

Manulife



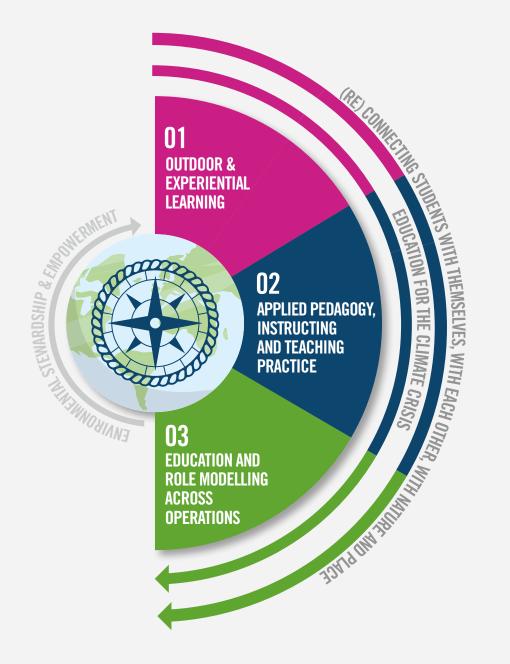
OUTWARD BOUND INTERNATIONAL ENVIRONMENTAL CHARTER

NATURE BOUND EDUCATION GUIDE

AN EDUCATION GUIDE FOR OUTWARD BOUND INSTRUCTORS AND EDUCATORS

(RE) CONNECTING STUDENTS WITH THEMSELVES, WITH EACH OTHER, WITH NATURE AND PLACE.

Developing greater ecological awareness and understanding. Fostering a sense of environmental stewardship and empowerment. Education for the climate crisis.



INTRODUCTION

This "Nature Bound" Education Guide aims to support instructors to improve environmental education outcomes for students across 4 education focus areas:

- (Re) connecting students with themselves, with each other, with nature and place
- Developing ecological understanding
- · Fostering a sense of environmental stewardship and empowerment
- Education for the climate crisis

There are some excellent learning outcomes in relation to these four focus areas already being achieved across the diverse OB School network in various ways. The intention of this guide is to provide ideas and resources to support this work. Because of the diverse geographical, social and cultural contexts in which OB Schools operate, this guide does not offer a detailed environmental education curriculum; rather it offers some ideas, examples and resources from around the OBI community which it is hoped are both relevant and easily accessible to all OB Schools and educators. It is anticipated that the ideas and activities within this guide will be adapted to suit different contexts and learning aims.

This Education Guide is organized into 3 main sections: Outdoor and Experiential Learning, Applied Pedagogy and Teaching Practice, and Education through Role Modelling Across Operations. Chapter I, Outdoor and Experiential Learning, briefly reviews the importance of experiential learning to environmental education, with reference to three relevant OBI education models. In Chapter 2, Applied Pedagogy, Instructing and Teaching Practice, some traditional and contemporary approaches to environmental and sustainability education are briefly reviewed, along with some examples and case studies. Some ideas in relation to education for the climate crisis complete this chapter: Chapter 3, Education through Role Modelling across Operations, concludes the education guide by reviewing some of the inherent education opportunities that exist across students' broader interactions with Outward Bound websites, infrastructure and resources, and helps to link this Education Guide with the Nature Bound Operations Guide.

OBI ENVIRONMENTAL CHARTER AND THE "NATURE BOUND" GUIDES

This Nature Bound Education Guide sits alongside and complements the Nature Bound Field Guide and Nature Bound Operations Guide. These 3 guides offer guidance to help OB Schools work towards fulfilling the OBI Environmental Charter, which aims to support excellence in environmental education and practice across the OBI School network.

For more information on the Environmental Charter and the process through which OB Schools can fulfil the Charter criteria, please refer to the "Introduction to the Environmental Charter" document.

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Throughout this guide, there are web links for more information. These are highlighted on the right column of page as per this example.

1. OUTDOOR AND EXPERIENTIAL LEARNING

INTRODUCTION - WHAT IT MEANS TO BE OUTWARD BOUND

The Senegalese environmentalist Baba Dioum famously said: "In the end, we will conserve only what we love, we will love only what we understand, and we will understand only what we are taught."

We might add to this that in terms of how to develop this understanding and love, Outward Bound provides powerful opportunities for participants to learn through relationships with self, with others, with the natural world, and with places. Given the global environmental and social challenges we currently face, these opportunities to develop deeper understanding and connections may be more important now than ever.

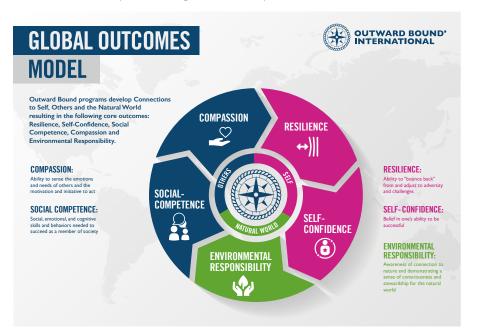
OBI PEOPLE PROCESS PLACE MODEL

Outward Bound provides unique opportunities for students to work collaboratively with one another and build connections and understanding within and between people, the natural world, and places. The OBI People Process Place model provides a good visual overview of these inter-relationships:



OBI GLOBAL OUTCOMES MODEL

In terms of environmental and social outcomes, OB participants take a wide range of relevant learnings away from their OB course experiences. The OBI Global Outcomes model provides a good summary of these:



ALIGNMENT WITH UN SDGS

There are a wide range of initiatives underway at global and national levels to help address our environmental and social issues and sustainability challenges. The United Nations 17 Sustainable Development Goals (SDGs) provide a framework and focus areas for this work. Outward Bound course outcomes align with these SDGs in multiple ways:



SUMMARY

Outward Bound courses provide excellent opportunities to help students develop connections with themselves, with each other, with the natural world, and with places. The focus of this Education Guide is to explore some ways in which these connections can be strengthened, ecological understanding deepened, participants' sense of environmental stewardship increased, and students ability to empathise and work collaboratively together maximised.

