

Walking to Know Our Mother

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A Community Land Mapping Inquiry Project Overview:



Driving Inquiry Questions:

1. What stories or teachings are connected to key locations around our community?
2. How has the land around our community changed over time and how might it continue to change into the future?
3. How are human beings and the natural world interconnected and what other beings do we share these lands with?
4. How can respect for Mother Earth be shown?

Secondary questions:

1. How can local maps be utilized to learn navigation skills and explore answers to the driving questions above?
2. Where are the best hunting, fishing, berry picking, medicine gathering sites, or other places of significance around your community?
3. What are the important things to consider when choosing a site to set up camp out on the land?
4. What observations and assessments can be made about the health of local habitats surrounding our community.
5. How can Elders, Storytellers, and local Knowledge Keepers support us in developing a better understanding the key concepts below:

wahkotowin – Mamowi-Manachitiwin – Ugi-daguchiábi:

Interrconnectedness – Respect for all Things – Our Relationship to Everything

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Key Concepts Overview: wahkotowin – Mamowi-Manachitiwin – Ugi-daguchiábi

An intense and deep connectedness with all that surrounds us is a foundational concept of First Nations holistic development. This includes a connection to Mother Earth and all that the Universe contains, including a person's relationships towards themselves, their families, communities, nations, all of the flora and fauna beings, and ultimately the Creator that animates all.

Suggested Process:

- 1. Approach and invite any valued Elders or knowledge keepers from your community** who may wish to participate in this inquiry project. Feel free to share this project overview with them, (respecting and honouring protocols of tobacco offerings with all related expenses claimable under New Paths Innovation funding until June, 2019)
- 2. Introduce students to the driving questions and student project workbook that can help guide the process.**
 - Look for stories and lessons connected to specific locations on these maps. Students and Elders could mark these locations with thumb tacks connected with string to an index card that could write the story or teaching on.
 - Look for current & historical information that can be shared or questions that could be asked about key locations on these maps
 - Have students for groups of 4 and brainstorm responses to Driving questions and come up with other possible questions each group might want to focus.
- 3. Create a trip plan to visit key locations around your community and a mission/purpose for what could be gathered while visiting them. Book a facilitator to help with this day.**
 - Examples of mission or purpose:
 - Identify as many birds, plants, trees and animals as you can and take pictures to document them.
 - Identify key elements that make for a good campsite
 - Assess health of local habitats by conducting experiments that test local water quality and biodiversity.
- 4. Concluding performances / Demonstrations of understanding:**

Invite students to document and share their explorations in a number of different ways. Teachers and students could choose from a number of different projects and products listed below:

- Draw and label a map of the land areas you've studied
 - Create a photo story, album, or video montage of field visits and activities undertaken
 - Write and/or perform a song, poem or skit
 - Draw, sketch or paint pictures of your explorations
 - Document experiments that assess overall health of local wildlife habitats
 - Create a TV, print, blog, radio, or news report
 - Create an informational brochure or pamphlet
 - Design a webpage to showcase class-work with www.learningtheland.ca/schools
- 5. Assessment and Evaluation:**
 - Outcomes-based assessments included at the end of this **CMP Manual For Teachers** and **CMP Workbook for Students**, which can be viewed, downloaded and printed from: www.learningtheland.ca/community-land-mapping

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Resources

- 1:50,000 scale topographic maps of local areas (found at <http://learningtheland.ca/schools/>)
- Saskatchewan and Manitoba Nature Guide
- Wonders of Wildlife –A leader’s activity guide for teaching young conservationists
- Mapping Our Land: A Guide to making maps of our own communities and traditional lands
- Hands on activity kits including animal tracking molds and stamps, and bird calls

Possible Software/Applications:

- iNaturalist
- Sibley Birds
- Trees Canada
- iMapInvasives

Technologies

- www.learningtheland.ca
- iPads
- GPS devices
- Compasses

- Trail Camera
- Water and soil testing kits
- Drone bookings to capture overhead video of local landscapes that you choose to visit.

Web 2.0 Tools for collaboration:

Strategy Lab willing to offer workshops to show students how to upload any photos or videos that you want to share of any projects and initiatives you choose to undertake

Suggested Class and Field Activities:

Activity 1: Exploring and Interpreting Local Maps

Honour local knowledge and explore maps of your local communities, utilizing the **Driving Questions**. Search for **stories** connected to specific locations in your area. Brainstorm questions that you want to find out about your surrounding landscapes, and into current & historical information that can be collected from local landscapes. Use maps and GPS to navigate your way there. Create a walking tour of these locations. Go and visit these locations and **Explore** any new questions or interesting discoveries you make.

Activity 2: How to use a compass:

Lesson 1: <http://www.learn-orienteeing.org/old/lesson1.html>

Lesson 2: <http://www.learn-orienteeing.org/old/lesson2.html>

Activity 2: How to use a GPS:

<https://itstillworks.com/make-own-route-garmin-gps-13985.html>

Activity 4: Habitats Explorations

What habitats exist in your playground or school yard or nearby? Discuss with students what a habitat is, have them make predictions about which they may find nearby. Go on a nature walk to see which you can identify. Take a camera and a GPS (or app) to mark the locations and descriptions of the habitats. Create a log and revisit your habitats throughout the seasons to **record changes**.

