

Outdoor Environmental Learning: increasing opportunities

AUTHOR

Conor McMullan, Director of Educational Programs, Cheakamus Centre

REVIEWER

Scott Slater, Principal, Bowen Island Community School

What is happening?

The Átl'ka7tsem/Txwnéwu7ts/Howe Sound region presents countless opportunities for formal and informal learning. From overnight school and camp programs to field trips and interpretive experiences, there continues to be a growing interest in providing children and youth a wide range of year-round outdoor learning opportunities. These opportunities provide meaningful outdoor experiences, which is a powerful way to foster understanding and care for our environment.

There are significant physical, social and cognitive benefits provided through learning in nature. Such benefits may include increased physical activity, reduced stress and anxiety, and enhanced enthusiasm and engagement in learning.¹



Learning about garbage in the marine environment. (Credit: Ocean Wise)

What is the current status?

Park access and usage across B.C. has increased by approximately 23% since 2014.² A similar trend is evident in Átl'ka7tsem/Txwnéwu7ts/Howe Sound as public and independent secondary and elementary schools in Skwxwú7mesh/Squamish, Lions Bay, West Vancouver, North Vancouver, Nexwéléxwem/Bowen Island, Langdale and Gibsons use their school sites and nearby Átl'ka7tsem/Txwnéwu7ts/Howe Sound forests and shores for outdoor learning.

Additionally, post-secondary institutions including Quest University (Skwxwú7mesh/Squamish), Capilano University (North Vancouver), University of British Columbia (Vancouver) and Simon Fraser University (Burnaby) have all conducted field-based courses in Átl'ka7tsem/Txwnéwu7ts/Howe Sound for undergraduate students, including student-teacher candidates. Many of the groups, schools and organizations using Átl'ka7tsem/Txwnéwu7ts/Howe Sound as an outdoor learning classroom have begun to recognize and include Indigenous learnings and Traditional Indigenous Knowledge into their programs.

In addition to the numerous camps, programs and outdoor schools operating in Átl'ka7tsem/Txwnéwu7ts/Howe Sound (see tables 1 and 2, [Outdoor Environmental Learning](#), Ocean Watch Howe Sound Edition [OWHS] 2017), three new programs have been identified since the last report. These include the Cheakamus Centre Environmental and Indigenous Learning Workshops, the Ocean Wise Mountains to Oceans Youth Leadership Camp, and the Nicholas Sonntag Marine Education Centre. The first two have been offered since 2018, and the latter since 2017.

Cheakamus Centre offers unique Skwxwú7mesh Úxwumixw/Squamish Nation cultural learning opportunities. For example, since 2018, Cheakamus Centre has been offering an Indigenous Youth Leadership Program. This is a four-week intensive learning course teaching traditional Skwxwú7mesh Úxwumixw/Squamish Nation cultural practices, with a focus on skills related to outdoor education and tourism, such as outdoor facilitation and food safety. The centre has also been offering a range of workshops for educators designed to enhance participants' understanding and appreciation of traditional Skwxwú7mesh teachings and cultural practices. Skwxwú7mesh Úxwumixw/Squamish Nation offers courses for Nation members which include, among other skills, Skwxwú7mesh/Squamish language.

Ocean Wise offers numerous educational opportunities. Amongst these, as above, is the Mountains to Oceans Youth Leadership Camp, an outdoor education program that utilizes the Squamish River watershed. This is a multi-day program with a focus on environmental learning, outdoor adventure activities and stewardship. Participants visit the Cheakamus Centre and stay at the Longhouse, spending that time to learn about traditional knowledge, led by Skwxwú7mesh Úxwumixw/Squamish Nation employees of the centre. There is a focus on traditional storytelling and history, and environmental education such as ethnobotany.

The Nicholas Sonntag Marine Education Centre is an aquarium based in Gibsons. They offer experiential and classroom learning experiences for schools, as well as week-long camps focussed on learning at

the land-sea interface. In addition, the centre carries out regular community release days, where aquarium specimens collected from the local marine environment are released upon conclusion of a display.

In addition, throughout 2019, two youth project leaders from Sk̓wx̓wú7mesh Úxwumixw/Squamish Nation worked with the Marine Reference Guide (MRG) team to elevate Indigenous youth voices and participation in marine stewardship and spatial planning, while acknowledging and respecting Traditional Indigenous Knowledge and values. They led activities engaging

youth in outdoor learning, such as a canoe journey to K̓w'ém̓k̓w'em and Nínich K̓w'ém̓k̓w'em/Defense Islands and a shoreline cleanup.

Various other environmental program service providers exist. Examples include the Sea to Sky Gondola, which offers interpretive environmental programs for school-aged children and youth; and the Britannia Mine Museum, which offers children's programming during school months that includes conservation-based educational content.