Of course, there is a limit to what we can include in this guide, and there are many other ways that people can develop these connections and a sense of environmental stewardship that are not described within this guide. These include music and the arts, love, truth, laughter, beauty, peace, play, friendship, and everything else that helps to celebrate and develop the positive, creative, cooperative and inspiring aspects of humanity.

We hope that this guide contains something useful for every Outward Bound educator.

2. APPLIED PEDAGOGY, INSTRUCTING AND TEACHING PRACTICE

INTRODUCTION

There are various ways in which the educational goals of connecting students to nature, improving ecological understanding and developing a sense of "environmental stewardship" can be approached. In this chapter some common approaches relevant to OB Schools are briefly summarized, and some examples of activities, resources, and links to further information provided.

SUMMARY OF TERMS: ENVIRONMENTAL EDUCATION, EDUCATION FOR SUSTAINABILITY, CONNECTION TO NATURE, AND PLACE BASED EDUCATION

There is some variation in how these terms are interpreted and used around the world. Environmental Education (EE) could be considered a broad umbrella term for a wide range of activities and teaching methods generally defined as education in, for, and about the environment. EE approaches often include fun activities which can get students exploring the world around them in creative and engaging ways.

Education for Sustainability (EfS) may include similar approaches and activities to EE, but also extends the scope of EE in that it aims to help students explore the interconnected and interdependent nature of environmental issues alongside social, cultural, economic, and political considerations. Through an EfS lens students might gain a greater understanding of the underlying causes and considerations of a given environmental issue, and thereby help to identify and engage in effective courses of action.

Connection to Nature (CTN). People are inherently part of nature, yet modern life makes it easy for us to feel disconnected from this natural state. There is a significant volume of academic research which shows that people who feel a strong sense of CTN are more likely to behave in a pro-environmental manner. While participants on Outward Bound courses may naturally develop a feeling of CTN through being in outdoor environments and participating in outdoor activities, there are various ways in which this connection can be emphasized and strengthened.

For example, through activities designed to get students interacting with and using their senses more fully to engage more deeply with the natural world around them.

Place based education puts local places at the centre of outdoor learning program design and experience to foster connections with local places, environments, and communities. Using a place based approach to learning, students might explore the natural and cultural history of an area; learn some of the stories of a place; learn about current perspectives, challenges and opportunities that come from the intersection of social, cultural, economic and political influences on the local environment; and consider what a place might be like in the future. Outdoor activities such as hiking or canoeing become a means to explore and learn about place, as well as a vehicle to help fulfil other course outcomes related to personal and social development.

While a place based approach might be best suited for students who are learning within their local environments and communities, it can still be used indirectly with students who have travelled away from their homes to attend Outward Bound courses. For example, students can learn about the place within which their Outward Bound courses run, consider how this place connects to their home place, and be encouraged to learn more about the places and stories local to their homes. Some further considerations relevant to place based approaches are offered in the Nature Bound Field Guide.

EXAMPLES AND RESOURCES

The examples and activities that follow come from Environmental Education, Education for Sustainability, and Place Based Education perspectives. They will help students explore the environment around them, engage their senses, think about relationships and interconnections, deepen their sense of connection to the natural world, and help students to consider their place within the broader ecological and social communities of which we are all a part.

I. Outward Bound UK was recently involved in the "Generation Green" project and developed "5 key ways to connect to nature". This is summarized in the graphic below:



Generation Green project developed an Outdoor Activities Resource Pack. Some examples from this resource pack are below. For more examples and information on the **Generation Green Project,** please refer to the **Environmental Charter online** resources. >>



*https://oee.nrcan.gc.ca/corporate/statistics/neud/dpa/calculator/ghg-calculator.cfm?_gl=1*103vzmr*_ ga*NDlxMzQ3NjYwLjE2Njk4MzAwMzU.*_ga_C2N57Y7DX5*MTY2OTgzMDAzNS4xLjEuMTY2OTgzMDA1Mi4wLjAuMA#results





Can you use your senses to find out which tree you met? Trust your partner and get connected to nature.

Time | 20 mins Cost | Free Location | Outdoors

You will learn

Value the Outdoors

Enjoy being outside, feel comfortable in nature, and feel connected to the natural environment. **Be active**

Look after your body by being physically active.

You will need

- Blindfolds
- Access to outdoor space



Before you begin

- Check the location you plan to use. Make sure that there are enough trees for each pair or group, and where possible try and make sure there is a good variety of trees.
- Mark out a clear boundary for the activity, including a starting location.

