniques consistent and realistic with the context of the program?
What are the targeted times (before, during, after) to perform the transfer? Was the schedule designed based on this aspect (e.g., distance to be covered based on planned transfer activities)?
What are the target locations for transfer activities (e.g., promoting attention, ensuring privacy or confidentiality)?
Relationship Between the Facilitator and the Participants

Support Grid for the Planning of Outdoor Therapy
Gargano, Pellerin, & Létourneau (2023)
What are the five core values of the team of facilitators regarding the program?
What are the means and times planned to convey these values within the group?
What are the strengths and skills of the team members (e.g., knowledge of the population, comfort in a natural environment, technical skills and risk management, comfort in group intervention) and how will they be used?
What are the roles of each team member? What are the areas of overlap?
What is the supervision ratio needed for each activity to support participants in achieving their objectives?

Conclusion

This chapter aimed to expose the key features that influence the impacts identified within OTs, first by explaining them theoretically and then by discussing the ways to configure them. These were the key features: immersion in nature, adventure, group experience, levels of physical activity, type of transfer, and the relationship between facilitator and participants. An OT planning tool was proposed to ease the implementation of key features in practical settings.

In future studies, testing this preliminary tool to determine its strengths and limitations would be beneficial. Stressing that the key features apparently serve as both mechanisms of change and effects, and their interrelation poses a challenge in evaluation is essential to consider. Further studies on this perspective would be appropriate. A more thorough comprehension of the processes involved in OTs could enable the optimization of the impact on the participating populations. Furthermore, ongoing research suggests that underlying theories for achieving benefits may surface and require further study.

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PART VI
HARMONY

14.

RE-CONNECTING CHILDREN AND YOUTH WITH NATURE FOR A HEALTHY PLANET

Alan Warner

A Nova Scotia elementary school secured a modest grant to build an “outdoor classroom” in a small stream gulley just below the playground. Once it was completed, the principal called me to see if I would be able to provide the teachers with an in-service to help them develop expertise on how they might best use the space with the children. I agreed and went down to scout out the setting before starting to plan the session. I was aghast as I surveyed a beautiful natural opening with a small creek winding its way through the gulley below it. The outdoor classroom consisted of about twenty large square rocks in rows, places for the kids to sit in the new “facility.” In fact, the in-service never happened as it was scheduled for a warm day in the middle of black fly season and the principal did not think it would be a good time to introduce the teachers to the setting. He was likely right. I refused his offer to do the in-service inside or on the playground!

In short, outdoor learning is a problematic term simply connoting that something is happening in a place without a roof and four walls. We rarely use the opposite term—indoor learning. The key to meaningful, engaging and empowering learning in, about, and for nature depends on the educational philosophy and concepts guiding the programming, as well as the activities, the leadership, and the learners. My mission and passion across forty years of program design, research, and teaching in the outdoors has been to consider how best to re-connect children and youth with nature so as to develop healthy, environmental citizens who appreciate and work to protect natural places and address problems such as climate change, biodiversity loss, Reconciliation, and injustice. Twenty rocks in rows does not produce good education in nature in my view, and there is no mission more important than doing this well given the state of the planet. Of course, effective nature-based education is but one significant piece of the much larger mission to develop more sustainable, just lifestyles and reduce broader environmental impacts at a systems level. Following the progression listed below, this chapter describes the rationale (why), content (what), and process (how) for achieving this educational mission based on current research and practice in Canada. It advocates for an experiential and place-based approach, grounded in experiences in nature and the community, and draws heavily on an earth education framework (Van Matre, 1990) and place-based learning (Sobel, 2008).

Table 1: Summary of why, what, and how to re-connect with nature

WHY re-connect with nature?
<ul style="list-style-type: none"> • Healthy People • Healthy Relationships • Healthy Planet
WHAT needs to be learned?
<ul style="list-style-type: none"> • Feelings and Attachment • Understanding • Action Skills
HOW do we go about re-connecting?
<ul style="list-style-type: none"> • Place-Based Experiences • Solitude Experiences • Story-Based Experiences

WHY Reconnect Children and Youth With Nature?

Healthy People

The COVID pandemic and resulting lockdowns, which kept people inside, drove home the point that psychological and educational researchers have documented over many years. People of all ages need to spend time in nature as a source of psychological strength, health, and well-being. Fromm (1964), a prominent psychological theorist, and Wilson (1984, 2002), a widely recognized and distinguished biologist, separately proposed the biophilia hypothesis: humans innately need strong relationships with nature (Barbiero & Berto, 2021). Wilson (2002) defined it as “our innate tendency to focus upon life and life-like forms and, in some instances, to affiliate with them emotionally” (p. 134). Louv (2008, 2016) proposed the concepts of “nature deficit disorder,” and “Vitamin N for Nature,” pulling together an enormous breadth of research documenting that frequent exposure to nature is essential for a child’s mental, psychological, and physical development, whether it be mental acuity, creativity, or wellness.

Nature deprivation has been linked to depression, anxiety, obesity and attention-deficit disorders. Louv’s work inspired the establishment of the Child and Nature Network, an international network that provides resources and up to date compilations of research for the field. More than eighty percent of children in

Canada do not meet the recommended guidelines for adequate sleep, screen time, and physical activity (Nature Canada, 2018). This research is not simply about the importance of outdoor activity of any sort; rather that there is intrinsic value in children and youth interacting with other life forms as a means to facilitate healthy psychological development.

Healthy Relationships

The Halifax Adventure Earth Centre has been providing nature experiences for children and youth for over forty years and has been one focus of my work on reconnecting children and youth with nature. I am always curious as to why their youth leadership group is so strong and its members are so committed to it. Engaging teens in community programming is not always easy. I frequently ask the young people why they keep coming, and their typical answer is that “this place,” by which they mean the social space, is “different.” They say it lacks the competitive and put-down aspects of many school and peer settings: “Everyone is nice to you here regardless of who you are or what you look like.” On further questioning, a key foundation of this youth culture is their weekend time at camp and in nature on a regular monthly basis. It offers time away from social media and peer pressures in a space where nature exploration and team and group development go hand in hand. These anecdotes are substantiated by research findings, whether it be the value of forest schools in developing social skills (Obrien & Murray, 2007) or the value of green spaces in promoting pro-social and cooperative play in children (Putra et. Al, 2020). Natural settings provide rich sensory experiences with other forms of life, isolated from everyday pressures, which children and youth can enjoy and share with their peers.

Healthy Planet

I frequently begin environmental education workshops and classes for voluntarily participating youth and adults by asking how many people spent a lot of time in nature as a child. Inevitably, almost every hand in the group goes up. We immediately recognize that this is a key distinguishing feature between those present and those who are not among a particular cohort. This substantiates the research findings gathered over decades: adults and youth who have had significant positive experiences in nature as children are more likely to report taking action for the environment and being positive environmental citizens (Chawla, 2020).

Simultaneously, this time in nature can build a sense of well-being and constructive hope, including the willingness to act in the face of environmental loss and degradation that can overwhelm others and lead to despair. There seem to be several ingredients to building this environmental commitment and hope: lots of time to explore and play in nature (both alone and with peers), significant role models (parents, teachers, etc.) who supported and encouraged connection to nature, and opportunities to take action on nature’s behalf. It is not coincidental that as children and youth have increasingly been brought up in cities with limited access to natural settings, spending more time inside and on screens, that the biodiversity and health of ecosystems has

been increasingly damaged by human impacts. Nature connection and nature protection actions look different in differing cultural contexts, but the basic need for connection is fundamental across all situations.

In short, re-connecting children and youth with nature is essential to growing healthy people, developing healthy relationships, and taking action to protect and restore a healthy planet. Increasingly, our families, schools, and communities are finding it difficult to achieve this mission. However, there is increased awareness of these problems, with a wide spectrum of people and organizations working to take action. What needs to be done?

WHAT Needs to Be Learned?

Feelings and Attachment

It is essential to develop feelings and attachment to other creatures and natural spaces. Kids are naturally fascinated by almost any creature they come upon, be it an insect crossing a sidewalk or a frog in a pond. They simply need opportunities. It is not coincidental that infants are often happiest outside where there are soft shapes, movements, and sounds (the wind in the trees), rather than the harsh surfaces and noise of indoor environments where they spend most of their time. They love to be outside. Yet mainstream messaging is often: “be careful,” “don’t get dirty,” and “stay where I can see you.” “Let’s go for a walk in the stroller” has replaced “let’s go for a walk in the woods.”

Traditionally in North America, Indigenous cultures and lifestyles were deeply rooted in experiences in natural settings, and it is not surprising that to this day, many of these cultures, despite efforts to eradicate them across centuries, have transmitted a stronger set of environmental values and nature connection across generations than mainstream settler cultures. The essential ingredient to developing feelings for nature is positive time in nature, regardless of one’s cultural identity. For example, *Being Caribou* (Heuer, 2006), is the gripping story of a wildlife biologist and his partner who followed a caribou herd for five months across the Arctic. Through the process of being immersed with them in nature, they transitioned from seeing caribou as interesting creatures in a scientific sense to thinking and feeling like caribou. Attachment to nature is not restricted to Indigenous cultures: other peoples can regain these attachments if they spend positive time experiencing nature. Carson (1956) eloquently made this point by saying:

...if a child is to keep alive [an] inborn sense of wonder... he [she] needs the companionship of at least one adult who can share it, rediscovering with him [or her] the joy, excitement and mystery of the world we live in (p. 42).

Some have argued for a knowledge-based approach to introducing the natural world to children: “if you learn about it, you will come to care about it.” However, this rational, information-based approach to caring and action has not been substantiated by research (Kollmuss, & Agyeman, 2002). Rather, the pathway to environmental connection and protection for human beings, according to Van Matre (1990), is if people come

to experience and develop care for the natural world, then they will then want to learn more about it. Next, they may then take action to protect it. The first priority is to grow a love of the Earth, a kinship with all living things, a reverence for communities, and a joy of being in touch with nature.

Understanding

Feeling and care is a prerequisite for human societies to address the increasingly damaging environmental impacts of current lifestyles and to change the negative trajectories of the biodiversity and climate crises. But positive change requires a basic understanding of how ecological systems function and how humans depend on and interact with them. For example, there will never be more materials than there are now on this planet: the air, water, and soil cycles simply move them around. Breathe in: you are breathing in air molecules that passed through many a dinosaur. Yet individuals and communities in the mainstream fail to actualize this understanding in their lifestyles and infrastructure.

A number of years ago, a nearby town came up with the idea of removing dry cleaning pollutants that appeared in the drinking water by aerating the water and bubbling the gases into the air. Where do the toxins go next? How does that help? It is essential that everyone understands the big picture ecological concepts such as the role of materials moving through the air, water and soil cycles, the path energy takes from the sun through food chains, how species interact within ecological communities, and the way these communities and systems naturally change over time (Van Matre, 1990). These basic understandings enable people to take reasoned and responsible action.

Action Skills

Caring about the natural world and understanding what needs to be done to transform individual lifestyles or shift collective policies and practices is insufficient for individuals to take action. Taking action is in itself a set of competencies, be it having the confidence to assert one's lifestyle choices in response to negative peer pressure, effectively writing a letter to a politician, or standing up to speak at a public meeting. Much as one learns to swim or ride a bicycle by doing it, one learns to take action for the environment by practicing action-taking with others. This is part of developing action competence (Jensen & Schnack, 1997), which involves having the commitment and caring, sufficient knowledge and understanding, the vision to know what is needed, and the action experiences to develop the confidence and skills to act. This means providing young people with opportunities to practice action taking as a part of the educational process, not for the purpose of bringing about environmental change, though this can be a positive result, but for the purpose of developing their action skills. Wild radicalism is not necessary or appropriate to expect of children; rather, their actions may be to reduce the environmental impacts of their lifestyles or to work together to advocate for a natural place or species they are strongly connected to and passionate about protecting.

In short, meaningful environmental education in the outdoors needs to be a holistic process focusing on the feelings (the heart), the understandings (the head), and the actions (the hands). This is not surprising given the extensive research and practice documenting the benefits of integrated and holistic learning in so many spheres (Anderson et al., 2017).

HOW Do We Go About Reconnecting Children and Youth With Nature?

Place-Based Experiences

Our personal identity is made up of a constellation of factors that gives us a sense of self. It is rooted in deeply held values and played out in our feelings, thoughts, and actions. For example, one evening I was hosting a small group of adults for a discussion of how we could purchase more sustainable food for our households. One man said he always went out of his way to buy organic apples because he had been brought up on an apple farm and deeply understood the difference between organic and conventionally sprayed apples. Another woman said she always purchased free-range eggs as her family had chickens as a child and she knew the value of good, fresh eggs. Neither was as committed to purchasing other items sustainably. These are examples of how our early experiences and connections to childhood places help establish our deeper values and attachments. The key to developing a strong connection to nature is to provide lots of hands-on experience in nature, starting in early childhood. This is the *raison d'être* for the development and increasing popularity of forest schools where young children spend most all of their time exploring and playing in nature.

Sobel (2008), a noted educational theorist and philosopher, has extensively observed children's play and identifies seven characteristics of experiences in nature that are fundamental to the types of experiences children seek, regardless of culture. They are: adventure, fantasy and imagination, animal allies, maps and paths, special places, small worlds, and hunting and gathering. As Sobel (2008, p. 13) states, "one transcendent experience in nature is worth a thousand nature facts." The educator's mission is to provide experiences in natural areas for children and youth that embody these characteristics. For some children, the nearby natural area is a forest, but for others it may be a ditch, backyard, or overgrown vacant lot where they can explore and experience other forms of life. The ecological quality of the setting is not the key but rather the opportunity to experience semi-wild settings. The benefits of allowing children to play with "loose parts" are widely recognized in preschool settings, yet there are no better loose parts than pinecones on the forest floor, leaves in a pile, or pebbles in a stream. The level of structure may vary with the children and the context, but there needs to be a clear sense of purpose to the activities, be it strengthening feelings (e.g., appreciating the beauty of the place), building ecological understandings (e.g., how a leaf makes sugar), or developing action competence (e.g., reflecting on experiences through art or prose). Maybe the goal for an experience is simply having so much fun that the kids want to return.

One outdoor, environmental program that embodies these sorts of characteristics is Eco-Champions, a summer day camp run through the Halifax Adventure Earth Centre in Nova Scotia. Here is how it starts: groups of seven- to nine-year-old children sit on a circle of benches in a small, peaceful, and protected forest hollow. Their attention is riveted on a moving human-like shape that shimmers in the distance through the trees. The storyteller begins...

Long ago, long before this age, there were lots of shape shifters in the natural world. The people loved to hunt for and search out the shape shifters in all of their forms and appreciate the neat shapes in nature. But over many, many years, the people went out into nature less, and they began to forget that the shapes could move and change. Since most people forgot them and no one was playing with them, the shape shifters became sad and quiet and stopped moving. Today, almost all of the shape shifters have become stuck as one shape in nature, maybe as a rock, a branch or a small bush. That moving shape in the distance is likely Epash, one of the last shape shifters still moving here. She survives by playing hide and seek games with the children who still come out and appreciate this forest. But Epash needs a friend. That's why she is taking the bold step of contacting you, even though shape shifters are very shy. You see, Epash is an endangered species and needs your help to bring another shape shifter back to life.

The children then head off on a treasure hunt to help bring another shape shifter back to life by generating good feelings through appreciating the shapes in the forest. Through the day, they learn about and take on the roles of endangered creatures. To connect back to Sobel's themes, the kids are off on a fantasy adventure and treasure hunt as part of a story, using maps to find special places and become animal allies.

A key to providing these meaningful experiences in nature is leadership. Leaders are not experts standing at the front "teaching": they are caring people sharing and doing with the children through a progression of experiences, stimulating their creativity and giving them space to explore and discover in nature. If the children are exploring the small world of a stump with a magnifying glass, the leader is right there exploring with them and remarking at their discoveries. Nature is the teacher, and the leader is there to ensure that everyone is engaged.

How could one teach an ecological concept this way? In Eco-Champions, the children learn the concept of habitat by coming upon a group of cute, stuffed animals sitting together in the forest, each with a tag around their neck that describes in simple words where they get their food, water, air, and shelter. The kids adopt a creature in pairs and use the information to choose a suitable location nearby for their creature's home. The pairs then give the group a tour of their homes and explain why they are suitable. At the end of the activity, the leader helps them process their experiences and understand and label the ecological concepts of home, habitat, and community. A carefully designed experience is holistic, and the feelings, understandings, and action skills can be drawn out of it and applied to a subsequent set of experiences. The leader organizes and frames the experiences, but nature does the teaching.

Solitude Experiences

A second essential element of how to re-connect children and youth with nature is to provide meaningful solitude experiences. The Halifax Adventure Earth Centre runs a yearly summer environmental, residential camp program for ten- to twelve-year-old children that is high adventure and rooted in nature with lots of razmataz, dramatic characters, attention-getting special effects, props, and surprises. Despite all of this, time and time again, the first thing the kids do when the parents arrive to pick them up is to ask them to come see their “magic spots,” the personal spot in the forest where the child spent 20 minutes in solitude each day at camp. As much as time in nature with peers is incredibly valuable, time spent alone in relationship with different species is essential and irreplaceable for actualizing the benefits of nature, be it for preschoolers, children, youth, or adults.

The structure of solitude experiences varies with the age and context, but the importance of it does not. Young children may take a few steps away from a circle in the forest and hug a tree for a couple of minutes, and adolescents, with careful preparation, may spend twenty-four hours alone at a vision spot. There are a range of options in between these extremes depending on the age and context. It is too easy for educators with larger groups to diminish the value of solitude because the logistics may be challenging. Given that children and adults rarely experience solitude, they are often uncomfortable with it, meaning that it has to be introduced in a gradual, thoughtful, and planned way. For children, introducing it in small groups with clear expectations, engaging stories, and solid ground rules is a recipe for success. Once children get comfortable with the process, it is something they love to do. Being comfortable with solitude is a critical life skill to enable children and adults to reduce stress, find joy, and develop care in nature.

Story Based Experiences

Stories are the means through which human beings organize their experiences and a third key program element. We build relationships and chronicle our lives through sharing stories. Children are looking for experiences that are meaningful and engaging in terms of how they see the world. Stories draw them in and provide the characteristics that David Sobel (2008) cites as key to connecting children to their places. Story-based programming is engaging and valued by youth and adults as well, but typically they first want to understand the educator’s objectives to ensure they align with their own objectives. Once they are clear as to what they will learn, they love the engagement of taking on a role and becoming part of an adventure, a quest, a puzzle, or a problem-solving mission.

One example of a story-based program is *Mysterious Encounters Earth*, a Halifax Adventure Earth Centre program for grades five and six children who are invited to join a small detective agency and become detectives-in-training, while searching for the formula of all life, which is to be discovered through the class embarking on a day of adventure in a nearby park. They ultimately discover that if they *touch* the earth (develop feelings for nature), *know* the workings of the earth (understand basic ecological concepts—energy flow in this instance)

and *care* for the earth (define specific action steps for a more sustainable lifestyle), then they will work toward healthy food, clean water, and fresh air for all. The leaders (volunteer high school and university students) are detectives working for the Ecoleese, which is led by “the Chief,” and there are lots of surprises and plot turns along the way.

The final gathering is an opportunity to help them define future experiences to work on this formula through which they can connect with and take action for nature. There are multitudes of opportunities for building stories into programs and giving children and youth roles in them, be it using books as a framework, defining adventures, treasure hunts, mysteries, etc. The storyline endeavour may also be to accomplish something real and meaningful for the environment—fundraise to protect a piece of land, establish a small business to provide a sustainably-related service. The point is to give participants roles through which their experiences play out rather than simply providing them with activities or knowledge that are only connected by the educator’s goals or priority themes.

Two good sources for exploring the theory and concepts behind this approach include *Creating Worlds, Constructing Meaning: The Scottish Storyline Method* (Cresswell, 1997) and *Drama for Learning: Dorothy Heathcote’s Mantle of the Expert Approach to Education* (Heathcote & Bolton, 1995).

Place-based, solitude, and story-based experiences are key to providing the platform for building child and youth connections with nature so as to enhance the feelings, understandings, and action skills for nature. There is one other characteristic that holds it all together: some call it “magic” (Van Matre, 1990), others call it “transcendence” (Sobel, 2008), but it is that special moment and feeling that glues things together and cements the experiences in our memories. Nature itself is awe-inspiring, and these moments happen if one gets outside in the proper place or position, such as the snapping turtles hatching from a hole in the gravel, the fox sneaking along the edge of a field, or the firefly lighting up a summer night.

These events are happening all of the time in the natural world, but typically, we miss them. It is up to the educator to provide opportunities for people to experience this magic, either alone or with others. For example, one afternoon when I was leading a small group of children at summer camp, they were sitting in their solitude spots just out of sight from each other. They were under a “veil of silence” and were expected to be absolutely quiet for the twenty minutes at their spot. During this time a deer came wandering through the area. All of the kids saw her, but no one moved or made a noise until after I picked them up from their spots and the veil of silence was lifted. The deer had inevitably noticed them but was not startled or perturbed, given the kids’ complete silence and stillness. At the follow-up sharing circle, all of the kids exclaimed simultaneously, once they could speak, how cool it was that they had seen the deer. Each one thought they had been the only one to see her. It was an unforgettable and magical moment, but it would not have occurred had I not positioned them to be able to see it by carefully structuring their solitude experience. Being present to experience the magic in nature is transcendent, but it is so much more likely if an educator has facilitated the opportunity in one way or another—be it actively structuring the experience or enabling the kids to have unstructured time exploring for themselves.

Re-Connecting to Nature on the West Coast

Sea to Sky is a great example of an outdoor school in British Columbia that embodies the approach to environmental education described in this chapter. It has been running a wide range of programs for school classes for more than 30 years on the Sunshine Coast. Their grades 3-4 program, Webweavers, is a magical experience that involves students earning the blue orb by experiencing the sights, sounds, textures, and tastes of wild places. They earn a green orb by learning about the wisdom that Nature offers: inter-connectivity, systems, and cycles. They earn a yellow orb by participating in a community building action project. Finally, after the program, they earn an orange orb by sharing what they have learned with their families and friends and a red orb by participating in a community project in their school. Their high school program, Connections, emphasizes the importance of slowing down, being present, and discovering the joy and inspiration of wild places. Solitude and carefully structured activities challenge students to engage with and find hopeful strategies to addressing environmental and social challenges.

Conclusion

Providing place-based, solitude, and storied experiences in nature that develop feelings, understandings, and action competence are antithetical to many current social and mainstream pressures, which push children and youth to online, stress-inducing, and materialistic lifestyles. It is not coincidental that the concepts presented in this chapter are in line with Indigenous ways of knowing, which have survived and been strengthened across time despite mainstream attempts to silence them. Mi'kmaq elder Albert Marshall has coined the term two-eyed seeing, which refers to:

learning to see from one eye with the strengths of Indigenous knowledges and ways of knowing, and from the other eye with the strengths of Western knowledges and ways of knowing... and learning to use both these eyes together, for the benefit of all (Hatcher et. al., 2009, p. 335).

This sort of approach enables outdoor learning that supports the development of healthy people, healthy relationships, and a healthy planet. One valuable Canadian resource that weaves many of the concepts in this chapter together for practice at far greater length, including the connections to indigenous perspectives, is the Natural Curiosity Resource Manual (Anderson et al., 2017). There are many other resources and opportunities that can be part of the journey of being a more effective outdoor and environmental educator

in terms of teaching in, about, and for nature. The rationale, content and process concepts presented in this chapter provide a map for further exploration and learning. There is no more important mission than working for a healthier planet.

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Resources

- Children and Nature Alliance of Canada: <https://childnature.ca>
- Children and Nature Network: <https://www.childrenandnature.org>
- Halifax Adventure Earth: <https://www.halifax.ca/parks-recreation/programs-activities/recreation-centres-your-community/adventure-earth-centres>
- Sea to Sky Outdoor School: <https://seatosky.bc.ca/>

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15.

A NEW HOLISTIC MODEL OF ECOHEALTH PROMOTION

Stephen D. Ritchie; Jonah D'Angelo; Ginette Michel; Jim Little; and Sebastien Nault

Outdoor Learning (OL) in Canada is a broad umbrella term that reflects many diverse contexts and practices that ranges from recreation (including camping and tourism), through education and development, to therapy or therapeutic programs (Priest, 2023). According to Berman and Davis-Berman (2000), these OL designations reflect a continuum from low sophistication in programming leading to incidental outcomes (e.g., camping/recreation) to highly sophisticated programming leading to intentional outcomes (therapy).

In most contexts, OL involves a person's mind, body, and emotions in a complex relationship with other people and nature in either a planned (intentional) or unexpected (incidental) manner. Other relationships would also include a connection with the cosmos (God, Creator, or higher power), especially when OL involves organizations with religious affiliations or Indigenous land-based programs. It is self-evident that OL reflects a positive, educational, developmental, or healing process, depending on the context. In other words, OL is helping people have fun and/or improve their lives in and with nature. Thus, it is not difficult to view OL through an ecohealth lens. This chapter aims to present a new Holistic Model of Ecohealth Promotion as a framework that can be used as a resource for OL programs, practitioners, and health promoters.

What Is Ecohealth?

A practice that adopts systems approaches to promote the health of people, animals, and ecosystems in the context of social and ecological interactions. Health is seen as encompassing social, mental, spiritual, and physical well-being and not merely the absence of disease. As a contraction of ecosystem approaches to health, ecohealth emphasizes human agency and systemic thinking to promote well-being and quality of life (Parkes et al., 2014, p. 1770).

This definition is broader and more holistic than the World Health Organization's (WHO, 1948) definition of health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (p. 1). Rather than the health of a person, ecohealth is concerned with developing and maintaining healthy reciprocal relationships between humans and the entire ecosystem within which they live, work, play, or learn.

The concept of ecohealth is similar to other concepts, such as one medicine and one health (Zinsstag et al., 2011); and global health and planetary health (Parsons, 2020). However, further comparisons of the similarities and differences are beyond the scope of this chapter, and they have been addressed elsewhere (Harrison et al., 2019). Ecohealth also has some similarities to approaches such as ecopsychology (Roszak et al., 1995), ecotherapy (Jordan & Hinds, 2016), and nature-based therapy (Harper et al., 2019). However, each of these disciplines has its unique literature base, and exploring the similarities and differences is also beyond the scope of this chapter.

What Is the Evidence for Holistic Health Benefits From OL in Nature?

Increasing evidence has been accumulating for the holistic health benefits that accrue through contact with nature and participation in various outdoor activities and programs. Systematic reviews and meta-analyses are research designs that compile and summarize the strength of evidence from all the published studies related to the same research question or topic. Systematic reviews can use either qualitative or quantitative analyses to synthesize this evidence.

Qualitative analyses typically involve pooling outcomes as common themes across studies, and a meta-analysis is a quantitative analysis that pools all the numerical outcomes across studies together and then usually calculates an effect size (ES). An ES is a statistical way to calculate the magnitude of a change or improvement, and Cohen's (1988) commonly accepted interpretation is that <0.2 is small, 0.5 is medium, and >0.8 is large. A positive ES indicates a positive change, and a negative ES indicates a negative change (1988). It should be noted that a small ES is not necessarily trivial, especially if the pooled outcomes from the included studies were statistically significant.

Many researchers consider systematic reviews and meta-analyses to be the most credible forms of evidence. Thus, drawing on the evidence from over one hundred diverse systematic reviews and meta-analyses, the following sections summarize some of this evidence related to the various holistic health benefits from varied OL contexts.

Camping/Recreation Systematic Review Evidence

In 1994, Cason and Gillis completed a meta-analysis of outdoor adventure with adolescents. Based on analysis of the 43 included studies, the mean effect size was 0.31, related to several different outcomes (self-concept, behaviour improvement, locus of control, clinical improvement, grades, school attendance). Marsh (1999) completed a meta-analysis on the organized camping experience for youth, and 22 studies were included for analysis yielding strong evidence that participation in camp enhanced self-construct, a broad term referring to self-development.

Walker and Pearman (2009) surveyed four independent systematic reviews on therapeutic camps for children and young people with chronic illnesses. They claimed that these camps enhance self-esteem, disease knowledge, emotional well-being, adaptation to illness, and symptom control (Pearman, 2009). According to Holland et al. (2018), participating in wildland recreation can lead to personal development, pro-social behaviours, mental restoration, and environmental stewardship; and Pierskalla et al. (2004) found that participation in outdoor recreation led to physical fitness, feeling healthier, skill acquisition, confidence, independence, and strengthened spirituality.

For students participating in campus outdoor recreation programs, the “benefits include[d] increased academic success, smoother transitions to college, better mental and physical health, lower levels of stress and anxiety, better and more numerous social connections, better intra- and interpersonal skills, increased environmental sensitivity, and better connectedness to nature” (Andre et al., 2017, p. 15).

Two meta-analyses related to challenge courses concluded that there was a statistically significant increase in self-awareness (Ferrell, 2017) and group effectiveness (Gillis & Speelman, 2008). Not surprisingly, the effect size (ES) was higher for therapeutic (0.67) and developmental (0.47) groups compared to educational (0.17) groups (Gillis & Speelman, 2008).

There were two systematic reviews summarizing the health benefits for children completed by the same research group from Canada. They concluded that: (1) spending increased time outdoors was related to increased physical activity, decreased sedentary behaviour, and improved cardiorespiratory fitness (Gray et al., 2015); and (2) risky outdoor play leads to increased physical activity and social health and decreased injuries and aggression (Brussoni et al., 2015). Pre-schoolers (2 – 5 years) were also found to be more physically active during outdoor play sessions (Truelove et al., 2018).

Education/Development Systematic Review Evidence

From an education and personal development perspective, a meta-analysis by Hattie et al. (1997) on adventure education compiled outcomes from 96 studies and reported an ES of 0.34 and a remarkable increase of 0.17 when follow-up assessments were completed. The outcomes in this study were diverse and included health-related categories such as self-concept, academic, personality, and interpersonal. Building on this earlier work, Laidlaw’s (2000) meta-analysis of outdoor education studies revealed that outcomes related to program goals had a higher ES (0.77) than those that were distally related (0.40). Fang et al. (2021) found a mean ES of 0.60 for enhanced self-efficacy for students in outdoor education programs.

Hans (2000) calculated an ES of 0.38 for a shift of locus of control from external to internal through participation in adventure programs. Ardoin et al. (2018) reported 121 unique outcomes (many health-related) in their systematic review of environmental education involving K-12 students. In a more recent systematic review, children ages 2-7 years participating in nature-based early childhood education programs seemed to improve their self-regulation, social skills, emotional development, nature relatedness, awareness of nature, and play interaction, although study authors warned that the evidence was low certainty (Johnstone et al., 2022).

A Cochrane Review, a special systemic review specifically focused on the health and well-being of adults related to their participation in environmental enhancement and conservation activities, yielded inconclusive quantitative results (Husk et al., 2016). However, the qualitative results indicated that study participants reported high perceived benefits (Husk et al., 2016). Two environmental meta-analyses found that (1) human connection to nature influenced pro-environmental behaviour (Bamberg & Möser, 2007; Whitburn et al., 2020), and (2) an analysis involving structural equation modelling identified behavioural intention and morality as the social determinants most likely to predict pro-environmental behaviour (Bamberg & Möser, 2007).

Therapeutic/Therapy Systematic Review Evidence

In a meta-analysis of wilderness challenge programs for delinquent youth, Wilson and Lipsey (2000) calculated a small ES improvement of 0.18 for delinquency outcomes. Bedard et al. (2003) reported a moderate ES (although no overall ES was calculated) for wilderness therapy compared to traditional treatment for enhancing self-esteem/self-concept, improving interpersonal skills, and promoting positive behaviour change. In 2011, George completed a meta-analysis of outdoor behavioural healthcare (OBH) programs for adolescents. He calculated an ES of 0.45 from the 25 included studies adhering to OBH criteria (George, 2011), and Baker (2011) included 16 studies that met his inclusion criteria related to adventure and wilderness therapy and identified six main outcome areas: behavioural conduct, self-concept, self-esteem, mental health, locus of control and interpersonal skills.

