

Grade 3 - Water the Gift of Life: Investigating Environmental Impacts

Social Studies, Grades 1-6; History and Geography, Grades 7 and 8 (2013) Grade 3, People and Environments: Living and Working in Ontario

Overview of Module

Students gain an understanding of Aboriginal perspectives on nature by exploring the interconnectedness of water, the environment, and life itself. Students explore how environmental problems such as pollution and climate change affect water. Students apply their knowledge of the interconnectedness of water, human health, and Earth's ecosystems as they consider water conservation for future generations.

Connections to Curriculum

The curriculum expectations addressed in this teaching and learning example (TLE) are identified within the TLE plan and can also be found in the Ontario curriculum: Social Studies, Grades 1-6; History and Geography, Grades 7-8 (2013), Grade 3, People and Environments: Living and Working in Ontario.

Connections to First Nations, Métis and Inuit People and Perspectives

Many Aboriginal peoples consider Mother Earth to be connected to their identity. All that comes from Earth sustains people today and for the next generations to come. Water is the life-blood to all living beings and maintaining clean water is essential for our physical and spiritual health. Many Aboriginal cultures believe that how we use water today impacts the next seven generations. Aboriginal people believe it is our responsibility to maintain clean water in dealing with waste management and resource development for the success of future biodiversity. In Anishinaabe and Métis cultures, women are the water keepers and carry the specific responsibility for water. Many First Nation and Métis communities participate in Water ceremonies and/or Water Walks to bring awareness to the importance of clean water and to celebrate the spiritual quality of water and the life it sustains.

Considerations for Planning

- Teachers may choose to begin the lesson with a short introductory task: “Whose land are you on?” Many students and community members are unaware of which traditional lands their school is located upon. Maps include: The [First Nations and Treaties Map of Ontario](#) – a copy

of which was sent to all schools – available at: <www.ontario.ca/aboriginal/treaties>; or a historical map such as the one found at the [Canadian Museum of History](http://www.historymuseum.ca/cmc/vmnf/premieres_nations/en/map/index.shtml) web page: <http://www.historymuseum.ca/cmc/vmnf/premieres_nations/en/map/index.shtml>

- If teachers want to participate in an Extension Activity involving an off-site visit to an Aboriginal community for a Water Ceremony, this would need to be arranged at the beginning of this module. (Board policies for off-site visits would need to be observed, and teachers would have to prepare students for appropriate behaviour during the ceremony. Elders or cultural guides can help teachers to understand expectations.)
- Students use the components of the social studies inquiry process to investigate, and to communicate their findings about, significant events, developments, and issues. By applying the inquiry process, students develop skills that they need in order to think critically, solve problems, make informed judgements, and communicate ideas.
- The social studies inquiry process consists of five components: formulating questions, gathering and organizing information, evidence, and/or data; interpreting and analysing information, evidence, and/or data; evaluating information, evidence, and/or data; and drawing conclusions, communicating findings.
- It is important for teachers to understand that the inquiry process is not necessarily implemented in a linear fashion. Not all investigations will involve all five components; moreover, there are different entry points within the process.

Curriculum Connections

Curriculum Overall Expectations	Curriculum Specific Expectations
<p>Grade 3 – People and Environments: Living and Working in Ontario</p> <p>B2. Inquiry: use the social studies inquiry process to investigate some of the environmental effects of different types of land and/or resource use in two or more Ontario municipal regions, as well as some of the measures taken to reduce the negative impact of that use.</p> <p>B2.1 formulate questions to guide investigations into some of the short- and/or long-term effects on the environment of different types of land and/or resource use in two or more municipal regions of Ontario and</p>	<p>We are learning to:</p> <ul style="list-style-type: none"> • investigate our water supply by asking good questions. • explore how our short- and long-term actions affect the water supply. • discover how Aboriginal peoples view, care for, and celebrate, water. • identify ways that we can reduce the negative effects of pollution on our water supply. • Sample Success Criteria • I will know I am successful when I can: • ask good questions that help us to learn more about water.

Curriculum Overall Expectations	Curriculum Specific Expectations
<p>measures taken to reduce the negative impact of that use.</p> <p>B2.2 gather and organize a variety of data and information on the environmental effects of different land and/or resource use and measures taken to reduce the negative impact of that use.</p> <p>B2.4 interpret and analyse information and data relevant to their investigations, using a variety of tools.</p> <p>B2.5 evaluate evidence and draw conclusions about some of the short- and long-term effects on the environment of different types of land use in municipal regions of Ontario and about key measures to reduce the negative impact of that use.</p> <p>B2.6 communicate the results of their inquiries, using appropriate vocabulary and formats.</p>	<ul style="list-style-type: none"> • explore how my actions impact the water supply. • explain the ways that Aboriginal peoples view, care for, and celebrate, their water. • name specific ways that we can reduce the pollution of our water supply.