Tree hugger

- 1. Everyone should get into pairs or small groups. One person in each pair or group should put on a blindfold.
- 2. From a set starting location, team members must guide their blindfolded teammate safely to a tree. Make sure everyone wearing a blindfold walks slowly, with their hands out in front of them.
- 3. The blindfolded person should use their other senses to get to know their tree: hug it, smell it, feel for knots or branches, and listen to the leaves rustling.
- 4. Carefully guide the blindfolded people back to the starting location.
- 5. Everyone should remove their blindfolds and try to locate the tree they went to, using what they learned about it.





Have you ever stopped and thought... why? Practice curiosity with this simple activity.

Time | 30 mins Cost | Free Location | Outdoors

You will learn

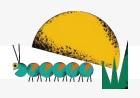
Communicate

Learn to express your own views, listen to others, and understand what they're trying to tell you. **Problem Solve**

Find it easier to understand challenges, consider your options, and find solutions.

You will need

Access to outdoor space



Why, why, why

- 1. While on any adventure outdoors, whether in the park, on a hike, or in a canoe, take a moment to pause.
- 2. Everyone should take in their surroundings and see if anything makes them feel curious. As they look at nature, ask them to say 'I wonder why...' and then ask questions. They could share their questions with the rest of the group if they feel comfortable.

For example, they might ask: 'I wonder why the trees are in straight lines? I wonder why the hills are all different shapes?'

3. If anyone knows the answer to a question, they could share it with the person who asked.





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2. The following activities come courtesy of Outward Bound Canada.

MINI SOLO/ REFLECTIVE TIME

OUTCOME: Reflection and sense of place

ACTIVITY TYPE: Reflective, Growth

This can happen in camp or during the travel day. If you are in a cool spot, if students need a break from each other, or if you want to ground (orient) them to where they are, have them pick a spot to sit with their journals for 5-10 min. If you want to give them a directive you can make a list of all the things you can hear, draw something interesting, or write about what you can see; or leave it unstructured and let them just sit and take it all in.

NATURE METAPHOR INTRODUCTIONS

OUTCOME: Grounding (orienting) to "place" at course start ACTIVITY TYPE: Semi active, metaphoric, group sharing Growth

This activity works best with older groups as they are more often on course, at least in part, to spend time in the natural world. Ask the participants to think about what it is that they want to get out of the course, and then give them time to go out and find something natural that would be representative of this (like a rock to symbolize strength and calmness). Have them come back to the circle and share their name, object and what their goals for course are. These tangible objects can act as reminders during the course of what it is that they wanted to get from their experience at Outward Bound.

PINWHEEL DEBRIEF

OUTCOME: Nature appreciation

ACTIVITY TYPE: Reflective, Growth

Just before leaving camp, when everything is packed up, have everybody lie on their backs on the ground with their heads in the middle to form a pinwheel shape. Starting anywhere, have each person share one word to describe what they appreciated about the campsite location. Go around in the circle, each person in turn sharing one word. Continue until energy dissipates. This is a nice way to have them connected to place and to the earth, and appreciative of their surroundings.



For more examples of activities like this, please refer to the Environmental Charter online resources >>

SILENT WALK/PADDLE

OUTCOME: Appreciation of the natural world, sense of place ACTIVITY TYPE: Reflective and active Growth

It is easy to get caught up in the rapport building, team building, and social dynamics on course, and so the value of having a period of silent travel is tremendous. Easy to do, just pick the right time, and frame/ debrief it well. Set it up just before you enter a beautiful stretch of the trail or route. Bring the energy down and ask the students to be silent for the duration. At the end, break the silence, bring everyone together and ask what they observed. What they became more aware of, what they wondered about.

3. The Outward Bound Peacebuilding movement works with leaders, communities and organisations to build a more compassionate, resilient and peaceful world through experiential learning centred around the intersection of people, nature, and peace.

WHERE WE FIND PEACE, WHERE WE BUILD PEACE

GENERAL TYPE OF ACTIVITY AND ELEMENT: Reflection and visioning ACTIVITY TIME: 10-15 minutes

SUGGESTED USE: Makes a good opener for any program or an evening reflection

SPACE REQUIREMENTS: None

MATERIALS: A quiet space is helpful. Visuals above are useful but not mandatory

SUGGESTED USE: Makes a good opener for any program or an evening reflection

- To support participants in exploring their own understanding and imagination of peace
- To foster initial connections between nature and peace
- To launch the process of a deeper engagement with the idea of peace as a process and an activity

Set up and Explanation:

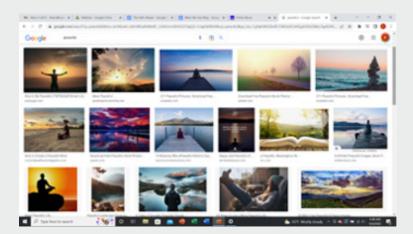
- Ask participants to sit or stand in a circle:
- 'I invite you to close your eyes and take a deep breath. Imagine yourself in a place that you think of as peaceful. A place that brings you peace. What do you see? Hear? Smell?
- Ok, please open your eyes. Would anyone share and describe their location?



