



Environment & Climate: A Teaching Toolkit

Exploring Nature with Two-Eyed Seeing

This Learning Experience was created by Atlantic Canadian educators



TUPEUX!
Action jeunesse pour le climat

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Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Educator Checklist

An educator checklist is provided with each learning experience to support reflection on the depth of inquiry, pedagogy, and the skills continuum.

Depth of Inquiry

- ☐ Structured: learners follow the lead of the educator as the whole class works through the inquiry process
- ☐ Controlled: educator selects topics and identifies resources learners will use to investigate questions
- ☐ Guided: educator choose topics and questions and learners design a product or solution
- ☐ Free: learners choose how they want to explore the outcome

Reflection

- ☐ Have I accommodated for the diverse learners in my classroom? How?
- ☐ Have I considered culturally relevant pedagogy? How?
- ☐ Are there opportunities to collaborate with our community?
- ☐ Where are the opportunities for assessment?

Skills Continuum

What skills will be implemented in the learning experience:

- | | |
|--|--------------------------------------|
| <input type="checkbox"/> Create | <input type="checkbox"/> Test |
| <input type="checkbox"/> Construct | <input type="checkbox"/> Analyze |
| <input type="checkbox"/> Plan | <input type="checkbox"/> Classify |
| <input type="checkbox"/> Implement | <input type="checkbox"/> Compare |
| <input type="checkbox"/> Reflect | <input type="checkbox"/> Apply |
| <input type="checkbox"/> Evaluate | <input type="checkbox"/> Investigate |
| <input type="checkbox"/> Formulate | <input type="checkbox"/> Question |
| <input type="checkbox"/> Problem Solve | <input type="checkbox"/> Select |

Notes

Tips for Teaching Outside

Taking learners out of the classroom can be rewarding for everyone! The following tips may help you feel confident to take your learning outside.

Classroom practice

- Inviting learners to create a list of **rules and expectations** together can be a positive experience for all and may prevent many behavioral issues
- Give each learner a **“roll call”** number and practice this in the classroom. Ask learners to raise their hand when they call out their number.

School grounds practice

- **Practice the “roll call”** while walking around the school, pausing at each corner of the school. Encourage learners to adjust their volume to the proximity to other people (in nearby classrooms), treat each other with respect, and stick together.
- **Use the school ground for simple “field trips”**. This is a great way to get started without having to find chaperones and keep a proximity to support if a situation arises. Plus, there are lots of wonderful things to discover nearby!
- **Practice walking single file**, in lines, past one another. This imitates a situation where they are walking on a sidewalk!
- **Let an administrator know** of your intentions. They may have time to also observe your classes practicing and have an opportunity to reinforce positive behavior.
- **Invite learners** from other classes, including those working on Independent Program Plans. This allows for all to learn from each other. If these learners work with Learning Supporter Assistants, you may have extra adults with you as well.

Tips for leaving school grounds

There may be areas suitable for a quick “field trip” within walking distance that can be

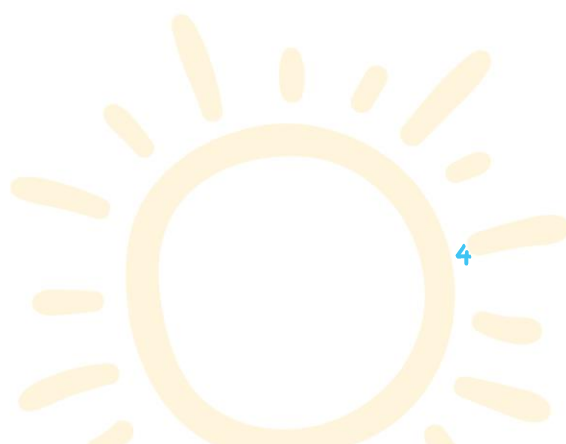
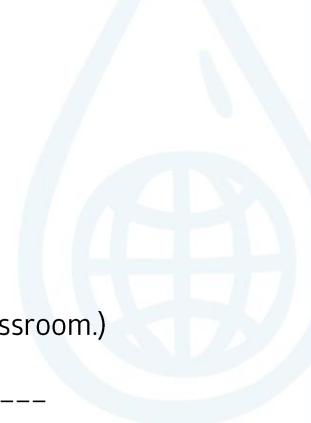
visited within a class period, and could be repeated over time to see changes in nature!