Likely the most extensive systematic review and meta-analysis of adventure outcomes and moderators, Bowen and Neill (2013) included 197 studies in their analysis, calculated an overall ES of 0.47, and then suggested an ES of 0.5 as a benchmark for adventure therapy programs. They concluded “that adventure therapy programs are moderately effective in facilitating positive short-term change in psychological, behavioural, emotional, and interpersonal domains and that these changes appear to be maintained in the longer-term” (Bowen & Neill, 2013, p. 42).

Beyond these earlier studies related to therapeutic OL contexts, there have been systematic reviews reporting positive health benefits related to wilderness therapy for private pay clients (Bettmann et al., 2016), wilderness therapy compared to non-wilderness treatment programs (Gillis et al., 2016), adventure therapy impacts related to locus of control, self-efficacy, and self-esteem (Fleischer et al., 2017), talk therapy on natural outdoor spaces (Cooley et al., 2020), and the effects of forest bathing and nature therapy on mental health (Kotera et al., 2022).

Other Related Systematic Review Evidence

Beyond the systematic review evidence related to health benefits and OL in terms of camping/recreation,

education/development, and therapeutic/therapy contexts cited above, there is a burgeoning evidence base of systematic reviews highlighting holistic health benefits from interactions with nature that do not necessarily fit directly within the OL paradigm. The following list of systematic reviews summarize diverse health benefits related to nature:

- Exposure to natural environments leads to modest improvements in emotional well-being (McMahan & Estes, 2015).
- Nature connectedness is related to positive affect (emotions), vitality, and life satisfaction (Capaldi et al., 2014).
- Nature-based outdoor activities improve depressive mood and positive affect (emotions); and reduce anxiety and negative affect (Coventry et al., 2021).
- Nature connectedness is positively correlated with eudaimonic (psychological) well-being (Pritchard et al., 2020).
- Exposure to natural environments improves working memory, cognitive flexibility, and attention control (Stevenson et al., 2018).
- Natural environments are more restorative than urban environments (Menardo et al., 2021).
- Exposure to the natural environment can lead to stress reduction (Yao et al., 2021).
- Interactions with nature for children and teenagers leads to improved mental well-being (Tillmann et al., 2018).
- Nature activities for children and young people improves their self-esteem, confidence, positive and negative affect, stress reduction and restoration, social abilities, and resilience (Roberts et al., 2020).
- Nature exposure improves children's physical and mental health (Fyfe-Johnson et al., 2021).
- Early life nature experiences benefits mental health later in life (Li et al., 2021).
- Nature access for people with mobility impairments can benefit their physical, mental, and social well-being (Zhang et al., 2017).
- Nature-based interventions in institutional and organizational health settings provide diverse benefits for participants, although authors did not make specific health related claims (Moeller et al., 2018).
- Enhancing human–nature connectedness improves human health and environmental sustainability (Barragan-Jason et al., 2022).

Collectively, these studies demonstrate that many diverse health outcomes can accrue from simply being outside in nature without necessarily acting or behaving in a particularly prescribed manner. There are also an increasing number of systematic reviews emerging in recent years describing the health benefits related to living, working, and playing near green (land) space (Callaghan et al., 2021; Houlden et al., 2018; Jabbar et al., 2021; McCormick, 2017; Rahimi-Ardabili et al., 2021; Zhang et al., 2020) (Yuan et al., 2021). Two other systematic reviews describe the health benefits of blue (water) spaces (Georgiou et al., 2021) and blue care interventions (Britton et al., 2020). Exercising outside, often referred to as green or blue exercise in the United

Kingdom, also seems to provide more health benefits compared to exercising inside (Brito et al., 2022; Hanson & Jones, 2015; Li et al., 2022; Thompson Coon et al., 2011; Yen et al., 2021).

Although the health and well-being benefits reported from these systematic reviews were positive, some of the study authors did indicate that the quality of evidence was low to medium in some of the included studies; however, taken together, the overwhelming number of studies and systematic reviews related to the holistic health benefits related to OL cannot be ignored. Since the benefits described here were from pooled results reported in systematic reviews and meta-analyses, it is beyond the scope of this chapter to provide specific details of individual studies, such as the description of the population, ages, sex, and type of program or experience. It is also beyond the scope of this chapter to explore all the accumulating evidence for the health specific benefits related to contact with nature; however, some of it is summarized further in the Nature Rx Chapter (Langelier et al., 2023). It is clear that there are many holistic health benefits associated with OL, and this is why the Holistic Model of Ecohealth Promotion was developed to further recognize, strengthen, and deepen that association.

Holistic Model of Ecohealth Promotion (HMEHP)

Ecohealth promotion is the intentional process of helping people to use their volition (will) and agency (action) to make personal decisions and think systemically about improving both their own health and that of the surrounding ecosystem or environment (Ritchie et al., 2022). To enhance personal and planetary health, people can be encouraged to embrace wellness practices in harmonious interactions with nature to aspire to a state of mutually beneficial relationships across six interwoven dimensions of well-being: physical, mental, emotional, social, spiritual, and ecological.

The critical difference between ecohealth and ecohealth promotion is intentionality, volition, and agency; ecohealth describes something, and ecohealth promotion intentionally does something. Thus, in promoting ecohealth, one is encouraging or teaching people to use their choices and behaviours to purposefully practice wellness in specific ways to achieve holistic health outcomes across the six interconnected dimensions of well-being.

Within the Holistic Model of Ecohealth Promotion (HMEHP), we define ecohealth as more than the absence of disease, illness, injury, and disability but as a state of complete physical, mental, emotional, social, spiritual, and ecological well-being that can be achieved through immersive interactions with nature. Although the terms well-being and wellness are often undefined or utilized interchangeably in the literature, in the HMEHP, the term well-being is used intentionally to refer to each of the six dimensions of ecohealth, and wellness refers to the pathway or promotion practice leading to holistic ecohealth (Ritchie et al., 2022).

In other words, ecohealth consists of six interconnected dimensions of well-being. Wellness practices are the evidence-based choices and behaviours that are the tools used on the journey or pathway towards holistic ecohealth. We use the term endohealth to refer to the three internal dimensions of physical, mental, and

emotional well-being and the term ecohealth to refer to the three external dimensions of spiritual, social, and ecological well-being (Ritchie et al., 2022).

Since every person on earth will eventually experience diminished health, leading to death, it is essential to help people to thrive no matter where they are on the health continuum, from languishing (low psychological, emotional, and social well-being) to flourishing (high psychological, emotional, and social well-being).

It is important to note that the definitions of both physical and mental well-being include the absence of something (illness/injury/disorder/disability) and the optimization of something, or in the case of mental well-being, a state of flourishing or high psychological, emotional, and social well-being (Keyes, 2010). Thus, ecohealth promotion can intentionally help a person with or without a physical disability or chronic illness to flourish using available resources. For instance, a person with a disability that prevents them from walking or using their legs can still participate in OL (perhaps with equipment modifications or trained personnel to help) and implement many wellness practices, such as simply being physically active outdoors, to optimize their physical well-being. Similarly, ecohealth promotion can intentionally help a person with or without a mental illness to flourish (high psychological, emotional, and social well-being) using natural resources and wellness practices. Keyes (2010) tested this empirically and found that helping a person to flourish was both a prevention and promotion practice related to mental health. From a prevention perspective, a person already flourishing (high psychological, emotional, and social well-being) who then declined to a moderate level of flourishing was 3.7 times more likely to develop a diagnosable mental illness ten years later (Keyes, 2010). From a promotion perspective, a person who was languishing (low psychological, emotional, and social well-being) and who improved to a moderate level of flourishing reduced the risk by 50% of developing a diagnosable mental illness ten years later (Keyes, 2010).

By helping people to implement wellness practices in nature, ecohealth promotion can also provide a prevention or protection function from declining states of well-being. The concept of helping people to flourish also helps us understand how ecohealth promotion can be used by any OL practitioner regardless of their level of training. For instance, an OL practitioner can help a person to be physically well or flourish without being a physician. They can also help a person to be mentally well without being a psychologist or clinician by helping them flourish (rather than diagnosing and treating a mental illness). This is a crucial point differentiating the HMEHP and other approaches, such as those who contend that you must be a trained and licensed therapist to practice adventure therapy. Within the HMEHP framework, almost anyone can help people achieve holistic health benefits regardless of their level of training or type of credential (or lack thereof). In other words, OL practitioners should consider incorporating the HMEHP into their educational curriculum since anyone in society can help people achieve ecohealth outcomes regardless of their professional credentials.

Figure 1: Graphic Portrayal of the Holistic Model of Ecohealth Promotion

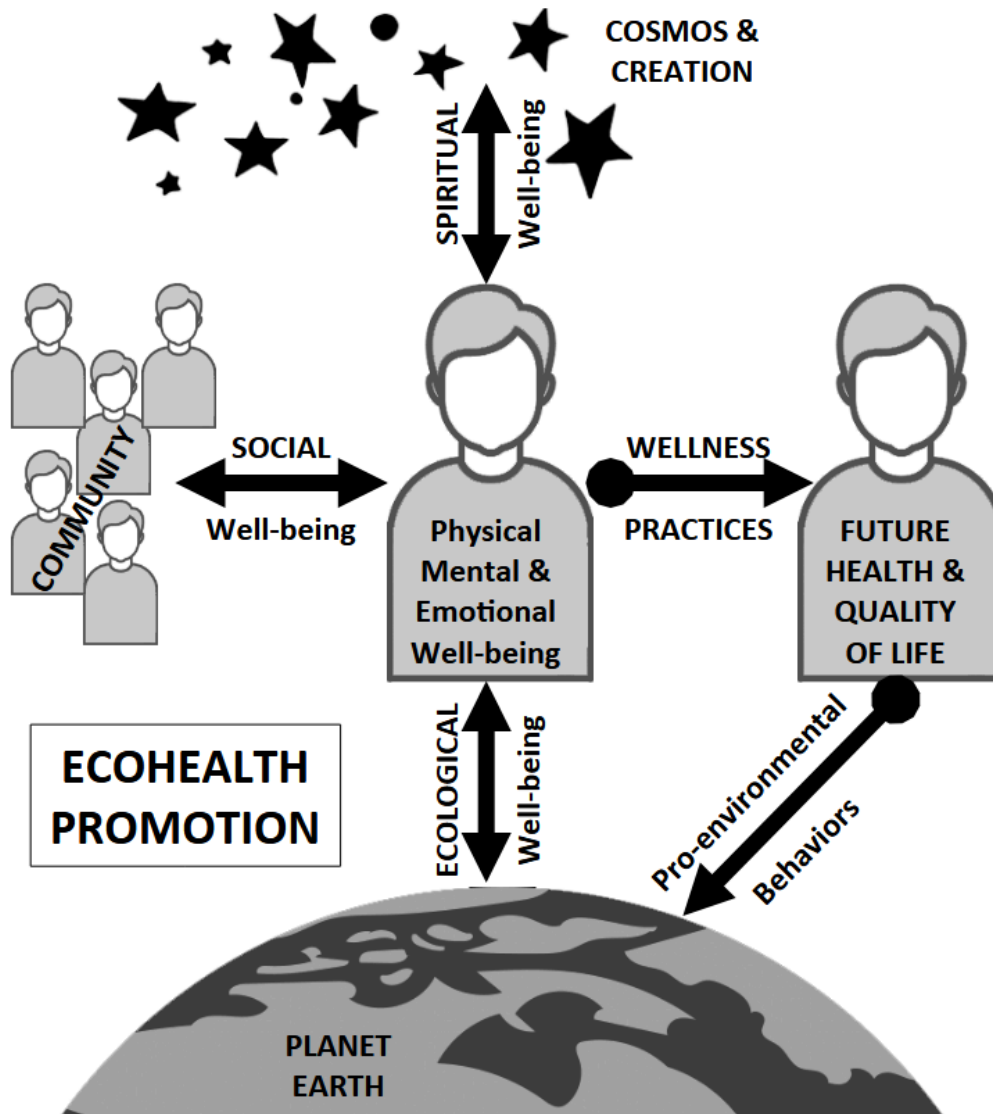


Figure 1 is a simple graphic portrayal of the HMEHP. It shows the relationships among the various dimensions. Table 1 contains pertinent definitions used in the remainder of this chapter.

Principles of Ecohealth Promotion

Ecohealth promotion has five foundational principles that interact and overlap in many healthy and synergistic ways:

1. **Natural Environment:** It occurs when a person can continuously interact, connect, and develop holistic relationships within the ecosystem where they live, travel, or apply wellness practices. In other words, ecohealth promotion differs from other approaches to health promotion primarily because it

focuses on applying wellness practices in nature and with nature (and in other outdoor contexts).

2. **Intentional:** Evidence-based wellness practices are recommended or prescribed explicitly or designed implicitly (within a broader program design), so a person is encouraged to use their volition and agency to spend time in nature and to behave or act in ecohealthy ways.
3. **Homeostatic and Relational:** The development process between a person and their interwoven well-being dimensions is a pursuit of complete internal homeostasis (endohealth) and positive external relationships (ectohealth) achieved through applying wellness practices.
4. **Harmonious and Balanced:** This simply reflects systems theory and an inclusive view of striving to live a healthy life within a healthy ecosystem.
5. **Interrelated and Integrated:** This reflects how all the dimensions of well-being are connected; many elements overlap and interconnect in reciprocal and mutually beneficial ways.

Table 1: Ecohealth Promotion Definitions

<p>ENDOHEALTH is focused on homeostasis (an effort to maintain equilibrium); it consists of the three internal well-being dimensions (physical, mental, and emotional) reflected as interconnected and harmonious interrelationships within a person's body and brain.</p>	<p>ECTOHEALTH is characterized by relationships; it consists of the three external dimensions of well-being (social, spiritual, and ecological) reflected as interconnected and harmonious relationships with other people, the cosmos, and the planet.</p>
<p>Physical well-being (PWB) is more than the absence of illness, injury, pain, or disability. It consists of a state of optimal functioning of the human body, and it includes various aspects such as cardiovascular fitness, muscular strength, endurance, flexibility, balance, and body composition (Capio et al., 2014; Sharma-Brymer & Brymer, 2020)</p>	<p>Social well-being (SoWB) is a state of optimal functioning in relationships, and it is characterized by having a sense of coherence and integration with other people, feeling acceptance and actualization in the presence of others, and contributing positively within a family and community (Cicognani, 2014; Keyes, 1998).</p>
<p>Mental well-being (MWB), also known as cognitive, eudaimonic (Sharma-Brymer & Brymer, 2020), or psychological well-being (Ryff, 1989; Ryff & Keyes, 1995), is more than the absence of illness or disorder and consists of a state of optimal functioning characterized by self-acceptance, autonomy, personal growth, a sense of purpose in life, and environmental mastery (Ryff, 1989; Ryff & Keyes, 1995). It also includes an intellectual element of engaging the brain in continual lifelong learning, including the application and sharing of knowledge (Mazurek Melynyk & Neale, 2018; Montoya & Summers, 2021; Stoewen, 2017; Swarbick, 2015), and it is the realization of one's abilities, capacity to cope with life stressors, work productively, and make positive contributions to the community (World Health Organization, 2022).</p>	<p>Spiritual well-being (SpWB), also sometimes described as religiosity (Peterson & Vann, 2014) and inclusive of cultural well-being (Manning & Fleming, 2019), is a state of optimal functioning that is characterized by having moral and ethical guidelines, accepting and embracing cultural and ancestral heritage, having a clear reason or purpose for life, feeling self-actualized and accepting of personal identity, believing in a higher power (God/Creator/ cosmos/universal consciousness/nature), and aligning personal behaviours with beliefs (Canadian Institute for Health Information, 2009; Peterson & Vann, 2014; Shek, 2014).</p>
<p>Emotional well-being (EWB), also known as affective (emotions, moods, and feelings), subjective (Diener, 2009), and hedonic well-being (Joshano, 2016), is a state of functioning characterized by maximized positive affect, minimized negative affect, and overall happiness, contentment, and satisfaction with life (Diener, 2009; Diener et al., 1999).</p>	<p>Ecological well-being (EcWB), also described as environmental health (Bailey-McHale et al., 2020) or Indigenous well-being and the good life (Ritchie et al., 2015; Yadeun-Antuñano, 2020), is a reciprocal relationship between a person and their ecological system that is characterized by harmoniously and sustainably living, managing, harvesting, preserving, and distributing environmental resources for current needs while ensuring their availability for future generations and mitigating ecosystem degradation, pollution, and disease development (Grouzet & Lee, 2014).</p>
<p>ENDOHEALTH PROMOTION is the process of using immersive interactions within nature to help people to improve their endohealth by focusing on homeostasis to maximize their physical, mental, and emotional well-being and, when necessary, managing, minimizing, or even curing their physical or mental illnesses.</p>	<p>ECTOHEALTH PROMOTION is the process of using immersive interactions within nature to help people to improve their ectohealth by focusing on relationships to maximize their social, spiritual, and ecological well-being.</p>

Because every person on earth will eventually experience diminished health, leading to death, it is essential to help people to thrive no matter where they are on the health continuum from languishing (low psychological, emotional, and social well-being) to flourishing (high psychological, emotional, and social well-being).

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From a prevention perspective, a person already flourishing (high psychological, emotional, and social well-being) who then declined to a moderate level of flourishing was 3.7 times more likely to develop a diagnosable mental illness ten years later (Keyes, 2010). From a promotion perspective, a person who was languishing (low psychological, emotional, and social well-being) and who improved to a moderate level of flourishing reduced the risk by 50% of developing a diagnosable mental illness ten years later (Keyes, 2010).

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Wellness Practices

Wellness practices are evidence-based and characterized by intentional choices and behaviours people make taking steps to improve their holistic ecohealth. More specifically, within the HMEHP, wellness practices are defined as the pathway or journey, outdoors in nature, towards holistic ecohealth in all six dimensions of well-

being (physical, mental, emotional, social, spiritual, and ecological). Thus, a wellness practice may promote one or several interrelated and integrated (Principle 5) dimensions of well-being. This section provides a few examples of wellness practices and how they contribute to helping a person improve one or more dimensions of well-being through interactions in nature or through a more intentional OL program element. In other words, a wellness practice can be simple and passive or more intentional, challenging, and complex; the key is that it is evidence-based. Creating a definitive list of all the evidence-based wellness practices related to promoting ecohealth is beyond the scope of this chapter; however, the vast majority of those profiled here were simply extracted from the systematic reviews cited earlier. Perhaps the first and most important wellness practice that is supported by the evidence, summarized from more than a dozen systematic reviews, is to **interact outside within nature**.

- **Interact and connect with gardens** (Gonzalez & Kirkevold, 2014; Nicholas et al., 2019; Ohly et al., 2016; Whear et al., 2014; Yeo et al., 2020)
- **Walk through forests** (Kotera et al., 2022; Mathias et al., 2020; Oh et al., 2017; Wen et al., 2019; Wolf et al., 2020)
- **Participate in activities on water** (Britton et al., 2020)
- **Use all senses in connection with other people** (Barragan-Jason et al., 2022; Bowler et al., 2010; Browning et al., 2020; Capaldi et al., 2014; Coventry et al., 2021) (Gagliardi & Piccinini, 2019; Li et al., 2021; McMahan & Estes, 2015; Menardo et al., 2021; Orr et al., 2016; Oswald et al., 2020; Pritchard et al., 2020; Rahimi-Ardabili et al., 2021; Stevenson et al., 2018; Taheri et al., 2021; Trøstrup et al., 2019; van den Bosch & Ode Sang, 2017; Yao et al., 2021; Zhang et al., 2017)
- **Reduce barriers** (van den Berg et al., 2020) **and inequities** (Schüle et al., 2019) related to access
- **Be physically active in nature each day or week, ideally for a minimum of two hours per week; peak health benefits accrue when spending at least three to five hours per week** (Barton & Pretty, 2010; Coventry et al., 2021; Ho et al., 2019; Nisbet & Zelenski, 2011; Park et al., 2010; White et al., 2019)
- **Engage in outdoor activities** (Holland et al., 2018; Pierskalla et al., 2004; van den Bosch & Ode Sang, 2017; Yen et al., 2021), **sports** (Eigenschenk et al., 2019), **and/or physical exercise outside on land or in water** (Bowler et al., 2010; Brito et al., 2022; Coventry et al., 2021; Gagliardi & Piccinini, 2019) **and with other people whenever possible** (Hanson & Jones, 2015; Jansson et al., 2019; Lahart et al., 2019; Li et al., 2022; Thompson Coon et al., 2011)
- **Encourage growing children to engage in self-directed, unsupervised, and risky outdoor play in nature** (Brussoni et al., 2015; Fyfe-Johnson et al., 2021; Gray et al., 2015; Li et al., 2021; Marsh, 1999; Oswald et al., 2020; Roberts et al., 2020; Tillmann et al., 2018; Tremblay et al., 2015; Truelove et al., 2018)
- **Acquire knowledge about the environment and ecosystem health** (Ardoin et al., 2018)
- **Develop pro-environmental attitudes, behaviours, and habits** (Holland et al., 2018; Mackay &

Schmitt, 2019; Osbaldiston, 2004; Whitburn et al., 2020)

- **Pray, meditate, and/or be mindful when engaged in nature and outdoor experiences** (Barragan-Jason et al., 2022; Pritchard et al., 2020; Schutte & Malouff, 2018)
- **Incorporate challenge course activities into your program where feasible or participate in challenge course activities where possible** (Ferrell, 2017; Gillis & Speelman, 2008; Gillis et al., 2016)
- **Increase the intentionality of achieving targeted goals (e.g. therapeutic outcomes) in your outdoor program** (Bowen & Neill, 2013; Cooley et al., 2020; Gillis et al., 2016; Hattie et al., 1997; Marsh, 1999; Wilson & Lipsey, 2000)
- **Lengthen the time you participate in or develop and deliver a nature-based immersive outdoor program** (Coventry et al., 2021; Hattie et al., 1997)
- **Live, work and play either within or as close to green and blue spaces as you can** (Fyfe-Johnson et al., 2021; Gascon et al., 2017; Gianfredi et al., 2021; Green Analytics, 2020; Holland et al., 2018; Houlden et al., 2018; Jabbar et al., 2021; Kabisch et al., 2017; Kua & Lee, 2021; Lambert et al., 2019; McCormick, 2017; Peng et al., 2021; Rahimi-Ardabili et al., 2021; Rautio et al., 2018; Rojas-Rueda et al., 2021; Schüle et al., 2019; Taheri et al., 2021; Twohig-Bennett & Jones, 2018; Vanaken & Danckaerts, 2018; Wendelboe-Nelson et al., 2019; Yuan et al., 2021; Zhang et al., 2020)
- **Teach and learn outdoors** (Ayotte-Beaudet et al., 2017; Becker et al., 2017; Fang et al., 2021; Hattie et al., 1997; Laidlaw, 2000)

Readers may find that some (or all) of the wellness practice summarized here are very general or self-evident, and that is precisely one of the reasons we listed them here in this chapter. It highlights the remarkable synergy between ecohealth promotion and OL. In other words, many OL practitioners have been practicing ecohealth promotion for years, and one of the main reasons for introducing the HMEHP is to help provide rigor and credibility to OL, which can hopefully provide help with program development, funding requests, policy development, or simply obtaining permission to take students outside the classroom.

The other reason these wellness practice may appear general is related to the fact that the evidence is primarily from systematic reviews and meta-analyses where details from specific studies are lacking. More detailed and specific wellness practices can be synthesized from individual studies or studies related to a specific practice. For instance, although there is no systematic review (that we could find) related to the potential wellness practice of earthing or grounding, there is a relatively small body of evidence developing that the practice of earthing (connecting directly with the earth, such as walking barefoot or lying on the ground) can lead to improvements in several dimensions of well-being. A recent triple-blind (participant, tester, and data analyst) randomized control trial provided conclusive evidence that grounded sleeping reduced muscle damage and inflammation and improved recovery time for the experimental group compared to the control group after 20 minutes of intensive downhill running on a treadmill (Müller et al., 2019). Another double-blinded RCT reported improved mood in the experimental group after only one hour of being grounded while relaxing

compared to the experimental group who were not grounded while relaxing (Chevalier, 2015). Neither of these studies were conducted outdoors.

However, although only singular studies, this type of research in outdoor contexts may lead to wellness practices in the future related to (1) sleeping or lying down outside on the ground after intense physical activity (e.g. climbing a mountain) to improve recovery, and (2) intentionally relaxing while being directly connected to the ground (e.g. sitting on a beach with bare feet buried in the sand or in a field with feet in the grass) to improve mood. There is still much work for future researchers to synthesize current research into evidence-based wellness practices and conduct future research studies to develop more wellness practices.

Contraindications

Although the evidence for the holistic health benefits related to OL is extensive, several contraindications need to be acknowledged. In other words, ecohealth promotion is not necessarily appropriate for all people, at all times, in all outdoor and natural contexts. Priest (2020) summarized the contraindications for participants related to outdoor therapy, and many of these likely apply to ecohealth promotion as well. Many of these are summarized in Table 2 (Priest, 2020) and the challenge and nature contraindications listed relate to different types of phobias or fears that may counteract or prevent someone from participating or benefiting from a particular wellness practice or ecohealth promotion activity.

The list of contraindications in Table 2 are primarily related to endohealth dimensions and social well-being (anthropophobia). Contraindications related to ectohealth could include misaligned spiritual values or beliefs related to OL programming (participant's values or beliefs not aligned with the OL program); extreme environments that are excessively hot (Bruce-Low, Cotterrell & Jones, 2006) or cold (Farrace et al., 1999; Farrace et al., 2003); excessively risky activities or risky activities with no effective risk management plan (Jackson & Heshka, 2011); certain seasons and weather conditions in particular geographies (Tucker & Gilliland, 2007); and other objective hazards such as, but not limited to, lightning, avalanches, floods, and steep terrain. Fortunately, many OL practitioners are aware and trained in risk management processes and practices, so addressing many of these contraindicators is not an insurmountable task. It should also be noted that these contraindications do not reflect the diverse array of nature contexts and participant preferences or aversions that could impact the benefits that accrue from a particular wellness practice or program. For instance, Gatersleben and Andrews (2013) found that outdoor environments with low levels of prospect (obscured field of vision) and high levels of refuge (places to hide) were not restorative and more likely to lead to increased stress and directed attention fatigue, and Bixler and Floyd (1997) found that 8th grade boys with high fear expectancy and disgust sensitivity preferred urban rather than wild environments.

Table 2: Potential Contraindications for Participants Engaged in Ecohealth Promotion (Priest, 2020)

CHALLENGE CONTRAINDICATIONS	NATURE CONTRAINDICATIONS
<ul style="list-style-type: none"> • Periculophobia (dangers) • Anthropophobia (groups) • Autophobia (being alone) • Achluophobia (dark) • Acrophobia (heights) • Hydrophobia (water) • Chionophobia (snow) • Claustrophobia (feeling trapped in confined spaces) 	<ul style="list-style-type: none"> • Biophobia (outdoors) • Anthrophobia (flowers) • Dendrophobia (trees) • Entomophobia (insects) • Zoophobia (animals) • Heliophobia (sun) • Astraphobia (lightning and thunderstorms) • Agoraphobia (feeling trapped in open spaces)
<p>GENERALLY CONTRAINDICATED FOR:</p> <ul style="list-style-type: none"> • Perpetrators with uncontrolled or severe disorders (especially arson/pyromania and unremorseful violence) • The unfit or obese (including poor cardiovascular health that might limit exercise) • Patients with major injuries (that may prevent movement or locomotion) • Patients undergoing medical treatment (that might require confinement to a clinic or hospital) • Patients taking certain prescription medications (that might interact environmentally) • Clients who are daily non-functional due to either an over-reliance on others (such as their parents) or being sincerely suicidal (more than mere ideation of suicide) 	

Conclusion

There is now overwhelming evidence for the holistic ecohealth benefits related to OL and contact with nature. This chapter presents a new HMEHP that we hope will be helpful for OL practitioners and health promoters to use and apply in their leadership roles related to taking people outside and/or promoting health. The HMEHP can be used as a theoretical framework to inform OL or health promotion programs and program development where wellness practices are: (1) directly incorporated into the program as a primary modality; or (2) indirectly incorporated into a program as an adjunctive modality to support other targeted program goals. In other words, ecohealth promotion can occur through intentional programming or incidentally by focusing on other targeted goals and simply being active outdoors while incorporating wellness practices when convenient and synergistic with other program priorities.

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PART VII
SAFETY

16.

INSURANCE FOR OUTDOOR LEARNING IN CANADA

Keith Bossaer

Seeing how so many talented Canadians can utilize their skill sets, training, expertise, and experience to help serve others enjoying the great outdoors is always exciting. However, the realities of an increasingly litigious society means that insurance should be an essential consideration for most outdoor learning endeavours. Insurance considerations are rarely given adequate in-depth consideration well in advance. Far too frequently, insurance coverage is a complete afterthought. This chapter explains the various terms and choices to be made in securing insurance.

One initially important legal consideration is whether the business will be a sole proprietorship, a partnership, a for-profit corporation, or a non-profit corporation. Although that decision may seem more for your lawyer and accountant to hash out, please remember, a sole proprietor or partnership means liability and other obligations flow to you directly as a person or group of people. Alternatively, a corporation, as a separate legal entity, will keep almost all obligations at the corporate level and away from you personally. This can be a crucial point, since it is unlikely that a plaintiff can access your personal assets if you are incorporated. An insurance provider will need to know if you will be incorporated or not.

Commercial General Liability

Commercial General Liability (CGL) is the first and most important coverage you will require. Therefore, consider CGL to be essential for your core liability protection. The author often refers to it in conversations as the “Blood & Gore Policy,” because it applies to bodily injury incidents and property damage claims. As the number of frivolous lawsuits mount, they will need legal defence against claims. For the genuine litigation that succeeds, and where negligence may be established, insurance can cover the financial losses that will ensue. The CGL generally has numerous valuable extensions beyond bodily injury and property damage. These include:

- Personal & Advertising Injury Liability (i.e., a non-bodily injury like libel, slander, or defamation)
- Products and Completed Operations (i.e., cover for products sold or your completed work projects)
- Tenant’s Legal Liability (i.e., damages to rented premises, even a short term hotel rental)
- Non-Owned Auto Liability (i.e., a vehicle temporarily in your control or used for your business)

- Employer's Liability/Contingent Employer's Liability (In Canada, provincial workers' compensation plans may well apply, but some employee injuries may fall out of scope).
- Fire Fighting Expenses
- Employment Practices
- Many additional extensions

Take, for instance, the imaginary "Mary's Guided Hikes." This was a sole proprietorship where business had taken off at an amazing pace. Mary was fully booked on practically every hiking opportunity, and she was very pleased that her life experience, passion, and training were really paying off.

On one guided hike, an unexpected rainfall had made the trails slightly slippery. At a particularly steep spot, Mary slipped and lost her balance. As she dropped her cell phone, and attempted to recover it in midair, she fell backward and collided with one of her many clients: Samantha. As a result of the collision, Samantha then fell backward on the only challenging part of the trail and rolled down the slope to hit her head on a rock. While her initial injury "did not seem that bad," and she was talking and confirming that she "felt just fine" and just needed to rest, Samantha was soon nauseated and vomiting, with the risk of a traumatic brain injury assessed as both scary and potentially severe.

Despite prior risk management planning and appropriate accident response procedures (all discussed in other chapters in this text), accidents can and will happen. Luckily, Mary had CGL coverage and, afterwards, she carefully reviewed her insurance policy. Mary did not incorporate her business, so she had to rely on her CGL coverage to fund a legal defence against claims arising from Samantha's injury and to pay for any court judgments or negotiated settlements that might follow. In this instance, Mary was covered for findings up to the \$1 million limit, plus defence costs. However, beyond that amount, if the findings exceeded her limit, then she would be expected to pay the difference from her personal assets, since she was not incorporated.

