

Chapter 5: Indigenous Ways of Knowing

Inquiry 1: Indigenous Perspectives Elder Knowledge

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Land Acknowledgement

Begin the inquiry by offering a land acknowledgment and discussing [why we acknowledge the land](#). It is essential to teach students that we must recognize the Indigenous land that the [school is on](#) to learn about and from it.

As educators, recognizing that these lands are the traditional territories of Indigenous people and that all Canadians benefit from the land plays an essential role in modelling reconciliatory behaviour with your students. Reciting your school's land acknowledgement helps create a foundation in students for learning about and from Indigenous people whose land we live on.

A land acknowledgement reinforces that we benefit from the land, and we all have a responsibility to actively work towards honouring Indigenous Peoples as equal partners in sharing the land. Land acknowledgments are only one step in cultivating greater respect for and inclusion of Indigenous Peoples, with the understanding of the importance of our [Treaty](#) responsibilities.

Chapter 5 Indigenous Ways of Knowing recognizes the importance of Indigenous perspectives and connections to land and place as we work towards reconciliation to address the Calls to Action of the Truth and Reconciliation Commission, particularly the call to "integrate Indigenous knowledge and teaching methods into classrooms" (clause 62) and "build student capacity for intercultural understanding, empathy and mutual respect" (clause 63).

Sharing stories is a way of sharing knowledge among Indigenous communities. Your classroom materials should be culturally diverse and inclusive of Canada's three distinct Indigenous groups. Here are a few examples of children's books that illustrate the importance of learning from our Elders and include the three distinct Indigenous groups.

- [The Elders are Watching](#) by [David Bouchard](#) and [Roy Henry Vickers](#) (Métis)
- [Nimoshom and His Bus](#) by [Penny M. Thomas](#) (First Nations Cree), illustrated by [Karen Hibbarb](#)

- [*Nokum is My Teacher*](#) by [David Bouchard](#), illustrated by [Allen Sapp](#) (Métis)
- [*Oral Traditions and Storytelling*](#) by [Anita Yasuda](#) (First Nations)
- [*The Tree by the Woodpile*](#) by [Raymond Yakeleya](#), [Jane Modeste](#) (First Nations Dene)
- [*Jigging for Halibut with Tsinii*](#) by [Robert](#) and [Sara Davidson](#), illustrated by [Janine Gibbons](#) (First Nations Haida)
- [*Making a Whole Person: Traditional Inuit Education*](#) by [Monica Ittusardjuat](#) (Inuit)
- [*Fishing with Grandma*](#) by [Maren Vsetula](#) and [Susan Avingaq](#) (Inuit), illustrated by [Charlene Chua](#)
- [*A Walk on the Tundra*](#) by [Rebecca Hainnu](#) and [Anna Ziegler](#) (inuit), illustrated by [Qin Leng](#)
- [*Siha Tooskin Know the Nature of Life*](#) by [Charlene](#) and [Wilson Bearhead](#), illustrated by [Chloe Bluebird Mustooch](#) (First Nations Nakota)
- [*Sila and the Land*](#) by [Shelby Angalik](#), [Araian Roundpoint](#) and [Lindsay Dupré](#), illustrated by [Halie Finney](#) (First Nations, Métis and Inuit)

Teaching and discussing controversial and sensitive topics is essential because it helps students think in-depth and fosters critical thinking. Many issues involving First Nation, Métis and Inuit peoples are controversial (land claims, self-government, blockades, hunting and fishing rights) or sensitive (residential schools, worldview). Building in and addressing controversial or sensitive topics at an early age allows students to explore and question in the safety of the classroom. Teachers may use some of the suggested questions in this inquiry to introduce more sensitive issues regarding the inequalities faced by Indigenous People. Please keep in mind that Acts of Reconciliation and Reclamation are fundamental as we move forward as a country. Our acknowledgement, and inclusion of Indigenous literature and media helps to create an understanding of the history, diversity, and issues that many Indigenous peoples face.

It would be helpful for the learners to understand that traditional/cultural knowledge is passed as an: [I Do, We Do, You Do](#) model. This mentorship model provides the close watching and coaching of the learner by the teacher. This model would aid in learning from mistakes, as well as identifying areas of strength and need for reflection. This helps the person who is learning of how knowledge is passed on, to connect with the sacredness of our relationship with Creator, Mother Earth, the plants, animals, and all other animate and inanimate beings as part of the Creators making. (Daniel Sylvestre)

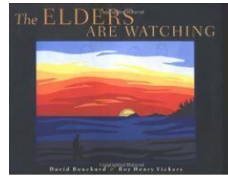


A. Provocation 1: [Book](#)

To hook student interest, use the following provocation to initiate student thinking.

