Global Voices

Volume 12 | Issue 6

April 2018

Global Voices is a weekly column written by Craig and Marc Kielburger examining current events, topics and issues affecting local and global communities. Each month, engaging classroom resources are created to accompany one column to help educators bring world issues into the classroom in a digestible manner. For more information on how to sign up please visit WE.org/global-voices-signup.

What Happens When Day Zero Comes Here?

Fact Sheet

- The average Canadian consumes more than 300 litres of water a day, making us one of the world’s biggest water consumers. Only Americans use as much water as Canadians. Europeans, on average, use less than half the water of North Americans. (Vancouver Sun)
- 65% of our household water gets used in the bathroom by toilets, baths and showers. Another 20% of our water use goes to laundry, 10% for cooking and drinking, and 5% for other household cleaning. (Global News)
- Canada is home to 20% of all the freshwater resources in the world. However, over half of that supply is not considered “renewable.” Renewable means water sources that, when used, are refilled and replaced by new water from rain, snow melt, etc. Most of Canada’s supply is “fossil” water—this includes water leftover from melting glaciers during the last ice age (as in the Great Lakes), or water trapped in underground aquifers. These sources refill very slowly, or not at all, so they can be used up. (Government of Canada)
- Although the number varies, at any given time there are usually more than 100—as many as 140—Indigenous communities that do not have secure access to clean water. For some, the problem has existed for years. The Neskantaga First Nation in Ontario has been under a boil water advisory for 24 years. (Huffington Post)
- In 2015 and 2016, blue-green algae reached dangerous levels in Buffalo Pound Lake, the primary water source for the cities of Regina and Moosejaw in Saskatchewan. Blue-green algae are plantlike bacteria called “cyanobacteria,” which can produce chemicals that are toxic to humans and animals. (Maclean’s)
- In 2016, Nova Scotia experienced a drought. While the big cities like Halifax still had water, in many rural areas people who relied on underground wells for their water found their wells going dry. They had to pay companies to bring them water by truck. (Halifax Chronicle-Herald)
- A drought that has lasted several years has forced the city of Vancouver, and other cities in British Columbia, to ban things like watering lawns and gardens and refilling swimming pools, to protect the water supply. (Globe and Mail)

WE Learning Framework Skills

These icons identify the most relevant skills students will develop using this resource. Learn more about the WE Learning Framework at WE.org/we-schools/program/learning-framework/.

Subject

- Canadian and World Studies
- Social Studies

Materials

- Front board
- Paper and writing utensils
- Computer/tablet with Internet access
- Blackline Master 1: Understanding the Global Water Crisis

Key Terms

- Freshwater—Water that does not contain high levels of salt, unlike the oceans, which are very salty and therefore unsafe for humans to drink. Inland lakes and rivers are usually freshwater.
- Drought—When there is little or no rain in a particular area for an unusually long period of time, resulting in a water shortage.
- Boil water advisory—A public warning by government officials that people should boil the water from their taps before drinking or washing with it, because there is a high risk of contamination by dangerous microorganisms like E. Coli bacteria.
- Water conservation—Measures that protect water resources by reducing consumption and preventing pollution.
Classroom Activity - Grades 9 to 12

Essential Question:
- Why should the water crisis be considered a global issue?
- In what ways does the water crisis have an impact socially and economically, as well as environmentally?

Learning Goals:
Students will:
- Develop an understanding of the global water crisis
- Recognize the consequences of a water crisis
- Identify the causes of and possible solutions to local or global water issues

Discussion:
1. What are the different water issues affecting our world today? Why can this be considered a global water crisis?
2. What are the potential consequences of a water crisis? How do they affect people directly and indirectly?
4. The article states, “The well-to-do can afford bottled water at undoubtedly inflated prices, or even shell out hundreds of dollars to have a private company truck water to their house...” What is this text not saying? What is the implied message?
5. What do they authors mean when they say “Canadians are still complacent about our water”?

Warm up: (10 minutes)
Choose one or more of the videos or images below. Explain to students that these are videos and images of people taking action to raise awareness for local and global water issues.

Share the videos or images with students and, in small groups, have students discuss one or more of the questions below. Alternatively, invite students to choose one of the videos or images to explore in their groups and have them answer some or all of the questions about their video or image.

Videos
- Autumn Peltier, “I Am Indigenous,” www.youtube.com/watch?v=._EodBINY7A (2:02)
- “Global Water Dances 2017,” www.youtube.com/watch?v=H-9fbmm7Nc4&list=PLJ4KvKB22QetmFu3PeAeArdPDPKswiHs (3:12)

Images
- Shoal Lake, media.winnipegfreepress.com/images/141208_._WATER_02_18329639.jpg
- Dakota Access Pipeline, https://media.npr.org/assets/image/2016/08/19/gettyimages-587636528_custom-8c05f831b3d3d2696526016ada176144c3e7f4a-s1500-c85.jpg
- Flint Michigan Water Crisis, fm.cnbc.com/applications/cnbc.com/resources/img/editorial/2016/03/24/103494487-RTS9KWZ.530x298.jpg?v=1458823352

Questions
a. What are the water issues the people in the video or image are raising awareness about?
b. What motivates these people to take action?
c. What role does water play in their lives? What does water represent for them?
d. What role does water play in your life? What does it represent to you?