Outdoor adventure and sport insurance can be a difficult insurance coverage to obtain in Canada. Mary did indeed seek insurance coverage as she was preparing to begin business operations. She reached out to both insurance brokerages which she routinely dealt with for home, auto, and health insurance products. Two weeks into her business start-up, the brokers still had not received any offers from insurance providers, as all of their insurance carriers had declined coverage by citing trail exposure concerns that were outside their desired risk. This was shocking to Mary: "Can't anyone get insurance on whatever they wish, when they want it?"

Business insurance is not always straight forward. Commercial insurance availability tends to go through cyclical soft and hard markets, but specialty commercial insurance needs can be even more challenging. Although, as in Mary's case, guided hiking is only a "modest" risk activity, a vast collection of other outdoor businesses are deemed much higher risks. Insurers struggled greatly through the hard insurance markets, which have made some classes of insurance overly difficult or unreasonably expensive to get.

Coverage for a long list of activities has proven difficult to secure. Guided operators and rentals operators have struggled to find coverage for motorized off-road vehicles, boat or personal watercraft rentals, and non-motorized hiking, biking, zip lining, parasailing, gliding, rafting, rock climbing, and mountaineering. Contact

sports, organized sports, race and speed events of all types have extended their efforts to find coverage in recent years. Various sports and product sales have also faced difficult challenges due to the frequency of injuries and, for electric bikes, fire exposure from charging batteries. Sadly, obtaining insurance coverage is just not always available at the rates and terms that clients envision without restrictive limitations.

In Canada, the good news is that some insurers, managing general agents, Lloyds Coverholders, and specialty brokers have stepped up to try and meet the consumer needs through this hard market. Business owners seeking to find coverage options are wise to ask similar operations about their insurance providers and coverages. In most cases, the coverages in Canada exist from a specialty provider, but may be hard to access without a knowledgeable broker. The good news is that one's current broker, if familiar with the markets, should be able to access these specialty providers.

Participant Exclusion

Returning to Mary's situation, she found a helpful insurance broker who was more commercially aware than her regular insurance provider. Discovered from a quick internet search, the new broker was skilled in accessing the specialty markets. The broker found a couple of solutions within one week through managing general agents. However, now Mary had to learn new insurance jargon. Both new quotes insisted that waivers must be utilized and signed by the participants. The quotes were as follows:

1. Optional CGL limits of \$1 million, \$2 million, or \$5 million.
2. Same limits as the above quote, but premiums priced 40% lower due to an extra provision of participant exclusion.

All policy exclusions are of vital importance and must be well understood by the insurance purchaser. Participant exclusion refers to not covering the people engaged in the adventure activity. Obviously, avoiding such exclusions is in the best interests of the purchaser when possible. However, the insurers may see such activities as overly dangerous and may feel that injuries will occasionally happen for this class of business. Therefore, they simply refuse to defend or pay claims of this nature when arising from the participant's injury.

How Much is Enough?

One of the more frequent questions asked is, "How much liability should I carry?" The simple answer is as much as you can reasonably afford given the possible outcomes of the activities undertaken. Higher limits are certainly better, but only if feasible, reasonable, and affordable for a business operation and budget. Sadly, extremely horrific incidents do occasionally occur, and practically no limit of coverage is likely to be adequate.

Along with the great pleasures of enjoying the great outdoors comes a degree of risk. Unfortunately, in rare

instances, negative outcomes can result, and whilst the frequency and severity of negative outcomes may not have changed throughout history, society has become increasingly litigious, with unprecedented consequences for those who may be seen to hold a degree of liability. A person may be held liable even though their contributory negligence was only slight. In some situations, through strict liability, if the injured party cannot recover from the other defendants, then the operator might just be on the hook fully! Be cautious, and consider these additional coverages for insurance.

Medical Expenses

A small amount of medical expenses are often built into most CGL's. The limits of coverage are generally low at a \$25,000 or \$50,000 maximum and may have a small \$2,500 or \$5,000 maximum limit per person. Check to be certain that this coverage extends to the actual participants and not just third parties. The best part of medical coverage is that it normally applies regardless of fault and/or waivers signed.

Accidental Death & Dismemberment

An Accidental Death and Dismemberment policy (AD&D) is very similar to the medical expenses discussed earlier. Generally, it is an optional extra coverage outside the CGL, but may have limits of coverage. Coverage would apply despite any waivers signed, but limits of cover tend to be modestly low: often \$25,000 or \$50,000. Covered losses are only as specifically shown in the schedule provided by the insurance broker.

Non Profit Entities in Canada

Non-profits, such as outdoor clubs and other community or special interest groups, need the same CGL insurance coverage as for-profit entities in Canada. The provinces, cities, municipalities, and landowners are increasing offloading their liability exposures onto the nonprofits and other parties involved in delivering outdoor recreation and other leisure services. They need and want the help of non-profits to broaden and deepen the opportunities for the citizenry, but local governments are also thrilled to offload their liability exposure. So, non-profits will need to seek suitable insurance coverage as well as for-profits.

Directors' and Officers' Liability

In addition to the CGL, non-profits and for-profits ought to acquire a Directors' and Officers' (D&O) policy to protect their board and executive members. This is not the same as the CGL coverages that protects against bodily injury claims. When individuals agree to serve on a board, they accept some legal obligations that can

flow to them personally. They must comply with the different levels of regulations and laws from municipal through provincial to national. They must have their organization's best interests at heart and ensure that funds are spent in an acceptable fashion. The risks of employment practices need to be managed, such as discrimination, wrongful termination, and sexual harassment. They need to avoid conflict of interest and avoid improper self-dealings. Although being elected or selected for these roles can be flattering, the lack of a good D&O policy can turn serving into a risky proposition, since personal assets become exposed. Many D&O suits do eventually get dismissed, but the defence may take years and can be very expensive. D&O policies are written on a "claim made basis," which is often different from CGL policies. Oversimplified, this means the policy will only cover "claims made" during the policy term of coverage. Therefore, keep D&O policies active, avoid lapses, and continue to renew them even after the organization ceases. Ask an insurance broker to fully explain this coverage and its limitations.

Professional Errors & Omissions

For many professions, including those in outdoor learning, Errors & Omissions (E&O) coverage is worth considering. However, these can be expensive, since professionals carry more exposure than can be covered by a CGL alone, such as malpractice and acts of omission or commission. The more highly specialized one's training is, and the more professional affiliations and certifications held, the higher the standard that person may be held to in terms of liability and the more likely an E&O policy may be required.

Other Coverages

While greatly over simplified in this chapter, insurance coverage varies widely. Depending on the type of business being operated, adding extra coverage may be prudent. Coverage can be extended for commercial building property, equipment needs, and cyber or data breaches. If outdoor businesses cannot obtain high enough liability limits, then excess liability or umbrella liability policies may be warranted. Lastly, in Canada, very different from the USA, employee injury coverage is available through provincial workers' compensation. However, a business may also want to carry contingent employees' coverage. Ask your broker for an explanation.

About the author

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Keith Bossaer is founder of Oasis Outdoor Adventure & Sport Insurance Solutions Inc., a national MGA & Lloyds Coverholder. He has spent more than 35 years in the insurance industry, with a focus on specialty

insurance for the past two decades. Helping tens of thousands of Canadians enjoy their chosen sports and business ventures, while also enjoying their passions, has led him to an immensely rewarding career watching these industries grow and thrive.

17.

LEGAL LIABILITY IN CANADA

Jon Heshka

Author's note: some of the language quoted is biased toward the masculine. This comes from the historical times, when women were rarely part of the law. No offense or gender singularity is intended.

The law is as omnipresent as winter fog in Vancouver.

We live in a world governed by the rule of law. It gives us stability, certainty, and comfort. The law provides guardrails on how guides and adventure businesses should govern themselves. Society and courts demand a higher degree of professionalism and accountability from adventure operators, including better training, standards, risk management, and insurance. Providers want safeguards to help protect them from liability, such as contractual waivers and the doctrine of contributory negligence (Frolick et al., 2017).

Most of the time, we're unaware of the law's presence, or instead, view it as something that operates silently in the background. However, its might and utility become appreciated in times of conflict or injury. This chapter explores where and how risk intersects with the law, how clients can avail themselves of the protection of the law, and what businesses can do to defend themselves in the event of a lawsuit.

A distinguishing feature of adventure is that it is inherently dangerous. Its risks are inseparable from the very nature or essence of the activity; remove the risk and the activity is no longer the same. Drowning and falling are inherent risks of whitewater rafting and climbing, respectively. The only real way to prevent any possibility of that ever happening would be to raft on dry land or revoke the law of gravity. The challenge, then, for guides and adventure businesses, is to manage risks in such a manner that the activities can still reward its participants while not unnecessarily exposing the participants to dangers and themselves to legal jeopardy.

The main areas of interest and concern in law for adventure guides and businesses are negligence and releases (alternatively known as waivers). Both are critically important, yet are often misunderstood. For example, despite signing a document that has a heading at the top, typically contained in a red-bordered rectangular box with a background highlighted in yellow and text written in all caps, which seemingly screams something like, "RELEASE OF LIABILITY, WAIVER OF CLAIMS, ASSUMPTION OF RISKS, INDEMNITY

AGREEMENT, AND JURISDICTION AGREEMENT. BY SIGNING THIS DOCUMENT, YOU WILL WAIVE CERTAIN LEGAL RIGHTS, INCLUDING THE RIGHT TO SUE,” many people believe they’re still entitled to legal remedies (Griffith-Greene, 2014).

Further, in the largest-ever adventure lawsuit in Canada, which arose after nine people were killed by an avalanche while heli-skiing in British Columbia in 1991, the court noted, “It is not unusual for a lay person to [erroneously] think that negligence means making mistakes” (*Ochoa v. Canadian Mountain Holidays Inc.*, 1996, p. 135). Madam Justice Koenigsberg of the Supreme Court of British Columbia in *obiter dictum* observed that only one of eight persons who signed the release, all of whom had considerable education and experience, knew what negligence actually meant, and that even the founder and then-president of Canadian Mountain Holidays Inc. did not know what negligence in the waiver was specifically intended to cover. Viewed in this light, it’s blindingly obvious that greater awareness and education as to the meaning of negligence and application of releases is required for clients, operators, and guides.

Negligence

Negligence refers to conduct that involves a failure to act with the reasonable care that would ordinarily be expected in the circumstances, and thereby results in injury to another person. To be negligent means not to act reasonably, or prudently, in the circumstances. The courts, not industry, ultimately determine what is reasonable. For the purpose of this chapter, “guide” will be used to characterize anyone who leads or instructs participants, whether paying adult clients on a commercial trip or school children on custodial programs, such as field trips or camps.

The injured complainant must show that there was a duty owed by the guide that required conformity to a standard of care, that the conduct breached the required standard of care arising from a foreseeable and unreasonable risk of harm, and that the conduct was a proximate cause of the harm suffered. These points will be discussed in detail below.

The first question to consider in an action for negligence is whether the defendant (the person being sued) owed a duty of care to the plaintiff (the party who initiates the lawsuit). This focuses on the relationship between the two parties. It asks whether this relationship is so close that one may reasonably be said to owe the other a duty to take care not to injure the other (*Donoghue v. Stevenson*, 1932, p. 562). The leading case of *Donoghue* invoked the “neighbour” principle, stating that a duty of care is owed to those who are our neighbours. The court characterized a neighbour as someone who is “so closely and directly affected by my act that I ought reasonably to have them in contemplation as being so affected when I am directing my mind to the acts or omissions that are called into question” (*Donoghue v. Stevenson*, 1932, p. 562). Whether such a relationship exists depends mostly on foreseeability (*Anns v. Merton London Borough Council*, 1978, p. 728).

Duty refers to the nature of the relationship between the parties. It’s like a responsibility or obligation to take care of another. The duty of care owed is to take reasonable care to avoid acts or omissions – doing something

that shouldn't have been done, or not doing something that should have been done – which are reasonably foreseeable to injure those who ought to be in contemplation of being affected. Just as a duty of care exists between teachers and students, or doctors and patients, a duty also exists between guides and clients.

That duty, however, is not to guarantee that clients will be free from harm. As the British Columbia Court of Appeal in *Scurfield v. Cariboo Helicopter Skiing Ltd. et al.*, (1993) stated – a case in which two clients died in an avalanche while heli-skiing – “It is not contended that the defendants [the guide and heli-skiing business] had a duty to ensure that their guests were kept away from all places where avalanches could occur – in the context of helicopter skiing, that would be impossible” (p. 3). The court went on to say that the duty was “not to expose their guests [to risks] regarded in the business as unreasonably high” (*Scurfield v. Cariboo Helicopter Skiing Ltd. et al.*, 1993, p. 3).

The second question in a negligence action is whether the defendant's behaviour breached the standard of care. The defendant's conduct must be sufficiently unreasonable that it amounts to a breach of the duty and required standard of care. This is often the crux of negligence cases in adventure programs.

The question of what is reasonable vexes the courts and the outdoor community. Being reasonable doesn't mean you have to be extraordinary. Standards change and evolve, and what used to be extraordinary may become ordinary and reasonable over time. The courts do not expect a guide to be judged against the world's most qualified practitioner, who may have a PhD with 25 years experience and is internationally industry certified in the discipline. The courts do not expect people to be paragons of perfection, or to never make mistakes or errors of judgment. They are instead to be judged against what is reasonable in the circumstances. The circumstances will likely demand qualifications commensurate or comparable with a reasonable professional in the activity.

For professionals, the standard is that of a reasonably competent person with the training and expertise demanded of that profession. The standard of care expected of a lawyer is that of a “reasonably competent solicitor,” synonymous with “the ordinary competent solicitor and the ordinary prudent solicitor” who brings “reasonable care, skill, and knowledge to the performance of the professional service” which has been undertaken (*Central & Eastern Trust Co. v. Rafuse*, 1986, p. 52). In discussing a doctor's standard of care, the Court of Appeal for Ontario in *Sylvester v. Crits et al.* noted that:

Every medical practitioner must bring to his task a reasonable degree of skill and knowledge and must exercise a reasonable degree of care. He is bound to exercise that degree of care and skill which could reasonably be expected of a normal, prudent practitioner of the same experience and standing, and if he holds himself out as a specialist, a higher degree of skill is required of him than of one who does not profess to be so qualified by special training and ability (*Sylvester v. Crits et al.*, 1956, p. 34).

Guiding associations have contributed to the crafting of the care, skills, and knowledge expected of guides. Its overall effect on the adventure industry is improved client care and safety practices. Industry certifications and benchmarks will form part of the equation in the court's determination of the standard of care, but it will not be the sole basis for it.

The third point is that a plaintiff who suffers personal injury will be found to have suffered damage. The

scope of the harm suffered takes many forms. It can include the loss of life and limb and other physical injury, mental or psychological injury, property damage, and reputational harm.

The fourth and final question to address in a negligence claim is whether the defendant's breach caused the plaintiff's harm in fact and in law. It requires proof, on a balance of probabilities, that the defendant's failure to meet a reasonable standard of care caused the plaintiff reasonably foreseeable loss, damage, or injury. The conduct of the defendant must be the proximate cause of the injury, or the harm suffered should not be too remote to warrant recovery. It sounds simple, but it isn't. The remoteness inquiry asks whether "the harm [is] too unrelated to the wrongful conduct" (*Linden & Feldthusen*, 2006, p. 360). The principle in law is that "it is the foresight of the reasonable man which alone can determine responsibility" (*Overseas Tankship (U.K.) Ltd. v. Morts Dock & Engineering Co.*, 1961, p. 424). In other words, failing to think about and reasonably foresee the possibility of harm could give rise to an action in negligence.

Considerable debate has ensued about what this actually means in application. Is a reasonably foreseeable harm one whose occurrence is probable or merely possible? The Supreme Court of Canada in *Mustapha v. Culligan of Canada Ltd.* (2008, p. 114) dismissed this question as misleading and a red herring. That court properly described any harm which has actually occurred as "possible," rendering moot whether possibility should be a metric of how reasonable foreseeability is defined. So it's more than whether something could happen, but whether it might happen.

The court in *Bolton v. Stone* (1951, p. 850) – a seminal case involving a plaintiff who, while walking on a residential side road, was injured by a ball hit from an adjacent cricket ground (balls were known to have flown over the fence about six times in the past 30 years) – effectively said that it wasn't enough that something may possibly cause injury, but rather that some greater probability must exist.

The court in *Bolton* held that the duty is to not guard against "fantastic" possibilities like the fantastical odds of winning the lottery, but to instead guard against harm in which there is a "sufficient probability" of eventuating. Further, the degree of probability that would satisfy the reasonable foreseeability requirement has been described as a "real risk," i.e., one which would occur to the mind of a reasonable person and would not be brushed aside as far-fetched (*Overseas Tankship (U.K.) Ltd. v. Miller Steamship Co. Pty.*, 1967, p. 617).

It is in this context that guides make go/no-go decisions based on their perception of the probability of the risk materializing. Risk is always a probability issue (British Standards Institute, 2016, p. 2). Guides effectively take into account the odds of success versus how much is wagered when making risk management decisions. It's ultimately a risk-reward or cost-benefit issue, and it boils down to whether the risk is worth it, or if it's justifiable. Is it worth it to ski this slope, raft that river, or climb a particular route? What is the probability of that slope experiencing an avalanche, of the raft flipping, or being hit by rockfall?

To the extent those questions can be truthfully answered – after all, just as the Supreme Court of Canada implied in *Mustapha*, the probability is 100%, if the slope experienced an avalanche, the raft flipped, or clients were hit by falling rock – will determine if the risk was reasonably foreseeable. Liability will be attached if the decision wasn't justifiable and the risk wasn't worth it.

An example of this happened, beginning on the north face of the Tour Ronde, a subsidiary peak of Mont

Blanc in the French Alps in 1990, and ending in a courtroom four years later (*Woodroffe-Hedley v. Cutbbertson*, 1994). The guide – aware that he and his client were behind schedule and moving too slowly, and that the temperature was hotter than expected (Scott, 1998, p. 191) – decided it was preferable to move rapidly to avoid being hit by falling rock caused by the unexpected heat, rather than spend additional time conforming with “best practice” of placing two ice screws at the anchor point. In his need for speed, the guide left his client connected to one ice screw and intended to move quickly out of the fall line of the face beneath a rocky section which offered protection from falling rock above. Unfortunately, the guide fell, pulling out the anchor to which the client had been connected, and both fell down the face, stopping when the rope snagged on a rock. The client was killed almost instantly. The guide survived and was successfully sued in 1994 for negligence. The judge found him liable, saying that the guide’s concern over the immediate or imminent risk of rockfall was outweighed by the possibility of a foreseeable fall (*Liability Issues*, 1997).

The Supreme Court of Canada summarized the law of negligence in *Jordan House Ltd. v. Menow* (1973, p. 247) thusly:

The common law assesses liability for negligence on the basis of breach of a duty of care arising from a foreseeable and unreasonable risk of harm to one person created by the act or omission of another. This is the generality which exhibits the flexibility of the common law; but since liability is predicated upon fault, the guiding principle assumes a nexus or relationship between the injured person and the injuring person, which makes it reasonable to conclude that the latter owes a duty to the former not to expose him to an unreasonable risk of harm. Moreover, in considering whether the risk of injury to which a person may be exposed is one that he should not reasonably have to run, it is relevant to relate the probability and the gravity of injury to the burden that would be imposed upon the prospective defendant in taking avoiding measures.

This is where things can get tricky. Cooked into the calculus of what constitutes negligence are concepts of reasonableness and foreseeability. Were the risks which eventuated and harmed the plaintiff reasonably foreseeable, and were the actions of the defendant reasonable? As the Supreme Court of Canada said in *Mustapha*, while citing Linden and Feldthusen (2006), conduct is negligent if it creates an unreasonable risk of harm.

To a layperson, there is nothing remotely reasonable about adventure. Reasonable people, after all, don’t jump out of perfectly good airplanes or climb mountain faces relying on skinny ropes to save their backsides! The public might regard parachuting and mountain climbing as being unreasonably risky. This complicates the determination of what constitutes unreasonable risk. However, it boils down to what is reasonable in the circumstances, and even high-risk adventure sports have lines which cross into the unreasonable.

The Supreme Court of Canada, in *Crocker v. Sundance Northwest Resorts Ltd.* (1988, no page) – a case involving an intoxicated plaintiff who broke his neck after being permitted to participate in a tubing competition on a ski hill – encapsulated the totality of the issues nicely:

People engage in dangerous sports every day. They scale sheer cliffs and slide down the sides of mountains. They jump from airplanes and float down white water rivers in rubber rafts. Risk hangs almost palpably over these

activities. Indeed, the element of risk seems to make the sports more attractive to many. Occasionally, however, the risk materializes and the result is usually tragic.

The court in *Crocker* held that there was a duty owed by the defendant ski hill, which required conformity to a standard of care regarding intoxication, that the conduct breached the required standard of care arising from a foreseeable and unreasonable risk of harm, and that the conduct was a proximate cause of the harm suffered.

Two main ways that liability can be limited, once it has been established that the defendant guide or business has been negligent, are transferring the legal risk back to the plaintiff through the doctrine of contributory negligence and enforcement of a previously administered waiver of liability.

Contributory Negligence

Even though a plaintiff may have suffered injury attributable to the defendant's negligence, the plaintiff's claim for damages may be reduced or eliminated if the plaintiff failed to take reasonable care for their own safety, and their own negligence contributed to their loss. If the plaintiff's own negligence or carelessness contributes to their injury, their right to fully recover for that loss may be correspondingly diminished.

The test for contributory negligence is consistent with proving negligence. The Supreme Court of Canada, in *Bow Valley Juskys (Bermuda) Ltd. v. Saint John Shipbuilding Ltd.* (1997, p. 76), adopted the test for that set out by Lord Denning in the English case of *Jones v. Livox Quarries*, (1952, p. 615):

Just as actionable negligence requires the foreseeability of harm to others, so contributory negligence requires the foreseeability of harm to oneself. A person is guilty of contributory negligence if he ought reasonably to have foreseen that, if he did not act as a reasonable, prudent man, he might be hurt himself; and in his reckonings he must take into account the possibility of others being careless.

Provincial statutes codify how liability and costs are apportioned. For example, the *British Columbia Negligence Act* (1996) states that, "If, by the fault of two or more persons, damage or loss is caused to one or more of them, the liability to make good the damage or loss is in proportion to the degree to which each person was at fault." It further says that, "The liability for costs of the parties to every action is in the same proportion as their respective liability to make good the damage or loss" (*Negligence Act*, p. 1). In other words, a plaintiff's carelessness, misjudgment, mistake, or inattentiveness may limit the defendant's liability and reduce the damages to be paid out.

Waivers

The other principal method for a guide or business to limit their legal liability is through the use of waivers. It's possible for a defendant guide or business who has caused an accident or has been negligent to not be liable

for the injuries sustained if the plaintiff client has signed a waiver prior to participation. The term waiver is being used here in an all-encompassing way which includes releases of liability, waiver of claims, assumption of risks, indemnity agreements (a risk transfer workaround, whereby one party agrees to cover the costs for the losses of another party), and covenants not to sue. These are different, but are lumped together here for ease of explanation.

Basically, a waiver uses exclusionary language that allocates legal responsibility for personal injury to the person who signed it and not to the adventure operator that administered the waiver and may cause an injury. Waivers are ubiquitous in sport and society. People sign waivers as a condition of participation when climbing at a gym, rafting on a commercial guided trip, or even skiing or snowboarding at a resort.

Due to their popularity, many people hold a mistaken belief that waivers don't work, that they're not worth the paper they're printed on, and even allow people to sue even though the header to the waiver typically says something like: "By signing this agreement, you will waive certain legal rights including the right to sue or claim compensation following an accident." Further, a 2014 survey showed that more than half of the respondents didn't understand what they were signing and thought they could still sue even if the operator was negligent (Griffith-Greene, 2014).

However, the reality is that a properly prepared and presented waiver can be upheld and enforced by the courts. Waivers are a complete defence in Canadian law. If the party attempting to rely on the waiver can show the court that it is applicable and valid, then the plaintiff can't succeed in their claim. A valid waiver can act as a bullet-proof claims defence to the extent that it cannot be penetrated even in instances where the plaintiff is injured due to the carelessness of the defendant operator or guide.

This is well-illustrated in the ziplining case of *Loychuk v. Cougar Mountain Adventures Ltd* (2011, p. 193). At a ziplining park in Whistler in 2007, Danielle Westgeest and Deanna Loychuk were injured after Westgeest was authorized to be sent down by the guide, unaware that Loychuk hadn't reached the bottom platform and was stuck, suspended on the zipline. Westgeest slammed into Loychuk at high speed, causing both women to be injured. At trial, Cougar Mountain Adventures conceded that the negligence of its employees caused the accident, but successfully argued that the waiver provided a complete defence. The decision was affirmed on appeal.

The turning point for the enforceability of waivers occurred in the 1975 snowmobile racing case of *Dyck v. Manitoba Snowmobile Association* (1985). At the end of a snowmobile race in Beausejour, Manitoba, Ronald Dyck collided with a race official who was signalling an end to the race by moving mid-track onto the course and subsequently struck a wall, suffering serious injuries. The Supreme Court of Canada upheld the Manitoba Court of Appeal's decision which found that the race official was negligent and that the association was vicariously liable for the official's negligence, but that the waiver of liability clause in the race entry form applied to the official and the association.

The clause in the entry form mentioned injury caused or contributed by the negligence of officials. The Supreme Court of Canada said the clause was neither unfair nor unreasonable in application to what actually happened. The court also didn't find it unconscionable nor against public policy to uphold such a clause.

It concluded that “the races carried with them inherent dangers of which the appellant [Dyck] should have been aware, and it was in no way unreasonable for an organization like the Association to seek to protect itself against liability from suit for damages arising out of such dangers” (*Dyck*, 1985, p. 10). *Dyck* is the first adventure case decided by the Supreme Court of Canada that upheld a waiver for injuries caused by negligence.

The next landmark adventure case to be dealt with by the Supreme Court of Canada was *Crocker v. Sundance Northwest Resorts Ltd.*, as referenced earlier. William Crocker was, at the time of the incident, a 29-year-old beginner skier and a heavy drinker. He registered for a tubing competition at the resort’s bar and signed the waiver. The resort did not point out the specific provisions in the waiver, nor was he asked to verify that he understood its contents. Two days later, Crocker and his friend, after having drunk large quantities of their own alcohol and even more from the resort bar, competed in the race.

Between the first heat – which they won – and the second, Crocker drank large swallows of brandy offered by a driver of a Molson beer van and was sold two more drinks at the bar. At the top of the hill, before the start of the second heat, Crocker fell down and his inner tube slid down the hill. The event organizers got him and his friend a new inner tube. The manager of the resort saw Crocker and knew he was drunk, but did nothing to dissuade him from continuing to compete in the race. Crocker went down the hill, crashed, broke his neck, and was rendered quadriplegic.

The court found that Crocker did not, either by word or conduct, voluntarily assume the legal risk involved in competing. The court did not uphold the waiver because no attempt was made to draw the release provision to Crocker’s attention, noting that he did not read it nor know of its existence. Crocker honestly thought he was signing a race entry form. Therefore, Sundance had no reasonable grounds for believing that the waiver truly expressed Crocker’s intention. The Supreme Court of Canada restored the trial court’s judgment, which found Crocker 25% liable for his injuries and Sundance 75% contributorily negligent. Sundance was found at fault because it breached its positive duty to take steps to remove an obviously inebriated Crocker from the competition.

The next big waiver case was *Karroll v. Silver Star Mountain Resorts* (1988). Karroll sustained a broken leg after colliding with another skier while competing in a downhill race at a ski resort in British Columbia in 1986. The court in *Karroll* built on the decision in *Crocker* by outlining the circumstances when and how an operator should take an extra step in bringing to the attention of the person signing the waiver the terms to which they will be bound. The decision in *Karroll* was written by Beverley McLachlin, Chief Justice of the Supreme Court of British Columbia, before she became a Justice of the Supreme Court of Canada and later Chief Justice of Canada.

In upholding the waiver and finding in favour of the ski resort, McLachlin was mindful of the principle in general contract law that where a person signs a document, which they know affects their legal rights, they’re bound by it in the absence of fraud or misrepresentation, even though they may not have read or even understood the document. It was further acknowledged that the party seeking to rely on a waiver which the signing person has not read must show that they have made a reasonable attempt to bring the signing person’s

attention to the terms contained in it if they wish to rely on the waiver. Ever since, the expectation is that operators must make reasonable efforts to apprise the person signing the waiver of the terms contained in it.

McLachlin added a third test which is that a waiver should not be enforced, if the party seeking to enforce it knew or had reason to know of the other's mistake as to its terms, because, if it runs contrary to the signing person's normal expectations, it is fair to assume that they do not intend to be bound by the terms. In other words, if the operator or guide believes or suspects that the person signing the waiver doesn't really know what they're signing, then it won't be enforced in court.

The judgment in *Karroll* identified a number of non-exhaustive factors that should be taken into account in assessing whether reasonable steps have been taken. These include the length and format of the contract and the time available for reading and understanding it.

The principles in *Karroll* have been applied in many adventure cases since 1988. In the heli-skiing case of *Ochoa v. CMH* (1996), in which nine people were killed in an avalanche, the Supreme Court of British Columbia assessed whether the waiver would have been valid. The Court would have enforced the waiver – there was no finding of negligence and so the waiver question was actually unnecessary – because the plaintiff had a history of heli-skiing with the operator, had signed a waiver three times previously, knew what he was signing, and the waiver covered the alleged negligence.

The Ontario Superior Court of Justice enforced a waiver in the 2016 rock climbing case of *Arif v. Li* (2016, p. 4579). Mohammed Arif was injured while climbing during an introductory rock climbing and rappelling course. He fell to the ground from a height of about two metres, resulting in an injury to his right leg. In its summary judgment, the Court found that Arif was bound by the waiver and that its scope covered the alleged wrongful conduct of the defendants. In so doing, the Court noted that the title of the waivers was written in bold capital letters, clearly communicating the purpose of the waiver, and that the hazards and risks being fully assumed by the plaintiff included negligence on the part of the operator. It was also noted by the Court that when booking the climbing course, the operator's website provided Arif with a copy of the waiver and notified him that all participants would be required to sign the waiver as a condition of participation. The operator's website had the waiver on it and a heading of the waiver stated, "PLEASE READ CAREFULLY" in bold capital letters, which helped satisfy the requirement that the operator bring to the attention of the plaintiff the onerous terms contained within the waiver.

Conclusion

This chapter has examined, in the context of adventure guides and businesses, the elements of negligence (injury, duty, breach of duty requiring conformity to a standard of care, proximate cause), focusing on the concepts of reasonableness and foreseeability. It has also described how contributory negligence and previously administered waivers can transfer the legal risk back to the plaintiff and limit the adventure provider's liability.

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18.

EMERGENCY AND RESCUE RESPONSE

Jim Little

Outdoor leaders deal with complex situations in the field (Carden, 2017) and must also possess a vast array of skills and competencies to lead safe experiences (Williams-Orser 2021, Asfeldt, 2021). Outdoor learning (OL) programs often attempt to create experiences for people to overcome physical and mental challenges while living and travelling in natural and wild spaces without everyday conveniences. (Purc-Stephenson et al., 2019).

When compared to urban areas, if a remote field emergency arises, access to necessary resources can be a challenge despite recent technological advances or seemingly improved access to remote regions (Curran et al., 2018). Especially in the vast Canadian wilderness, we may find ourselves far from Emergency Medical Services (EMS), however, we can gain confidence with our response efforts with solid training, a foundation of risk management knowledge, and knowing what tools to access in remote locations (D'Angelo, 2021). In this chapter, we take a glimpse at the complexities of pre-trip response preparedness and the various ways and means of best utilizing jurisdictional emergency resources in the Canadian backcountry.

A Foundation of First Aid Standards and Training

Interpreting governmental regulations for first aid training is a challenge for practitioners in the OL sector. The Canadian Centre for Occupational Health and Safety states the minimum level of first aid training within Bill C-45 (Westray Bill) under the amended criminal code. This establishes the legal requirements for workplace health and safety and the duty that organizations have to keep their workers safe (CCOHS, n.d.). The law asserts minimum first aid training standards for various environments and emergency response times. With respect to remoteness or wilderness first aid (WFA) training, we assume that rescue resources in the field are limited, and we may find ourselves hours away from emergency medical service (EMS).