The following activities are examples from their programs. For more examples, please refer to the Environmental Charter online resources, and have a look at the OB Peacebuilding website: www. outwardboundpeace.org/

Facilitator Notes:

- Guide the group in sharing their imaginary places and seek commonalities - most groups will have a frequency of participants referencing water, lakes, oceans, sunrise or sunset, silence, reflections, stillness.
- At this point a visual of a google image search for "peaceful" is a useful example of how similar many imaginations are.



- Pivot this to ask what is absent from these images: noise, speed, movement, other people, signs of habitation. Ask the group what this might mean?
- Our instinctive response is to imagine nature as a place of peace and retreat from the dynamics of the world that most represent conflict, aggression and violence.
- This is an opportunity to talk about the framework of Positive

 Negative Peace. Explain it as a visualization of the difference
 between the absence of things we see as part of violence and
 conflict and yet, our challenges as leaders and humans is to work
 toward to build positive peace (as exemplified by a community
 that demonstrates collaboration, respect, equity, communication, etc).



• Ask the group to imagine how we can demonstrate community in the outdoors and enact a vision of positive peace in nature as well as the absence.

IMAGINE FUTURE LAND AND PAST LAND*

GENERAL TYPE OF ACTIVITY AND ELEMENT: Reflection and visioning ACTIVITY TIME: 10-20 minutes

SUGGESTED USE: Makes a good opener for any program or an evening reflection

SPACE REQUIREMENTS: None

MATERIALS: None

SUGGESTED USE: On programs with students, adults, in any context or setting. Goals:

- To support participants connecting with the natural environment and applying their imagination to the environment.
- To highlight the time dedicated to considering the history of places and the potential future impact of human behavior
- To launch the process of recognizing that we are all subject to and influenced by space(s) and that time in a natural environment allows us to remind ourselves and deepen our understanding of and concern for major topics like global climate change.

Set up and Explanation:

- Ask participants to stand or sit in a circle and say something like this:
- 'I invite you to look around carefully for one minute and observe where we are. What do you see? What do you hear? What do you smell?
- If you would like, please close your eyes and take a deep breath. Now imagine...what might this place have been like 100 years ago, or 1000 years ago? Would anyone have been here? How different would it have been?
- Take another deep breath and imagine, what might this place be in 100 years from now? What would happen to this ecosystem if it was much hotter, or colder, or drier or wetter? Imagine if a major storm damaged this place - who would be vulnerable? Who might be hurt or impacted?

Facilitator Notes:

• Invite participants to share what they saw and what they imagined? Did their imaginations focus on changes in nature? What about the presence of people? of animals? Did their vision of the future make them feel optimistic or concerned?

*(This is an adaptation with an environmental lens)

INDIGENOUS AND LOCAL KNOWLEDGE

In recent years, the rights and practices of indigenous and local peoples around the world have been receiving increased attention and recognition. Indigenous knowledge offers essential insight in relation to various environmental issues, including peoples' relationships to the natural world, conservation, and land and water management. Indigenous knowledge offers perspectives and worldviews which are much more aligned with broader sustainability concepts and aspirations than many more common societal perspectives. Indigenous peoples also have rights as recognized by the 2007 United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).

The recent IPCC report "Climate Change 2022: Impacts, Adaptation and Vulnerability" uses the term "indigenous and local knowledge" to describe societies with "long histories of interactions with their local surroundings, and understandings and skills developed by individuals and populations specific to the place where they live". The report goes on to describe the importance of this indigenous and local knowledge in relation to a variety of land management practices, natural disaster prediction, and historical knowledge of past climate changes. The report recognises the importance of securing the rights of indigenous and local peoples and communities to their lands, with the benefits of doing so including sustainable farming and forestry, protecting wildlife and habitats, and protecting the rights of indigenous and local peoples.

At the time this publication goes to press (December 2022), the United Nations COP15 Biodiversity Summit is underway. At this conference the interconnection between the global climate crisis and the global biodiversity crisis have been widely acknowledged; one of the goals of this summit is to protect 30% of the earths' land and 30% of the earths' oceans by 2030. Indigenous people currently make up around 5% of the worlds' population, yet protect 80% of the earths' remaining biodiversity. Thus the knowledge, perspectives, and rights of indigenous and local peoples are crucial in helping to solve the worlds' biodiversity and climate crises (Western, P. and Greenfield, P., 2022).

Implications for OB Schools and courses

OB Schools operate within different social and cultural contexts around the world and the perspectives of indigenous and local peoples may have varying degrees of relevance. For those Schools for whom this topic is relevant, there are a number of ways in which Schools can work to uphold and promote the rights and perspectives of indigenous and local peoples, including:

- Promoting UNDRIP
- Working to form relationships with indigenous and local peoples
- Finding out about current and historical relationships between indigenous and local peoples and areas of land in which OB courses operate; and respecting these relationships and perspectives

- Where appropriate (i.e. with approval from indigenous and local peoples), incorporating some of the language and knowledge of indigenous and local peoples into OB courses
- In some cases, there may be potential for OB Schools to partner with indigenous and local peoples to co-design and deliver both cultural training for staff, and OB courses.

Carried out in a respectful and appropriate way, promoting indigenous and local language and knowledge within OB courses not only helps to raise awareness about the rights of indigenous and local peoples, but also offers opportunities for students to learn about cultures and worldviews which may be different to their own. The Nature Bound Field Guide contains some further considerations around considering the rights of indigenous and local peoples.