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Activity 5: Descriptive Writing: What am I?

After exploring specific elements of nature (ex. types of trees, rocks, wildlife), students write a descriptive paragraph without the element's name. Other students read the description and have to guess what it is describing. You can also play 21 questions using elements you are studying.

Activity 6: Plant/Tree/Rock/Animal track Identification

Use field guides and knowledge keepers to help identify different types of plants/trees/rocks/tracks depending on what you are learning. Use field guides or iPad apps to help you identify. Extension: Create a classroom or playground field guide with pictures and descriptions.

Activity 7: Create a School Yard Map

Choose an outdoor area that you would like to map. Your yard, local park or nature trail are excellent choices. Creating school yard maps are a great way for students to grow a better understanding of the types of plants they see when out in the school yard or on a hike. Make notebook entries about the plants you find. Kids might even want to carefully collect a leaf sample and tape it into their notebook. Once you have identified several plant species, create a map that indicates where you found them. Include a key to the map. If you have older children, you may even want to challenge them to draw their map to scale.

Treaty Education Related Outcomes:

SIK: Express personal connectedness to nature and one another (e.g., Circle of Life, seasons, elements, weather, families, and relatives).

HCK: Explore the connection all people have to the land as expressed through stories, traditions, and ceremonies.

TR1: Examine how sharing contributes to treaty relationships.

HC1 Explore the many ways people meet their needs from nature and the land on which they live.

TR2 Examine how the Treaties are the basis for harmonious relationships in which land and resources are shared.

TR3 Examine the relationships between First Nation peoples and the land, before and after the signing of treaties.

SI3 Examine how various teachings people have about the natural world guide behaviour and actions.

HC4 Explore the historical reasons why people entered into treaty.

Cross-Curricular Grade 7 Related Outcomes:

Science 7:

IE7.1

Relate key aspects of Indigenous knowledge to their understanding of ecosystems.

IE7.4

Analyze how ecosystems change in response to natural and human influences, and propose actions to reduce the impact of human behaviour on a specific ecosystem.

EC7.2

Identify locations and processes used to extract Earth's geological resources and examine the impacts of those locations and processes on society and the environment.

EC7.3

Investigate the characteristics and formation of the surface geology of Saskatchewan, including soil, and identify correlations between surface geology and past, present, and possible future land uses.

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Arts Education 7:

CP7.6

Express ideas about the importance of place (e.g., relationships to the land, local geology, region, urban/rural environments) in drama and/or collective creation.

CP7.10

Create visual art works that express ideas about the importance of place (e.g., relationship to the land, local geology, region, urban/rural landscapes, and environment).

CP7.11

Investigate and use various visual art forms, images, and art-making processes to express ideas about place.

CH7.1

Investigate how artists' relationship to place may be reflected in their work.

Social Studies 7:

DR7.1

Analyze and use various types of maps (that provide differing perspectives and information for differing purposes

DR7.2

Appraise the impact of human habitation on the natural environment in Canada

DR7.3

Analyze the relationship between current and historical events and the physical and social environments

Language Arts 7:

CC7.2

Create and present a teacher-guided inquiry project related to a topic, theme, or issue.

CC7.5

Create and present a variety of representations including visual and multimedia presentations such as displays, illustrations, and videos, and enhance communication with appropriate graphic organizers, charts, circle graphs, timelines, maps, and sound effects.

CR7.5

Listen critically to understand and analyze oral information and ideas from a wide range of texts (e.g., complex instructions, oral explanations and reports, opinions or viewpoints, messages presented in the media

Links to all Gr. 6-9 Cross Curricular Outcomes Related to a Community Mapping Inquiry Project:

Subject	Arts Education	Language Arts	Science	Social Studies
Grade 6	CP6.6 CP6.9 CP6.10 CR6.2 CH6.1 CH6.2	CR6.5 CC6.1 CC6.5 CC6.6 CC6.7 CC6.9 AR6.1	DL6.1 DL6.2 DL6.4 DL6.5	IN6.1 IN6.2 IN6.4 DR6.1 DR6.2 DR6.3 RW6.2
Grade 7	CP7.6 CP7.10 CP7.11 CH7.1	CR7.5 CC7.2 CC7.5	IE7.1 IE7.4 EC7.2 EC7.3	DR7.1 DR7.2 DR7.3
Grade 8	CP8.1 CP8.6 CP8.9 CP8.10 CR8.1 CR8.2 CH8.1 CH8.2	CR8.1 CR8.4 CR8.5 CR8.6 CR8.7 CC8.1 CC8.5 CC8.6 CC8.7 CC8.9 AR8.1	CS8.2 FD8.4 WS8.1 WS8.2 WS8.3	DR8.2 DR8.3 RW8.2 RW8.3
Grade 9	CP9.1 CP9.6 CP9.9 CP9.10 CR9.1 CR9.2 CH9.1 CH9.2	CR9.1 CR9.4 CR9.5 CR9.6 CR9.7 CC9.1 CC9.5 CC9.6 CC9.7 CC9.9 AR9.1	RE9.1 CE9.3 CE9.4 EU9.1 EU9.3 EU9.4	IN9.2 IN9.4 DR9.1 DR9.2 DR9.3 DR9.4 RW9.1 RW9.2 RW9.3