The training required for OL is multi-faceted and includes but is not limited to training in first aid, emergency response, risk management, navigation, leadership, facilitation, and activity specific technical skills (Priest & Gass, 2018). It is generally agreed within the OL community that first aid training is a core competency (Ritchie et al., 2014) when working in remote locations; yet, WFA training should be a target competency, one that is essential for outdoor leaders to possess in the backcountry. The first aid training marketplace is highly available to leaders throughout the country, but it takes a high level of individual

commitment and time to get trained to appropriate levels. Several levels of WFA training are available through certifying organizations in Canada.

- The 16-hour standard-level WFA training is geared towards the outdoor enthusiast who intends to go on short adventures (Wilderness Medical Associates, n.d.).
- The 40-hour Advanced Wilderness First Aid/Wilderness Advanced First Aid (AWFA/WAFA) training option is for outdoor professionals in wilderness areas targeting the special needs in remote areas reaching beyond typical emergency medical services (Siriusmedx, n.d.).
- The 80-hour Wilderness First Responder (WFR) course is aimed at leaders in remote areas, including outdoor educators, guides, military, professional search and rescue teams, researchers, and those involved in disaster relief (Canadian Red Cross, n.d.).

From these foundational WFA programs, one could progress through to higher levels of professional training such as Wilderness Emergency Medical Responder/Technician (WEMR or WEMT) that aligns with the Paramedic Association of Canada (n.d.) competencies. However, these likely exceed minimum standards set out for the OL sector.

Many professional outdoor organizations have attempted to create first aid policies which have yet to be fully aligned across their respective sectors. The Alberta Camping Association (2012) accreditation standards stand with a 40-hour wilderness first aid training for trip leaders in remote locations. The Ontario Camp Association (2023) standards go a bit further and define first aid attendants as unregulated care providers and further mandate first aid qualifications for backcountry trips. This accreditation for Ontario camps has a mandatory 16-hour wilderness first aid training for the trip leader (section 5.5-5.6), and standard first aid and CPR training for assistant leaders (section 5.7-5.8). These standards go on to “highly recommend” 40 or 80-hour wilderness first aid training for at least one leader to have if the duration or context of the trip warrants it (p. 129).

Paddle Canada (2023), the largest supporter of the recreational paddling community in Canada, mandates their instructors to have wilderness first aid and CPR (16-hour) training as a minimum whenever they are teaching in a location where it will take more than one hour to reach medical care. The Association of Canadian Mountain Guides (n.d.) first aid requirement for Mountain Guide and Hiking Guide Programs is an Advanced Wilderness First Aid course with a minimum of 80-hours or an Occupational First Aid Level 3. Individual organizations seem to initiate their own policies for first aid personnel, which hopefully align with federally mandated first aid training.

A Systems Approach to Risk Management

Applying a systems-based approach to pre-trip planning sets a solid stage for safe OL programming. Instead

of reacting as a crisis unfolds, outdoor leaders and their associated organizations may incorporate crisis management systems into their pre-trip planning process so that any and all unexpected events may be adequately dealt with (Jackson & Heshka, 2021; Jackson et al., 2021; Salmon et al., 2017). North American researchers have suggested various approaches to managing risks for consideration by the OL sector, however, it remains for individuals or organizations to adopt their own sector specific application of risk management with a focus on rescue, emergency, or crisis management planning.

Models such as the Adventure Risk Exposure and the Adventure-REACT models (Brown, 1999) are suggested for specific application in whitewater rafting. Howard's 2009 case study hopes that owners [of rafting businesses] "opt in" to incorporate industry standards for risk mitigation. An industry-educational analysis from Harper (2005) produced five key elements for curriculum design of outdoor adventure risk management for application in the post secondary sector, predominantly reflecting industry and institutional needs for risk management in Western Canada. Jackson and Heshka's 2021 book *Managing Risk-Systems Planning for Outdoor Adventure Programs* can be specifically used by Canadian outdoor programmers. These system approaches to emergency planning can help us to avoid serious incidents (also to maximize our learning and enjoyment of the trip) and guide us to leverage the important safety resources at our disposal in case of calamity. Taking an active approach to integrating risk management systems and striving to reduce serious incidents should remain a key strategy for the OL sector across Canada.

Industry Partner Rescue Resources

Canadian industry organizations have developed publicly accessible tools and resources for use in emergency planning, preparedness, and implementation. An example is the AdventureSmart program, which is in partnership with the federal government and provides various planning tools for outdoor pursuits, such as paddling, outdoor survival, and snow sports. It is "a program designed to reduce the frequency and severity of Search and Rescue incidents" (Adventuresmart, n.d.). Backcountry skiers, ice climbers, and snowmobilers have access to avalanche awareness and preparation resources through Avalanche Canada (Avalanche Canada, n.d.). The Avaluator tools are designed to be used in two stages: planning the trip at home; and making decisions during the trip. The Association of Canadian Mountain Guides has several online resources available to its members, such as gear reviews and checklists, technical publications, and even real-time mountain conditions reports. All are designed to assist outdoor recreationalists to make reasonable and informed decisions in the field. White water enthusiasts are not left out of the mix and can access online resources through their host organizations, such as Whitewater Ontario (2018), and Alberta Whitewater (2021). These organizations provide paddlers with emergency action plan templates and visual maps of local conditions on stretches of river or rapids, thus maximizing white water enthusiasts' fun and enjoyment, but concurrently helping them to avoid paddling in perilous areas.

Responding to an Emergency

When a wilderness emergency arises, time is of the essence. Certain environments demand immediate action, such as lost people, avalanches (AvySavvy, 2023), or when someone is submerged in a rapid due to being trapped. This list can be exhaustive. Positive outcomes demand that rescue personnel should be trained, practised, and provisioned for in order to understand the key steps for responding to an incident.

According to the Ontario Search and Rescue Volunteer Association (2012), the critical steps in any emergency action plan starts with having a leader capable of organizing effective rescue efforts. Before departing for a trip, the designation of a suitable and trained leader and arranging appropriate provisions for the trip will help to create effective outcomes when a stressful incident arises. Thankfully, some common steps exist that leaders may take when dealing with an incident. However, caution in explicitly following these steps must be considered due to the dynamic nature of how they unfold in a highly complex outdoor environment.

Immediately following an incident, the leader, often with the assistance of group members, will survey the scene and ensure safety for themselves and their group; concurrently, the immediate rescue personnel may be established. A further analysis of the surroundings ensues and designating critical zones (for operations, searches or barriers) in the area of concern are set up to prevent others from entering into a hazardous area. The American Canoe Association (2020, pg 3) suggests a two phased approach to rescues.

- Phase 1 – S.T.O.P: Stop, Think, Observe, and Plan.
- Phase 2 – L.A.S.T: Locate, Access/Assess, Stabilize, and Transport.

Gaining access to the victim(s) is imperative for prevention of further injury or at worst case dealing with a fatality. Brookes, a leading Australian researcher on fatalities and fatality prevention, suggests that “calls for outside assistance may be delayed due to ‘risk management,’ however, fatality prevention requires that early recognition and dispatch of outside rescuers be done as soon as possible” (Brookes, 2003, pg. 41). Leaders should be trained in the roll-out of emergency management plans, but also be prepared to call for outside resources to assist with any serious incident.

Jurisdictional Rescue Resources

When field capabilities are exceeded, as an incident unwinds, it may be necessary to utilize outside rescue resources. Canadian rescue resources are within reach through multiple jurisdictions. The National Search and Rescue Program (NSP) integrates organizations and resources to provide search and rescue (SAR) services to Canadians (Public Safety Canada, 2021). Canada’s SAR collaborative approach is built around a framework for minimizing the risk of injury or loss of life and providing an effective service across the nation.

The framework is supported by government at all levels, first responders, and a trained network of SAR volunteers to provide a comprehensive safety net for Canadians (Public Safety Canada, 2021)

The aggregate of the NSP partners field about 15,000 calls to action per year (Quadrennial, 2013), and it has a national reach for assisting approximately 25,000 people. The Canadian Armed Forces (CAF) alone respond to about 1,000 airborne SAR missions each year. The NSP integrates operations between the Canadian Coast Guard for marine missions, and among the RCMP or territorial and provincial police forces for land and inland waterway instances. These are commonly known as Ground Search and Rescue (GSAR). Because of Canada's vast land base, it may be warranted that one of three major Joint Rescue Coordination Centres (JRCC) will be utilized. An average of 9,000 annual responses are reported through the JRCCs in Halifax, Trenton, and Victoria. However, municipalities (i.e. major urban centres) may have jurisdiction over SAR operations if an incident occurs within these specific regions. Volunteer resources may be brought in to support the search and rescue operations at any level. Established volunteer organizations are available across Canada through the Search And Rescue Volunteer Association of Canada (SARVAC, 2017) and the Civil Air Search and Rescue Association (CASARA, 2023) which provide 24/7 support services during SAR operations. Canadian Rangers from the Canadian Armed Forces are specifically utilized in sparsely populated or remote northern SAR areas.

Access to remote areas for SAR operations is often decided based on the severity of the situation, remoteness and availability of resources through the multi-jurisdictional approach. Following an incident, field calls for help are routed to emergency services (ex. 9-1-1). The call is then conveyed to the proper SAR partner for investigation and response. Further assessments of the subject's location, the situation's conditions, and resources available are conducted, and a decision is made to launch a response, where local resources are allocated through the host jurisdiction.

Partner organizations will organize the appropriate level of resources applied to the incident. An air ambulance or police helicopter may fly into more remote areas, a regional police force snowmobile may be utilized on local logging roads or bush trails, or specialized equipment may be used when terrain and conditions become too arduous for access with regularly deployed equipment. As seen in April 2018, a major SAR operation ensued (with positive results) in an area north of Sudbury, Ontario. The equipment used for access to this complex scene was a large 4-wheeled vehicle specifically designed to navigate harsh conditions such as swamps, snow, and mud (The Manitoulin Expositor, 2018). If resources are stretched or unavailable in a jurisdiction, then the responsible partner can tap into further available resource partners to complete a rescue operation.

Enter the Electronic Age

Outdoor leaders have several cutting-edge options for contacting outside rescue resources. Personal electronic locating devices, satellite phones/communicators, and cellular phones have diversified and improved in recent

years (CRTC, 2020). This section will discuss some current options and lay out the typical functionality of common (and lesser known) devices being used in OL programming.

Personal Locator Beacons (PLB), Electronic Locator Transmitters (ELT), and Emergency Position Indicating Radio Beacons (EPIRB) are used for specific environments and situations; inland activities, aviation or aircraft beacons, and maritime/naval use respectively. These devices operate solely through the regulated Cospas-Sarsat emergency satellite system in Canada, for which they are registered to an individual/vessel or organization. If deployed, the unit directly notifies Canadian rescue authorities about the who, where, and when of deployment. Most units are manually deployed by the user pushing a button, yet some are configured to deploy through force of impact or submersion in water.

A more popular series of communication devices for remote use are satellite communicators. Units such as SPOT, InReach, Zoleo, and ACR Bivy Stick are all readily available and affordable options for communicating with others from world-wide field locations. These units allow users to press an emergency/SOS button that sends a distress signal to a third party emergency operator, who then connects your location to the nearest rescue jurisdiction. If an SOS message is not deemed necessary, or the leader needs to send specific messages to outside contacts, most of these devices are able to send pre-programmed messages or real-time text messages. Connectivity through the unit itself or via a Bluetooth mobile hookup are options for message generation.

Monthly subscription data plans are available once the based unit, costing hundreds of dollars, has been purchased and activated. Subscriptions can be temporarily suspended for nominal monthly rates if owners do not intend to use the device for a period of time. Use of various versions and models of these units, over the years in OL programming, has been both a boon and a bane. Users should consider these as a backup to good systems planning (as discussed earlier) and be prepared for idiosyncrasies in electronic communications. Battery charging needs regular monitoring, software uploading is often without notice and doesn't always proceed or succeed normally, monthly financial management of subscriptions is required, and pre-trip testing is an absolute must to check for functionality. Many readers will appreciate that these devices should not be the sole means of contacting EMS, but one can save the day if your travel plans are disrupted by an emergency.

Satellite phones are used for voice to voice communication from remote locations. Just like any cellular phone, satellite phones connect you to and from outside cellular phone service, where the voice signal is routed through Iridium, Inmarsat, and Globalstar satellite systems. Typically, a monthly subscription rate for talk-time, messaging, and connectivity is necessary. The same arguments or cautions can be made for these battery powered devices, and ensuring that a clear view of the sky is maintained will help to limit the possibility of dropped calls.

The newest range of portable satellite internet communications are the Iridium-GO, Strigo, Cobham, or Hughes devices. These devices operate through an independent field-based satellite receiver which facilitates the transmission of high rate cellular data (voice, text, or video) through a dedicated set of satellites (both ground and orbiting). These are designed to work synchronously with multiple devices, from phones to laptops.

Conclusion

Dealing with the nuances of wilderness travel is a challenge in itself, but when a serious incident occurs, the degree of complexity quickly escalates. Outdoor leaders are tasked with managing these dynamic emergency situations from the field, thus demanding a high level of knowledge, training, and preparedness to influence positive outcomes. Knowing what specific resources are available from the current marketplace, local providers, and federal emergency service partners will help to support safe OL programming in Canada.

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- Royal Canadian Air Force SAR <https://www.canada.ca/en/air-force/programs/search-rescue.html>
- Parks Canada SAR <https://www.pc.gc.ca/pn-np/mtn/securiteenmontagne-mountainsafety/programme-program/res-sar.aspx>
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19.

POST INCIDENT CRISIS RESPONSE

Ross Cloutier

What is a crisis?

A variety of different types of incidents can cause a crisis within outdoor education and adventure tourism organizations. A crisis is any situation where normal operations are no longer possible. This could be any threat to the reputation or bottom line of an organization, an incident that causes severe disruption of normal operations, or a situation that causes a breach of faith with key stakeholders. While we would like to believe that all incidents are foreseeable and preventable, there remains enough uncertainty in outdoor learning that crisis incidents do occur.

Most staff members of outdoor learning and guiding programs will spend their whole career without experiencing a fatality, and for them, accident management remains a hypothetical planning process. Time is spent training in planning for and the prevention of potential incidents, and staff are prepared through first aid training to respond to relatively minor events. While the likelihood of catastrophic program failure is low, it does remain, and this is borne out by the very occasional, but very severe event. Dealing with these crisis events are outside the experience of most outdoor organizations, but knowledge of what to expect, along with a detailed structure of what to do during and after, can help.

While some crisis events include single or multiple fatalities, others revolve around such hazards as fuel spills and exposure to other hazardous substances, pandemics (as we have learned all too well), foodborne illness, missing persons, lodge and facility-related incidents such as fire or norovirus outbreaks, or human-wildlife conflicts. A critical incident plunges an operator from normal into chaos in an instant. It is too late to start planning at that point, so actions and roles need to be pre-determined and pre-planned. The outdoor communities are expert planners and competent responders, and this section is intended to provide tools to assist with the post-incident recovery stage.

The four stages of emergency response in the risk management cycle are mitigation, preparedness, response, and recovery (HeliCat Canada, 2019). This chapter is primarily concerned with the last two stages of response and recovery. Holistic discussions of the first two are well covered by other chapters in this outdoor learning book. Preemptive risk management (those activities intended to prevent, plan for, and reduce the severity of incidents) generally fall into mitigation and preparedness activities. Post-incident management activities generally fall into the response and recovery stages of the risk management cycle.

1. **Mitigation:** Preventing future emergencies and reducing their impact on the organization. Mitigation activities include any activities aimed at preventing an emergency, reducing the chance of an emergency happening, or reducing the damaging effects of unavoidable emergencies. Guides meetings, hazard assessment, personal protective equipment, and buying insurance are all mitigation activities.
2. **Preparedness:** Preparing to handle an emergency. Preparedness activities include plans or preparations made to help response, rescue, and post-incident management operations. Compiling emergency response plans, purchasing emergency response equipment, conducting staff training, compiling emergency contact lists, and establishing emergency equipment caches are examples of preparedness activities.
3. **Response:** Responding efficiently and safely to an emergency. Response activities include actions taken to save lives and prevent further property damage in an emergency. Response is putting preparedness plans into action and takes place during an emergency. Responding to an avalanche, searching for a missing student, dealing with the media, and communicating with the family are all response activities.
4. **Recovery:** Returning to normal (or a new normal) after an emergency. Recovery includes actions taken to return to a normal or even a better situation following an emergency incident. There are several recovery activities that take place immediately after or during the latter phases of the Response stage. Collecting witness statements, conducting a snow profile for record keeping purposes, debriefing staff, compiling guest and incident documentation, and providing staff and guests with critical incident stress debriefing are all examples of immediate (proximate) actions. After the immediate recovery, those activities which follow can continue for an extended period of time (months or even years in many cases). Conducting an internal accident investigation, maintaining a relationship with families and guests, working with insurers, investigators, coroners, and lawyers, and managing potential claims are all longer-term recovery activities.

Levels of Incident Response

While there are many different descriptive models of response levels, the following is a simple model used by much of the Canadian backcountry skiing sector (HeliCat Canada, 2019). These include three levels: internal, external, and integrated, identified by the colours green, yellow, and red respectively as shown in Figure 1.

Figure 1: Three levels of Incident Response

LEVEL 1 – INTERNAL RESPONSE (GREEN)

This is an incident handled by the guides/instructors and personnel at the incident site. The response is self-contained using personnel and equipment that is within the field group and organization. Most incidents that occur will be of this scale, where the guides on scene will be able to facilitate rescue, conduct first-aid treatment, and evacuate with personnel and materials that are on hand. Resources may include as little as one helicopter, pilot, guide or instructor, equipment carried, and ground support.

LEVEL 2 – EXTERNAL RESPONSE (YELLOW)

This is a more serious incident that can still be resolved with mostly internal organizational resources, but may require some additional external assistance. The response is mostly self-contained within the organization with the support of specific requested resources such as other guides and helicopters and/or equipment, but may also need outside supporting resources such as EHS ambulance, medivac helicopter, ski patrol, doctor, etc.

LEVEL 3 – INTEGRATED RESPONSE (RED)

This is a serious incident that is integrated with extensive outside-the-company resources such as mutual aid from supporting SAR agencies, police, or emergency services. It is usually initiated through a 911 call. Command and control may change to an external agency such as the police and organization resources may need to integrate into a broader Incident Command System (ICS). The response may carry over to more than one operational period. This level of incident may include fatalities or complex operations.

Response

The primary responsibility in managing an incident is to care for the injured guest(s) and staff. The impact of an incident may affect others beyond those who were involved firsthand in the event. It is essential to ensure the needs of those around the injured are met, conduct a debrief, make counselling available, and be aware of any symptoms that may emerge as signs of critical incident stress. Finally, bear in mind that responders and investigators themselves may need care and support. Here are some suggested actions to aid with response to an incident.

- Keep calm and think actions through.
- Ensure the injured party is cared for and that appropriate and timely on-scene response is in place. Respond quickly and professionally.
- Implement an appropriately scaled Incident Command System to manage the event.

- Confirm the details of the incident and do not act on unconfirmed information.
- Conduct debriefing sessions with staff and guests separately.
- Notify proper authorities as required (police, insurer, lawyer, Provincial Occupational Health and Safety agency, and your organization's Executive team).
- Plan the relationship with the next of kin, such as who will contact them, the level of information to be provided, and the logistical assistance to get them to the location of the patient. Assign the next of kin a contact person and provide regular updates.
- Communicate confirmed information with staff. Discuss the incident or causes of the incident only with designated staff, and resist the urge to blame or find fault.
- Activate your business's media plan. Ensure all requests or questions are channelled through a designated Public Information Spokesperson. You may need to seek legal advice before any information is released to media or the public.
- Additional staff meetings and debriefing sessions with professional counsellors may be required.
- Document and photograph all stages of the response. Compile all related documents including registration forms, signed waivers, incident reports, ICS forms, Occupational Health and Safety, insurance forms, and witness statements.
- Follow up with your insurer regarding whether their insurance adjuster or lawyer needs to be involved. They will lead any resulting investigation.
- Under no circumstances are any employees to make comments to the media. Please refer all inquiries to the designated Public Information Spokesperson within your organization.

Incident Command System

While most operator incidents will require a Level 1 or Level 2 response and be handled “in-house,” larger incidents will require accessing outside resources and integrating any already carried out activities with outside response agencies such as the police, local SAR Groups, Provincial emergency management agency, Parks Canada, ambulance services, and fire departments. This will also be the case when an operator provides aid to an external incident managed by one of these agencies. Responding to emergency situations requires an organized management system, and the Incident Command System (ICS) is commonly used in North America. Organized response agencies are likely to be using terminology and management systems from the Incident Command System (ICS).

ICS is a standardized on-site management system designed to enable effective, efficient incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure. Inability to integrate smoothly into the ICS communications, command, span of control, and accountability easily fail. There has been a strong initiative by Canadian response agencies to move to ICS, and it is important that outdoor program providers and adventure tourism businesses can integrate with these agencies.

Pre-planned response resources

As part of your organization's preparedness, many elements of an organized response can be prepared. This may include:

- Management team personnel
- Internal and external response resources
- Communication plans
- Pre-written news releases
- Occupational health and safety contacts
- Critical Incident Stress Debriefing resources
- Response toolkits
- Response checklists

Documentation

During litigation arising from an incident, all relevant documentation is “discoverable,” is not protected by “privilege,” and may need to be disclosed to the litigant's representative lawyers. Nothing is confidential, including internal reports and memos, social media, and staff emails. It is important to maintain objectivity and professionalism in all incident-related documentation. Subjective comments and opinions have no place in incident documentation.

Procedural protocols about what entails appropriate incident management, reporting, documentation, and interaction and communication with guests and the public need to be established by each business and reiterated in staff training. Remembering that any claim from an incident could happen years in the future, actions taken by the operator during and immediately after the event may not have the advice of insurers or lawyers, and meticulous care regarding documentation content, record keeping, and presentation is necessary.

Pre-incident Documentation

Outdoor program operators have extensive pre-incident documentation. This may include registration and booking information, marketing materials, website content, emails with guests, staff training materials, waivers, safety talks, risk management plans, snow/water level/weather observation data, guide/instructor meeting minutes, trip plans, equipment and maintenance logs, guide/instructor field books, insurance policies, staff training program, staff CV's and certifications, and general business records.

After an incident, there is large reliance on these materials, and they need to be compiled and kept indefinitely. There will be an intense analysis of these materials during investigations and claims. In the case of

a fatal incident, each province has a provincial death investigation system – either through a coroner or medical examiner – and police are the investigators. Expect documents to be seized and whatever is in the record to become an official part of the file. Additionally, in the case of litigation, expert witnesses will also conduct investigations and scrutinize all documentation and operating procedures. If guests are involved in the crisis, and you are using an electronic waiver platform, you should immediately copy all waivers from the site for all guests associated with the trip and maintain these records. If the guests have also signed waivers for earlier trips with your organization, you should maintain copies of these as well because multiple signed copies are better than one.

Post-Incident Documentation

This includes anything produced during the response as well as anything produced after the event. This may include accident site diagrams, guide field book notes, witness statements, recorded guest statements, photographs and video, GoPro video (get this from guests immediately), guest group lists and contact details, social media postings, staff emails, internal memos, incident reports, press releases, internal investigation reports, external investigation reports, incident management forms, correspondence with guests or family, insurers, and other businesses, marketing materials, and correspondence within your organization. All this needs to be collected and retained.

Post-Incident Management

Post-Incident Investigations

Crisis incidents may require various forms of data collection and investigation. It is recommended that operators have one senior person responsible for being the liaison in this process. In a smaller business, this will likely be an owner. In a large firm, this will be a senior manager. There are three primary types of investigations following an incident: in-house analysis and data collection, regulatory investigations (worker injuries), and litigation investigations.

In-house analysis and data collection is necessary to collect and protect salient facts about the incident. This should focus on the collection of records, documentation, witness statements, video, correspondence, and incident reports. Since a business should inform their insurance broker of any accident immediately, at that same time, they may also ask for advice from the broker about the next steps in the investigation process. The broker will be able to help implement a response strategy and provide legal and expert contacts as necessary. In the event of a serious incident, the broker will contact the insurer, who may assign a lawyer or adjuster, or other outside experts to become involved.

To reiterate an earlier point, subjective comments and opinions have no place in incident documentation

and care needs to be taken that resulting reports should be approached as fact-finding and not fault-finding exercises. Personal opinions of staff should not be presented. Often, the most important stage for information gathering about an incident is the first 24 hours – guests are willing to make witness statements with greater accuracy, video footage and photographs can be acquired, and things like avalanche start-zones, river water-level analyses, weather analyses, and fact finding is most effective.

At this point, the business should follow the following steps:

- Gather information about what happened in the incident. Collect factual, objective, and non-judgmental information.
- Debrief staff and guests and collect witness statements, photographs, and video.
- Contact insurers to inform them of the incident.
- Gather and store all related pre-incident and post-incident documentation (as described above).
- Activate a plan to manage media, guest, and family interaction going forward.
- Review business operations as necessary.
- Communicate clearly and often with the insurance broker, lawyer, or adjuster, if they are assigned, regarding the management of potential claims from the incident.

Regardless of the injury or near miss, the investigative process begins as follows:

- secure, photograph, and document the scene,
- collect information about what happened, and
- identify and establish the sequence of events.

Regulatory investigations

These are prescribed by provincial or federal statutes or regulations, such as an incident investigation required under a provincial Worker's Compensation Act when a worker is injured. These are conducted by the regulatory body. For injuries to workers, and in the case of some regulatory investigations, the operator must also:

- determine the cause(s),
- recommend and implement corrective actions, and
- complete and submit the report to their provincial Occupational Health and Safety agency.

Although Occupational Health and Safety regulations exist in the different provinces, for the most part, the expectations are similar in the different jurisdictions. As an example of content related to one agency's

expectations, the British Columbia Worker's Compensation Act (Kings Printer, 2019) was amended, and new investigation requirements were created. It states the following:

If a worker is injured or, if nobody was hurt but there was potential for serious injury to a worker (close calls), the employer must conduct a preliminary and full investigation into the incident.

The **preliminary investigation** must be completed within 48 hours of the incident. It focuses on what is being done immediately to ensure a similar incident does not re-occur and to prevent injury to more workers. Interim corrective actions must be applied if any are identified at this stage.

The **full investigation** is a more detailed examination of the circumstances that determines an accident's cause (or causes) and factors which may have contributed to the incident and injuries. The full investigation must be completed within 30 days of the incident and a copy of final, corrective actions, and their implementation submitted to WorkSafeBC.

The Occupational Health and Safety Regulation was also amended to clarify the role of Worker Representatives or Health and Safety Committee members. These duties include:

- Viewing the scene of the incident with the persons carrying out the investigation.
- Providing advice to the persons carrying out the investigation, respecting the methods used to carry out the investigation, the scope of the investigation, or any other aspect of the investigation.
- Assisting the persons carrying out the investigation with gathering information relating to the investigation.
- Assisting the persons carrying out the investigation with analyzing the information gathered during the investigation.
- Assisting the persons carrying out the investigation in identifying any corrective actions necessary to prevent recurrence of similar incidents.

This increased level of participation is intended to lead to improved outcomes in any investigation. In British Columbia, if you are a smaller operator with fewer than nine employees, it is not necessary to have the same level of worker participation, but smaller operators are encouraged to seek input from staff.

An employer's requirement to notify their provincial Occupational Health and Safety agency varies by the type of the incident and is different from reporting injuries related to claims. If there is an injury on the job, the worker's employer still must complete various report of injury forms, but this does not satisfy an employer's need to immediately report certain incidents. See your provincial Workers Compensation Act for specific requirements.

Litigation Investigations

During litigation arising from an incident, investigations are necessary when there is concern that an incident

may lead to court action. These are directed by the insurer and their lawyer and conducted by highly credible subject-matter experts because they will become expert witnesses during legal action.

The insurer may hire adjusters, expert consultants, and lawyers. At this point, the insurer has the responsibility and authority to defend the claim as they determine appropriate, and strategy is determined with the insurer's lawyer. Note, this is not your organization's corporate lawyer, and this lawyer will generally determine defence strategy from this point forward. Other than the deductible on your policy, these costs are generally included in your insurance.

A business needs to be clear what costs are applied against their deductible and what is paid for by the insurer. Costs incurred by the business up to this point are not likely to be applied against the deductible (for example, for in-house analysis, data collection, or other associated business costs).

Securing and Documenting the Scene

The information gathered at the scene of an incident might be required as part of a court case or regulatory investigation that may not begin until months or years after the event. Record everything, as details that may seem insignificant at the time could be of vital importance to help determine causation or for a legal defence at a later stage. Initially, evidence at the scene may be obscured or may be disturbed by rescue efforts. Site photos of the scene at the time of the incident can be valuable in establishing facts, including identifying personnel and witnesses at the scene.

While the priority is to care for the injured, it is important to take photos and make rough sketches as quickly as possible due to the likelihood of changes in weather and snow conditions, as well as the loss of daylight later in the day. The following are some things to consider when documenting the scene of an incident:

- The exact location of the incident should be marked until it can be measured and recorded.
- Any physical evidence at the scene, such as hazards and obstacles, should be identified for examination later.
- Photos showing the exact location of equipment at the scene should be taken, and the condition of equipment at the scene should be documented. It may be necessary to tag and decommission any equipment involved.
- Care should be taken to avoid moving or substantially changing the physical scene until all agencies and investigators are satisfied with the record of the site.
- When possible, the footwear the injured party was wearing at the time of an incident involving a slip, trip or fall should be documented and photographed. Determining if the footwear was appropriate for the weather conditions, location, activities being undertaken is a viable defence in the event of a lawsuit.

Where the incident is related to a location or premises, as in the case of a slip, trip or fall, there is often a gap

between the time of the incident and the moment when company staff are made aware that the incident has occurred. Often, by the time the investigation is initiated, the conditions have changed, and the exact location may be difficult to determine. In these cases, it is advised that photos be taken in the direction that the injured party was travelling, along with close-ups of the surface condition.

Photographing the Scene

The number of photos taken at an incident scene will vary, but you can never have too many. Take as many as possible. Do NOT delete any photos taken. Reviewing the photos at the scene before leaving will allow you to re-take any images that are blurred or unclear due to angle, etc.

Log the date, time, location, and photographer's name prior to starting to take the photos, this can be done by snapping a picture of a sheet of paper with the information or noted in a field book. When photos are completed, note the time again. When possible, keep photos free of equipment not related to the incident, unless they are being used specifically to show incident location or relative size and distances.

Guests may have captured photos or video footage of an incident, the response efforts, or even activities prior to the incident. If so, the investigator should ask if they may have a copy, although the guest can refuse. In the event of a police force, coroner, or WorkSafeBC investigation, a guest may be compelled to provide the footage.

Information Gathering

Witness Statements

Witnesses to the event should be interviewed and statements taken from anyone with first-hand knowledge of an incident. In some cases, the responsibility for this will fall with police; however, even minor incidents require the collection of information from a wide range of people connected to the event. The sooner a witness can be interviewed, the better their recollection and more accurate their statement will be. When witnesses are contacted immediately and the reason for the interview request is clearly explained, it is likely they will take the time to participate.

Most witnesses are cooperative, especially if the investigator approaches them with respect and recognizes that they are giving up valuable personal time. Some witnesses may consider the interview an imposition and become impatient and uncooperative. This may also be their reaction to witnessing a traumatic situation; the request for a prompt interview must be balanced against the wellbeing of the witness. If it is not possible to interview the witness immediately following an incident, get their full name and permanent address so the individual can be contacted at a later date.

Where a minor is involved as a witness, the parent or guardian has a right to be present or to refuse the

interview. The presence of the parent may help or hinder the witness's recall, and the investigator should use their judgment to determine whether the interview is worthwhile. Witnesses can be interviewed at the scene of the incident. This is most convenient for the witness and may prove most informative for the investigator, as witnesses are able to point out specific locations or items and can relate information about the scene that they may otherwise have difficulty remembering or qualifying.