EXAMPLES FROM THE OBI COMMUNITY

I. OB COSTA RICA RESIDENTIAL GAP YEAR PROGRAM: INDIGENOUS COMMUNITY AND SELF-SUSTAINED COMMUNITY

Our Residential Gap Year Semester programs are different from stereotypical Outward-Bound Courses. The program still focuses on experiential learning and promotes the use of our OBCR educational model but intends to target students who are not solely interested in outdoor adventure but for young adults who are looking to dive deeper into topics that they are passionate about.

Students travel around the country, utilizing the remote natural environments of Costa Rica and Panama as their 'classroom' and immersing themselves in local communities, cultures and traditions. We want students to make sense of the world around them by encountering authentic real-world experiences, developing social and personal skills and adding relevance and meaning to learning.

Students work through eight STEAM (Science, Technology, Engineering, Arts, and Mathematics) based modules. For example, Scuba & Tropical Marine Biology, Peaceful Resolution & Social Justice, Agriculture & Culinary Arts, Spanish Language & Latin American Culture, Health & Wellbeing, Indigenous Art & Culture, Volcanology & Thermal Springs and Environmental & Wildlife Conservation.

Each module topic is complemented by a combination of research studies, theory teachings, guest lectures, and excursions that enhance



For more information about OB Costa Ricas' environmental and indigenous education programs please refer to the Environmental Charter online resources >>

students' understanding, including day trips to tropical cloud forest or rainforest reserves, turtle nesting sites, and important political and historical locations in Costa Rica. For example, students learn from resident naturalists about underwater creatures that inhabit the region and factors contributing to coral depletion, speak with local leaders on racial dynamics in Central America, visit the northwest to discover the land of volcanoes and thermal springs and learn why Costa Rica is a leader in renewable energy, and so much more.

The program works toward three United Nations Sustainable Development Goals (SDGs) – Life Below Water, Life On Land, and Sustainable Cities and Communities. Through sea turtle conservation programs in Guanacaste, students help protect sea turtles by taking part in beach patrols, protecting mama sea turtles, and recording important conservation information. On land, OBCR is based within 12 acres of a 1600-acre rainforest reserve, and students on the Residential program support reforestation by replanting trees and learning to grow their own fruits and vegetables. Students also assist in community projects within indigenous communities, supporting them with what they need while experiencing their way of life. Students stay in small indigenous villages, such as with the Boruca tribe, maintaining our meaningful and sustainable relationships with our local communities.

During their Environmental Conservation module our students have the opportunity to visit a World Heritage Site, Parque la Amistad. Located south of the country, this park is one of the most outstanding conservation areas in Central America, preserving 1% of the planets biodiversity thus making it a life source for Costa Rica and the rest of the world.

There they learn about a local community and a women's empowerment organization that lives solely off the land and has developed environmentally sustainable business practices, such as harvesting organic coffee and cacao.

2. OB NEW ZEALAND – CO DESIGN COURSES WITH LOCAL IWI (INDIGENOUS TRIBES):

Maori are the indigenous people of Aotearoa New Zealand. Maori recognise different iwi (tribes) and hapu (subtribes) across the country based on both ancestry and geography. The Treaty of Waitangi, signed in 1840, was an agreement between the British Crown and a large number of Maori chiefs representing different iwi from around the country. The Treaty is a constitutional document that establishes and guides the relationship between the New Zealand Government and Maori. Within an education context, the Treaty of Waitangi is recognised through the principles of partnership, protection, and participation.

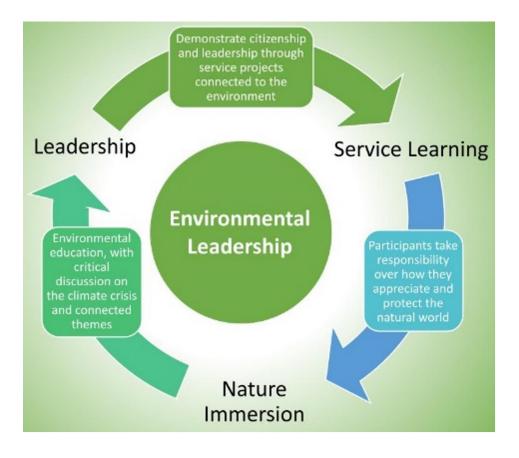
Te Atiawa is the iwi with traditional governance rights over the area which includes Anakiwa, where Outward Bound New Zealand has its main operations base. OBNZ strives to align its' delivery with the Treaty principles of partnership, protection, and participation. This is achieved through the long established and positive working relationship between OBNZ and Te Atiawa, with Te Atiawa guiding and supporting the use of te reo Māori (Māori language) and tikanga tuku iho (Māori customs and traditions) within OBNZ courses. In 2022 OBNZ re-signed a MoU with Te Atiawa to continue working together to enhance tikanga tuku iho of their organisations in Anakiwa and the surrounding areas, with a co-designed course currently being planned.

Kai Tahu is the iwi with traditional governance rights of most of the South Island of New Zealand. In 2003 OBNZ partnered with Kai Tahu to develop a course which brought together tribal culture and traditional practices with the experiential learning and development of Outward Bound. Course aims included "building future tribal leaders, increasing cultural awareness, personal development, and fostering a strong sense of what it means to be Kāi Tahu. This includes understanding who we are, our connections to the environment and growing a commitment towards building a brighter future for our tribe, the wider community and this land that we call home."