Getting Started

Learner Readiness

Knowledge and understanding:

- information on the major landform regions in Ontario
- the connection between the features of the natural environment and the type of land uses practiced there

Terminology

- Turtle Island
- water ceremony
- consequences
- environmental responsibility
- relationships
- interrelationships
- stewardship
- interdependence
- watershed
- investigate
- explore
- discover
- identify
- landforms
- inquiry

Materials

- Coloured markers
- Chart paper
- Books, photos, and resources about water
- music (Aboriginal musician/singer)

Resources

- listed at the end of the TLE

Relevant Backgrounders

- Water the Gift of Life: Investigating Environmental Impacts

Minds On	Connections
<p>Water Word Clue Activity</p> <p>Distribute one word clue to each student. (See suggested list in Reproducible 1 – Water Word Clues.)</p> <p>Students will circulate to music until the music stops. Then students talk to a partner about their clue, trying to figure out what their clue means, and how their clue might fit with another student’s clue. Students repeat this process a number of times. Then ask students to guess what topic they think the class will be exploring, and the reasons for their guesses.</p>	<p><i>(Assessment of, as and for Learning; Tips; Differentiation)</i></p> <p>Differentiation</p> <p>Carefully select and discuss ‘Water Word Clues’ to be assigned to ELL and students with Special Education needs before the activity begins.</p> <p>A for L: As students are talking to one another, the teacher listens and takes note of the questions that students are asking. Use these questions as samples when giving explicit instruction on how to ask investigative questions.</p> <p>Teachers can also take note of words and concepts that students are unfamiliar with and ensure that these are explained after the activity.</p>

Action!	Connections
<p>Part 1 – Brainstorm</p> <p>On chart paper create a brainstorm web that includes everything students know about water, including what they learned from the Water Word Clues activity.</p> <p>Suggested prompts include:</p> <ul style="list-style-type: none"> • Where does our water come from? • In what ways is water important? • How do we keep our water safe to drink? • What things can pollute our water? • What happens to communities and people when water becomes unsafe? 	<p>A for L: During the brainstorming session listen for student knowledge of this topic.</p>
<p>Part 2 – Aboriginal Perspectives on Water</p> <p>Aboriginal perspectives on water may differ from that of non-Aboriginal peoples. It is important that</p>	<p>N/A</p>

Action!	Connections
<p>students understand that in the Western world, water may be seen as a commodity to be bought and sold. To Aboriginal peoples, however, water is seen as the very lifeblood of survival, and therefore it needs to be nurtured and celebrated.</p> <p>Allow opportunities for students to learn about Aboriginal perspectives on water. Possible sources of information include:</p> <ul style="list-style-type: none"> • “Crisis On Tap: First Nation Water for Life,” (video), <http://www.youtube.com/watch?v=lxmht-g2C5s> • Indian and Northern Affairs Canada. (2006). “Unit 3. Water: Its Many Uses”. In The Learning Circle: Classroom Activities on First Nations in Canada, Ages 8–11, <www.aandc.gc.ca and www.etfo.ca> • Mother Earth Waterwalk -The Water Song <http://www.motherearthwaterwalk.com/index.php/?p=2244> • Toronto Zoo - Ways of Knowing Earth’s Teachings Guide & Educational Bundle, <http://www.torontozoo.com/conservation/tic.asp?pg=resources> • Waterlife. (2009). Director Kevin McMahon. National Film Board of Canada, <http://waterlife.nfb.ca/#/> (Select clip on “Healing.” Additional instructions on how to access this clip are found at the end of this TLE.) <p>After learning about Aboriginal perspectives on water, go back to the Brainstorm Web. Add additional information to the web.</p>	
<p>Part 3 – Small Group Water Inquiry</p> <p>Guide students in co-developing criteria for</p>	<p>A as L: Learning how to ask good questions helps students practice peer assessment.</p>

Action!	Connections
<p>inquiry questions as a large group. List criteria on chart paper. Ask students in pairs to come up with two inquiry questions about water, the water supply or water pollution. Ask every pair to share their questions, and the rest of the class uses the criteria to give immediate feedback. Pairs improve their questions based on peer feedback.</p> <p>Some sample inquiry questions could include:</p> <ul style="list-style-type: none"> • Are hydroelectric dams good for local communities? • Does water pollution change the way we live? • Can mining affect local people’s water supply? • What would happen if we did not have fresh water? • How do water walkers help us all? <p>In pairs or groups students select an inquiry question to investigate. You can have a selection of resources available to assist them in their inquiry. (See the list at the end of this TLE.)</p> <p>Mini-Scrapbook</p> <p>Students compile a mini-scrapbook of their inquiry, sharing their thoughts and decisions about what they have learned.</p>	

Consolidation	Connections
<p>Part 4 – How do we preserve our water supply?</p> <p>Lead class in a discussion around ways to preserve our water for future generations. Ask them to suggest at least one change they can start at home or school. Remind them that Aboriginal peoples believe that how we use water today impacts the next seven generations.</p> <p>Extension Activity:</p> <p>A Water Ceremony lead by an Elder or cultural guide</p> <p>The class could visit a local Aboriginal community to observe a traditional water ceremony. The Elder or cultural guide would provide guidance on how to prepare your students prior to the event.</p>	<p>A of L: Listen for knowledge as well as application of big ideas learned in the TLE.</p> <p>Tip:</p> <p>Check board policies and procedures for off-site visits.</p>