In many cases, the interview will have to be conducted at a lodge or office. Ensure it is a comfortable and quiet environment where the interview will not be interrupted. When possible, separate the witness you are interviewing from friends or family members. This process reduces distractions and helps preserve the integrity of the witness's recollection of the incident.

Record Keeping

The investigator must compile information that helps paint a picture of the day and time of the incident itself. In complex cases, you may require logbooks, reports, and other supporting documentation to establish a timeline of the days or even weeks leading up to the incident. Senior management should actively supervise all record keeping. Records should be checked periodically for extraneous narrative comments and acceptable completion, including dates and the full names of all staff completing the form.

Records should be filed in a systematic and controlled manner where they can be accessed later. These records may become evidence, and they will reflect the company's professionalism, due diligence, and general standard of operation. The following is a non-exhaustive list of relevant records that may be used as evidence during an investigation:

- Waivers
- Registration forms
- Rental forms
- Guide logs
- Guide meeting notes
- Internal investigation reports
- Email and other correspondence
- Avalanche and InfoEx data
- Program activity planning documentation
- Incident report forms
- Weather reports/conditions
- Equipment operating logs
- Equipment pre-start checklists
- Equipment maintenance logs
- Repair work orders

- Injury and first aid reports
- Guide CVs

Critical Incident Stress Management

In the delivery of outdoor programs, many people will at some point experience dangerous situations caused by nature, mechanical failures, or people. Often, people will fully recover from those dangerous situations. But sometimes they don't. Critical incidents are powerful negative events that can potentially create a significant and strong physiological response at the time of the incident, or later. Critical incident stress is a common reaction to these events.

A critical incident stress debriefing is an opportunity for those directly and indirectly involved in an event to talk about it individually or within a group with a trained peer-support person or mental health professional. Critical incident stress management includes crisis intervention techniques shown to be effective for those seeking support after being impacted by a critical incident or traumatic event. The intent of these interventions is to provide a sense of normalization, foster a sense of affiliation, and to assist an impacted individual to reestablish their disrupted natural coping strategies. Critical incident stress management (CISM) intervention is available from a number of sources, and employers should consider it as a resource for staff. These include:

- The Canadian Mountain Industry (an associated collection of HeliCat Canada, Canadian Avalanche Association, Avalanche Canada, Backcountry Lodges of BC Association, Association of Canadian Mountain Guides, and the Canadian Ski Guide Association) provides a CISM peer-support program to their staff (HeliCat Canada, n.d.).
- Some of the provincial worker compensation board agencies provide CISM response services to businesses (WorkSafeBC, 2018).
- Professional mental health clinicians provide this service.
- Mentorship programs provide peer group support networks. (Mountain Muskox, 2022)

Incident Response Communication Checklists

In addition to the operational functions of responding to a crisis, good communications and managing messages with media, public, families, staff, insurers, lawyers, and other stakeholders are crucial during a crisis event. The following communication checklists are organized in the first 1–3 hours of a crisis response, then into the first few days and weeks, until the event subsides (Coast Communications, 2020).

First Hour

- Engage with your organization's executive team to confirm the facts of the incident
- Activate the Crisis Communications Plan and management team
- Develop key messages using the Concern/Action/Commitment model. Add in five Ws as available, who, what, where, why, what, how?
 - What was the cause?
 - What is our response?
 - What are the next steps?
 - When is the next update?
 - Where can more information be found?
- Begin monitoring social and traditional media
- Pull ads, social media – review before reactivating
- Determine media relations approach, including how/when to release a statement
- Secure approvals – determine who will be the approver of all public information – keep it streamlined
- Begin tracking media requests
- Assess resources, call external support if needed, begin saving all documents related to the crisis in a shared drive
- Provide advice on which key stakeholders require contacting and in what order and manner – i.e., outreach to regulators' communications contacts, insurance broker, government
- Consider activating a crisis communications website if you have one (i.e., a dark site that is held in reserve in case it is needed) or quickly updating your homepage to make key information pronounced
- Determine spokesperson – brief them immediately

Two – Three Hours

- Connect with the full communications and Executive team, including any external advisors/consultants
- Continue to monitor social and traditional media and begin sending packages to your core team
- Correct the record immediately (provide updates in social media format to stakeholders to share, call individual reporters to update them, correct any misinformation)
- Update website/social media with new information if needed, including any statements
- Report to the team what media, key stakeholders, and the public are asking and saying – focus on verbal updates with analysis for the first few hours, but share written reports by email
- Consider the next cycle of major updates to the media and public
- Provide information to insurer and lawyer as required for daily updates
- Determine when the next press conference or media release will be issued
- Revisit key messages and update as information evolves

- Begin briefing and activating supporters/validators
- Check on the team – how are they doing? Physical health and mental health?

End of Day One

- Develop a report of social and traditional media. Provide analysis and advice:
- Determine the key issues. What information needs correcting? To what degree is your messaging being picked up? What are your partners saying?
- Consider where the story will go – what is the next phase of reporting? How can you be prepared?
- Determine if you need resources to relieve the first team (i.e., if media inquiries will continue through the evening)
- Confirm with response team what their plans and needs are for the next day
- Confirm all media interviews cleared

End of Day Two

- Confirm resourcing for the day
- Update key messages based on evolving information
- Begin assessing longer-term impact on reputation, update your Communications Plan as needed
- Check in with key stakeholders — share update if needed
- Do they have current information?
- What information are they receiving?
- Can they help share key messages?

End of Incident

- Wrap report
- Assess and track upcoming dates (reports, investigations, etc.)
- Place thank-you calls and send emails to key partners and stakeholders

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20.

SURVIVING OFF THE LAND

André-François Bourbeau and Manu Tranquard

Surviving off the land? A review of actual practices in Canada reveals that the teaching of wilderness survival is generally done in a haphazard manner, erroneously based on miscellaneous information deemed to be “cool” by outdoor enthusiasts in search of adventure. Unfortunately, this is far from an ideal approach to prepare for a real unexpected emergency for those who frequent remote outdoor environments for sports, work, or leisure.

In this article, the authors discuss the teaching of wilderness survival in order to meet the real needs of an outdoor emergency. The intent is to provide a best-practices outline to help survival instructors adapt their teaching accordingly, to go beyond the “surviving off the land” paradigm.

Introduction

Several previous studies have shown the importance of the outdoor adventure industry in Canada and the numbers of people who partake in outdoor related activities in remote environments for sports, work, or leisure (Tourisme Québec, 2007; KPMG, 2010; MELS, 2017; Tranquard, 2021a). Other studies have analyzed the amount of serious or fatal incidents which occur in Canada (Curran-Sills et al., 2013). The sheer numbers involved demonstrate the need for a systemic approach to prepare outdoor leaders and enthusiasts for potential life-threatening outdoor incidents.

Bourbeau (2019) has argued that nothing can be changed in the outcome of a survival situation once it is upon you. Either you can deal with it and survive, or you can't. In other words, you will face your predicament with the tools you are already in possession of: your actual physical fitness, psychological fortitude, decision-making capabilities, and outdoor skills. United States Army Survival Instructor Lutyens (2019) came up with a similar idea independently, called the survival balance, which weighs the difficulties of a given situation against the resources available to face them. Difficulties can be physical and/or psychological, whereas resources are measured as the sum of gear available, nature's bounty, human factors, and perhaps luck, as shown in Figure 1.

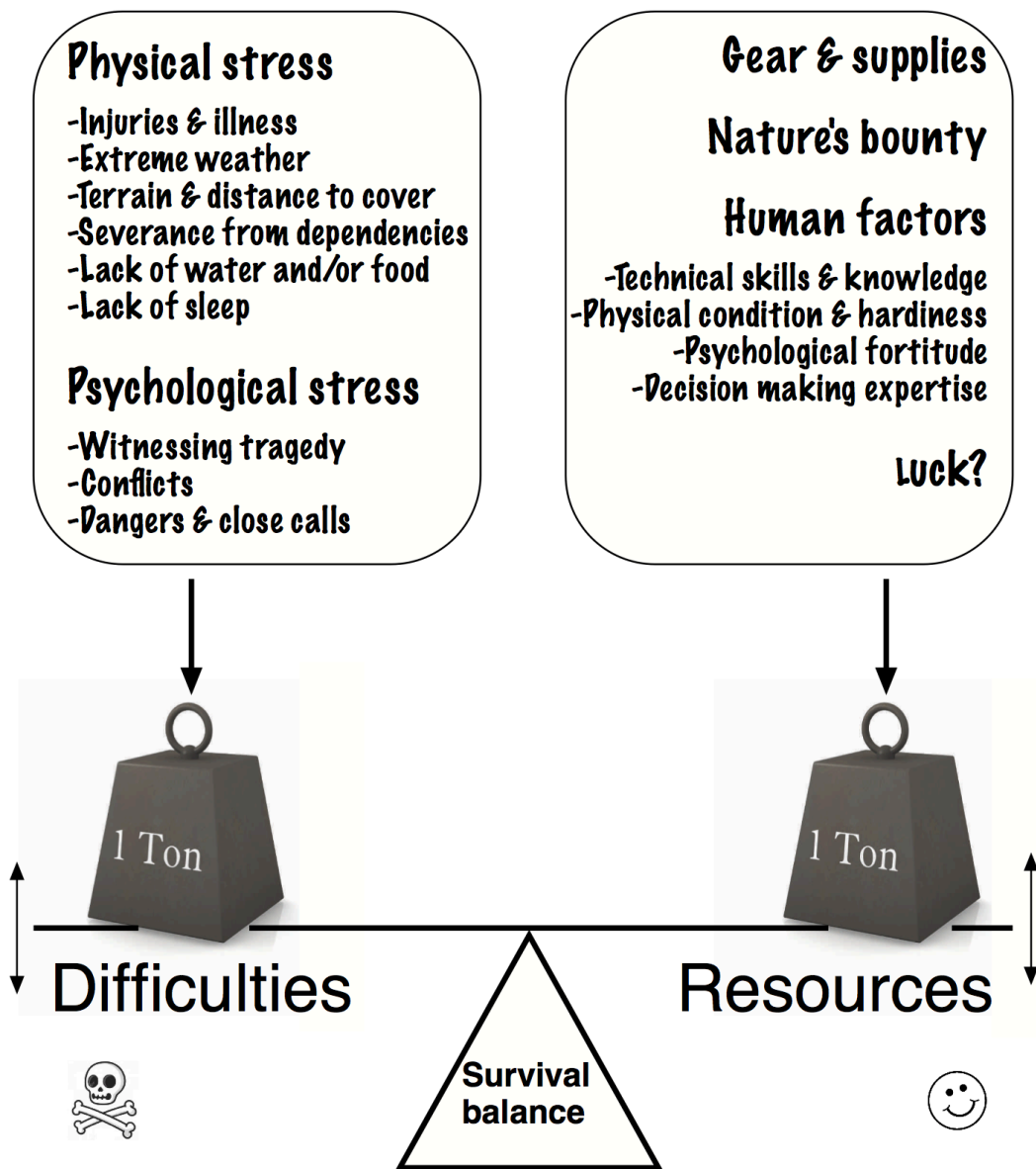


Figure 1. The survival balance (used with permission of the authors)

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This suggests that the primary goal of a wilderness survival teaching program should be to ensure that the balance can never fall on the wrong side. There are two ways to accomplish this: controlling the difficulties and gear available (risk management), or improving the strength of the human factors. Note that both of these approaches are *preventive*. Once in a predicament, it is too late, the survival balance then determines the outcome!

Risk management solutions

The purpose of risk management for the outdoors is therefore to verify ahead of time that during an outdoor

activity, the difficulties encountered will not be greater than what the group can deal with while considering the gear and supplies they carry for the specific environment in which the trip evolves. In other words, it must be verified that the level of difficulty of a trip corresponds to the strength of the leaders and participants.

Quebec's widely used risk management manual (AEQ, ACQ, LERPA, 2002) suggests a novel approach to ensuring this correspondence between trip difficulty and strength of group. In essence, outdoor activities are divided into four categories:

1. Beginner (one hour from hospital, mostly day trips or overnight trips)
2. Intermediate (one day from hospital, usually two to four day trips in semi-remote environments)
3. Advanced (several days from hospital, any lengthy expeditions in remote environments where risks can usually be controlled)
4. Expert (in very remote settings, while racing or attempting records, where risks are difficult to control, for example ocean crossings or climbing major peaks)

Once the difficulty of the trip is ascertained, safety becomes a matter of ensuring that the participants and leaders match the difficulty level, both in general outdoor competencies (camping), and also in the specific activity involved (canoeing). For participants in each category level, this means:

1. Beginner (no experience necessary)
2. Intermediate (several beginner experiences as background)
3. Advanced (several intermediate experiences as background)
4. Expert (several advanced experiences as background)

For leaders, this means having acted as leader several times in the previous category and having acted as assistant leader in the given category before acting as leader. The second most useful risk management tool (AEQ, ACQ, LERPA, 2002) is to file a trip plan which includes viable solutions for the following five pessimistic scenarios:

1. Delay of 4 hours per day
2. A participant is separated from the group
3. The most important piece of gear is destroyed (usually means of transport or shelter)
4. The leader becomes unconscious and needs emergency evacuation
5. A participant needs evacuation for a non-life-threatening cause

Finding solutions to these scenarios obliges the leaders and participants of the trip to question the adequacy of their personal competencies, choice of gear, route selection, and the availability of "trip angels," someone who can truly help if need be. These two major risk management tools, 1) ensuring match-up between trip difficulty and group competencies, as well as 2) filing an adequate trip plan, especially if validated by one or two other

experienced outdoor leaders, will go a long way towards ensuring that the survival balance stays on the positive side.

In the opinion of the authors, the first concern of survival training should be to emphasize these two main risk management practices, including evaluating the participants' strengths and weaknesses (Tranquard & Bourbeau, 2014). In this way, it will be less likely that individuals get in over their heads.

As previously stated, other than risk management, the only other way of positively affecting the survival balance in a preventive way is to use the survival program to improve the strength of the human factors, of which there are four (Bourbeau, 2019, Tranquard & Bourbeau, 2014):

1. Technical outdoor skills and knowledge
2. Physical condition and hardiness
3. Psychological fortitude
4. Decision-making expertise

Obviously, a short-term survival course cannot affect the survival balance all that much! Making a significant difference in any of the four factors is a long and ongoing process. The survival program should therefore endeavour to instill in the students the will to continue to improve in each of the four aspects, whilst at the same time, insisting on prevention through risk management. Since a wilderness emergency cannot be predicted, and the most dangerous aspect of a survival situation in Canada is to fend off cold, it is important to add “the habit of carrying a means of starting a fire in one’s pockets” and other such prevention habits to the risk management tools (to enhance availability of survival gear during an unexpected predicament). Let us now examine the most important course content for each of the four human factors which affect the survival balance.

Technical outdoor skills and knowledge

Most survival books and programs deal almost exclusively with this technical skills factor which deals with “surviving off the land,” the exciting part which attracts readers and students. Usually, there are sections on first aid, shelter, fire, water procurement, food sources (edible plants, hunting, trapping, fishing), protection from insects, signalling, orientation, and navigation (Angier, 2014; Bourbeau, 2011a; Brown, 1983; Davenport, 1998; Défense nationale, 1992; Fry, 1981; Olsen, 1997).

Learning the intricacies of all of these subjects can easily be a life-time endeavour! In a short survival program, the difficulty lies in choosing which of these subjects are the most important and merit a spot in the limited teaching and experimenting moments available. In the opinion of the authors, the elements which should be emphasized, those which are easy to learn and make the most difference to the real Canadian need in an unexpected emergency are confronting cold (Berry et al., 2008; Tipton, 2006) and facilitating rescue

(Protecteur du citoyen, 2013). As for first aid, it should be suggested as a separate entity since instruction is commonly available. Note that food and water are included here because they help avert cold.

- How to start and maintain a fire and use it to stay warm with the use of a rear wall
- Bourbeau's "Park bench" technique, a raised bed of poles to lie on
- The "Scarecrow" technique, which consists of stuffing clothing with dry material to improve insulation
- The importance of a makeshift hat
- The flat "Sponge roof" technique which absorbs rain vs the slanted "Shingles roof" technique which sheds rain
- The "Snow tomb" technique, a simple trench covered with evergreen branches and snow for fireless winter survival
- Frostbite prevention and quick solutions
- Bourbeau's "Slush" technique, how to suck water from snow slush melted on a flat stick
- Drinking potentially bad water vs dehydration
- Common edible wild fruit (vaccinium, amelanchier), cattails (typha) and rock tripe (umbilicaria) as food
- Using green branches with fire for signalling
- Tracing an SOS inside a rectangle and/or using a V for signalling

Physical condition and hardiness

Although it is obvious that being fat and out-of-shape or otherwise physically disabled will make any survival ordeal that much more perilous, hardly any survival courses or documentation include these notions in their teachings. Nevertheless, the simple fact is that physical condition and hardiness are certainly at least as important to surviving a wilderness emergency as technical skills and knowledge. For example, when a snowmobile breaks down 30 km from help at minus 30 degrees, the marathon runner has a better chance of surviving than the very old and weak former boy scout, despite the latter's skills.

The dilemma here is that physical fitness is perceived as an independent area of study, far removed from wilderness survival teaching priorities. Nevertheless, the authors suggest that, at the very least, physical fitness should be evaluated during a survival program in order to make students aware of their limitations, which encourages further risk management.

Also, the survival program should encourage further action by suggesting physical fitness and endurance training. Finally, it might be a good idea for survival programs, especially longer ones, to include increasingly physically demanding activities (like walking to another location) in order to kick-start the re-establishment of physical activities in the student's lifestyle.

Psychological fortitude

The importance of psychological fortitude as a determining component of survival outcomes has been largely documented (Leach, 1994, 2004; Tranquard, 2017, 2021a). For example, motherly instinct is a powerful motivator, whereas a serious depression suggests the opposite. Unfortunately, survival literature rarely includes concrete ways of increasing such fortitude in students (Leach, 2022). The problem is compounded by ethics – it is not possible to torture students to teach them what it would be like to be tortured! The authors have spent substantial time considering this topic and have come up with the following ideas which can be safely included in survival curriculums (Bourbeau, 2011b, Tranquard & Bourbeau, 2014).

1. Reading or relating facts concerning real survival ordeals and how people have reacted. Understanding how other individuals have lived through intense stress and suffering helps to mentally prepare for similar potential events.
2. Participating in simulations in controlled situations with the possibility of immediate escape. This permits individuals to predict their reactions to a real threatening event.
3. Suggesting voluntary solitary confinement or solitary trips in nature. This prepares for eventual solo survival ordeals.
4. Suggesting resolving phobias or apprehensions or depression or addictions via professional psychological help.
5. Participating in activities to improve group dynamics. Team building challenges, conflict resolution simulations, trust falls, group problem-solving, and so on, can be used to prepare for a group survival ordeal.
6. Evaluating food aversions. It can be fun as well as instructive to evaluate the willingness of students to eat bizarre foods. For example, offer them a scoop of a mixture of chopped up bananas, chocolate, and baloney flavoured with molasses, mustard, and ketchup. Or have them drink juice stirred with a brand new fly swatter. This type of activity opens discussions relating to adaptation to new situations.
7. Encouraging foreign travel. This too encourages adaptation and prepares psychologically for the acceptance of changes inherent during a survival ordeal.
8. Completing survival challenges in a safe setting. The confidence gained by problem-solving while completing voluntary survival challenges is deemed helpful while confronting real challenges. 400 such challenges were created to help students develop outdoor skills at the University of Québec's Outdoor Adventure Program (Bourbeau, 1996).

For example, these challenges vary from easy in level 1 (start a fire with a ferrocerium rod), through more difficult in level 2 (start a fire with paper matches but no striking surface), then advanced in level 3 (start a fire with an empty lighter), to extreme in level 4 (start a fire in the wilderness by using a piece of ice as a magnifying glass). Examples in other categories are

1. Make a 2-meter rope from an old T-Shirt which will support your weight
2. Make a basket out of natural materials, in which you can carry 1 kilo of rice with only one hand for 500 meters
3. Peel 5 potatoes using a knife made by forging a 4-inch nail.

It was observed that solving these types of challenges over time not only helped with problem-solving skill development and dexterity, but also boosted psychological confidence and developed attitudes of prevention.

Decision-making expertise

The fourth human factor which seriously affects the survival balance is decision-making. Indeed, even if there are major strengths in the technical, physical, and psychological competencies, it is all too often bad decision-making which leads to trouble (Costermans, 2001; Flin et al., 1996; Klein et al., 2010; Schmidt & Lee, 2005). Most survival books offer priority based approaches to decision-making. In a similar way, many authors argue as to which task should be prioritized: first aid, fire, shelter, water? Or again, they provide lengthy arguments for and against staying put vs travelling to find a way out. But all too often, the answer is: “it depends!”

In the search for a better way to teach decision-making which is independent of context, the authors developed the SERA model (Bourbeau 2011a; 2013; 2019; 2022) which is based on the four actual “jobs” which need to be addressed while in a survival situation:

- **S:** Signal so search and rescue teams can find you or attempt self-rescue
- **E:** Energy needs to be conserved and when possible rejuvenated by water, food, and sleep.
- **R:** Risks must be avoided to prevent worsening of the situation
- **A:** Assets need to be cherished, they are precious

In essence, the SERA model consists of examining each and every decision in a survival context in light of its effect on the four SERA factors. In other words, to ascertain if you are improving your situation or making it worse, you always need to consider the effect of a decision on each of the four factors.

For example, suppose your snowmobile runs out of gas at -10 degrees Celsius and you are considering spending the night by building a Quinzee (snow shelter) with the emergency shovel you carry. Before doing so, you analyze this decision based on the 4 SERA factors:

1. *Signaling:* from inside the soundproof shelter, you will no longer hear passing snowmobiles, and you might miss some rescue options (negative);
2. *Energy:* you will expend quite a bit of energy building the shelter (negative), but it will be a few degrees warmer inside (positive);
3. *Risks:* there is a moderate risk of spraining your back while shovelling and a slight risk of the snow

collapsing on you (negative);

4. *Assets*: your clothes are currently dry, but will be wet by the time you finish digging the snow house (negative).

The SERA model does not automatically imply that the right decision will always be taken, but at least the right *considerations* will have been made before executing a decision, which can be the difference between life and death.

Here again, the difficulty lies in finding efficient ways to teach students the decision-making process. One strategy the authors have experimented with is to ask students to show what they would do in the first thirty minutes if ever they were in a survival situation. They typically frantically proceed to gather firewood, make shelters, beds etc. At the end of the exercise, the sweaty students are asked if they would like to see what the instructors would do in the same situation. The instructors then simply pull out a whistle from their pockets, give it three blows, and all of a sudden, an assistant screeches in with an ATV vehicle and a case of beer. Lesson learned. Think SERA.

In the authors' experience, decision-making is best learned by thinking through or finding solutions to invented scenarios, be they on paper or real-life. For example, if groups of three students are brought 3 km from home base in winter and 4 of their 6 boots are accidentally "burned" while drying them near the campfire, how can they get back to camp? Without the SERA model, they get an idea and immediately begin acting on it. But after thinking it through with the SERA factors in mind, they better see all of their options, starting with calling camp to see if someone can pick them up, sending one person for help with the two boots, saving energy while waiting for rescue, considering frostbitten feet, checking if they are willing to sacrifice gear assets to make emergency footwear, etc.

Summary

The outcome of a survival ordeal depends on the balance between the difficulties presented and the resources available to face them. The first option to maintain a positive balance is to implement two main risk management strategies. The first is to ensure that the level of difficulty of a trip is appropriate for the strength and experience of the group. Quebec's risk management manual divides outdoor activities into four categories: beginner, intermediate, advanced, and expert. Participants should have a certain level of experience in the previous category before moving up to the next level. Leaders should have acted as leader in the previous category and as assistant leader in the current category before leading a trip. The second important risk management tool is filing a trip plan that includes solutions for five pessimistic scenarios: delay, participant separation, lost gear, unconscious leader, and participant evacuation.

The second option to positively impact the survival balance is to improve the four human factors of

technical outdoor skills, physical condition, psychological fortitude, and decision-making expertise, but all of these are a long term process.

The two risk management tools suggested and improving the most quickly modifiable parts of each of the human factors should be the main focuses of a survival program.

Conclusion

Teaching new outdoor skills sometimes creates more of a security problem than it resolves. For example, a person who has never been down a rapid in a canoe will not likely attempt it. By teaching them simple basic strokes and taking them down some minor R-2 rapids just once, the fun they had might then incite them to try more difficult rapids which are beyond their capabilities. In this way, the fact that they took a beginner's canoeing course has rendered them less safe, not safer. As outdoor leaders, we have to be particularly aware of this phenomenon.

In the wilderness survival world, we must be even more aware of the possibility that our teachings can give a false sense of security to our students. This is why best-practices must ensure that students maintain realistic views of their capabilities. It is not because you have learned to start a fire with a bow drill in a dry and controlled environment that you will be able to light one in a real survival setting with soggy wood during a downpour! And it certainly does not mean that you don't need to carry a lighter or matches into the woods. It is essential to remember that the survival balance is independent of what has been taught; there will always exist the potential for a situation more dramatic than what the group can handle. The message must be loud and clear: forget about "surviving off the land" as anything other than an interesting pastime. Instead, focus on avoiding predicaments through prevention, prevention, and more prevention.

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21.

PROFESSIONAL OBLIGATIONS FOR RISK AND SAFETY

Jeff Jackson

Leaders Creating and Controlling Risk

The outdoor leader has a difficult job. Despite the beautiful places, enjoyable activities, and often wonderful companions, the job also entails hard physical work, long hours, time away, and dealing with all types of weather and people. Beyond that, though, adventure – as the purposeful pursuit of risk – makes adventure guiding a very ambiguous position when it comes to managing risk.

Leaders take their clients into dangerous locations and then protect them when they get there. Leaders are the creators and controllers of risk. They both produce risk and protect against it. This is a highly subjective situation to be in, especially when asked to defend how much risk is enough? The very nature of adventure activities involves subjective decisions regarding how much risk exposure is suitable for a given group, and how much and what kind of safety precautions to apply. This balance between producing risk and protecting from risk will often be viewed unfavourably against the leader when something goes wrong. Why did they allow so much exposure? Why did they not apply more effective safety measures? Because of this ambiguity, there are defined professional obligations when it comes to planning and managing for risk and safety.

For the purposes of this chapter, adventure is defined as the purposeful pursuit of risk. This limits the scope of this piece, as only a narrow slice of outdoor and experiential learning specifically seeks risk as fundamental to their purpose or program. For the wider outdoor learning, outdoor recreation, or experiential education sector, risk may be perceived as negative, and is to be reduced at all levels (Jackson, et al., 2023). In other domains such as adventure tourism, adventure recreation, or adventure education, challenge and risk are essential to realize the desired outcomes.

Risk and Uncertainty

Problematic in this discussion is the root word “risk.” Mainstream interpretation of this word would equate to something similar to “the potential for loss.” This is not without argument, as there are dozens of formal definitions in print, and the word itself traces its history back to Ancient Greek. What is missing from the

mainstream interpretation is the flip side of the word; the potential for gain. For fields such as adventure activities, this positive aspect is particularly important to balance the potential for loss against the potential for gain. Rather than wade into this philosophic and semantic debate, this chapter will simply consider risk as uncertainty, without judgment as to positive or negative consequences.

The economist Frank Knight differentiated between risk and uncertainty in his landmark book *Risk, Uncertainty, and Profit* (1921). Risk can be quantified absolutely with probability, he argued, while uncertainty has no calculable probability (Knight, 1921, I.I.26).

Uncertainty must be taken in a sense radically distinct from the familiar notion of “risk,” from which it has never been properly separated... It will appear that a measurable uncertainty, or “risk” proper, as we shall use the term, is so far different from an unmeasurable one that it is not in effect an uncertainty at all. We shall accordingly restrict the term “uncertainty” to cases of the non-quantitative type.

The adventure guiding, recreation, and education field deals almost exclusively with uncertainty, as the risks, hazards, and potential for loss are overwhelmingly of the non-quantitative type.

Further, this chapter will refer to the adventure ‘leader,’ which includes guides, instructors, teachers, or any other lead role that has a professional obligation to plan and manage risk and the safety of a group.

A secondary assumption for this discussion is that the adventure leader is operating under an organizational umbrella, whether it be a guide service, outfitter, or educational institution. This implies, then, that there are organizational and system influences that interact with the decisions and actions of the leader.

This balance between the ‘right’ amount of risk and the ‘right’ amount of safety becomes the focal point of lawsuits. When asking if the leader performed to an expected standard, implied is the risk present versus the safety applied. One judge in a heli-ski case (*Scurfield v. Cariboo Helicopter Skiing Ltd.*, 1993) explained:

It is not contended that the defendants [i.e. the guides] had a duty to ensure that their guests were kept away from all places where avalanches could occur — in the context of helicopter skiing that would be impossible. I think it is correct to say that the duty of care which lay on the defendants was not to expose their guests to risks regarded in the business as unreasonably high, whether from avalanche or any other hazard to which participants in the sport are normally exposed. To enjoy the excitement of skiing in mountain wilderness areas, participants are necessarily exposed both to risks which the careful skier is able to avoid and certain risks also which such skiers may be unable to avoid, including some risk of being caught in an inescapable avalanche.

The tension between creating and controlling risk is a core element of professionally facilitated adventure activities. As such, there are specific professional expectations when it comes to managing risk and safety. These expectations are formed from three sources:

1. Peer practice, or an estimated ‘industry standard’ – performing similarly as others would in a similar context, with similar training and client groups.
2. Court rulings and judicial opinion – court decisions serve to measure a particular circumstance against specified law or societal expectations.

3. Social license – moral or societal expectations that create performance requirements in order to be deemed ‘acceptable,’ or to direct towards the ‘right thing to do.’

Leaders’ Professional Obligations

At a base level, these professional obligations include supervision, care, prudence, risk assessment, safety briefings, and doing the right thing.

First and foremost, the leader supervises. The leader is in charge of the group and the scenario, and it is expected that whatever goes on within that context does so under the eye of or the direction of the leader. As evidence, ‘failure to supervise’ shows up in many related adventure guiding lawsuits (i.e. *Stations de la vallée de St-Sauveur Inc. c. M.A.*, 2010).

Secondly, leaders take care of people. Within the parameters of the activity, trip or environment, the leader’s job is to look out for their clients. In Canada, the leader is more than the one who knows the way; theirs is a greater role that is concerned with the care of people (Jackson & Heshka, 2021).

Third, the leader is expected to perform as other leaders would in that situation. This is the ‘reasonable instructor’ test or ‘reasonable guide’ test discussed in legal liability settings (*Ochoa v. Canadian Mountain Holidays Inc.*, 1995, *Roumanis v. Mt. Washington Ski Resort Ltd.*, 1995). A leader needs to know the typical and expected behaviours that would be endorsed by their peers, and reliably perform to those. To go beyond or outside what most leaders would consider ‘normal’ would require exceptional circumstances, and expose one to claims of failing in their duty as a leader.

Fourth, leaders assess risk and plan for emergencies. Dynamic risk assessment is a continual in-field process, and risk assessment as a planning tool happens every trip and as a part of pre-trip staff briefings. Leaders grow to see the world through a risk assessment lens and are expected to apply suitable safety measures when they sense emergent hazards or escalating risk levels. In the event of a non-normal occurrence, an injury, or some other emergency, it is expected that the leader will have an emergency response plan sufficient to assist with such an event (*Isildar v. Rideau Diving Supply*, 2008).

Fifth is safety briefings. Leaders are expected to inform their participants of the expected hazards and outline the expectations on the client to assume and manage some aspects of their own safety (*Isildar v. Rideau Diving Supply*, 2008). Transport Canada Regulations (SOR/2010-91) specify that all ‘guided excursions’ on water are required to include a pre-trip safety briefing, the logic of which can reasonably be extended to all led outdoor activities regardless of domain. This risk communication can extend to pre-trip information or parental consent briefings. It can be argued that modern adventure-based risk management is organized around this communication exchange before and during facilitated activities (Jackson & Heshka, 2021).