The course spent 8 days at OBNZ's main operations base in Anakiwa before setting out on a hikoi (journey), travelling through places of significance to Kāi Tahu. The course ran from 2005 – 2020, when Covid 19 forced a pause to course delivery.

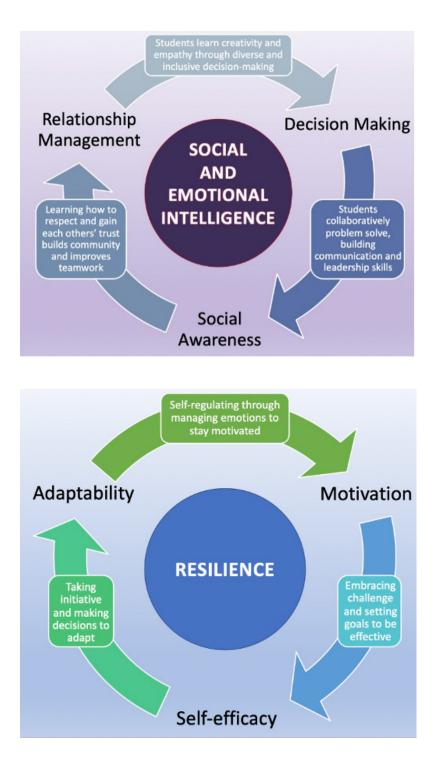
SERVICE

The concept of service was a key aspect of the early Outward Bound movement and the idea of making a positive contribution to society continues to be a key part of Outward Bound philosophy today. Given current global social and environmental challenges, the idea of giving selflessly to others, to communities, and to the natural world which we are a part of may be more important now than ever. There are a number of ways in which OB Schools can make positive contributions to local communities and environmental projects, and numerous ways in which the idea of service can be connected to other course outcomes. OB Canada use the following diagram to help show the role of service in developing environmental action and leadership:



There may be opportunities for OB Schools to further develop the environmental service component of their courses, for example through more local conservation, restoration, or pollution cleanup projects. The idea of regeneration or improving the world around us is a key principle of the OBI Environmental Charter and the Nature Bound Guides.

Service schemes can also be used to work towards other course outcomes such as developing social and emotional intelligence and resilience. These diagrams from OB Canada provide an overview of how these processes might work.



Helping students to explore opportunities for service within their own communities after their OB course has finished is a great way to help students connect with local community, continue with their own Outward Bound inspired learning journeys, and make a positive contribution to the world around them.

ENGAGING OB ALUMNI IN ENVIRONMENTAL AND SERVICE PROJECTS

Keeping OB alumni connected and engaged post-course offers numerous potential benefits to both alumni and OB Schools; yet most Schools find it hard to do this for a variety of reasons. OB Singapore runs several programs which involve their alumni in a range of environmental service projects and initiatives. A couple of examples of these are below:

PROJECT ZERO HERO (ALUMNI PROGRAMME)

Project Zero Hero was a 16-month long Alumni project driven by six Leadership & Service Award (LSA) Alumni, in collaboration with Cerebral Palsy Alliance Singapore School (CPASS). The project aimed to educate CPASS students on the importance of zero waste and to step up as "Zero Heroes". The Project Zero Hero curriculum was designed to span 10 months with sessions consisting of exciting hands-on activities throughout 2020, such as enzyme detergent making and Bokashi composting. With the COVID-19 outbreak, plans for large-scale face-to-face presentations to the students were replaced with instructional videos and engaging virtual lessons that elicited active participation from the students. Although the initiative has ended, it has kickstarted a new wave of green practices in CPASS. The teachers are now empowered to drive environmental sustainability projects within the school, which include regular Bokashi composting of food waste for their vegepods planted around the school and incorporating enzyme detergent making into the school's curriculum. As a result, CPASS has reduced its purchase of commercial detergent, which in turn helped to reduce expenditures by up to 80%.

This year, the Project Zero Hero programme will be launched in Rainbow Centre Margaret Drive School, Rainbow Centre Yishun School, and Grace Orchard School. All 3 schools are special needs school. The support from these special needs schools goes a long way in helping the LSA Alumni achieve their goal to touch lives and ignite positive environmental changes in the community and the programme also promote inclusivity in OBS programme.



For more information on OB Singapores' alumni programmes and broader approach to environmental and sustainability please refer to the Environmental Charter online resources >>

MASS COASTAL CLEANING AND ENVIRONMENTAL AWARENESS PROGRAMME (ALUMNI PROGRAMME)

The Outward Bound Singapore (OBS), in partnership with the Singapore Sailing Federation (SSF) and Better Trails, provided close to 500 youths with the opportunity to learn from peers the importance of marine sustainability, and good ethics and practices in conserving our environment at the inaugural Singapore Regatta 2022

During the programme, Alumni had the opportunity to sail in an OBS cutter, a 12-crew capacity craft on a 10-15 nautical mile passage race, around the eastern part of Singapore waters at the Singapore Regatta 2022. It also provided the opportunity to inculcate an appreciation of the marine environment and promote good ethics and practices in conserving our environment.