An educator instructing a participant at Cheakamus Centre's Youth Leadership Program, 2019. (Credit: Gadbois Photography)

What are the potential impacts of climate change on environmental learning?

The summer of 2017 and 2018 presented challenges for outdoor learning as smoke from wildfires across the province resulted in poor air quality. At certain times, air quality advisories recommended that time outdoors be restricted. Children and adults with res-

piratory issues were particularly at risk. These climate-related conditions present significant concerns for summer camps whose core activities are outdoor based.

What has been done since 2017?

The table below reports on progress made on recommended actions from the previous 2017 article, where identified. Many of these require ongoing action.

2017 ACTION	ACTION TAKEN
GOVERNMENT ACTIONS AND POLICY	
Prioritize protection of Átl'ka7tsem/Txwnéwu7ts/Howe Sound's natural beauty so that it remains preserved for educational opportunities to thrive and expand in the future.	In January 2019, an Important Bird Area (IBA) in English Bay/Burrard Inlet was extended to include part of Átl'ka7tsem/Txwnéwu7ts/Howe Sound. In March 2019, Fisheries and Oceans Canada formed eight marine refuges around known glass sponge reefs in Átl'ka7tsem/Txwnéwu7ts/Howe Sound, closed to all bottom contact fishing activities. (See Marine Protected Areas , OWHS 2020).

What can you do?

A detailed overview of recommended actions relating to climate change is included in *The path to zero carbon municipalities* (OWHS 2020). In some cases, no progress was identified on previous recommended actions; these remain listed below. Additional actions marked as **NEW** also follow.



Individual and Organization Actions:

- Familiarize yourself with educational opportunities available to all ages in Átl'ka7tsem/Txwnéwu7ts/Howe Sound, and get involved!
- Explore opportunities to incorporate outdoor learning and natural sciences into professional development.
- **NEW** Promote volunteer opportunities that support educational initiatives.



Government Actions and Policy:

- Increase awareness of and encourage participation in the many educational opportunities offered in Átl'ka7tsem/Txwnéwu7ts/Howe Sound for all ages.
- Support research on children and youth development outcomes from natural science educational opportunities, in order to better understand and document the benefits of these programs and justify further growth.
- Collect and maintain information on educational opportunities and participation in Átl'ka7tsem/Txwnéwu7ts/Howe Sound to track trends to understand needs and desires for this type of learning.
- Identify additional local conservation groups, citizen science projects, and restoration efforts for potential collaborations with educational initiatives.
- Capitalize on the uniqueness of Átl'ka7tsem/Txwnéwu7ts/Howe Sound's natural beauty and accessible location by expanding outdoor education programs throughout more schools in the Greater Vancouver Area.
- **NEW** Prioritize and support education at a range of sites in Átl'ka7tsem/Txwnéwu7ts/Howe Sound by providing appropriate campsites and facilities and access points.
- **NEW** Identify and support initiatives to enhance Indigenous knowledge and connections in Átl'ka7tsem/Txwnéwu7ts/Howe Sound.

Methods

Information included in this article was obtained via scanning the websites below, specific to learning and education (see Resources Accessed). Additionally,

much of the information came from conversations the author had with educators currently working in the public and independent K-12 systems in Átl'ka7tsem/

Txwnéwu7ts/Howe Sound. These were not formal interviews.

References

¹ Rugel E. Green space and mental health: pathways, impacts, and gaps [Internet]. National Collaborating Centre for Environmental Health; 2015. Available from: http://www.nccch.ca/sites/default/files/Full_Review-Greenspace_Mental_Health_Mar_2015.pdf

² BC Parks. Facts and figures [Internet]. 2019. [cited 2019 Nov 12]. Available from: <http://www.env.gov.bc.ca/bcparks/about/facts-figures.htm>

RESOURCES ACCESSED

Bowen Island Community School
westvancouver.schools.ca/bics-elementary/

Camp Artaban
campartaban.com

Camp Elphinstone
gv.ymca.ca

Camp Fircom
fircom.ca

Camp Sunrise
campsunrise.ca

Camp Suzuki
campsuzuki.org

Camp Potlach
bgcbc.ca

Capilano University
capilano.ca

Cheakamus Centre
cheakamuscentre.ca

Children and Nature Network
childrenandnature.org/

Easter Seals Camp Squamish
eastersealscamps.ca

Evans Lake Forest Education Centre
evanslake.com

Island Pacific School, Bowen Island
islandpacific.org

Quest University Canada
questu.ca

Metro Vancouver School & Youth Leadership Programs
metrovanvancouver.org

Sea to Sky Outdoor School for Sustainability Education
seatosky.bc.ca

Sk̓wxwú7mesh Úxwumixw/ Squamish Nation
squamish.net



Mountains to Oceans students in the Squamish Estuary, 2019. (Credit: Hailey Renaud)