Sixth, and lastly, the leader understands that in some aspects their role is defined and prescribed by their supervisor, and in others it is up to the individual leader to do the right thing. The author Robert Kegan called this as being at the same time a “hired hand and master of one’s fate” (1994, p.1). Large aspects of the adventure

leader's role is unsupervised. The leader is on their own to steer the boat, direct their group, or set up a site. No one is looking over their shoulder to ensure they are doing it right. Within those acts, the leader's organization may prescribe what lines to take down a rapid, what trails are suitable and which are not, and what a suitable site setup looks like. There are myriad opportunities for the leader to take shortcuts or skimp on safety – the odds are it will likely work out okay – but routines are in place to ensure consistent, quality programs that fall within prescribed risk tolerance guidelines. The leader's role is to perform to these invisible lines, even when no one else is looking. When the rules aren't clear or a situation emerges that is not covered by normal routines, it is up to the guide to assess the risk, consider the options, and conservatively implement the best option.

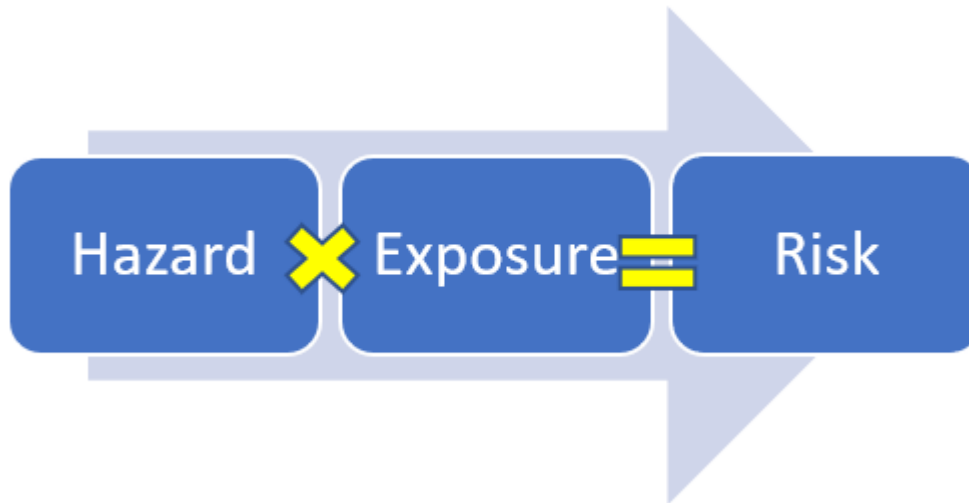
Risk Tolerance, the Organization and Leaders

The term “risk tolerance” was introduced to the outdoor sector in the Cloutier (2003) report on the Connaught Creek avalanche, and is defined as the articulated limits on the nature and magnitude of dangers to which an organization will expose its clients, staff, and self (Jackson & Heshka, 2021).

In his book *Target Risk* (1994), Gerald Wilde explained that all individuals have a desired level of risk in their life — some position on the spectrum between absolute safety and absolute danger — that they accept, and in fact seek it. He called this “risk homeostasis,” and it helps explain why some climbers expose themselves to avalanches and rock falls, for example, while other equally skilled climbers shy away from such terrain — individuals choose the level of risk they are willing to expose themselves to. In other words, this is pointing toward an individual's decision-making, risk tolerance, and internal balance between risk and reward.

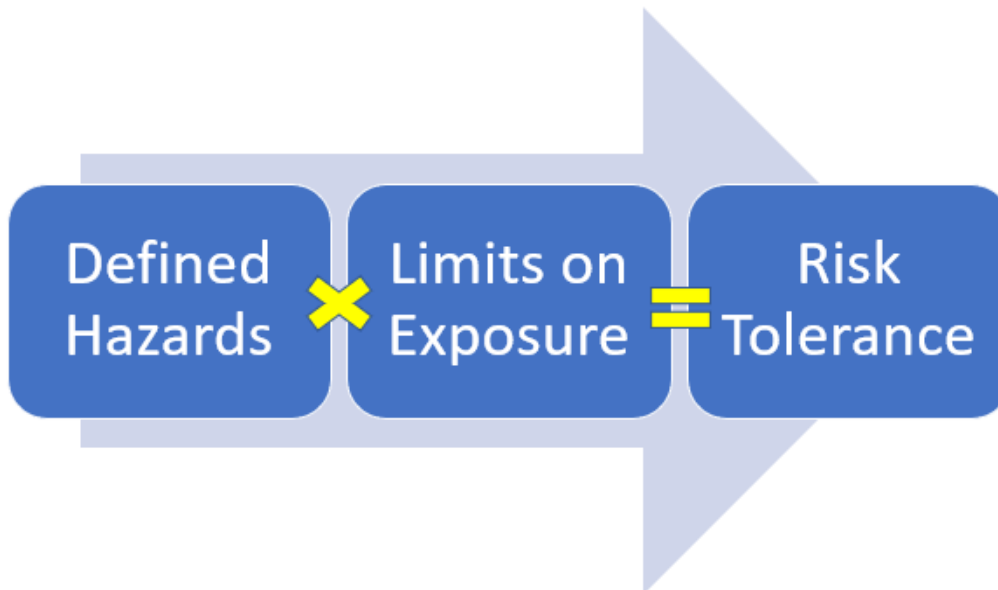
Risk tolerance has a different tone and gravity when applied to organizations, educational institutions, or commercial guiding operations. When considered in the context of a leader's duty of care, decisions and tolerance for risk by the leader now directly affect those they are charged with caring for. Every organization has a certain risk tolerance, present in every single decision that is made. If not articulated expressly, then it is buried deeply in the assumptions that underlie the organization's mission, values, and history. These base-level assumptions may or may not be universally shared throughout the organization (Jackson, 2016).

Figure 1: Basic risk equation



One of the basic models for organizing and understanding risk, shown in Figure 1, proposes that risk is a function of hazards and the exposure allowed to that hazard. If this is so, then it can be the basis for understanding risk tolerance, shown in Figure 2, as a function of defined hazards and the limit on exposure to those hazards.

Figure 2: Tolerance equation



Inherent in the idea of risk tolerance is choice. An organization is not at the mercy of the environment in which it finds itself – it must choose where it will position itself, choose what strategic direction it will and will not go, choose the hazards it deems beneficial to confront, and choose the terms on which it will expose its clients, staff, and self to particular uncertainty. This can be applied to trip types, program locations, client groups, operational uncertainty, and strategic decisions. Risk tolerance gives an organization's decision-makers the ability to act, and makes no assumptions about what must or must not happen. Decisions made at this

organizational level directly set up adventure leaders and the risk baked into the activities they run on behalf of the organization.

Organizational risk tolerance has substantial ethical implications. Normal accident theory, proposed by Charles Perrow (1999), directly addressed this issue, and argued that risk tolerance is not about corporate culture – those articulated or embedded assumptions – but about power. Risk tolerance is about who gets to decide. Who gets to decide what hazards a program will willingly confront? Who gets to decide the exposure level? Rarely is it the clients. Often, even the leaders don't get to decide. Adventure tourism in particular is implicitly based on a caveat emptor/buyer beware risk philosophy. Clients deciding on an adventure vacation rarely have the understanding to fully assume the hazards and exposure level an operator has embedded in their trips or activities. Taken to children, schools, and adventure education, the ethical implication grows, and opens a liability can of worms. The organization has the obligation to plan suitable programs and trips with hazards that are within the ability of the leader to manage.

For the leader, organizational risk tolerance can provide clear direction – if that risk tolerance is clearly defined and uniformly applied throughout the organization. This clarity could be found in the form of specific cut-off levels or times, weather warning cancellations, or base-level staffing requirements. If these 'rules' are not clear or unevenly applied, interpreting risk tolerance adds a layer of ambiguity to the professional leader's role. Cognitive effort is required to intuit the numerous indirect cues offered by the organization or by the manager in order to estimate the accepted level of risk. From the manager's standpoint, and from a systems planning perspective, articulating risk tolerance is the first step in building effective risk management and safety systems.

Risk Planning Obligations

Risk management is about planning — the absolute fundamental building block number one of safety-oriented adventure trips, activities, and facilities. Leaders planning for safety, for their trip, their day, and their clients' experience they will create; managers planning their systems, routines, training, risk assessment, and documentation; the organization planning for sustainability and operating within a specified risk tolerance. This is the 'blunt' end of adventure – all the things that go on before a trip ever starts, yet set it up for success.

Safety is individual decisions and actions that limit exposure to any one hazard or risk. For adventure trips, this is the leader's job. Safety is a front-line activity, assessed and managed on a moment-by-moment basis. Safety, as limiting exposure, is found everywhere in adventure: ensuring clients have their life jackets buckled up; checking the battery on the cell phone before the trip leaves; double-checking anchor knots; moving out of the way of oncoming traffic; mopping up spilled water at an entryway; positioning clients in the proper location while the leader prepares equipment – all day, every day, safety is created by frontline leaders.

Risk management is the systems that are in place to ensure that hazards are minimized, safety is consistently practised, and overall exposure to risk is controlled to levels acceptable to the organization. Risk management is the manager's job. What we know is that the organizational structures, systems and routines that are in place

set the stage for front line workers to do their job effectively (Rasmussen, 1997). Poor planning or poor systems set up employees for poor performance. Poor performance opens the door to unsafe conditions.

Within the organization, analysis of Canadian-led outdoor activity fatalities pointed to several key factors that persist over time (Jackson et al., 2023). Key person dependency, where one person is responsible for risk decisions and program delivery, was found as a common thread, and in the cases reviewed, was combined with a lack of supervision oversight. One individual was running a high-risk program in a vacuum. Overlapping factors of unclear organizational risk tolerance and signs of risk creep were also evident. Risk creep refers to the incremental and unnoticeable increases in risk as programs progress and as staff become comfortable with old risks (Jackson & Heshka, 2021). With these conditions persistent over time, the organization's risk planning obligation is to account for and mitigate these known risk factors in advance.

Adventure Activities as Complex Social Systems

Some significant disasters in the adventure sector forced practitioners to re-think risk management as more than field-level safety decisions. Adventure researchers in Australia looked to industrial safety theory and offered a significant step forward in risk planning (Carden, Goode, Salmon, 2017). An earlier industrial safety researcher, Jens Rasmussen, envisioned safety as more than the 'operator' on the shop floor. In his landmark paper (1997), he theorized that risk management involved several layers of influence: government regulations and laws influence industry regulations; those industry regulations influence organization or company structure, goals, policy and practices; those company goals influence the manager and their directions to staff; staff take their cues from all of the above and incorporate those as variables into their own decision-making and safety actions.

In effect, the adventure leader is on the downstream end of many influences. It is disingenuous to automatically blame the leader when something goes wrong, when in fact the error may have been handed to them from some other higher layer of risk management planning or subtle social influence. Accident theorist James Reason believed that human error is a consequence, and not a cause. Individuals perform to their ability, and (mostly always) believe they are doing the right thing or the best they can (Reason, 2016). The conditions under which guides work may have set them up for failure: impossible time restrictions, difficult conditions (i.e. sending out a group with impending severe weather), assistant guides that are more liability than help, clients with individual needs beyond the ability of the guide; the list can be long. While the highest levels of 'the system' are beyond the influence of the leader and (likely) the organization, there is an obligation to recognize the latent errors that existing regulations, lack of regulation, industry practice, and other stakeholders such as certification bodies play in influencing program layout and leader safety decisions in the field.

Conclusion

The outdoor leader is expected to create risk and then control for it. This ambiguous position is open to wide subjective interpretation and has inputs by the individual leader, the supervisor, at the organizational level, and system influences beyond the organization. Peer practice, societal expectations, and court decisions all direct adventure leaders in defining their professional obligations with regard to managing risk and safety. Beyond the leader, there are expectations upon the organization to define its risk tolerance and plan suitable adventure activities that only incorporate those hazards that are manageable by the leader.

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PART VIII
TEACHING

22.

AN INTRODUCTION TO WILD PEDAGOGIES

Bob Jickling; Sean Blenkinsop; and Marcus Morse

Extraordinary Times

We live in extraordinary times. The Earth is stressed in ways humans have never witnessed and the stories of our times are being written in mass species extinctions, extreme weather events, and accelerating climate change. Each successive report from the Intergovernmental Panel on Climate Change is more dire than the last. It has become apparent—as if wildfires, hurricanes, droughts, and floods aren’t enough— that timelines for change are urgent and climate change will influence our lives dramatically. However, the consequences facing our children and grandchildren are likely to be catastrophic (IPCC, 2023). It is also a time of social upheaval and of war, pandemic, protest, polarization, and climate-induced migration. Meanwhile, nature is crying.

We do not even have adequate language to describe the epochal scope of the coming change. Terms such as Anthropocene do not adequately capture the scale of Earth’s shifting geostory (Latour, 2014). Perhaps it is another human mistake to even think we can fully describe what is happening. The Earth is writing the script and “modern” humans are, for the most part, not listening. One thing is clear, the future is uncertain.

It would be a mistake to think that we humans can control the pending crisis or that we can avert it with more technological innovation. If we are to affect the environmental trajectory, then it will not be by using the same kind of thinking that created this social and environmental upheaval. We cannot continue to act as we are. So, what might potential responses entail?

Troubles in Education

Education is often invoked as a way out of crises, yet this can be fraught. Many current modes of education are, at best, pervasive in their rational, reductionist, measurable, and neo-liberal driving forces. And they operate on a scale that makes them seemingly impenetrable to change. Bauman (2005) is just one of many scholars who is doubtful that deploying typical educational strategies will bring about change. He insightfully asks, can education ever be effective; will it ever be able to “avoid being enlisted in the services of the self-same pressures they are meant to defy?” (Bauman, 2005, p. 12). We share his skepticism and fear that much educationally attempted change unavoidably tends to bend back in the direction of the status quo. This seems

to be especially true for those of us working in modernist, globalized, westernized, euro-centric, neo-liberal, colonial, Cartesian, and/ or anthropocentric educational narratives.

If evidence is pointing towards the need for significant cultural change and not just mere tinkering, then education must be at the heart of this project. Change does not happen by naming the possible goal and hoping we get there. To move people, a culture even, from where they are— ontologically, ethically, metaphysically, practically—to somewhere else must involve teaching and learning. To disrupt the current pace of environmental destruction and climate change, we cannot continue to do the same things; we cannot continue to be the same people; and we cannot continue to be the same educators.

Of course, there are many superb teachers who push limits and disrupt the status quo. As Au (2011) remarks, even in the face of high stakes testing there will be teachers who find ways to do what they call “real teaching” (p. 39). From this short but evocative expression of our present situation, two questions arise for educational consideration: First, what will it take to nurture healers and restorers of the Earth? And second, what continues to hold us back?

The Emergence of Wild Pedagogies

Wild pedagogies is a relatively new idea that arose first in Canada, and since 2014 has been embraced by an emerging international group of educators. Together we seek to explore and expand this idea for significant educational change. The book, *Wild Pedagogies: Touchstones for Re-Negotiating Education and the Environment in the Anthropocene* (Jickling et al., 2018), was published as a provisional gathering of ideas. It rests on the premise that the modernist relationship to the natural world must change, urgently; and that education is a necessary, even fundamental partner in such a project. Wild pedagogies began with two questions. First, why is it so darned hard to change the educational direction of our times; are we really fooling ourselves when we think we are making progress? Second, what has gone so badly wrong with relationships between humans and nature under the influence of western cultures? A favourite answer to these questions is unquestioned assumptions. And the one word that links our two questions and these assumptions is control; we modern humans most often seem to believe that we should exert control: we should be the masters of just about everything. Many readers will recoil at this thought, and in a sense, quite rightly. We are doing good stuff; we outright reject the urge to be in control; there are lots of signs of progress. However, most of us are marinated daily in the cultural values of western societies and it is near impossible to simultaneously keep track of all the cultural assumptions that press upon us. Even the most conscientious amongst us can miss deeply embedded assumptions that bend our best intentions back towards the status quo.

In seeking to understand the problem of control, we propose challenging existing assumptions, rethinking possibilities, pushing open doors to educational opportunities, exposing the limitations of current ways of knowing and being in world, and embracing learning opportunities arising from engaging with the more-than-human world. In short, we’re seeking to loosen the leash of control a little or maybe a lot. We are specifically

seeking to renew our art and practice of teaching and to make it less controlled by cultural norms, less dogmatic about expectations, and more disruptive and rebellious. We seek intentional activities that provide fertile fields for personal and purposeful experience without controlling the environment and its actors, learners, or educational outcomes. In short, we seek to make it more wild (Blenkinsop & Morse, 2017). So, in our work, we are proposing something we have called wild pedagogies. Below, we consider what this means in terms of education and our relationships in the world.

Wild Pedagogies in Education

By introducing wild pedagogies, we suspect that we are giving a name to what many educators are already striving to do. Some will be teaching outside of mainstream education. Some will be outdoor leaders, wilderness guides, environmental educators, or interpreters. Others will be involved in social justice issues and work with the homeless, the marginalized, and those with special needs. Still others will be involved in community education projects, cross-cultural settings, or have worked abroad. One thing that often unites such an eclectic group of educators is an enthusiasm for making a difference in the world and an understanding that mainstream education is, at best, incomplete. For many, they also know that transformative experiences do not easily fall within prescribed teachable goals and formal subjects. Perhaps the keyword here is “prescribed.” Learning must typically serve the ends of the education process based on predetermined outcomes and preferably those that are measurable. The learning environments are predominately classrooms. The language and metaphors for teaching and learning reflect an established educational culture in ways that are prescriptive. Even within education faculties there can be enormous efforts to prescribe and control the education of teacher candidates (Jickling, 2009). Where we feel that these demands have become less rigid, we find opportunities.

Despite curriculum control, testing pressures, and these deeper cultural constructs, many committed teachers do find ways to resist and to create space for what they consider meaningful transformative, even wild, teaching. Without sliding into an unstructured free-for-all, many outdoor educators are finding ways to loosen forms of control, to act in solidarity with the marginalized, to bring the voices of the voiceless to students, to push back against the often implicit anti-environmental orientations of the cultures they are immersed in. They are enacting pedagogies that are less objectively oriented and more co-constructed, less human-expertly known and more epistemologically diffuse, less universal and more place responsive. In short, they are wilding their practices.

Into the Wild World

Any meaningful shift from the present status quo will most likely require a profound change in the way most of us humans (though, not all) relate to the world around us. We need to be different. Reimagining relationships within the world will require disrupting dominant human-centered thinking and hierarchical

positioning. We will need to move from simply controlling the world around us to thinking of ourselves as being emotional, educational, and ecological partners within this more-than-human world. Rather than attempting to domesticate the lands that we inhabit, we must move towards appreciating this land's inherent wildness; to appreciate its agency and its capacity to shape understanding of our presence in it. To do this we work with the idea of wilderness, and its relative wildness, to leverage our thinking. We suggest it is timely to re-think, once again, what these concepts have been, what they are, and what they might become. We acknowledge, at the outset, the colonial legacy of wilderness and the impact this has had in the disenfranchisement of peoples and cultures the world over (Bird Rose, 1996). And we recognize that wilderness can be positioned in a way that reduces its value to a backdrop as an inanimate set of resources, for human-centered and self-serving ends (Cronon, 1996). It can also be positioned as a challenge to be overcome which often leads to images of heroic and/or colonial conquest. We acknowledge and agree with these critiques. However, with some reconsideration, we believe that there is value in a robust conception of wilderness that does not rest in, or rely upon, colonial tropes and heroic narratives.

Despite its historical liabilities, we argue that wilderness can be reconceived by tracing its etymological roots to “self-willed land” and, hence, its inherent wildness to freedom even. Such a new becoming points to a deeper understanding of relationship as remarkably different from the colonially infused concept. Capacity for selfwill, or wildness, hints at concepts like inherent value, independent purpose, resistance, agency, and rights. For the wild pedagogies project, it also helps to problematize ideas about control. Hence, within the concept of wilderness lies wildness, and pedagogical inspiration. Wildness, we argue, resists the kinds of control that can limit educational opportunities. This also suggests that the wild is not some place at a distance from most human life, but that the wild can be found in places close to home, in urban, suburban, and industrial zones, and that is it within us all. So, an important question becomes: How might we allow the self-willed nature of human and more-than-human others, and the places we inhabit, to enter more fully into our practice?

The Shape of Wild Pedagogies

It would be tempting to think of wild pedagogies as a tight framework, but that would not be correct. Our intention is that wild pedagogies will be a provocateur at the intersection of imagination and praxis. That it will be an active agent of discovery, more generative rather than prescriptive. It is about the act of wilding education, rather than aiming for a particular destination. Wild pedagogies are not about replacing other “educations” such as environmental education or place-based education or outdoor education and so on. Rather, it is a tool intended for all educators to question their practices evermore deeply. As such, we hope that wild pedagogies will inspire responses that are creative, courageous, and radical, because that is what our times urgently require.

Who Are Wild Pedagogies For?

Educational change will not arise from any particular location and must be a broad undertaking. As educators ourselves, we see challenges facing education, and it is natural to begin with our professional kin. Most obviously, we are writing for environmental educators, outdoor educators, place-based educators, forest-school educators, and a vast array of like-minded others. However, we are forever reminded that the educational problems of our times are systemic and deeply cultural. So, we believe that this work has something to say to all those working and studying in formal education systems, whatever labels you choose to describe your work. Education also takes place at home, at work, and in community activities, with our children, our peers, and our friends, and our neighbours. Education takes place in museums, aquariums, parks, playgrounds, summer camps, and social service agencies. As such, there are educational steps that can be taken by parents, students, community educators, teachers, school principals, academics, business leaders, policy makers, healthcare providers, wilderness guides, ministers of education, and other politicians. The time for this collective response is now. We must critically and thoughtfully examine human activities on earth by considering our deepest assumptions, ideals, values, and worldviews. This is the work of everyone attempting a wilding of education.

Touchstones for Wild Pedagogies

It is not easy to quiet the ever-present normative chatter that bombards our minds. As we attempt to disrupt one set of social norms, we are surrounded by others that press us to conform. It is impossible to break free entirely from all deeply embedded and powerfully controlling instincts. In the following section, we offer a series of touchstones to help cut through this chatter and support the practical work of wild pedagogies. The touchstones stand as reminders of what we are trying to do, or as ideas to return to, and they help us to bring focus to some key issues that inhabit the core of this educational project. Each touchstone below begins with a brief description of a pedagogical consideration and concludes with a series of questions. Touchstones are intended to be revisited, refined, and reconsidered. Indeed, this version of wild pedagogies has two more touchstones than the original version (Jickling et al. 2018). The touchstones can become points of departure and places to revisit. As such they are not intended to be dogmatic, but simply a gathering of emerging ideas and practices. They are not intended to define wild pedagogies; rather, they should act as agents or provocateurs of discovery for inspired practitioners. We hope you enjoy them.

Touchstone #1: Nature as Co-teacher

We believe that education is richer, for all involved, if the natural world and the many denizens that co-constitute places, are actively engaged with, listened to, and taken seriously as part of the educative process (Crex Crex Collective, 2018).

At one level this touchstone might appear easy to understand and even put into practice. The claim is

that the natural world is a vibrant, active, agential place that is worth listening to, attending to, building relationship with, and learning from. Accepting this perspective likely means that educators will spend more time outdoors and thus find different pedagogical possibilities and new affordances being engaged. However, at another level, this touchstone has significant implications for what knowledge is and how learning happens. If nature becomes a co-teacher then the human, often considered as the sole possessor, arbiter, and conveyor of knowledge is de-centered and learning becomes a shared project that is no longer ever complete or human-based (Blenkinsop & Beeman, 2010). If we take this concept seriously, the impacts can be profound.

How might more-than-human and/or material others be understood as active collaborators or instigators in pedagogical activities, rather than objects of study? In other words, how might we move on from learning about the more-than-human world to learning with and from it? How can we acknowledge the role of the other-than-human (including the material other) as active agents, capable of being entangled with pedagogical events? Quay and Jensen (2018), for example, assert the need to widen educational approaches and reach beyond human-centric ideas of teacher-centered pedagogy and student-centered learning, to include more-than-human-centered learning.

Such opportunities remain strong within the lives of children, and for adults the challenge can be to acknowledge such possibilities. As Rautio (2013) suggests, “to appreciate also the momentary and the seemingly unguided in children’s everyday lives ... we would have to embrace the thought that teachers—those who invite, guide, support and steer us—can also be other than human beings” (p. 402). As an example, consider a moment on an outdoor walk when students’ attention is drawn towards some damp moss and micro-worlds atop a rock slab. They may lie down on the warm surface of the rock bringing their eyes to meet the moss world. This change in perspective might create a frenzy of excitement. At this moment, as ant trails emerge here and there, and water seeps through the moss forest creating miniature rivers, nature as co-teacher is taking over. Students are drawn, by the moss, into engaging in conversations with each other and the place—“why does moss feel so soft?” — “who lives within the moss?” — “what systems are they using to organize their lives?” This touchstone is a reminder that pedagogical response in such moments (through language, movement and time) ought to reflect the active agential role of nature.

With this discussion as background, educators might want to consider questions such as:

- How can I invite the natural world to be present as a co-teacher in my practice? How can I allow other teaching voices to be heard in their own ways?
- How have we been able to learn about, with, and from the more-than-human world?
- How can my class and I contribute to the flourishing of each other and those other beings that we live amongst?
- What are my teaching habits that can distance, background, undervalue, or denigrate the natural world?

Touchstone #2: Complexity, the Unknown, and Spontaneity

We believe that education is richer for all if there is room left for surprise. If no single teacher or learner can know all about anything, then there always remains the possibility for the unexpected connection to be made, the unplanned event to occur, and for a simple explanation to become more complex (Crex Crex Collective, 2018, p. 84). This touchstone prioritizes the unpredictable as it pushes back against the desire to control and contain. Embracing complexity requires acknowledging that not everything can be completely known, and that learning cannot be predetermined or packaged in advance, without the potential loss of serendipitous learning. Complexity can be understood as dynamic, fluid, and unpredictable, and is best described in reference to qualities without fixed boundaries. Wild pedagogies call upon educators to be open to spontaneous, complex, and sometimes surprising occurrences. For educators this touchstone can involve risk as the emergent tends to complexify situations and curriculum design can no longer focus on simply positing desired learning outcomes and then pushing students towards those chosen particulars (Green & Dymont, 2018). The world does not in fact work in such a clean, predictable, linear fashion and something important is lost when we assume that it does.

In many educational contexts, there exists a reliance on learning about the world through ideas of separation, classification and knowable objects. Learners, for example, can be encouraged to delineate individual objects, identify them, describe them and expound knowledge about them, as objects of study. Yet such ideas continue to reinforce individualistic subject/object relational understandings of the world. This touchstone asks, what might occur if we resist the ingrained urge to classify and define something, and instead search for complexity, permeability, interconnectedness and the unknown as we meet the world?

Consider, for example, a moment when students notice a mushroom growing at the base of a tree. They might be intrigued by the colour, smell and form. There might be an urge to classify the mushroom, to record its colour and form (even to pick the mushroom), and to learn more about this individual species. Yet, if we resist such urges, we might deliberately encourage a search for complexity and spontaneity. If we provide time and encouragement to explore and consider what we might learn from fungi with questions such as—“what do you notice about the trees, plants or surfaces they are growing on or near?”—“why do you think these fungi exists in this place?” We might then feel a hint of the relational way that mushroom exists. Indeed, we might learn a great deal not only from these mushrooms but also from an experience that welcomes complexity and entanglements as a source of knowledge, understanding, and even positionality in the world.

With this discussion as background, educators might want to consider questions such as:

- How did I embrace complexity in my teaching today? Was there room for the unknown, spontaneous, and unexpected to appear, and be taken seriously?
- How did I empower learners to embrace the complexity of knowledge and not reach for easy answers? Did they encounter the incomplete nature of knowledge today?
- Did I take risks today in moving away from attempts to control assumed ends? How can I continue that tomorrow?

Touchstone #3: Locating the Wild

We believe that the wild can be found everywhere, but that this recognition and the work of finding the wild are not necessarily easy. The wild can be occluded, made hard to see by cultural tools, by the colonial orientation of those doing the encountering, and, in urban spaces, by concrete itself (Crex Crex Collective, 2018, p. 88). For many outdoor environmental educators, the wild is more clearly apparent the farther one gets from urbanization. It can be hard to ignore the wild when standing by a waterfall deep in the Australian rainforest, or at the crest of a Norwegian glacier. But this touchstone acknowledges that the wild can be located anywhere: in the rural, standing on the ice, indoors, and in the deeply urban. Yet in any context (including the rainforest or arctic) the wild can be, and often is, obfuscated by cultural and colonial overlays. The child who sees the mushroom pushing up next to the tree, for example, can note its resilience, its wildness, and its self-willed nature. Seemingly just as easily that child can reconfirm human hubris by taking it for granted or crushing it flat. As such, educators will also be challenged to name and respond in critical ways to the language, the metaphors, and the actions that confirm environmentally problematic narratives and prevent learners from encountering the wild, their own or that of others, and enacting their own freedom. Despite the incredible efforts of many urban outdoor environmental educators the murmur of the wild can, at times, be drowned out by the noises, smells, impositions, and demands of a human culture that claims superiority and buries the other in its myriad constructions (Derby et al., 2015).

This touchstone brings the critical into wild pedagogies. It cautions against the cultural constraints inherent in contemporary public education and modernity's colonial orientations towards the natural world, and many people. Taking this touchstone seriously challenges educators to think about their own positioning and privileges, including those relative to the more-than-human world. It challenges educators to be constantly aware of how the status quo is sustained by the language and metaphors, the structures they work within, the tools they employ and it challenges them to devise ways to disrupt this status quos. Wildness asserts a resistance to such implicit means of control. One way to locate this wildness is to be deliberately open to it, to acknowledge, and to welcome it. This can require a shift in perception. Within education, for example, control is often structurally asserted through walls of buildings, timing of classes, arrangements of desks, and universal and measurable outcomes. These structures reinforce relationships of power. There is something comfortable about going along with known practices. To deliberately seek and engage with the wild, can be risky as it disrupts these relationships.

With this discussion as background, educators might want to consider questions such as:

- How can I enable encounters with wild, self-willed, communities in the spaces that my students co-inhabit? How can we ensure these encounters are acknowledged?
- How can we recognize human-centered habits, dominating impulses and urges to control and “manage” the natural world around us, and within our curricula? How can we respond to these tendencies?
- How can we help students “lean into” difficult encounters with human privilege, alienation, and

dominance?

Touchstone #4: Time and Practice

We believe that building relationships with the natural world will, like any relationship, take time. We also believe that discipline and practice are essential to this process (Crex Crex Collective, 2018, p. 92). This touchstone focuses on two key discussions: process and practice. Both are ultimately interested in building and maintaining relationships within the natural world, particularly in places we inhabit. Focusing on process suggests that building relationships is aided by spending time in places, immersed in and listening to the world (Wattchow & Brown, 2011). However, we might also be aided by reconsidering how we conceptualize time, finding ways to slow down, changing habits that separate us from others, listening to our bodies, and those around us, in different ways, and immersing ourselves in what some have called deep time. Focusing on practice implies discipline. The work required to build rich relationships is reminiscent of the work required to develop a meditative practice. Such practices are about the how of teaching and the habits that underpin this work.

But slowing down and allowing ourselves and our students to be present and engage directly with the work means stepping away from some of the ways we have been taught to teach. It means taking a risk and being willing, as a teacher, to give up full control and make space for the more-than-humans and the unexpected outcomes. Giving up control requires trust: not just trust in our students, but also in the places we inhabit. Planning teaching sessions can be uncertain. There can be some fear that the session will not keep students occupied, or that they might not learn enough. But if we trust our students, and places, to generate pedagogical possibilities, then we might be able resist the urge to retreat to conventional sequences of pre-determined activities (see for example, Morse et al., 2018). We might find the confidence to allow students to authentically settle into a place, to listen to myriad voices and to allow experiences to run their course. In doing so, we might resist what Jardine (1996) describes as “pedagogical hyperactivity.”