Two specially curated programmes were developed to encourage teamwork, an openness to experiential learning, and an appreciation of our maritime heritage and environment. Youth sailors and marine conservationists led peers on a sail in OBS cutters around the eastern part of Singapore waters, and a 7-kilometre coastal clean-up at East Coast Park respectively.

EDUCATION FOR THE CLIMATE CRISIS

"We are the first generation to feel the effects of climate change and the last generation who can do something about it" - Barack Obama.

The climate crisis is unfolding around the world at an ever-increasing and alarming pace. Education to help people understand and come to terms with the crisis and its implications; understand how they can get involved and make a positive difference; and help themselves, their communities, and wider society to prepare for the changes to come is essential.

However, the climate crisis is much more than just a technical challenge of emissions reduction. Rather, it is ultimately an issue of environmental and social justice which requires us to re-examine our relationship with ourselves, with each other, and with the natural world of which we are a part of.

As noted in Chapter I, the Outward Bound process offers inherent learning opportunities directly relevant to these challenges: the opportunity for people to improve their understanding and connection to themselves, others, the natural world, and places. Much of the educational outcomes which are already being delivered within Outward Bound courses, as well as the teaching approaches and resources within this guide, could be considered relevant to education for the climate crisis.

FOR EXAMPLE:

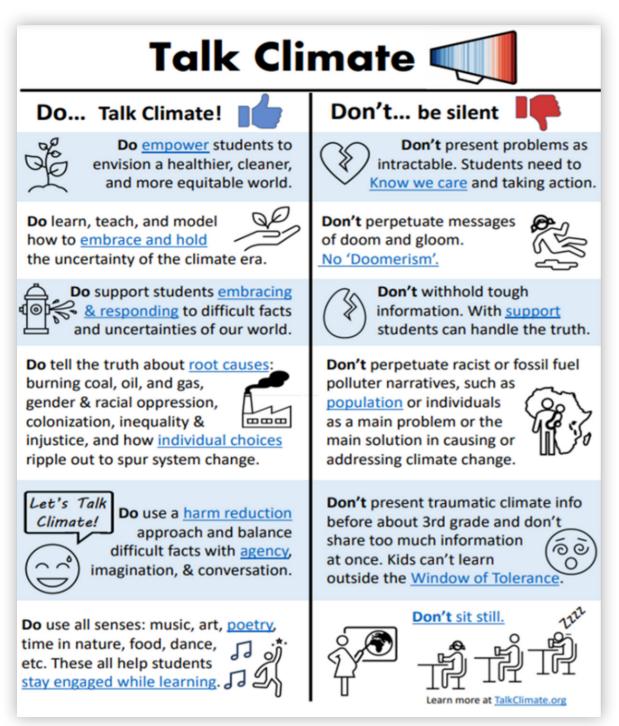
- Connection to Nature (CTN): People who feel a strong sense of CTN are much more likely to engage in pro-environmental behaviour
- Ecological understanding: Developing an ecological understanding of the natural world around us, and humanity's place within it, is an essential step for our societies to move towards more sustainable ways of living
- Values awareness: Developing more humanitarian, cooperative, and environmentally aware values; and less individualistic, materialistic and competitive ones, helps to influence positive social and environmental behaviour
- Indigenous and local knowledge: Learning more about the knowledge and perspectives of indigenous and local peoples helps to protect their rights, strengthen local conservation initiatives, and help students to explore worldviews and practices which may be quite different to their own
- Empathy, social understanding and teamwork: Well-connected and supportive communities and societies will be much more resilient in the face of change and disruption
- Self awareness, confidence and leadership skills: We need people to become their best selves, and help others to do the same, to face up to the challenges of the 21st century
- **Resilience, adaptability and dealing with uncertainty:** Adapting to and dealing with change, disruption and uncertainty are crucial skills for the decades ahead
- Service: The idea of giving selflessly to others and to the natural world is more important now than ever...

There is also scope for activities and programs which focus specifically on helping students to learn more about the climate crisis; explore, validate and normalise their thoughts and feelings around it; and learn more about how they can be part of the solutions. It is important that OB instructors create a safe space to explore these issues with students, including establishing boundaries of discussion for both students and themselves. Some general principles for doing this are offered below, but each OB School will want to carefully consider what approach will be most appropriate for their students.

GENERAL PRINCIPLES FOR EXPLORING THE CLIMATE CRISIS WITH STUDENTS COULD INCLUDE:

- Focus on opportunities and solutions rather than "doom and gloom" discussions
- Explore, validate, and normalise students thoughts and feelings in relation to the climate crisis
- Explore students existing knowledge in relation to the subject
- Where appropriate, introduce new knowledge/ ideas appropriate to students age and the learning objectives of the session
- Empower students with the knowledge and understanding that they can make a positive difference to the climate crisis
- Provide students with first hand experience of taking positive action in relation to the climate crisis. This might include:
 - o Involvement in conservation or restoration projects, or community service projects
 - o "Active citizenship", for example writing letters to local council or government representatives, or learning about how to vote
 - Learning through experiencing environmentally-friendly practice role modelled across OB operations – for example eating a more plant rich diet; using good quality, repaired or sustainably produced clothing and equipment; experiencing how packaging can be reduced, reused and recycled; experiencing efficient and innovative use of energy, fuel and water throughout interactions with buildings and vehicles; etc. Further details of how this concept of "education through role modelling across operations" might be applied to OB Schools can be found within Chapter 4 of this Education Guide, and within the Nature Bound Operations Guide
 - o Learning environmentally friendly and responsible practice when in outdoor environments. For further guidance in this area, please refer to the Nature Bound Field Guide.