Related Websites/Resources

- Caduto, Michael J., and Bruchac, Joseph. (1991). "Seventh-Generation Stewardship". In *Keepers of Life: Native Stories and Environmental Activities for Children*. Saskatoon: Fifth House
- Cherry, Lynne. (1991). *A River Ran Wild*. New York: Harcourt Brace
- "[Crisis On Tap: First Nation Water for Life](http://www.youtube.com/watch?v=lxmht-g2C5s)," (video), <<http://www.youtube.com/watch?v=lxmht-g2C5s>>
- [Environment Canada Website](http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=E86BC86A-1) <<http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=E86BC86A-1>>
- Indian and Northern Affairs Canada. (2006). "Unit 3. Water: Its Many Uses". In [The Learning Circle: Classroom Activities on First Nations in Canada](http://www.aandc.gc.ca), Ages 8–11, <www.aandc.gc.ca> and the [Elementary Teachers' Federation of Ontario](http://www.etfo.ca) - <www.etfo.ca>
- Indian and Northern Affairs Canada. (2007). *Water Is a Treasure*. A book of activities and poster for young children related to the importance of taking care of water.
- [Indian Country News interview with Josephine Mandamin](http://www.newsfromindiancountry.com/index.php/news/26-mainstream-politics/3690-ojibwa-grandmother-recounts-walk-around-the-great-lakes) <<http://www.newsfromindiancountry.com/index.php/news/26-mainstream-politics/3690-ojibwa-grandmother-recounts-walk-around-the-great-lakes>>

- Indigenous Education Coalition. (2013). The Gift of Water- Circle of Life Learning from an Elder Series. Toronto: Nelson Education.
- [Mother Earth Waterwalk -The Water Song](http://www.motherearthwaterwalk.com/index.php/?p=2244)
<<http://www.motherearthwaterwalk.com/index.php/?p=2244>>
- [Natural Resources Canada – Freshwater](http://www.nrcan.gc.ca/sustainable-development/freshwater/2572) <<http://www.nrcan.gc.ca/sustainable-development/freshwater/2572>>
- “[The Story of Bottled Water](http://www.storyofstuff.org/movies-all/story-of-bottled-water),” (video) www.storyofstuff.org/movies-all/story-of-bottled-water
- Toronto Zoo - [Ways of Knowing Earth’s Teachings Guide & Educational Bundle](http://www.torontozoo.com/conservation/tic.asp?pg=resources),
<<http://www.torontozoo.com/conservation/tic.asp?pg=resources>>
- Turtle Island Voices series, Grade 3. (2011). Pearson Education.
- United Nations: [International Decade for Action Water For Life 2005-2015](https://www.un.org/waterforlifedecade/kids.shtml)
<<https://www.un.org/waterforlifedecade/kids.shtml>>
- [Water Cycle Game](http://water.epa.gov/learn/kids/drinkingwater/gamesandactivities.cfm), United States Environmental Protection Agency,
<<http://water.epa.gov/learn/kids/drinkingwater/gamesandactivities.cfm>>
- [Waterlife](http://waterlife.nfb.ca/#/). (2009). Director Kevin McMahon. National Film Board of Canada,
<<http://waterlife.nfb.ca/#/> >

This documentary film about the Great Lakes includes a short section about water walker Josephine Mandamin – an Anishinaabe grandmother and healer. Mandamin spreads awareness about the importance of clean water as the lifeblood of Mother Earth for future generations by walking around the Great Lakes and then walking to unite all the ocean waters of Turtle Island. This clip can be accessed on the Internet. After the film loads click “enter.” Then place your cursor over “Water Is” in the left-hand corner of the screen. A table of contents will scroll down below your cursor. Select “Healing” from the list and double-click. The clip will begin.

Water Clue Activity

Note to Teacher: Give one “clue” to each student. Select the clue for each child based on literacy levels and any ELL or Special Education needs.

Pollution can make it unsafe to use.	It covers most of Mother Earth.	Cleans your clothes.	Aboriginal women are said to be the keepers of this.
We should be careful not to use too much of this.	Canada has more of this than most other countries in the world.	Some Aboriginal communities suffer because this is polluted.	Animals and humans need it to survive.
Agriculture (farming) uses more of this than any type of other industry.	Cleanses your body.	Countries may have conflicts over this natural resource.	Hydroelectric dams use it to make electricity.
Fish need it to live.	A key ingredient of lakes and wetlands.	It helps plants grow and live.	Ice sheets, ice caps, and glaciers are all sources of this.
Many Aboriginal communities do not have sufficient access to this.	Towns and cities are usually located near a major source of it.	In poor countries about 800 million people have little access to this.	Canada has about 7% of the world’s supply of this.
Americans consume (use) more of this than any other country.	We can’t survive without this.	It tastes good.	This can be salted or unsalted.