- Follow any permissions and acquire all documentation required for your school or region to leave to school grounds.
- Obtain permission slips and take them with you.
- The day before, and morning of, show the learners **the route** on Google Earth.
- **Schedule the 5-10 minutes** before you leave for learners to use the bathroom, obtain coats, etc.
- Ensure that at least one adult has current **First Aid** Training.
- **Be aware of any medical issues** of your learners and if necessary, have a plan for insulin management, EpiPen etc.
- If needed, arrange busses/transportation including Accessible Bus for all learners
- Check the **weather forecast** to know what to bring.

Suggested Resources for an Educator's Field Trip Backpack:

- ☐ Water
- ☐ Candies or peanut-free snacks
- ☐ Basic first aid kit
- ☐ Permission Slips, Insurance/Waiver Forms
- ☐ Cell Phone and portable charger
- ☐ Maps and plastic pockets (in case of rain)
- ☐ Rain gear
- ☐ Spare hats, gloves and socks
- ☐ Risk assessment of the site or area
- ☐ Emergency contact and health forms
- ☐ Sign in sheet for attendance
- ☐ Learner activity sheets (and spares)
- ☐ Clipboards and pencils
- ☐ Sunscreen and bug spray

- ☐ Backpacks for all learners
- ☐ Cameras or camera phones (for learners to refer to once back in the classroom.)
- ☐ -----
- ☐ -----
- ☐ -----
- ☐ -----



Preparing for the Learning Experience

Minimum Time Required: 1 hour

Background

Learners explore nature and how they perceive it with their senses. The outdoor component can be done in any season and is encouraged to be repeated through multiple seasons. Learners use multiple modes of learning to record or hold their thoughts. Educators support their learners to explore and make connections to the Indigenous ways of knowing through Netukulimk and Etuaptmumk- Two Eyed Seeing.

Key Vocabulary and Concepts

- Etuaptmumk - Two eyed seeing
- Netukulimk
- Grounding
- Senses
- Nature walk
- Indigenous Ways of knowing

Materials

- Paper
- Pencils
- Colouring pencils
- Markers
- Nature Senses Organizer
- *On Our Nature Walk: Our First Talk About Our Impact on the Environment* by Dr. Jillian Roberts
- *Les secrets de la nature* by Rachel Williams & Freya Hartas

Recommended Resources

• Ask learners to use a nature journal throughout the school year

Indigenous Knowledge: Netukulimk & Etuaptmumk

- UINR Unama'ki Institute of Natural Resources: <https://www.uinr.ca/>

- Active History: How and When to Invite Indigenous Speakers in the Classroom: <https://activehistory.ca/2019/01/how-and-when-to-invite-indigenous-speakers-to-the-classroom/>
- Mi'kmawey Debert Cultural Centre: <https://www.mikmaweydebert.ca/>
- Mi'kmaw Place Names Atlas: <https://placenames.mapdev.ca/>

Videos

- Our Connection to the Land: <https://www.youtube.com/watch?v=av3SeQpn37o>
- Netukulimk UINR featuring Elder Albert Marshall: https://www.youtube.com/watch?v=0mYfx5Plo_4&t=2s
- Netukulimk (UINRTV): <https://www.youtube.com/watch?v=ANxJllcW4Rs>
- Ocean School – Netukulimk: <https://www.youtube.com/watch?v=RAudXewjJGQ>

Safety

Tips for Teaching Outside

Facilitating the Learning Experience

Spark and Driving Question

(What would grab learner's attention/ interests?)

- Read '*On Our Nature Walk*' book
 - You could even read this book outside!