Another good summary of principles for exploring the climate crisis with students comes from the talkclimate.org website:



Further guidance around how individuals can take effective action in relation to the climate crisis is summarized below. These suggestions may need some adapting to suit local context. These ideas are also reflected in the principles of the Nature Bound Operations Guide.

1. Connect with what matters (eg get involved with local conservation or community groups, find a network of people with whom you can discuss the issues you are interested in/ concerned about)

2. Exercise your political voice (vote in local and national elections, write letters to council representatives and politicians, sign petitions (or start your own!), participate in peaceful demonstrations and protests)

- 3. Cut back on flying
- 4. Use public/ active transport more; drive less
- 5. Eat less meat and dairy, and more plant based foods
- 6. Reduce food waste and compost
- 7. Buy better! Reduce overall consumption and waste; shop locally and ethically
- 8. Reduce your energy use
- 9. Respect and protect green spaces
- 10. Focus on planet friendly investments

References: WCC, MfE, UNEP, WWF, Imperial College of London.

Artwork – IPCC Climate Change 2022 Report: Impacts Adaptation and Vulnerability.

Artwork credits

3. EDUCATION AND ROLE MODELLING ACROSS OPERATIONS

Students' Outward Bound learning experiences extend well beyond their interactions with instructors and other students.

Students will learn a lot through their broader interactions with OB websites, buildings and infrastructure (including how energy and water is used and conserved), vehicles, clothing and equipment, waste and recycling systems, food, systems for managing environmental impact in the field, etc. In other words, students will learn a lot through what we role model across School operations. Ideas for how to improve on environmental performance across OB School operations, and for how to make the most of these opportunities for "education through role modelling across operations", can be found within the Nature Bound Operations Guide.

4. REFERENCES AND LINKS FOR FURTHER INFORMATION

Brown, M., & Wattchow, B., 2008. *A Pedagogy of Place.* Outdoor education for a changing world. Monash University Publishing, Australia.

Clark, H. (editor), 2021. *Climate Aotearoa. What's happening and what we can do about it.* Allen & Unwin, Auckland NZ.

Dyment, J., Prince, H., Thomas, G. (editors), 2021. *Outdoor Environmental Education in Higher Education, International Perspectives*. Springer, Switzerland.

Figueres, C., & Rivett-Carnac, T., 2020. *The Future We Choose. Surviving the Climate Crisis.* Manilla Press

Harre, N. 2018. *The Infinite Game. How to live well together.* Auckland University Press.

IPCC, 2022: *Summary for Policymakers* [H.-O. Pörtner, D.C. Roberts, E.S. Poloczanska, K. Mintenbeck, M. Tignor, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem (eds.)]. In: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M.Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 3–33, doi:10.1017/9781009325844.001.

Imperial College London. 9 things you can do about climate change. Retrieved from https://www.imperial.ac.uk/stories/climate-action/

Irwin, D., Straker, J., Hill, A., 2012. *Outdoor Education in Aotearoa New Zealand*. A New Vision for the Twenty First Century. CPIT, Christchurch NZ.

Key, D. (2021). Why being outdoors heals us #3: Love. Retrieved from https://www.ecoself.net/why-being-outdoors-heals-us-3/

Orr, David W., 1994. *Earth in Mind: On Education, Environment, and the Human Prospect.* Island Press, Washington DC.

Orr, David W., 2016. *Dangerous Years – Climate Change, the Long Emergency, and the Way Forward.* Yale University Press, New Haven and New London.

Outward Bound International. What It Means To Be Outward Bound. Retrieved from https://www.outwardbound.net/what-is-outward-bound/

Talk Climate. *Talk Climate Educating. Partnering. Empowering.* Retrieved from https://talkclimate.org/

The EAT-Lancet Commission on Food, Planet, Health. *The Planetary Health Diet.* Retrieved from https://eatforum.org/eat-lancet-commission/the-planetary-healthdiet-and-you/

Thiele, L.P, 2016. Sustainability. Polity Press, UK and USA.

United Nations Climate Change. Homepage. Retrieved from https://unfccc.int/

United Nations Environment Programme. *10 ways you can help fight the climate crisis*. Retrieved from https://www.unep.org/news-and-stories/story/10-ways-you-can-help-fight-climate-crisis

Wellington City Council. *What you can do about climate change*. Retrieved from https://wellington.govt.nz/climate-change-sustainability-environment/climate-change/what-you-can-do-about-climate-change

Western, P. and Greenfield, P. (2022). *Plan to protect 30% of Earth divides and inspires at Cop15*. The Guardian online. Retrieved from https://www.theguardian. com/environment/2022/dec/12/plan-to-protect-30-of-earth-divides-and-inspires-at-cop15

World Wildlife Fund (WWF). *Livewell sustainable diets*. Retrieved from https://www.wwf.org.uk/what-we-do/livewell

World Wildlife Fund (WWF). What You Can Do to Fight Climate Change. Retrieved from https://www.worldwildlife.org/pages/what-you-can-do-to-fightclimate-change







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