Book - Read aloud the [Elders are Watching](#) by [David Bouchard](#) or watch [online](#)

As Native elders have advised from time immemorial, this is a gentle plea to respect the natural environment. A plea to respect the natural treasures of our environment and a message of concern from indigenous leaders of the past to the people of the new millennium, *The Elders Are Watching* has both a timelessness and an urgency that must be heard.



Vickers, Roy Henry, Cover Illustrations, *The Elders are Watching* by Bouchard, David, Raincoast Books, 2003

As you read the book, help students become aware of the knowledge, information and guidance older people such as Elders, Knowledge Keepers, grandparents, teachers, uncles, aunts, or mentors can offer. Students should be made aware that one must earn the right to become an Elder or Knowledge Keeper in a First Nations community. Not all Elders or Knowledge Keepers are seniors, nor are all old people Elders, and some Elders are younger. Elders or Knowledge Keepers are honoured because they have gifts of insight and understanding and are willing to share their knowledge. Discuss the role Elders or Knowledge Keepers play in Indigenous communities, provide picture books and other media that illustrate the connection Indigenous People have with the land to enhance the learning.

Discussion questions

What do you think the author means by *The Elders are Watching*?

What is an Elder or Knowledge Keeper? And what are they watching in this book?

Elders are often considered wise and share their Indigenous Knowledge, can you explain why?

Identify one of the messages that the author is trying to portray in his book.

The last visual of the online book identifies different indigenous People. Name three distinct Indigenous groups in Canada*?

Do all Indigenous People share the same traditions and knowledge*? In what ways do Indigenous peoples continue to pass on traditional knowledge from generation to generation?

Why is it important to hear the views and stories of other people?

Who do you have in your life that you would consider an Elder?

How do you show respect to your parents or other adults? How do you think respect is shown in Indigenous cultures? Why do people not always respect Indigenous knowledge?

Do you have an Elder, a grandparent, an uncle, an aunt or a mentor that shares knowledge with you about the land, family traditions, family recipes?

** Cultural diversity within the Indigenous people is frequently misinterpreted. There is a misconception that Indigenous People are one group who share the same culture, traditions, language and knowledge. Take the time to identify the three distinct Indigenous groups—First Nations, Metis and Inuit—and their unique connections to the land. Understand that these three*

distinct groups are identified by the Federal Government, that each Indigenous group on Turtle Island is distinct and that they all have their own distinct culture, traditions, language, governance, education, laws, customs, and ways of knowing. A small step students can take in respecting Indigenous people, and their culture is learning the three Indigenous groups and their unique traditions and knowledge.



B. Question Generation

At this point in the inquiry, we want to harness students' curiosity and build off of the provocations that have captured their interest by generating meaningful questions to continue to drive the learning process. This section will outline several pathways for question generation depending on the provocation(s) that your class engaged with.

5W's and H Questions - Students will be able to ask and answer questions using the five Ws and an H (who, what, when, where, why, and how) to show understanding of key details in a text.

Lead a whole-group discussion and brainstorm around the book's theme with the goal of students generating questions about the role of Elders, their Indigenous Ways of knowing and the message they are sharing with the readers

With younger students, review the pictures in the book and have them think about what questions they would ask? Use the [Creative Question Starts](#) thinking routine to help students generate a list of interesting questions.

Older students can work independently using the [Ask Questions](#) template to help develop questions that provoke thinking and inquiry

Possible Questions

Who do you have in your life that you would consider an Elder? Grandparent, coach, teacher, uncle, aunt or mentor? What important things do you learn from this adult?

What do we need to know about the land to live on it? What do indigenous People teach us about the land?

How can knowledge from Elders help scientists study climate change?

How can we apply the Elders understandings of sustainability to reduce the effects of climate change?

What can we learn from Elders to help us live sustainably in the face of climate change?

What messages are Elders trying to share? What changes have Elders seen in life on the land?

Research different ways Indigenous people have used their knowledge of living things to meet their own needs.

How has the weather affected the Elders' community?

What are some of the changes in birds, animals and insects in yours and other communities?

How have the weather patterns changed in the community?

Can you identify some other pressing environmental issues that are currently taking place in Canada? (Pipelines, clean drinking water in Northern communities)



C. Knowledge Building

At this stage, students may be ready to engage in a group knowledge-building activity. It will encourage students to open their minds to many alternative ways of thinking about the provocations and the ideas generated thus far in the inquiry process.