Educators, themselves, require time and practice to build and maintain significant relationships with and in the more-than-human world. At the heart of this touchstone is making time to deliberately encounter the wild. This means more than just encountering the wild within, but also the actual wild outside: wild landscapes, animals, plants, and situations. Part of this practice is learning or relearning how to be outdoors. It can also be considered a practice that requires listening deeply to potential co-teachers as an integral part of recognizing and working with wild others.

With this discussion as background, educators might want to consider questions such as:

- Can I leave enough time and space in my teaching for engagement with the nearby natural spaces and more-than-human beings?
- How are we able to step out of schools’ linear time together and work in different ways? How are we to recognize that some will need more time than others?
- Am I able to notice and support learners who are trying out new habits? Am I trying new practices

myself, and reflecting on these attempts?

- How can I nurture my own immersion in places? How can I build relationships with these places and the beings encountered?
- What opportunities do my students have to develop their intuition and other marginalized ways of knowing and understanding?

Touchstone #5: Cultural Change

We believe that the way many humans currently exist on the planet needs changing, that this change is required at the cultural level, and that education has an important role to play in this project of cultural change. We also believe that education is always a political act, and we see wild pedagogues embracing the role of activists as thoughtfully as they can (Crex Crex Collective, 2018, p. 97).

This touchstone begins with a radical premise: much of current educational practice, particularly that which rests on the same theoretical footing as modern western culture, is anti-environmental. By maintaining the status quo, or simply trying to tinker with the edges of what currently exists, will not be enough to change the human/ nature relationship or even limit the destruction being wrought. As such, wild pedagogies is a project of cultural change. This makes educating an explicitly political act and places the teacher in the role of activist, recognizing that the choices being made in the classroom have explicit and implicit implications for how learners come to understand themselves, what it means to be human, and the importance of the more-than-human world therein.

Education is always a political act. Through language, attitudes, and curricula, we either reproduce or disrupt the status quo and in turn shape social, cultural, and ecological futures. In many outdoor environmental education contexts, it is possible to assert, through language and narratives, the agency of places. For example, when we arrive in a place, we might initially take the time to introduce it as a place, a community, a culture, with agency and histories (not only human or necessarily in human timescales). We might even allow the place to introduce itself in subtle ways. In other words, rather than arriving in a place, staking our claim, and readying to use the place for an activity; we might rather walk slowly, listen carefully, be respectful, allow time to settle, and offer some stories that acknowledge and deliberately pay attention to its agency.

With this discussion as background, educators might want to consider questions such as:

- Where are my old habits limiting possibilities—in response to existing curricula and values embedded my workplace? What would it take to be satisfied with my response?
- What am I doing to help learners develop political agency? Am I offering them realistic tools to imagine alternative futures and support change?
- What politics of the natural world have we encountered? How have we brought them into our learning spaces?
- Have learners been give opportunities to consider their current relationships with places they inhabit

and the other beings that live alongside? Did they have the right to change these?

Touchstone #6: Forming Alliances and Building Community

We believe that the colonial ethos of resource extraction is not separate from, but is yet another shade of the many hierarchies of dominance that exist amongst humans. For this reason wild pedagogues seek alliances and build community with others, not only in the environmental world, but across all people and groups concerned with justice (Crex Crex Collective, 2018, p. 102).

This touchstone seeks to remember the importance of, and to work towards building, strong alliances and flourishing communities, while at the same time reminding us not to forget the human in all of this work. Here the implicit goal is to push against the challenges of individualization and alienation and, at the same, to resist the colonial move to separate marginalized groups, be they human or other-than-human, and place them at odds with each other. To create flourishing equitable communities, we need to listen and learn from each other. Here educators across formal and informal spectrums can work with and learn from others: outdoor leaders, classroom teachers, students, community elders, Indigenous practitioners, and activists.

Often our intuitive pedagogies can be about asserting control, and in so doing we can shy away from the risks of vulnerability, anxiety, and uncertainty both for ourselves and for our students. Yet being open to others and understanding knowledge as situated and incomplete is a critical part of forming alliances and expanding educational opportunities. Newbery (2012) suggests, in considering colonizing outdoor environmental education pedagogies, “often, our pedagogies work to contain conflict and anxiety, thereby containing, rather than opening up, possibilities for learning” (p. 38). Proactively forming alliances and building a sense of community could include, for example, engaging with Indigenous community members prior to, or during, an outdoor experience, seeking permission to travel on lands or waterways, taking the time to hear and understand their stories including traumatic histories, and through dialogue that acknowledges our own culpability in colonizing practices.

Taking risks, forming alliances and strengthening communities offers new and exciting educational possibilities. How, for example, might Indigenous knowledges offer pedagogies of kinship with places? How might such ways of knowing provide alternative relationships? And, how might the lives of our students be strengthened through an enlarged sense of community? Building community can provide connections, support systems, and resilience as everyone works towards shared goals, as well as important experiential opportunities for understanding relationships. Forming authentic alliances with others involves acknowledging, welcoming, and appreciating differences such that change might begin to happen together.

With this discussion as background, educators might want to consider questions such as:

- Who makes up my communities when I think of doing wild pedagogies work? Why? Who is left out, but should be included? Why?

- How do I support my communities and how do they support me? How can I foster these same questions in my classrooms or other learning spaces?
- How do my various communities make decisions? Who is affected by these decisions?
- What can I do to bring the natural world more explicitly into community decision making?
- How may my communities encourage one another to depart from the status quo? How do we encourage and challenge each other, allow for mistakes, and rebound from setbacks?

Touchstone #7: Learning That is Loving, Caring and Compassionate

We believe that, if given the opportunity, humans are able to develop rich relationships with myriad members of the more-than-human world. These relationships of reciprocal care are part of overcoming the alienation that exists between many humans and the natural world (Jickling & Blenkinsop, 2020, p. 126).

Where does care and compassion incubate, where does it arise, and can we even control it? It is insightful to revisit some contemporary environmental writers and consider how they have described, sometimes implicitly, their own caring and empathetic relationships with the more-than-human.

For example, the Norwegian eco-philosopher, Næss (1988), was explicit about the origins of his own compassion, and solidarity with the world around him. He repeatedly pointed to his experience of watching a writhing flea die in a bath of acidic chemicals. In this recognition of his own empathy for and affiliation with the suffering of the flea, he began to see, encounter, and even be in the world differently. He continued to work with these revelations, developing his theory of eco-philosophy, for more than four decades. Similarly, the well-known American conservationist, Leopold, described his own inescapable discovery of care, and the limits of his own understanding, the day he watched a wolf die. This moment fell outside of his normal experiences and he wrestled with it for the rest of his life. As Leopold's thinking evolved, he eschewed ideas that rested on the presumption of human dominance. And he gave us the idea that, "We can be ethical only in relation to something we can see, feel, understand, love, or otherwise have faith in" (Leopold, 1966, p. 251).

Carson (1962) thrived during her rural childhood on the family farm. There she rambled extensively, sometimes with her mother, and developed her sense of curiosity. As an inspiring young writer, her love, care, wonder, and awe for the world around her first appeared in stories written for children's magazines. Though she may not have thought of it in these terms, her writing highlights the agency of her cohabitants and their role as teachers. She found that learning, during these days on the trail, could be joyous. The foundational experiences Carson enjoyed as a child appeared to shape the publication of her landmark book *Silent Spring* (Greenwood, 2018).

When surveying these three examples it is possible to trace some entwined traits running through them. All are profoundly sensual and arise out of first-hand experience. All require being in the world. All evoke care through emotional engagement, empathy, and identification. This care can also evoke sadness,

disenchantment, and anguish. These examples point to understandings that aren't solely located in an individual human; the natural world exerts agency, perhaps even a kind of teaching.

Such a collection of traits has significant educational implications. What does teaching practice begin to look like if we take these insights seriously? If, as Derby (2015) suggests, “We have come to experience ‘school life’ and learning as fundamentally prosaic; characterized by fragmentation, emotionless and exacerbated by the privileging of epistemic foundations such as anthropocentrism, reductionism, linear causality, and dualism” (p. 25), then there is a lot of work to do.

With this discussion as background, educators might want to consider questions such as:

- What did I do today that required learners to be sensually present in their learning? What did I do today that required learners to encounter the other, to feel care, and to notice the more-than-human world?
- What have I done to accommodate experiences that exist beyond the capacity of language to fully describe and evaluate?
- Even though some learning cannot be measured, it still exists. How can I create a positive space in my evaluation scheme to honour this existence?
- Have I considered how to hold space for learners as they encounter the range of emotions that appear in response to burgeoning care? What kinds of skills and supports can I offer them as they act in ways that are at times contrary and potentially threatening to the system in which they live and learn?

Touchstone #8: Expanding the Imagination

We believe that the ecological world has changed dramatically and that public education has to change in response. Future teachers can no longer be trained for a system that leaves students ill-prepared to respond to current crises and imaginatively unable to create new responses (Jickling & Blenkinsop, 2020, p. 131). Here we draw on research from a radical public school to better understand the role the imagination plays in learning (Blenkinsop et al., 2018). The authors of that work focused on four ways policy can hinder innovation. However, the one that best translates into this discussion about teacher education was called the “self-limited imagination.” The emergence of this category was a surprise, though once named its presence became ubiquitously visible.

Self-limited imagination is not a case of something that has been thought of before, but is being ignored. Nor is it something that is deemed impossible. Rather, it was more about alternative policies not being imaginable at all! It appeared to be about people not having the experiential materials, the flexibility of mind, the institutional permission, the cultural range—whatever the blinder might be—to bring into consciousness an idea as even possible. This was about an imaginary limit being reached. When something beyond these imaginary boundaries was offered, the response was often complete blankness, or the muttered “I have never even thought of that....” This is striking. When not addressed, it stands to thwart far-reaching or radical innovation and indeed wild pedagogies.

We should also note that the “self-limited” part of this discussion might be a misnomer. For as we explored the idea, it became clear that imaginative limits are contained within cultures and systems. We must be aware that the imagination is not as broad and flexible as suggested in everyday understanding. For educators, this has important implications. Not only do we have to recognize our culturally limited imaginations, but part of our pedagogical work might be to expand the range of cultural options available to teachers. The languages we learn to speak, and the foundational stories we are told, shape who we are in the world. However, they also limit what we can think and imagine.

The challenge of expanding imagination is difficult and has implications for how we imagine and then re-create ourselves as teachers. However, there are some things to consider. We can name this limitation for educators and posit it as part of our practice. This might in turn act to de-centre the teacher as expert and open the space for risk-taking, for pedagogical exploration, and for humility regarding expertise. For if we are imaginatively limited by our histories and cultures, then none of us has the whole answer. This might also leave more space for the unusual, the crazy, the spontaneous, and those ideas characterized as “just won’t work” to find some fertile ground in which to prosper. Our sense is that this might in fact be the very places from which the best ideas will come for responding to the changing world we are in.

With this discussion as background, educators might want to consider questions such as:

- What did I do with my practice today that pushed outside the students’ previous experiences and my own imagination?
- What new “stuff”, experiences, and stories did I add to the mix? How are students taking up, working with, and being changed by these diverse cultural tools?
- Did I notice my proclivity to “not do” the seemingly unusual or limit learners seeking to do the same? Did I make a considered attempt to provide space for the unusual to happen?
- What cognitive, physical, cultural, and natural tools am I working with right now? What new ones might I try introducing? Where might I look to find additional ideas?
- What are the edges of my experience that might limit how far I can imagine into a different kind of education? What are the limits of my own imagination?
- What sources of inspiration am I seeking to support and enhance pedagogical change and development?

Concluding Thoughts

We must act differently. We cannot continue as we are and education must play a role in the cultural change required. Orr (2017), like many others, calls for serious educational change, because “without exaggeration it will come down to whether students come through their formal schooling as more clever vandals of the Earth and of each other” on one hand, “or as loving, caring, compassionate, and competent healers, restorers, builders, and midwives to a decent, durable, and beautiful future” (pp. ix–x) on the other. What will it take to

nurture caring, compassionate, and competent restorers of the earth? With wild pedagogies, we aim to provoke opportunities for reimagined relationships, to partner with more-than-human communities, and to nurture caring and compassionate educators. Responding to the ecological and social crises of our times, however, will require more. In working with students and communities to enact such cultural change, educators and researchers are called to rethink education, reimagine pedagogies, and, when needed, to fiercely resist the status quo: to be rebel teachers. By framing key underpinning ideas of wild pedagogies, situating them through the touchstones, and then experimenting with our practices, we hope to have offered a way forward that can provide possibilities for each of us to become better educators and allies of, for, with, and in the more-than-human world.

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23.

BEST PRACTICES FOR OUTDOOR TEACHING EXCELLENCE

Bryan Taylor

When we consider the word excellence, how would each of us describe it? Do we have a standard definition? A starting point might be some description of elements that can narrow the expected thought. One could say the quality of being must be outstanding. So how can we apply that exact definitive description to teaching in, for, and about the outdoors (Asfeldt et al., 2021)?

While a nuts and bolts science approach to teaching is common and even though teaching definitely has an art to it, this chapter is about the craft of teaching. It examines seven principles that go beyond the art and science of teaching outdoors and presents several Canadian examples.

Introduction

Take some time to think about your key ideas for what makes a great outdoor teacher. As you think, questions might arise, like, “Are my talents and passions aligned with reality and a good fit for teaching outdoors?” We might agree that being efficient, practical, organized, creative, and intentional within a well-thought-out plan to create desired learning outcomes would be significant contributors to teaching excellence. However, the journey of developing one’s craft also comes from a deep desire to pursue such excellence, and each outdoor teacher naturally wants to perform well. As an introduction, if we examine people deemed to be a master at something, they appear to perform effortlessly.

Let’s start by looking at the centre of our practice: our values as practitioners. Readers are encouraged to examine and list their personal values. These values come from the heart and our desire to make a difference and to empower learners as outdoor leaders should. If leadership comes into play, we aim to guide, license, and develop people to become better and more skillful. So how does all of this strategy happen? Modelling and research can help guide the development of such a strategy. Being strategic in the learning environment is a crucial trait every outdoor leader should possess: intentionally seeking to plan, prepare, deliver, and reflect on practices they would apply in an outdoor setting.

Next, let’s consider quality in teaching and learning. Quality assurance focuses on a continuous improvement model of planning, delivery, assessment, and improvement cycle that applies to teaching. Planning any teaching moment or lesson is a critical starting point. Indeed, curriculum design has a significant

guide to the organization and elements vital to ensuring that all factors are considered and arranged systematically to fit learners' needs. Using quality assurance principles, especially for curriculum design and delivery, develops the highest standards of quality and becomes a benchmark for outdoor practitioners and their programs.

To achieve high teaching and learning quality, readers may want to investigate the values of Quality Matters (QM) (2023) in supporting curricula design and delivery. QM is a design standard that guides practitioners in organizing key components critical to building and assuring well-organized and effective inventories for inclusion in any curriculum plan (Cochran-Smith, 2003). While originally intended for online teaching and e-learning, the QM framework has gained application from hybrid or blended learning through face-to-face or classroom teaching (Quality Matters, 2023). This author suggests that outdoor teachers may also find this useful, although the framework has yet to be tested in natural or field settings.

Teaching with a well-executed plan is like a symphony of sorts. The conductor has a composed curriculum and works with various groups and individuals to bring the best out of each, build strength from each instrument, and encourage an amazing collaborative work as one effort. This effort and its desired goal ask a provocative question: how are all these elements brought together in harmony to create the special environment needed to make such wonderful music and a place to grow and learn?

In the opinion of this author, the answer can be found in combining seven principles for learning and teaching excellence (Griffith University, 2009). This chapter will examine these in greater detail and explore their potential for supporting dynamic and engaging environments in the classroom and outdoors.

Seven principles for teaching excellence

The keys to the best teaching practices are engagement, creating interest, and drawing students' focus onto what you're communicating. Telling stories is an excellent segue into making such a mutual connection. Learners have come outdoors for something they seek to discover and transform. It's an adventurous story with mystery and discovery about the world and themselves. How can we enrich their lives and enable the experience to become a change in their personal thoughts, feelings or behaviours?

1. Create a dynamic learning environment that is engaging, motivating, and intellectually stimulating.

- Model and demonstrate to students the excitement of discovery and creativity in exploring ideas and solving significant and actual problems.

- Find ways to present appropriately challenging learning activities in an enthusiastic, interesting, enjoyable, and dynamic way.
- Foster active participation and passionate engagement in learning activities.
- Encourage mutual recognition of the talents, aspirations, and background knowledge that learners and teachers bring to the learning environment.

During the recent pandemic, faculty and students at the University of Sherbrooke in Quebec published a guide to education outdoors as an alternative to classroom-based instruction in higher education as a means to reduce viral transmission (Ayotte-Beaudet et al., 2020). They recommended a combination of experiential, problem-based, and project-based pedagogies that took place “in real-life situations” with problems that were “meaningful, motivating, and as close as possible to a real-life situation,” and where learners “engage in...learning that is anchored in real life” (p. 8). Of course, outdoor education is applicable and practised at all levels of formal and informal instruction.

Another best practice is applying and creating a dynamic situation where ideas and theories are applied. This validates the scientific views and allows learners to discover the truth from fiction, but also tests the boundaries of learned concepts in the real world. Consider teaching mathematical trigonometry concepts, where triangle side lengths and angles (sine, cosine or tangent) are calculated in relation to one another. One could teach this in the classroom, or go outside to measure the heights of trees, lengths of mountains, and widths of rivers using the same techniques (Yamamura et al., 2003). Seeing the concepts in action establishes a level of comprehension that complements the developed knowledge. The key idea is connecting to real-world situations that engage learners in every process.

2. Emphasize the importance of theory and knowledge, relevance, and integration with professional practice to develop solutions to real-world challenges.

- Provide examples from one’s own professional or discipline-based practice to illustrate concepts, skills, and knowledge relating to the discipline.
- Showcase the relevance and significance of curriculum content and learning activities to professional, disciplined, real-world, and personal experiences.
- Provide opportunities for students to understand their learning by providing links between individual content, the broader program of study, and the relevance and application of their

education to the future.

- Provide learning experiences that simulate professional and disciplinary practice or address professional and disciplinary practice problems.
- Design curricula, learning tasks, and assessments that allow students to apply their disciplinary knowledge in real-world and practice settings.
- Invite the community, professionals, and industry experts to present guest lectures, seminars, or other activities.

More than 50 years ago, as outdoor education was just emerging in Canada, the Executive Secretary of the Canadian Education Association noted that “more and more Canadian teachers are discovering the value of outdoor education as a method of learning through first-hand experience and discovery, and as a method of teaching, which uses the real world as a resource” (Passmore, 1972, p.5). Today, many outdoor programs are echoing the real world teaching philosophy espoused by the Blue Mountain WILD School (2020, no page) in Ontario:

Our classroom is life, our campus is the natural world. We foster curiosity in learning through hands-on experiences. We peel back knowledge like an onion, exploring the many layers that go beyond initial perceptions and investigate how they integrate and relate. Our thinking is critical, our lessons are rooted in real world problem-solving using relevant examples. This stimulates interest and motivation to discover more. We take the classroom outside and into the community – integrating real world projects and opportunities.

An additional piece to this collection of ideas is creating a learning space where one can express cultural backgrounds and beliefs, be encouraged to participate equally, and be free to participate and feel respected. There’s much we can learn about learners’ history that shapes how they process information, and we may identify limitations by such beliefs that form the values utilized by each person. We were all raised differently and in varying environments; we were inspired by some and discouraged by others. This process of each person’s history will create a way of processing situations differently. It can challenge the environment and be one of the personalizing perspectives.

3. Offer learning experiences that develop internationally aware and culturally sensitive graduates who make a difference as socially and ethically responsible citizens.

- Model respectful and culturally competent interactions with students.
- Make use of case studies and depictions of ethical and professional dilemmas.
- Integrate ethical issues and approaches into students' inquiry-based learning and assessment activities.
- Use cooperative and team tasks to increase opportunities for interaction among students in cross-cultural groups.

In the outdoors, the emphasis on making a difference often refers to developing the individual participant in relationship with his/herself, others, and/or the environment. In Canada, cultural sensitivity may refer to our pluralistic society and/or Indigenous reconciliation efforts. Teaching in the outdoors demands all of this be addressed in integrated combination, because everything in the world is connected. In British Columbia, the Ministry of Education has published an interdisciplinary guide to teaching in natural environments. Its suggestions for practice include many references to a wide variety of cultural perspectives about learning on and from the land. Most notably, “it is important that other diverse cultural and religious perspectives are acknowledged, respected, and analyzed in terms of their implications for [environmental] issues” and “First Peoples Traditional Ecological Knowledge (TEK) of specific landscapes, regions, or ecologies can be an important component of culturally appropriate and responsive, environmental education” (BC Ministry of Education, 2007, p. 10). Learners cannot make a difference, if they ignore significant alternative contributions to solving environmental problems.

The chair of Canada's Truth and Reconciliation Commission highlighted that education holds the key to future reconciliation, because miseducation was a past tool of oppression. Many programs across the nation teach land-based education from this perspective. Learning the Land, an excellent example evolving nationwide from Saskatchewan, links treaty rights with inherent Indigenous rights:

Learning the land is more than an outdoor education program. It is about learning from the land and understanding our connection to it. Understanding our connection will give life to what the land can teach us, how it communicates with us, and how it looks after all life upon it. The land has a way to strengthen all things...Every culture, no matter their location, is connected to the environment. It is that connection where cultures teach their people how their traditional ways connect and respect all things in their environment. Indigenous cultures have lived off the land for centuries, so traditional knowledge and connection is deeply rooted in the original relationships (Learning the Land, 2020, no page).

The next component addresses the support and maintenance of the learning environment. Without establishing mechanisms of support and group management, learning behaviours may become unreasonable. As mentioned, learners have some limitations and perceptions that can influence behaviours that disrupt a smooth learning process. It tests patience, perseverance, compassion, and fortitude to limit the emotional

discourse inside each of us. A learning environment should be a sacred space, where learners feel safe to step out of their comfort zones. Teaching is primarily about developing people intellectually, mentally, and physically. It stretches and challenges them to invest in themselves, while being sensitive to others. It encourages a respectful discord with collaborative spaces and relaxing activities sensitive to cultural and social norms.

The most critical piece is introducing policies or practices that address the discord to a more meaningful outcome, with provisions for mediating behaviours that circumvent these policies. Setting an example early typically displays follow-through and brings credibility to the guidelines, which will be a cornerstone of classroom management. This is one of the most critical factors in a healthy learning environment where learners are supported and encouraged to be respectful. The teacher needs a rapport with students to build trust. Without this trust, the learning connection will be diminished.

4. Provide an inclusive environment of support and respect for all students by embracing diversity and indigeneity, remaining empathetic to students' needs, listening to the collective student voice, and involving students as teachers and leaders.

- Be a role model for respectful behaviour.
- Acknowledge the value of student input.
- Demonstrate and foster the class's respect for student diversity.
- Establish ground rules for group discussions and apply quick action in the case of discriminatory student comments or behaviours.
- Provide support to students with learning and physical disabilities.
- Learn students' names and find out about their interests.
- Create a safe, non-threatening learning environment in which students are encouraged to express their views and opinions while respecting those of peers and staff in a respectful intellectual context.
- Emphasize the value of student diversity in the learning context and the benefits of learning from different individual and cultural viewpoints and perspectives.
- Design early formative assessment tasks to gauge students' background knowledge to determine gaps in requisite knowledge or skills and the support required by students at risk of failure.
- Adapt the pace of teaching to accommodate different learning styles while maintaining rigour and standards.
- Provide students with the necessary information about available support to assist them in

managing learning and personal issues, especially during times of stress, to reduce the risk of attrition or failure.

- Provide opportunities for students to develop oral presentation skills and use multimedia technologies in a supportive context.
- Design assessment activities that encourage students to use outdoor spaces – whether real or virtual, particularly in group settings that encourage students to meet and socialize outside formal classes.

A Prime Minister's Awards for Teaching Excellence recipient encapsulated the importance of engaging students as teachers. Her grade six classes with Inuit children in Nunavut have provided:

a chance to learn from elders, enjoy the land, connect as a class, and allow the students to show leadership, and become the teacher. The experiences are used as teachable moments and references when using a cross-curricular approach. Project-based learning has revolutionized my differentiated instruction in the classroom; students who were not engaged have now become the leaders in the classroom and the school (Sawyers, 2013, p.16).

Another outdoor teacher, researching schools on Vancouver Island and realizing a revelation, stated:

[my new] teaching practice involves keeping in mind my students' voices and their needs. In order to make significant changes, I need to change my lessons to be more student-led and less teacher directed [...] Allowing my students to communicate how, where and what they would like to learn within the confines of the curriculum can be the impetus of my new outlook on teaching (Gleeson, 2013, p. 37).

A crucial component is enhancing curiosity and encouraging creative thoughts as the learner's mind seeks to explore. This supports the expansion of the student's imagination. An appreciation for self-discoveries is empowering. There's a different kind of risk-taking in the outdoors, where we teach the learners to learn independently, a critical step for future self-development. Guiding learners constructively to explore while keeping the scope of the assignment focused on the topics is essential.

Encourage the spirit of inquiry, compassion, curiosity, and critical and creative thinking informed by current research, standards, and conditions.

- Design activities and assessments where students pose research questions and investigate the answers.
- Use problem-based learning, problem-solving approaches, and other strategies to build analysis, synthesis, and evaluation skills.
- Involve students in research team assignments.

In Alberta, a private school teaches outdoor education to achieve its mission of “engaging, dynamic, student-centered experiences that nurture a caring, inclusive culture and instill a love of learning” (Calgary Academy, 2021, no page). One teacher shared the importance of serendipity in developing curiosity, creativity, and thinking skills:

My favourite part about teaching OE is the ‘aha moments’ where the kids are experiencing something outdoors for the first time and realizing their love for it. I also love the connectedness that students begin to develop within themselves when they take on challenges and learn what matters to them. Finally, I love the relationships that are built here within our classes that transcend time – Jason Lindsey (Calgary Academy, 2021, no page).

At the University of Saskatchewan, Ecology Camps for Kids is outdoor education taught through the senses. The children “lie down in the grass and ‘bond to the prairies.’ Using all five senses, they...see the wind pulling the grass, listen for birds and insects, feel the sun and know when a cloud passed over it.... They visit a different wetland every day, walking barefoot and feeling the mud squish between their toes” (EcoFriendly Sask, 2018, no page). Engagement is achieved through multisensory awareness.

Engagement is an essential item on the list; without participation and interest, there’s a limit to the transfer of knowledge and skill development. Communication is vital, both verbal and non-verbal. Clear expectations guide learners, which is so essential to avoid frustrations. Setting goals and objectives creates a path of progress for each learner to reflect on, and they can ask themselves, “Am I getting there?” Measurements need to be fair and reasonable. This is about the learners’ experiences; when this is encouraged, engagement improves. When it’s ambiguous, learners see it as unfair and check out. Creating dynamic learning environments with interactive, self-paced activities supported by gamification helps keep students engaged.

6. Enhance student engagement and learning by designing an effective curriculum, matching technology with teaching, and using appropriate assessment methods.

- Communicate the goals and objectives of courses and programs.
- Explicitly link teaching and learning activities and assessment tasks to learning purposes, ensuring that learning objectives are aligned.
- Design a valid and reliable assessment that ensures the highest educational standards will be maintained at the highest level of appropriateness.
- Create fair reviews and have measures appropriate for the discipline.
- Apply reliable processes for marking and assigning grades, with consistent and systematic moderation processes used within and across courses.
- Provide transparent information about course and assessment requirements, the criteria by which work is created and measured, and the standards expected for high performance.
- Provide timely and targeted feedback on the assessment to enhance student learning and consider individual learning needs.
- Apply a combination of formative and summative evaluations with the opportunity for students to benefit from early feedback.
- Create good spread and timing of assessment tasks, considering student workloads within and across subjects in the timing of assessments.
- Use a range of teaching and assessment strategies to consider different learning styles.
- Ensure students are aware of issues and policies relating to academic integrity and penalties associated with breaches.
- Where possible, provide flexibility in terms of delivery of course content and type/timing of assessment.

Yukon Experiential Learning (YEL) is an initiative of the provincial Department of Education that supports outdoor learning by providing consulting advice, risk management guidance, equipment, and other resources to any school that wants to offer these programs. Their website defines experiential learning as “teaching and learning that incorporates the direct experience, critical reflection, and negotiation as a foundation for the learning process,” and explains that, in outdoor experiential learning:

[the] educator’s primary roles include setting suitable experiences, posing problems, setting boundaries, supporting learners, ensuring physical and emotional safety, and facilitating the learning process. The educator recognizes and encourages spontaneous opportunities for learning. Educators strive to be aware of their biases, judgments and pre-conceptions, and how these influence the learner. The design of the learning experience includes the possibility to learn from natural consequences, mistakes, and successes (YEL, n.d., no page).

As mentioned earlier, this practice must complete the initial plan and the teaching cycle of delivery, assessment, and improvement. During instruction, mini check-ins can help the teacher to stay in touch with the learners as

delivery progresses. Student performance assessments can signal some quick clues on how they are processing knowledge and its application.

After delivery, materials may be redeveloped or newly developed, teaching approaches or instructional strategies can be further refined, and lesson plans can be adjusted for the future and in keeping with the continuous improvement model. This is also an excellent time to gather feedback on the achievement of learner's initial expectations, as were communicated at the beginning. How the learners felt and were self-directed within the outdoor setting can also be reflected upon. Gain assistance through collegial relationships with other teachers. Last, but by no means least, is the crucial importance of ongoing development and continual improvement for outdoor teachers themselves.

7. Improve teaching practice through continuous self-awareness, ongoing professional development, and critical reflection, as informed by various evaluation approaches. Pursue opportunities to experiment with innovative teaching techniques while staying current, committed, and passionate about the subject.

- Regularly monitor how effectively students engage with learning in their courses and programs.
- Seek feedback from students and peers, and continuously improve by identifying strengths and weaknesses and responding accordingly.
- Use student feedback about teaching, courses, and programs to examine and justify possible curricula and teaching practice changes.
- Deliver feedback to students regarding how programs have improved in response to their feedback.
- Draw on evidence about learning and teaching scholarships from journal publications, conferences, seminars, workshops, etc.
- Develop scholarly practice through professional development activities.

The Western Region of the Newfoundland and Labrador English School District's Residential Outdoor Education program is a partnership with Killdevil Camp and Conference Centre, Gros Morne National Park of Parks Canada, and the Qalipu First Nations. This experience is linked to the curriculum, allows the opportunity for every student in the district to attend once during grades 4, 5 or 6, and has administrative staff conducting logistics, scheduling, and transportation, thus allowing teachers to concentrate on teaching:

This program is also unique in that visiting teachers do much of the teaching during their class visits. To prepare

for this program, every new teacher to the program will participate in a two-day professional learning session whereby they learn to teach students outdoors and deliver specific learning sessions pertaining to the specific curriculum outcomes [...] By teaching within the program, teachers are able to observe their students in contexts far different from the regular classroom and are able to follow up on what is taught here once they get back in the classroom. As well, teachers who are comfortable teaching their students in an outdoor environment have tools which can be used to teach their students in outdoor environments closer to their schools (NL English School District, n.d., no page).

Conclusion

In conclusion, isolated pockets across the country appear to be including some of these seven principles in their outdoor education programs. Evergreen, based in Toronto, but operating nationally, is a movement to change Canadian communities toward being greener, more livable, and prosperous. They summarize some of this teaching chapter in a great starting place for developing outdoor teachers. Their 4-page document, *Classroom Management: Outdoor Teaching Strategies* (Evergreen, n.d.), gives teacher suggestions, lesson planning advice, activity introductions, and guidelines for being outside. Most provinces have similar documents through their education ministries. For example, *Get Outdoors!* from WildBC (n.d.), contains a number of start-up tips and tricks for budding outdoor educators.