Idea and Plan Creation

(Learners make their plan)

- Have learners discuss the plan for a nature walk using the '5W's & 1H' method
- Discuss safety

Active Inquiry

(Learners actively explore and participate)

- Go on nature walk and find a spot within the safety parameters
- Learners use graphic organizer or journal to sketch, write, express what they are experiencing using their sense
- Learners can use Nature Senses Graphic Organizer provided

Understanding and Communication

(Putting all the learning together)

- Bring learners together to share what they experienced
- Discuss Etuaptmumk and Netukulimk and how the nature walk connects to these ways of knowing

Sharing Knowledge and Future Application

(Acting on it and extension opportunities)

- Learners discuss how they could extend the activity.
 - Use this learning experience as the spark for the unit or next learning experience

Learning Experience at a Glance

Spark and Driving Question	Idea and Plan Creation	Active Inquiry	Understanding and Communication	Sharing Knowledge of Future Application
What would grab learners' attention/ interest?	Learners make their plan	Learners actively participate and contribute to their own learning	Putting all the learning together	Acting on it and finding extension opportunities
<p>Read Nature Walk book</p> <p>*Recommended to read book outside</p>	<p>Have learners discuss the plan for a nature walk *5W's & 1H</p> <p>Discuss safety</p>	<p>Go on nature walk and find a spot within the safety parameters</p> <p>Learners use graphic organizer or journal to sketch, write, express what they are experiencing using their sense</p>	<p>Bring learners together to share what they experienced</p> <p>Discuss Etuaptmunk and Netukulimk and how the nature walk connects to these ways of knowing</p>	<p>Learners discuss how they could extend the activity</p>
Resources and Materials	Resources and Materials	Resources and Materials	Resources and Materials	Resources and Materials

	Chart paper for 5W's & 1H	Nature Senses Organizer		
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Cross-Curriculum Outcomes

Provincial Curriculum: Nova Scotia Provincial Curriculum				
Grade	Science	Social Studies	English Language Arts	Physical Education
4	<p>Learners will investigate a variety of local natural habitats.</p> <p>Learners will analyze interconnectiveness of and within local habitats, inclusive of a Mi'kmaw perspective.</p> <p>Learners will investigate how the Earth's surface changes over time.</p>	<p>Learners will investigate the concept of exploration.</p> <p>Learners will evaluate the impacts of exploration.</p> <p>Learners will investigate the relationships between humans and the physical environment.</p> <p>Learners will investigate the physical landscape of Canada.</p>	<p>Learners will communicate effectively and clearly respecting cultural contexts</p> <p>Learners will use writing and other representations to explore, clarify and reflect upon thoughts and experiences.</p> <p>Learners will create text, independently and collaboratively, using a variety of types of writing for a range of audiences and purposes.</p>	<p>Learners will implement fundamental movement skills and movement concepts within active pursuits.</p> <p>Learners will apply communication and interpersonal skills during different types of physical activities.</p> <p>Learners will investigate the well-being and safety of self and others during different types of physical activities in multiple environments.</p>

5	Learners will investigate weather. Learners will investigate how weather impacts daily life.	Learners will investigate the diverse societies of First Nations and Inuit, in what later became Canada.	Learners will communicate effectively and clearly respecting cultural contexts. Learners will respond personally and critically to a range of culturally diverse texts. Learners will use writing and other representations to explore, clarify and reflect upon thoughts and experiences.	Learners will implement fundamental movement skills and movement concepts within active pursuits. Learners will apply communication and interpersonal skills during different types of physical activities. Learners will investigate the well-being and safety of self and others during different types of physical activities in multiple environments.
6	Learners will analyze diversity of life in nature and significant relationships within the natural world.	Learners will compare sustainability practices between Canada and a selected country. Learners will implement age-appropriate actions that demonstrate responsibility as global citizens.	Learners will communicate effectively and clearly respecting cultural contexts. Learners will respond personally and critically to a range of culturally diverse texts. Learners will use writing and other representations to explore, clarify and reflect upon thoughts and experiences.	Learners will implement fundamental movement skills and movement concepts within active pursuits. Learners will apply communication and interpersonal skills during different types of physical activities. Learners will investigate the well-being and safety of self and others during different types of physical activities in multiple environments.