[Community Expert](#) - Sharing knowledge and storytelling is an integral part of Indigenous culture, and a visit from an Elder is an excellent way to bring this experience to students. Indigenous Elders, Knowledge Keepers and Cultural Advisors play a central role in Indigenous communities; they are teachers within and beyond their communities. Elders, Knowledge Keepers and Cultural Advisors are not self-taught individuals. They have been gifted with their respective teachings by other Elders or Knowledge Keepers, typically over years of mentorship and teaching.

Connect with your school's Indigenous Education department to speak to an Indigenous education specialist and enquire about education or cultural programs available. Also, to inquire about who you can utilize in your classroom/school for the curricular concepts that you feel need connections to Indigenous ways of knowing that will enhance inquiry into environmental sustainability and relationships with Mother Earth.

Observe appropriate protocols and acknowledgements when including elders and knowledge keepers in your school/classroom.

Plan a field trip that fosters a greater understanding of Indigenous Ways of Knowing.

In Indigenous cultures, the Elder is highly regarded as a role model in their community and is considered the keeper of knowledge. A gift must be prepared by the person requesting the visit and offered to the Elder at the time of the request. For more information regarding [Elder Wisdom in the Classroom](#)

[Umbrella Questions](#) Brainstorm some umbrella questions with your students. An umbrella question is developed to help ground the inquiry. The question should be focused – it's not

aiming to answer all aspects of an issue. The question should be of interest to the students and also connect to the topic of the inquiry.

Who do you have in your life that you would consider an Elder? Grandparent, coach, teacher, uncle, aunt or mentor? What important things do you learn from this adult? How can the knowledge that the Elders share in the story help us learn about climate change?

How can we apply the Elders understandings of sustainability to reduce the effects of climate change?

What can we learn from Elders to help us live sustainably in the face of climate change?

What are the Elders observing and learning by the changing seasons?

What wisdom and warnings are the Elders sharing regarding ways people are abusing the land and resources?

What impact do people have on the land? How does that make you feel?

What type of knowledge did Elders need to know about their environment to survive in it for thousands of years?

Can you create a list of the different things Indigenous people learned about to survive on the land?

Can you identify some other pressing environmental issues that are currently taking place in Canada? (Pipelines, clean drinking water in Northern communities)

Research different ways Indigenous people have used their knowledge of living things to meet their own needs.

What types of change have most affected First Nations, Métis and Inuit people?

Identify the changes for each distinct Indigenous group.

What can First Nations, Métis and Inuit peoples teach other Canadians about sustainability?



D. Determining Understanding

Use responses to inform and guide the learning process. They can provide insight into which concepts need clarity, what many students are already well informed about, and a general direction that many students want to pursue.

[Knowledge Building Circles](#) - A Knowledge Building Circle is a class discussion activity that is specifically reserved for working out students' questions and ideas. The aim of the circle is to help all students to improve their understandings as they share their learning, ideas and ask questions. This communal activity deepens students' understanding through increased exposure to the diverse perspectives of the class. The KBC aligns with the Indigenous time-honoured tradition of the [Talking Circle](#) where individuals take turns sharing ideas.

With younger students, begin by viewing the book [The Sharing Circle](#) by elder and author Theresa "Corky" Larsen-Jonasson. During your knowledge-building circle, use a talking stick so students listen and share respectfully. The student holding the talking stick, and only that student, is designated as having the right to share while the other students listen quietly and respectfully. This Indigenous cultural tradition is used during ceremonies, storytelling and sharing experiences with Elders.

Here is an example of [Putting the Talking Stick into practice](#) - use during speaking and listening activities to allow students to interact with others, contribute to a class goal, share ideas and opinions, and solve problems. [Making a Talking Stick](#) for the class.

Some Indigenous peoples use a rock when having a talking circle. This connects students to Grandfather Rock teachings, and to our connection with Mother Earth and our Ancestors. We seek guidance and wisdom when we include a rock in our talking circles, to ensure we are moving forward in a good way, as Creator intended us to be, Kind and Compassionate.

[KWHLAQ Chart](#) – Have students complete a [KWHLAQ chart](#). The chart provides teachers with information regarding the student's learning process. The chart asks the following questions:

- K – What students already KNOW about Indigenous ways of knowing or Elders?
- W – WHAT students want to learn about Elders ways of knowing?
- H – HOW they will research or find the information they want to learn?
- L – What students have LEARNED about Indigenous knowledge after taking action?
- A – How will students APPLY the Indigenous knowledge they've learned?
- Q – What QUESTIONS do they still have or have thought of as a result of this inquiry?