These defined practices, in these isolated Canadian pockets, develop best teaching by setting benchmarks of excellence one can strive towards. Over the years, this has proven to be a model of personal growth for a variety of outdoor practitioners and highly rewarding for their personal development. The model's foci remain: improving practice, being culturally sensitive, supporting the learning environment, staying connected to the instructional task, relating to learners, and expressing the teaching media and methods that reach them most effectively. Hopefully, this information will be valuable and meaningful, as we all continue developing our art, our science, and especially our craft to best meet students' challenges and needs.

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Resources

The introductory chapters of these two Canadian books address outdoor teaching techniques:

- Grant, T. & Littlejohn, G. (2014). *Teaching in the Outdoors*. Green Teacher.
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PART IX
LEADING

24.

OUTDOOR LEADERSHIP COMPETENCIES AND TRAINING

Beau M. Williams-Orser

For the purposes of this chapter, outdoor leadership (OL) is both “a process of social influence in an outdoor setting where the [activity] pursuits are the media used to create adventure experiences” (Priest & Gass, 2018, p. 416), and a product of “legal, moral, and supervisory responsibility where the leader has met the tests for duty of care and standard of care” (Priest, Ritchie & St. Denis, 2022, p.3). The job of the outdoor leader is to look after clients and participants engaged in adventures and enable their enjoyment, learning, and transformation. The roles of a leader during outdoor activities are varied and apply to multidisciplinary fields such as tourism, recreation, education, social work, psychology, health, and others.

The OL role often requires a diverse range of skills and competencies to manage program outcomes and safety during outdoor experiences. The importance of this role has been well-documented (Holland, Powell, Thomsen, & Monz, 2018), despite a lack of congruence across OL competency research, and OL training standards. In Canada, OL training is offered through both private and public training providers, including post-secondary programs offered at universities and colleges (Williams-Orser, 2021). The training required for OL is also complex, including, but not limited to, training in first aid, emergency response, risk management, navigation, leadership, facilitation, and activity-specific technical skills (Priest & Gass, 2018). Research related to outdoor learning has clearly underscored the importance of well-trained leaders (Goldenberg & Soule, 2015; Houge-Mackenzie & Kerr, 2017; Phipps & Claxton, 1997; Powell, Kellert, & Ham, 2009; Vagias & Powell, 2010). Further, authors of a recent systematic review concluded that a leader’s effectiveness has a strong influence on the success of program outcomes (Holland et al., 2018).

Outdoor Leadership Competence

While the importance of training for OL is clear, research on OL competencies has lacked congruence. Globally, OL competencies were a particular focus of research in the late 1970s and early 1980s, where a plethora of empirical studies were completed (Buell, 1981; Cousineau, 1977; Green, 1981; Johnson, 1989; Priest, 1984; Priest, 1987; Raiola, 1986; Swiderski, 1981). The focus of these studies was primarily to identify and rank OL characteristics, traits, skills, knowledge, attributes, or competencies, and not to expand on training curriculum.

While OL competencies have been studied extensively during this early period, reviewing these studies revealed that only two listed a definition for the term “competence” (or “competency”), and only a few of these provided definitions for related terms, such as skills, knowledge, and attributes. During this early emergence of OL competency research, the Council of Outdoor Educators of Ontario commissioned a work by Rogers (1979), which proposed an alternative to mandatory OL certification and offered a more holistic model for OL preparation, suggesting that the development of OL is an ongoing process of life-long learning and not a single course to be completed.

After this boom of OL competency-related research, prominent efforts to synthesize the prior research into a list of competencies and a framework for training resulted in the publication of two popular OL textbooks authored by academics. In 1997, Priest and Gass (2018) authored the first edition of *Effective Leadership in Adventure Programming*. In 2006, Martin and colleagues (2017) authored the first edition of *Outdoor Leadership: Theory and Practice*. A lack of alignment between early research and synthesis efforts have been noted, and competency-based approaches to OL training have been critiqued (Shooter, Sibthorp, & Paisley, 2009; Warren, 2007). Additionally, OL training has been criticized for lacking empirical methods to integrate competencies into curriculum (Berman & Davis-Berman, 2009; Pelchat & Karp, 2012). Despite considerable research and publications regarding OL, training, and competency-based approaches remain very complex and lack coherence within outdoor learning.

For instance, Priest and Gass (2018) suggested thirteen OL competencies, while Martin and colleagues (2017) suggested eight (as summarized in Table 1). In addition to the empirical texts on OL training, a number of OL curriculum developments have been published by reputable organizations (Cockrell, 1991; Gookin & Leach, 2009; Reynolds et al., 2007). Finally, an international framework for the progressive preparation of outdoor leaders was shared (Priest & Gass, 2018) and is appended to this textbook.

Table 1: Comparison of two outdoor leadership textbooks

Priest & Gass, 2018 (3rd Edition)	Martin et al., 2017 (2nd Edition)
HARD SKILLS	
Foundational Info	1. Foundational Knowledge
Technical Activity	8. Technical Ability
Safety and Risk	7. Safety and Risk Management
Environmental	5. Environmental Stewardship
SOFT SKILLS	
Organization	6. Program Management
Instruction	4. Teaching and Facilitation
Facilitation	
META SKILLS	
Communication	
Conditional Leadership	
Professional Ethics	2. Professional Conduct and Self-awareness
Problem-Solving	
Decision-Making	3. Decision-Making and Judgment
Sound Judgment	

The International Standards Organization (ISO) has recently released four proprietary documents outlining standards for the adventure tourism industry, including Good Practices for Sustainability (ISO, 2018), Information for Participants (ISO, 2014a), Safety Management Systems Requirements (ISO, 2014b), and Leaders – Personal Competence (ISO, 2020). In the ISO standard for Leaders – Personal Competence, competence is defined as the “ability to apply knowledge and skills to achieve expected results” (ISO, 2020, p. 1). Further, the competencies detailed by this ISO standard are outlined in three sections: knowledge, skills, and attitudes or attributes. The methods used by ISO to create standards were very rigorous and involved international collaboration. However, no reference to any of these ISO standards have been found in OL training research or manuals, thus the extent to which these standards are used or accepted within Canadian outdoor learning is unknown.

Led-Outdoor Activities in Canada

Canada has a long-standing tradition of outdoor learning, with a particular tradition of wilderness travel and use of routes with long-standing historical or Indigenous significance (Potter & Henderson, 2004). Canada's vast geographical breadth and linguistic diversity has often meant that outdoor learning experiences occurred within regional networks, and training providers and operators were not always aware of what was happening in other fragmented networks across the country (Potter & Henderson, 2004). Ritchie et al. (2016) noted similar barriers when describing the fragmentation of Adventure Therapy training programs in Canada, a subfield within outdoor learning.

Recently, the “Canadian way” of outdoor education was investigated in a systematic review by Purc-Stephenson et al. (2019). Their findings suggested that Canadian outdoor education experiences aimed to recreate and retrace historic routes of the early explorers and settlers. Beyond this, Asfeldt et al. (2020) investigated the common threads across outdoor education programs in Canada. Their findings suggested that, despite the many differences and distinctive programs, outdoor education programs in Canada had some common philosophical underpinnings (such as hands-on experiences and journeying through the land), common goals (such as personal growth and community building), and common activities (such as hiking, canoeing, kayaking, skiing, and snowshoeing).

A few notable tragic fatalities have significantly influenced the history and practice of outdoor learning in Canada, including the C.W. Jefferys Collegiate Institute drowning in Algonquin Park during 2017, the Strathcona-Tweedsmuir School avalanche disaster near Roger's Pass in 2003, and the St. John's School tragedy at Lake Timiskaming in 1978 (Jackson et al., 2023). Despite these high-profile tragedies, Canada has not adopted any formal standards for OL training or for employment in outdoor learning. Currently, no training, competency, or occupancy standards apply broadly to outdoor learning in Canada, although recent and ongoing standardization related initiatives have begun.

The first Canadian Outdoor Summit (delayed due to COVID-19) tasked a group to propose a framework for competency training for outdoor learning (2021). Additionally, Tourism HR Canada, a government funded organization, has recently started to develop a competency framework for the tourism industry, which includes competencies for adventure guides (Tourism HR Canada, 2020).

Two recent provincial legislative efforts within outdoor learning have added to this effort. In Québec, a provincial standard for safety in nature and adventure tourism was established in the wake of a snowmobile tragedy in 2020, offered by Aventure Écotourisme Québec (AEQ), a government supported organization (AEQ, 2021). Though this accreditation is not mandatory, operators without accreditation are ineligible for Ministry of Tourism funding (AEQ, 2021). In Ontario, two recent labour disputes led to the Ontario Ministry of Labour becoming the first province/territory to set a minimum wage for wilderness guides (Government of Ontario, 2020). This legislation defined a wilderness guide as:

A [person] who is employed to guide, teach, or assist a person or people while they are engaged [in] activities

in a wilderness environment, including the following activities: back-country skiing and snowshoeing; canoeing, kayaking, and rafting; dog sledding; hiking; horseback riding; rock climbing; operating all-terrain vehicles or snowmobiles; wildlife viewing; survival training.

Recently, several advocacy groups, who represent leaders across outdoor learning, have formed in support of fair wages, access to insurance, and safe working conditions, such as the Canadian Outdoor Professionals Association, the Association des guides professionnels en tourisme d'aventure, and the Sea Kayak Guides Alliance of British Columbia.

Professional Preparation

The many paths for OL training in Canada include activity specific training and certification programs and other private or public training programs. Many provincially and nationally-based not-for-profit organizations have developed curriculum and assessments to offer individual certificates, predominantly in activity specific disciplines. Two examples of this are offered through the Association of Canadian Mountain Guides (climbing) and Paddle Canada (canoeing and kayaking).

Further, the Outdoor Council of Canada developed its Field Leader program aimed at non-professionals, and primarily focused on positions of custodial care, such as schools, summer camps, and outdoor clubs. Additionally, many reputable private and public organizations have also developed OL preparation programs. One example of this is the Canadian Outdoor Leadership Training (COLT) program at Strathcona Park Lodge and Outdoor Education Centre on Vancouver Island (Tashiro, 2023). Others include various summer camps, which have a rich history in Canada of offering a plethora of outdoor learning experiences for youth. These summer camp programs typically hire seasonal staff and offer training before the programs commence. Post-secondary programs are also one of the main avenues for OL training in Canada, however, their focus appears to be toward technically proficient tourism guides.

In an attempt to identify the distribution of post-secondary OL training programs in Canada, Williams-Orser (2021) identified 54 programs across universities, colleges and CEGEPs (Quebec's Colleges of General and Professional Teaching attended for two years after grade 11). While several programs have closed since this study finished in 2019, a few new ones may have opened. A list of some post-secondary institutions from the Outdoor Council of Canada can be found in the final section at the end of this chapter.

Further research is needed to understand the current closure trends related to post-secondary OL training programs. Dymont and Potter (2021) suggested that this seems to be due to a combination of societal trends with neoliberal beliefs, administrators' desires for change given funding shortages, and a lack of understanding for the efficacy of outdoor learning coupled with a lack of strategic advocacy. Further, they recommend the need to:

[...] understand the neoliberal agenda driving universities; maintain strategic relationships with senior academics; position oneself in high level academic positions; participate in reviews equipped with evidence;

strategically advocate for OE programs; and, question the merit of being overly humble in a cut-throat evidence-based world (p. 1).

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25.

LONGEVITY OF AN EXPEDITIONARY FIELD INSTRUCTOR

Liz Kirk

How valuable is the experience of an expeditionary leader over age 30 in Canada? The literature suggests that outdoor leaders with a broader range of experiences, both in individual and professional contexts, show substantial differences in decision-making and overall judgement when compared to novices with limited to no experience in the field (Galloway, 2007). One field instructor states, “As you get older, you get better at knowing how you work and what you need. You know yourself a bit more and so, just depending on the situation, deal with things differently” (Kirk, 2013, p. 66). Even if organizations value the mature decision-making and risk management experience of older outdoor professionals, high rates of turnover of these individuals are extremely common. Therefore, recruiting and retention of front-line employees is regarded by many program directors as “their greatest concern” (McCole, 2004, p. 328).

Use of the term career in relation to work in the outdoors is relatively recent (Allin & Humberstone, 2006). Despite opportunities for a diverse range of professional development, it is “generally acknowledged ... that [the profession] lacks a clearly defined career structure” (Allin & Humberstone, 2006, p. 135). Factors like a significant lack of mentoring opportunities and inadequate support to encourage longevity in younger professionals, combined with “limited opportunities for employees to advance up the career ladder,” contribute to frequent replacement of individuals employed at the “field” staff level (Thomas, 2003, p. 59).

It remains unknown how many passionate outdoor professionals entering the field today earnestly intend on making this demanding lifestyle a long-term venture. Kirby (2006) suggests that working in the outdoors attracts “inherently transient” individuals, bound to move on from this type of work within a relatively short period of time, regardless of other factors. Field instructors may frequently be perceived by their employers as unlikely to demonstrate long-term commitment to their jobs. This is supported by the fact that individuals who begin this work in their twenties frequently leave front-line field instructor positions to pursue a different career in human services or exit the discipline entirely (Kirby, 2006).

Perhaps due to a desire to share their love of the outdoors with others, many field instructors report altruistic reasons as among the most important for choosing this job (Marchand, 2009). Many individuals who apply for this work are “talented and passionate and eager to feel they’re doing something worthwhile” (Ferguson, 1999, p. 11). Most field instructors report personal growth as an important benefit of the job, and many view “making a difference for students” and “living in the wilderness” as factors that are often positively valued in

this role (Marchand et al., 2009, p. 368). From qualitative research on field instructors working in wilderness therapy settings in Canada, the job was seen initially as the perfect combination of one's areas of skill and love of being outside in the wilderness environment, not to mention it being a "dream job" (Kirk, 2013 p. 63).

Outdoor professionals may find the satisfaction of the job so great that they willingly opt to overlook things like the high intensity of such work, the lack of significant income opportunities, and the inability to have a permanent home or simple amenities of life (Ross, 1989), for at least a little while. Despite this, older, experienced, educated, and resilient outdoor professionals are "too often expendable" (Ross, 1989, p. 34) and risk exploitation, since "there seems to be no shortage of new people keen to enter the [profession]" (Thomas, 2003, p. 59). However, hiring and maintaining a staff of caring, dedicated, knowledgeable, interested, and committed individuals is "fundamentally important to the viability of the organization" (Erickson & Erickson, 2006, p. 6).

Demographics

Many of the individuals who begin work as outdoor professionals are "young, educated, single, and Caucasian" (Kirby, 2006, p. 79). A candidate hired as a full-time field instructor may be required to have first aid training, a specified amount of wilderness guiding experience, and be a college graduate from an outdoor recreation program or related discipline (Russell & Hendee, 2000). Also known as "wilderness leaders," "guides," "outdoor instructors," or "field staff," teams of field instructors are usually responsible for providing direct care to participants, teaching wilderness living skills, and ensuring the safety of the group, while effectively managing all aspects of multi-day remote wilderness expeditions. Kirby (2006) asserts that "only a limited range of individuals would consider work as a field staff fulfilling and enjoyable," and attempting to find individuals from outside the standard demographic with similar sentiments would be difficult (p. 68).

Field instructor demographics show noticeable trends over time. Front-line work in the outdoors began from a "historically male-dominated culture and philosophy," apparent through military inspired values such as physical competence and the common presence of male leaders (Allin & Humberstone, 2006, p. 136). Men and women are now more equally represented in field instructor roles and in some cases, women even outnumber men (Marchand, 2010). However, when examining comparative longevity, male respondents in one survey had reportedly worked as field instructors for an average of six months longer than females (Marchand et al., 2009). Field instructors employed in the 1980s were commonly in their late 20s and early 30s (Birmingham, 1989), but today, the average age is more around the mid-20s. Regarding education level, approximately 60% to 70% of current field instructors have a baccalaureate degree, commonly related to adventure education, recreation, or social sciences (Marchand et al., 2009; Marchand & Russell, 2013). This represents an increase, as compared with the early 1980s, when those with undergraduate degrees numbered less than 40% (Birmingham, 1989).

Kirby (2006) suggests that the strong emotional bonds that develop between field instructors may be due

to “the rather narrow demographic that characterizes this group of workers” (p. 78). Due to work in remote locations, the social network of field instructors may be largely comprised of young adults who work for the same or another nearby expeditionary wilderness program. Remaining with the same organization for several years, front-line staff may develop strong networks of support and common understanding within their peer groups of instructors. A system of social support that is formed through communication with others, either personally or professionally, can assist field instructors in effectively managing the demands arising from their work (Kirk, 2013).

Work-Related Challenges

Why do so few people in Canada seem to continue this work into their late thirties? Most field instructors “understand the challenging nature of continued employment in the profession,” yet how long each intends to remain in this type of work when they begin is largely unknown (Thomas, 2003, p. 54). Disappointment surrounding the reality of the job and exhaustion from the increasing demands related to the lifestyle required for this work may unexpectedly motivate high quality field instructors to quit (Marchand, 2009).

Physical limitations or injuries may make the role unmanageable. The same could be said regarding limited and repetitive food choices. The grueling nature of the work can lead to field instructors who are burnt out and exhausted, both physically and emotionally, by the end of their first year. One study participant revealed she was often “absolutely spent because of all those relationships and asking kids questions and being fun and funny and engaging” (Kirk, 2013 p. 96).

Factors prompting one’s intention to change career may also arise outside the work context. These factors could include strain on one’s intimate relationships, difficulty creating new relationships with non-coworkers, or a feeling of being “disconnected” or “missing out” on time spent with friends and family (Bunce, 1998; Marchand et al., 2009, p. 368). Perhaps personal goals to have a less intense work schedule and more free time available motivate frontline employees to quickly move on to other fields where work and non-work aspects of one’s life are more easily combined (Marchand et al., 2009). Combining a career in the outdoors with the family responsibilities of motherhood was termed “particularly problematic” by female outdoor instructors in a study by Allin (2004, p. 64).

Leading remote trips in the backcountry may provoke feelings of isolation in field instructors. In Marchand et al.’s 2009 study, 48% of field instructors surveyed were single, only 9% were married, and 22% reported that their work had contributed to a breakup with an intimate partner. Another study found that a majority of participants were single (63%), while 12% were married and 25% in a relationship (Marchand & Russell, 2013). Field instructors who identified themselves as married or in a committed, long-term relationship reportedly felt more challenged with time and schedule constraints associated with their job than individuals who were single (Marchand et al., 2009).

Financial difficulty is another factor encouraging turnover. Early departures from those with post-secondary

degrees may potentially stem from a realization of one's monetary worth or an apprehension about getting trapped in a continually undervalued profession. In regard to finances, Kirk reports that some individuals felt it was "not very easy to have what you need" and there was a perceived expectation that field instructors would "live at a lower standard" (Kirk, 2013 p. 65).

What if concerns like those mentioned above were more commonly acknowledged and addressed by Canadian managers and directors of organizations within the outdoor profession? As a comparative example from elsewhere in the world, I will discuss Outward Bound New Zealand.

Outward Bound New Zealand

When I visited New Zealand in 2008, one of the managers informed me that the average age of their field instructors was 33. The 2021 Instructor Application form states that the average age of instructors is 30 years old, indicating this trend of retaining experienced field instructors has held constant for well over a decade. What is it that makes this example so different from the Canadian organizations that seem to have very few field instructors over 30 on their team?

The high value placed on their field instructors is written explicitly. The organization's website states "Our instructors are exceptional people" and their instructor application form states "Our instructors are integral to the high quality of the courses." The standard work schedule is also clearly laid out online, which includes 4 days off during course time, at least 5 days off between courses, not working more than 9 days in a row, and getting 5–6 weeks off, twice a year.

During my visit in 2008, it became clear that this organization was reportedly having trouble with staff turnover: no one wanted to leave! I was informed that the institution had just invested over two years into gathering employee feedback during the process of reviewing their mission statement, organizational values, and program offerings. Each field instructor committed to a three-year contract upon being hired, but many continued to stay in a front-line role within the organization for a much longer period. Not only that, but Outward Bound New Zealand had been awarded the title of Best Place to Work in New Zealand (against organizations of a similar size) multiple times due to "a clear, strong vision, a real sense of community amongst its employees, a commitment to grow and develop its people, and a culture of high performance" (Scoop Independent News, February 2008).

Outward Bound New Zealand is just one example where prioritizing growth, support, and development of their front-line employees can create a strong team culture. For example, by providing community-based, on-site staff housing for the field instructors, as well as their families, the sense of isolation and disconnection of their instructors can be reduced. With a strong commitment to similar goals, it is my hope that this same effect and "problem" with turnover can happen in other places too.

Revolutionizing Field Instructor Staffing in Canada

Can front-line work as a field instructor in Canada be perceived as a sustainable and meaningful long-term career choice? Organizations focused on staff retention would be able to reap the rewards of investing effort and resources into advancing the training and experience of their front-line employees. Retaining experienced field instructors means having staff who are better suited to delivering a higher quality program and making more appropriate risk-management decisions in a medical crisis (Galloway, 2007). The longstanding high rates of turnover in front-line field instructors in Canada signal a need for change in the profession. If organizations are serious about recruiting and retaining experienced staff who are high performing and committed to the organization, then organizations must invest the necessary resources to implement or adapt current policies and procedures to most effectively accommodate the needs of these individuals. The rewards are theirs to be gained.

Suggestions for Increased Retention of Field Instructors in Canada

High rates of staff turnover incur direct costs from continuous selection, hiring, and training of new employees, and indirect costs, such as lost knowledge, disruption of workflow, and reduced staff morale or uncertainty for those who remain (Kirby, 2006; Marchand et al., 2009). However, if managers were to play a more significant role in helping individual employees address the work-related problems they perceive, field instructors may be prevented from leaving the profession earlier than desired. Implementation of a diverse set of strategies to build supportive and sustainable work communities will be imperative to address the diverse work-related demands facing front-line employees (Thomas, 2003). If organizations offering wilderness-based expeditionary programs insist on providing high quality instruction from a dedicated, experienced and professional field staff team, they must adopt specific hiring and incentive practices to encourage this (Ross, 1989).

Prioritize Opportunities for Debriefing

The primary purpose of debriefing is to “allow participants to integrate their learning, thus gaining a sense of closure or completeness to their experience” (Hammel, 1993, p. 231). Usually verbal in format, debriefing can also take non-verbal forms such as journal writing, drawing, or taking time to be alone (Gass, 1993). Informal debriefing opportunities may occur during one’s time off or during moments shared between coworkers while still in the field or driving together to and from work (Kirk, 2013).

Since it may be difficult for field instructors to find appropriate times for debriefing during work hours,

building a formalized and consistent debriefing process into the program policies allows field instructors to discuss incidents or ongoing issues in a confidential, professional manner. A formalized process could take the form of a phone call or a face-to-face meeting. If a front-line employee requires additional support, an efficient channel to access whatever is needed should be provided. An organizational culture that deliberately prioritizes debriefing is seen as essential to being effective as a field instructor (Kirk, 2013).

Provide Honest Onboarding Processes

First impressions made during the recruitment and onboarding phases may be important factors in longevity as a field instructor. Providing new employees with a clear and complete understanding of their job responsibilities, as well as establishing an early familiarity with members of the community with whom they will work, could reduce rates of burnout and turnover in recently hired employees (Marchand & Russell, 2013). Improvements to this initial training period could include increasing the time one spends shadowing an experienced instructor, alternating responsibilities in the field with other venues, such as the office or a base camp, and taking steps to ensure new field instructors are always beginning work within an experienced team and are not paired with other novice instructors until they feel more comfortable in this role.

Provide Mentorship and Meaningful Feedback

When mentorship is made a priority, newer field instructors can more easily feel part of the team and like they have someone experienced to ask when questions arise. According to Parsons (1992), “the cost of establishing and maintaining a mentorship program is insignificant” when compared to the low productivity of alienated new employees and the cost of recruiting replacements” (p. 8). If a formalized mentorship program is not already in place, individual employees should be encouraged to independently seek out mentors within the profession.

Especially when front-line employees are working with demanding clients in a multi-day expeditionary setting, the importance of offering positive feedback and individual recognition should not be overlooked by managers (Thomas, 2003). One field instructor said, “when you had someone you trust give you sincere feedback, it was invaluable” (Kirk, 2013, p. 105). Lack of constructive feedback from managers may be viewed by field instructors as a problem. One study participant saw a lack of collaboration with the managers as a negative aspect in the development of both the program and the individual employees, suggesting there wasn’t enough reflection done to make the team stronger and the experience better (Kirk, 2013).

Provide Paid Instructional Clinics and Professional Development

Over time, most outdoor professionals get involved in various certification courses and workshops. Participating in continual professional development to upgrade one's skills and knowledge is an important way to combat feelings of stagnation in one's work. Opportunities for professional development and training outside the immediate work context are considered important to maximizing an employee's longevity (Thomas, 2003). Teschner and Wolter (1984) suggest that staff burnout is more to do with "an absence of ongoing personal growth" (p. 19) and less as a result of long working hours and high demands. Supporting employee participation in paid instructional clinics is a clear example of an organization's investment in the professional development of their front-line staff.

Create a Culture of Respect, Understanding and Openness

It is imperative that the voices of front-line employees are heard by management. When issues are brought up, managers must take action to adequately address the needs of front-line workers, or risk losing these employees. Dissatisfaction may build over time for field instructors who perceive that "nothing's changing" and that "the company wasn't really addressing the issues" brought to their attention by the workers on the front-line (Kirk, 2013, p. 98). Several study participants mentioned feelings of not being heard or offering recommendations that were "falling on deaf ears" or "on ears that just really didn't get it" (Kirk, 2013, p. 99). One participant stated, "I remember really clearly feeling frustrated because I wasn't listened to" (Kirk, 2013, p. 99).

A sense of disconnection from management was perceived by some field instructors as a reflection of a lack of support and feeling of alienation from the rest of the organization. Several participants stated that feeling unheard by management strongly influenced their eventual intentions to leave the position. One participant stated he'd had enough of "people not understanding the seriousness of what we are doing out here and what we need, in spite of requests and saying what's going on" (Kirk, 2013, p. 101). Another participant's perception that he was "bringing up concerns and being more or less ignored" by management attributed to his decision to leave the position (Kirk, 2013, p. 101). A third participant attributed strengthened feelings of intent to quit from the frequent sense that whatever was requested from management, "that thing was never coming" (Kirk, 2013, p. 101).

Involving field staff in major decision-making and in the development of policies and programs could help to increase retention. It has been found that such involvement allows staff to develop a stronger sense of ownership and acceptance, acquire a voice, and feel empowered (Mulaney, 2011). More than just the nature of the work itself, Parsons (1992) suggested other significant variables such as relationships with colleagues and one's sense of influence will affect one's sense of job satisfaction. Developing a culture of respect, where the work done by front-line workers is understood and valued at all levels of the organization, could reduce

an employee's feelings of being unappreciated and undervalued. Front-line summer camp staff who reported that they felt like a valued member of the team also reported greater group cohesion, resulting in greater investment in their work (Bailey et al., 2011). Therefore, giving front-line staff the opportunity to share their input and ideas for restructuring the program can help them to feel as though they are an important part of the organization and that their opinion matters.

Offer Scheduling Alternatives

A common complaint made by field instructors is the difficulty posed by the work schedule. Those endeavouring to settle into a longer-term job or career in the outdoor profession may face limited options when attempting to find a living situation that will accommodate their specific needs and preferences. Atypical scheduling of work shifts for field instructors often leads to inconsistent and segmented relationships with friends and family. In Thomas's (2001, 2003) research on outdoor educators, common contributors to work related stress were identified most frequently as long work hours and time away from home, as these factors could lead to a perceived lack of stability or permanence in one's relationships.

Perceptions that an employee's work schedule is threatening their relationships outside the workplace could be addressed by adopting creative approaches such as varying one's work schedule, periodically spending paid time out of the field, or diversifying one's work-related tasks (Marchand et al., 2009; Ross, 1989). Individualized revision of employee work schedules would ensure one's time spent in the field is balanced by what one perceives as adequate time to maintain a healthy and sustainable living situation outside of work (Marchand et al., 2009).

Change the rhetoric about turnover

A Canadian field instructor recalled once being told by her manager, "It's a dead end job. People who do your job, they do it for a little while, and then they move on, nobody does that for very long. You're a dime a dozen" (Kirk, 2013, p. 64). In Canadian organizations, the idea of this role as unsustainable is commonly accepted thinking among management as well as many field instructors themselves. One front-line employee stated, "Ever since I've worked in the field, people always speak to the fact that there's always a high turnover. Everyone knows that" (Kirk, 2013, p. 130). Front-line employee turnover is viewed as "huge," "quick," "inevitable," and "pretty fricking high" (Kirk, 2013, p. 65). One participant claimed, "every organization I've worked with has a high turnover rate" and he considers working three years or more as "very rare" (Kirk, 2013, p. 65). With this common rhetoric, is it any wonder that front-line instructors tend to leave an organization after only a short time in the role?

Improve Financial Compensation and Recognition

Front-line employees must be more appropriately compensated for the high levels of risk and responsibility they take on and the remote, challenging conditions they endure week after week. Additions like sick days, paid vacation, flexible scheduling options, and health benefits could contribute to significant increases in employee job satisfaction, as well as organizational commitment and longevity. Outdoor leaders do not find monetary gains to be the most important reason for their job choice, but pay is frequently seen as a reflection of worth and thus, feeling underpaid may lead to frustration and turnover (Marchand & Russell, 2013). Further research needs to be done to determine what baseline pay structure field instructors consider adequate financial compensation for their work, and what fiscal initiatives would motivate them to remain longer in their roles.

Staff retention was perceived by some study participants to be derived in large part from employees feeling valued, “taken care of,” and “invested in” by the organization, as opposed to feeling “taken advantage of” (Kirk, 2013, p. 101). One field instructor stated, “In order to have retention of front-line staff, there has to be some sort of recognition of experience. You can’t expect me to work a really hard job like this without a raise, without any change to things” (Kirk, 2013, p. 101).

Financial compensation that increases in line with the rising cost of living is an important part of feeling valued, however this is not the only aspect (Kirk 2013). Career counselling initiatives that examine “a plan of development” focused on “growth, appreciation, [and] investment in people” were also seen as significant and positive from a front-line employee’s perspective (Kirk, 2013, p. 102). One example where a participant recalled feeling valued by the organization was when the manager “sat down and figured out a plan of how [he] was going to improve [him]self for work”(Kirk, 2013, p. 102).

A sense of making professional progress, shown by increased responsibility, tools, knowledge, power, and influence, is also important to avoid a sense of stagnation in front-line field instructors. For example, getting a promotion to senior staff could lead to significant gains in experience, learning, and professional growth. Field instructors mentioned their appreciation for the “opportunity to learn in new circumstances, [and] new positions” and experienced “excitement at the prospect of growing professionally, [and] doing something new” (Kirk, 2013, p. 76).

Conclusion

Despite the common sentiment that a high rate of turnover is inevitable, some field instructors manage to remain in this role for several years or even much longer. Important questions remain to be answered regarding the effectiveness of organizational initiatives focused on staff retention. Field instructors of all types are an understudied population and may be frequently overlooked due to the transient nature of their jobs and the uniquely remote context in which they work.

In conclusion, a non-linear career path is expected for this kind of work and that aspect of the outdoor

profession may never change. The rates of pay for frontline work may never become competitive with some other fields. However, it is my hope that it will become more feasible and accessible for frontline outdoor professionals to continue doing what they love for as long as they want, with the necessary support and adjustments made by their employers.

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About the author

Liz Kirk

Liz Kirk currently lives in the Niagara region in Ontario and recently became a certified forest therapy guide. Her work as a wilderness trip guide and outdoor educator lasted into her late 30s. Her volunteer experience includes the Council of Outdoor Educators of Ontario (COEO) and Get Kids Paddling. To help address limited mentorship opportunities in the industry, she was instrumental in the development of the Ontario Wilderness Leadership Symposium (OWLS) that began in 2015.