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Sample Secondary Questions for furthering the inquiry process with your students:

1. What kinds of maps, current and/or historical can you find or create of your school, community and surrounding areas?
2. Where are the best hunting, fishing, berry picking or medicine gathering sites in and around your community?
3. Are there sights with stories of significance in and around your community that you would like to document and share with others?
4. Who are the Elders, storytellers, historians or knowledge keepers in your community?
5. Are there any community mapping projects that have already been undertaken by your community in years past? Could even invite the students to call the band offices to inquire into this.
6. Where are the major buildings located in your community? School, Band Office, Health Center?
7. What types of beings, birds, mammals, trees, plants, insects, fish live in and around your community?
8. What are some traditional names of lakes, rivers, hills, valleys and other locations in and around your community?
9. What traditional territories did your Community and/or Nation live within prior to Treaties being signed?
10. What's the size of your community's reserve lands, currently and historically?
11. Are there any reserve lands purchased by your community through Treaty Land Entitlement? If so, where are they located and how are these lands utilized?
12. What are the population estimates of humans and any other species living on reserve and/or off reserve?
13. What traditional ceremonies take place on your First Nation and what languages are spoken?
14. What conservation efforts are currently being undertaken by your community?
15. How do you see climate change impacting you and your community?
16. What kind of industrial threats could there be to local habitats around your community?
17. What could be done to improve the health of local habitats for animals, plants in and around your community?
18. Are there any community action projects you would want to take on that relate to seeking answers to any of the driving questions or subsidiary questions you may choose to explore?

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Assessments and Evaluation of Projects:

Students & Group Self-Assessments: (Also Provided in CMP Workbook for Students)

Topic: _____

Name(s) _____

This was my/our best source of information about my topic:
This is the most interesting thing I/we learned:
This is what I/we did to share what we learned:
This is something I might do differently in my next inquiry project:

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Inquiry Project Rubric: (Also provided in CMP Workbook for Students)

Categories & Expectations	Friendly Language	Level 1	Level 2	Level 3	Level 4
KNOWLEDGE AND UNDERSTANDING of concepts and associated <i>Hummingbird</i> curriculum outcome	<i>The student demonstrates understanding of concepts (e.g. insert something you want the students to focus and be able to talk about</i>	The student demonstrates <u>limited</u> understanding of key concepts and intended outcomes	The student demonstrates <u>some</u> understanding and understanding of key concepts and intended outcomes	The student demonstrates a <u>good</u> understanding of key concepts and intended outcomes	The student demonstrates <u>thorough</u> understanding of key concepts and intended outcomes
THINKING Use of creative/critical thinking processes	<i>The student uses creative/critical thinking processes with effectiveness to create a product that reflects their level of engagement with the key concepts</i>	The student uses creative/critical thinking processes to create a final product and reflect on their learning with <u>limited</u> effectiveness	The student uses creative/critical thinking processes to create final product and to reflect on their learning with <u>some</u> effectiveness	The student uses creative/critical thinking processes to create final product and to reflect on their learning with <u>considerable</u> effectiveness	The student uses creative/critical thinking processes to create a final product and reflect on their learning with a <u>high degree of</u> effectiveness
COMMUNICATION Expression and organization of ideas and information in oral, written, and/or visual forms	<i>The student expresses and organizes ideas and information with effectiveness. This may be shared in a variety of formats.</i>	The student effectively organizes ideas in presenting results of inquiry with <u>limited</u> effectiveness	The student organizes ideas in presenting results of inquiry with <u>some</u> effectiveness	The student organizes ideas in presenting results of inquiry with <u>considerable</u> effectiveness	The student organizes ideas in presenting results of inquiry with a <u>high degree of</u> effectiveness
APPLICATION Making connections within and between contexts	<i>The student makes connections between their project and the world outside the school (real life).</i>	The student makes a <u>limited number of</u> connections between the project and the world outside the school.	The student makes <u>some</u> connections between project and the world outside the school	The student makes a <u>variety of</u> connections between project and the world outside the school	The student makes a <u>wide variety of</u> connections between project work and the world outside the school
EVALUATION Reflecting on process and evaluating what has been learned and what could be improved	<i>The student evaluates how they did and what could be done to improve upon their work next time around.</i>	The student makes a limited evaluation of what went well and what could be improved.	The student is able to make some suggestions of and what could be improved.	The student makes a variety of suggestions for improvement and reflects on what they learned.	The student makes a wide variety of reflections and suggestions for improvement of their projects