KWHLAQ Chart

K	W	H	L	A	Q
What do I know?	What do I want to know?	How do I find out?	What have I learned?	What action do I take?	What new questions do I have?



E. Pursuing Learning

At this stage, students may begin research to pursue their umbrella questions, or some of the following activities could be integrated into the process to ensure that students have an understanding of foundational climate science. The activities listed below will enrich the understanding of climate change.

Indigenous peoples have been and are leaders of climate action; their role in monitoring climate change impacts and the environmental effects on traditional lands and waters play a critical part in our fight against climate change. There is a great deal that we can learn from how Indigenous peoples have lived sustainably with the Land for many years. They have adapted by travelling

throughout their Land in search of food and other resources depending on the seasons. We need to listen carefully to better understand the value of Traditional knowledge and its contribution to sustainability and planning for the future. Indigenous communities have their own experts, elders, knowledge keepers and ways of knowing; their knowledge is an essential resource for learning how to adapt to climate change. We need to value what they can bring to the climate conversation and actively seek it to guide us.

Watch [Norma's Story](#) an animated true tale of the profound effects of climate change on the environment, culture and food security on the people and wildlife of the Arctic. What happens when we do not respect the land, the environment?

[Natural Inquirer](#) – students use interview techniques to research and write about an animal or plant affected by climate change

[Arctic Survivor](#) - Students role-play polar bears and the habitat components of food, water, shelter and space to understand how polar bear populations are affected by changes in their habitat. In the second part of the game, some possible impacts of climate change on the Arctic habitat of polar bears are explored.

[Climate Connections](#) - Bring news reports of weather events that have happened in the world. Discuss with the students the impact these events may have had on local habitats. Use the climate connection picture cards to play a variety of non-competitive games that explore connections between human actions, climate change, and positive and negative impacts on wildlife habitat.

[Observing Change](#) - In this outdoor activity, students will complete a series of neighbourhood walks with an observation chart over a period of a few months to predict and observe changes in living and non-living components of the local ecosystems in order to understand the impact of weather, climate and climate change. Discuss how humans can impact habitats in positive and negative ways (e.g., provide water for plants; create diverse habitats in gardens; remove native plants and in the process, risk destroying habitat for native animals; pollute water and soil, etc.). Help the students to identify how to show respect for the environment and what actions they can take to positively affect the school environment.



F. Consolidation

This step is designed to encourage students to integrate and synthesize key ideas. When students make connections and see relationships within and across lessons, this helps them to solidify knowledge and deepen understanding.

[Doodling/Sketching](#)

- Share news reports of major weather events that have happened in the community, province, country or the world. Discuss with the students the impact these events may

have had on local habitats, cities, towns, ecosystems. Have students make a now and then community comparison picture.

Consolidation Discussion

- Ensure that every student can describe what they did, why they did it, and what they found out regarding Indigenous Ways of Knowing or the importance of listening to and respecting Elders wisdom.

Think-Pair-Share

- Have students write a thank-you letter to the land, the seasons, Elders, grandparents or other adults who teach them things about your culture or nature. Describe how and why you are thankful.
- Students reflect on their learning by reading their letter or sharing their picture/sketch and simply turn around and share with one other person



Assessment Ideas

- **Tableau** - In this activity, students create a still picture, without talking, to capture and communicate the meaning of a concept. Students must truly understand the meaning of a concept or idea to communicate it using physical poses, gestures, and facial expressions rather than words. Use Tableau to check for understanding or see what new insights students have gained during the inquiry.
- Assess students' knowledge and understanding by inviting them to write a text about an Elder in their life
- Invite students to brainstorm the teachings that their elders have shared with them and how these teachings connect us with others, the land, histories, and our ancestors (to show we are accountable and that our decisions that we make affect others and the future generations).
- Assess students thank you letters to verify the learning between Elders and the land
- Connect with another class/school in the Arctic virtually. Learn how climate change is affecting their schoolyard and community and how their elders share knowledge with them.
- Students could write letters, send emails to pen pals or connect virtually to other classrooms around the globe to explore and explain how climate change affects their communities explaining how climate change affects their community
- Have students create a poster informing how Mother Earth provides for them and what they can do to protect her. Share the posters with other students by posting them on the classroom bulletin board or in the school hallway/entryway.

- Gather evidence of learning with observations, thumbs up thumbs down, listening to conversations, anecdotal notes and comments, rough drafts
- Conference with students - conversations can also include written evidence such as journals in which educators can read what students have to say about their learning rather than listening
- Have older students complete a [What I Learned Today](#) self-assessment ([eftoassessments.ca](#))
- Have students express different ways to act in forests, parks, and other natural areas to show you respect the land in the medium of their choice.