Atlantic Canada Curriculum Connections

New Brunswick:

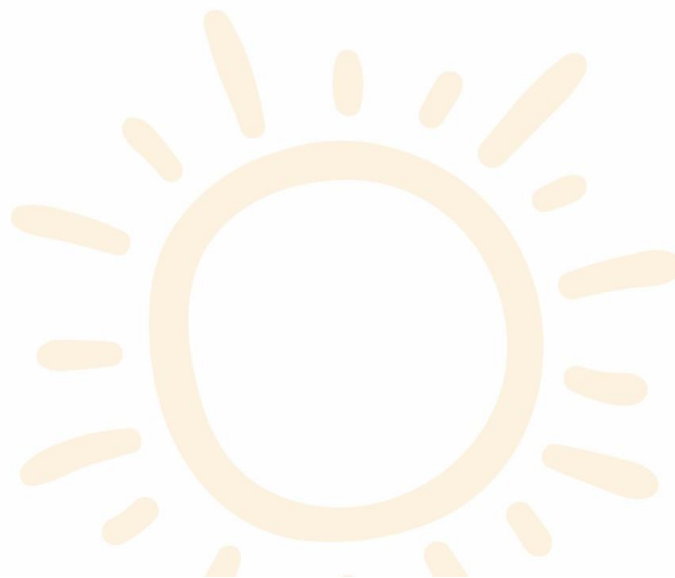
https://www2.gnb.ca/content/gnb/en/departments/education/k12/content/anglophone_sector/curriculum_anglophone.html

Newfoundland & Labrador:

<https://www.gov.nl.ca/education/k12/curriculum/guides/>

Prince Edward Island:

<https://www.princeedwardisland.ca/en/information/education-and-lifelong-learning/programs-of-study>



<div><div>SIGHT</div><table><tr><td>non-living</td><td></td><td>far</td></tr><tr><td></td><td></td><td></td></tr><tr><td>near</td><td></td><td>living</td></tr></table></div>		non-living		far				near		living	<div><div>SMELL</div><table><tr><td>Natural</td><td></td><td>Human-made</td></tr><tr><td></td><td></td><td></td></tr></table></div>	Natural		Human-made								
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Object		Description																				

<h2 style="text-align: center;">SIGHT</h2> <p>Look at:</p> <ul style="list-style-type: none"> • All things, big and small • Animals (dogs, birds, insects etc.) • The dirt, soil or rocks • The parts of plants you can see • Even things you don't know the name of <p>If you need help:</p> <ul style="list-style-type: none"> • Get a different perspective! Lay on your belly and look closely at the grass. Climb a tree or look out a tall window or go on a roof (carefully, please!). • Sit very still and see if you notice anything moving. • Draw anything that you can't name or describe. 	<h2 style="text-align: center;">SMELL</h2> <p>Close your eyes and smell:</p> <ul style="list-style-type: none"> • The air • Anything you pick up or touch • The dirt, buildings, rocks • Flowers, trees, animals (if you can) • Even things you don't know the name of
<h2 style="text-align: center;">HEARING</h2> <p>Be aware of:</p> <ul style="list-style-type: none"> • All sounds (holding your breath may help) • Animals (dogs, birds, etc.) • Any machines, vehicles or people <p>If you need help:</p> <ul style="list-style-type: none"> • Try banging some things together and see if you can guess what they're made of and whether this helps you place them on the chart. • Opening your mouth and tilting your head slightly can help you hear very faint noises. 	<h2 style="text-align: center;">TOUCH</h2> <p>Look for:</p> <ul style="list-style-type: none"> • Things that are small and you can pick up. • Insects, soil or dirt • Plants and parts of plants • Any litter or garbage you find <p>If you need help:</p> <ul style="list-style-type: none"> • Try walking with your eyes closed! • Crawl on the ground on your hands and knees. • Take leaves and flowers apart (but try not to hurt any insects!).