Provide each student with a sticky note. Invite students to choose one word or image that demonstrates what water means to them and record it on the sticky note. Use the sticky notes to begin to create a display in the classroom titled Why Do We Need Water?

Investigate and Learn: (50 minutes)
Create a carousel activity by writing each of the questions from the Discussion section on a piece of chart paper. Post the chart paper in different spaces around the classroom.

Divide students into pairs or small groups and provide each student with a copy of the Global Voices article, “What Happens When Day Zero Comes Here?”

Assign each group one of the questions. Ask students to read the article, discuss the question and then choose one person to record their response on the chart paper. Provide each group with a different colour of marker so it is clear which response belongs to which group.

Give students a signal and ask them to rotate to the next question. Ask students to review the answer from the previous group and add their comments to the paper. Encourage students to consider whether they agree or disagree with the previous response and to think about how they can extend the comments from the other group.
Once students have rotated through all the questions, post all five pieces of chart paper on the front board and review students’ responses. Discuss any questions students have about the article and provide clarification if necessary.

In a brief written reflection, ask students to describe three things they learned from the article and the discussions, two things they found interesting and one question they still have. Consider adding these reflections to the Why Do We Need Water? display to demonstrate student learning. As an alternative, students may also choose to respond orally or create a video reflection. Students’ questions can be used to begin the Dive Deeper section or can be used as a spark for independent inquiry.

**Dive Deeper: (2 x 60 minutes)**

Reinforce with students that water crises are taking place all around the world, including Canada. In pairs or small groups, challenge students to investigate one of the regions identified in the article that is experiencing water issues and use Blackline Master 1: Understanding the Global Water Crisis as a guide to explore how these issues are affecting the people living in the regions. Encourage students to also consider choosing to investigate a local water issue or a water issue in a region that has personal significance for them.

Provide students with the following links and resources to begin their investigation. Encourage students to explore additional local, national and international sources to find more information.

**Boil Water Advisories in First Nations Communities, Canada**
- Ending Long-Term Drinking Water Advisories In First Nation Communities, [www.aadnc-aandc.gc.ca/eng/1506514143353/1506514230742](http://www.aadnc-aandc.gc.ca/eng/1506514143353/1506514230742)

**“Day Zero,” Cape Town, South Africa**

**Water Shortages, São Paulo, Brazil**

**Water Restrictions, California, USA**

Have students select a method to present their findings to their peers. Students may consider creating a visual presentation or video, writing a picture book, or designing an infographic or diagram. Collect all student research and presentation materials as evidence of student learning.

Encourage students to identify at least one way they can start contributing to a solution to local or global water issues. Provide each student with a sticky note and have them add their ideas to the Why Do We Need Water? display. Return to the display every few weeks to give students opportunities to share their progress or any new information they have learned. This is also a time to provide students with support if they are facing any challenges or barriers.

**Extension:** Consider inviting local elders or community members who are involved in local water issues to speak to students about their work and their commitment to finding solutions to water issues.

**Go Further**

Now that students have a deeper understanding of the global water crisis and recognize the impact water issues can have on people locally and globally, challenge students to choose one of the following options to continue to take action to contribute to positive change.
Option 1

Host an awareness-raising event at the school where students, staff and community members can come to learn more about local and global water issues and how they can contribute to a solution. Consider building on the Why Do We Need Water? display by inviting participants to share what water means to them and how they can contribute to a solution.

Option 2

Join an organization or initiative that is working to address local or global water issues. Encourage students to use their time, their voice and their skills and abilities to work with others who are taking action to create meaningful change.

Option 3

Participate in the WE Schools WE Walk For Water campaign to raise awareness for people and communities around the world who lack access to water. Students can also consider hosting a water walk to raise money to provide people with clean water for life.

Extension: The UN World Water Day takes place every year on March 22 and focuses on raising awareness for the importance of water. The theme for 2018 is “Nature for Water” and it aims to challenge people to explore nature-based solutions to the water challenges we face in the 21st century. Visit http://worldwaterday.org/app/uploads/2018/02/fact_sheet_WWD2017_EN_2.pdf to find out more about nature-based solutions and explore how nature can inspire alternative ways to address the water issues we face today.
Blackline Master 1: Understanding the Global Water Crisis

<table>
<thead>
<tr>
<th>Which water issue will I explore? What geographic region does it affect?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What are the causes of this water issue?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What impact does this water issue have on the people in this region?</th>
<th>What impact does this water issue have on the environment in this region?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Blackline Master 1: Understanding the Global Water Crisis

<table>
<thead>
<tr>
<th>What ideas or solutions have been implemented to address the issue?</th>
<th>Have they been effective? Why or why not?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What else can be done?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>