Take Action:

Allowing time for students to take action is an essential part of the learning process on climate change, as it empowers students and eases their eco-anxiety. **Ask the students** what they want to do to positively impact climate change. List their ideas and come up with a plan to put their action in place.

Ideas for Taking Action:

- Create a video or presentation urging others to take action. Presentations can be in the classroom or at a school assembly
- Have students create a poster informing how Mother Earth provides for them and what they can do to protect her. Share the posters with other students by posting them in the school hallway
- Organize a Cleanup in your schoolyard or nearby park
- Bottled water-free day: educate your school about bottled water and its impact on the environment. Commit to reducing the use of bottled water at school and consider selling reusable water bottles for students to purchase as a fundraiser.
- Waste-free lunches: school lunches are a significant source of waste in schools. Reduce the amount of food and packaging waste heading to the landfill by hosting a waste-free lunch day. Take it a step further and host these days regularly on "Trashless Tuesdays" or "Wasteless Wednesdays".
- Have regular "No-Tech" days. Encourage the understanding of how tech usage has an invisible drain on our electric infrastructure. Also include the need for our reliance upon our local environments, as opposed to a virtual one. This will help our students mental and physical health, to ensure that they can "turn-off" to reflect and recharge without distraction.
- [Walk for water](#) - When senior students at Seven Oaks Met School learned that the local community of Shoal Lake 40 First Nation (the very community where most of Winnipeg's drinking water is sourced!) has been under a boil water advisory for over 20 years, they were inspired to take action. They organized speakers and elders from Winnipeg and Shoal Lake to educate the audience about the water crisis. The event raised over \$7,000 for the Shoal Lake 40 First Nation community and spread awareness across the region.

- The [Shaughnessy Medicine Wheel Garden](#) in Winnipeg was designed as a teaching garden, incorporating the medicine wheel's circle teachings, including fire, Water, air, and Earth. The plants and flowers reflect these elements and colours in each quadrant and feature Manitoba's traditional medicines and indigenous plants. Thirteen boulders encircle the garden to represent the 13 moons of the year, and seven cedar benches will represent the seven teachings. Providing an outdoor learning space for students and a natural setting to enjoy the environment for the local community.
- [MMHS Arboretum, Community, Indigenous and Medicinal Plant Gardens](#) Students, staff, community members and partners began planting trees, shrubs and wildflowers at Milliken Mills High School in 1994. Since that time, the arboretum and associated gardens have been enhanced and have flourished. This year we have made every effort to expand the nature of the gardens with an interpretive guide created by students across the curriculum. This, while the physical and plant make-up of the garden continues to evolve. This year, despite the challenges of face-to-face learning and participation, we established the indigenous medicinal plant garden and created a strong cross-departmental partnership in the school, which will see the roots truly become shoots as the project will become stewarded through teamwork.
- The Herb Campbell Public School has created a visual landscape plan for a [Medicine Wheel Garden Outdoor Classroom](#) on our school site, which includes: A centred medicine wheel garden with indigenous plants surrounded by stone seating and an outdoor classroom frame; 9 local food gardens including six raised-bed gardens (for herbs, vegetables, fruit, and edible flowers) and three in-ground gardens (a Three Sisters garden, an indigenous berry garden, and a pumpkin patch); 4 outer garden areas with indigenous plants, shrubs, and trees connected to the four cardinal directions of our centred Medicine Wheel Garden; A wildlife observation/inquiry area with feeders, water supply, and log stump seating; Interpretative learning signs; Pathways connecting to our natural forest, meadow, and wetland habitats and other planting areas.
- [Oak Park Outdoor Indigenous Learning Place](#) created an outdoor Indigenous learning space that allows students, staff, and the community to connect with nature and celebrate Indigenous culture, tradition, and teaching. This project has many stakeholders, including Indigenous and non-Indigenous students, Indigenous knowledge keepers (academics, community members, Elders), and various divisional staff. To have all staff and students embrace Indigenous ways of knowing, doing, and being; to enhance our Indigenous students' engagement and success in school. Having a teaching space in front of our school demonstrates our commitment to our school goal and reconciliation. It will also create endless opportunities for teaching and learning that honours, centres, and celebrates Indigenous culture.
- [Youth Climate Solutions](#) is a guide for making a difference for polar bears and their sea ice home. Visit Polar Bears and the Changing Arctic at [Polar Bears International](#) to learn more about the Arctic Ecosystem and how we can help protect this remarkable part of the planet.
- Visit [Our Canada Project](#) for many more action project ideas! This platform inspires youth to be responsible citizens and share their voice

