



Global Voices Information Sheet

Why we're all confused about climate change



Former U.S. Vice President Al Gore presenting *An Inconvenient Truth*

Background Info

- In 1997, the Kyoto Protocol was adopted. Part of the United Nations Framework Convention on Climate Change, Kyoto is an international treaty.
- UN member countries have agreed to reduce greenhouse gas emissions below the benchmark year level, which is a goal of about 5% reduction from 1990 carbon levels. The protocol was named after the location of the convention, which took place in Kyoto, Japan. Kyoto entered into force in 2005.
- The Kyoto Protocol is set to expire in 2012.
- From Nov 28 to Dec 9, 2011, world leaders gathered in Durban, South Africa, for the UN climate change conference, in part to discuss how to proceed once Kyoto expires.
- Canada has not met its reduction targets for Kyoto, and it plans to withdraw before it expires in 2012.
- Climate change is complex and sometimes contentious. Research cited in the article suggests that the complexity and urgency of the situation might lead people to avoid information about the problem.
- One unfortunate consequence is that the motivation for individual action might be suppressed, since people are more likely to ignore important issues and rely on governments.

Key terms

- **Climate change**—a significant, statistical change in temperature, measured over long periods of time—thousands or even millions of years. Climate change can be regional or global.
- **Global warming**—the gradual increase in the average temperature of Earth's atmosphere. There is large consensus as to the cause of global warming, namely, the greenhouse gas effect, or the erosion of the ozone due to carbon emissions, otherwise referred to as “man-made” climate change. However, there are some people who disagree with this theory.
- **Peak oil**—the point in time when maximum global petroleum extraction has been reached, which would lead to an oil shortage.
- **Subprime mortgage**—loans targeted at people who normally would not qualify for loans due to poor credit. Interest payments are very low for the first few years, but then sharply increase. Subprime mortgage lending was a significant contributing factor to the 2008 global recession.

Global Voices Elementary Educator Resources

Note to Educators:

The following activities are designed to stimulate a current events discussion. Generative in nature, these questions can be a launching point for additional assignments or research projects. Teachers are encouraged to adapt these activities to meet the contextual needs of their classroom.

In some cases, reading the article with students may be appropriate, coupled with reviewing the information sheet to further explore the concepts and contexts being discussed. From here, teachers can select from the questions provided below. Activities are structured to introduce students to the issues, then allow them to explore and apply their learnings. Extension and conclusion activities are included to challenge students and finally, encourage them to reflect on the issues at hand.

Since these activities are designed as discussions rather than formal lessons, assessment strategies are not included.

Themes and Course Connections

- Themes: climate change, global warming, the Kyoto Protocol, consumption, waste, lifestyle, ecological footprint.
- Course Connections: The Arts, Health and Physical Education, Language, Mathematics, Science and Technology, Social Studies.

Materials

- Chart paper or blackboard
- Global Voices column

Specific Expectations and Learning Goals

Students will:

- Develop and express responses to issues and problems.
- Reassess their responses to issues on the basis of new information.
- Participate in active group work and class discussions.
- Communicate effectively in written and spoken language or other forms of expression.
- Demonstrate the ability to think critically.
- Develop, express, and defend a position on an issue and explain how to put the ideas into action.

Reading Comprehension

1. Guided Reading: The Global Voices Column (estimated time: 20 minutes)
 - a. Have students sit in a circle and distribute one copy of the Global Voices column to each student.
 - b. Pre-reading steps:
 - i. Make predictions: ask students to read the title of the column and view the pictures. After doing so, ask them to make predictions as to what the column is going to be about.
 - ii. Introduce vocabulary from the column.
 - iii. Assess prior knowledge: ask students to discuss what they already know about these topics.
 - c. Reading steps:

- i. Go around the circle and have each student read a section of the column to the class, so that everyone gets a turn to read.
 - ii. As students are reading, offer guidance and coaching by providing prompts, asking questions, and encouraging attempts at reading strategy application.
- d. Post reading steps:
- i. Encourage students to provide a summary of the column in order to ensure they have understood the series of events.
 - ii. Ask questions about the text to judge comprehension.

Knowledge and Understanding

1. Discussing the Global Voices Column (estimated time: 10 minutes)
 - a. Ask students the following suggested questions about the column, encourage them to use evidence from the Global Voices column to support their answers:
 - i. What is the message in this column?
 - ii. What perspectives are presented in this column? Which ones are left out?
 - iii. What problem is presented in this column?
 - iv. What is climate change?
 - v. Who is responsible for taking action against climate change?
 - vi. What are the dangers of climate change?
 - vii. What is causing climate change?
 - viii. What is fossil fuel?
 - ix. What are CO₂ emissions?

Thinking

1. What is climate change? (estimated time: 45 minutes)
 - a. Get a copy of “The Lorax” by Dr. Seuss.
 - b. Ask the class to gather around and explain that they will be hearing an interesting story called “The Lorax”.
 - c. Read the story to the students.
 - d. When the story is complete, ask the following reflection questions:
 - i. What did the “far end of town” look like at the beginning of the story?
 - ii. What were the Once-ler’s goals? How did he use the natural resources of the area? Do you agree with his choices?
 - iii. What were the Lorax’s concerns? Did these concerns come true?
 - iv. What did the “far end of town” look like at the end of the story? Why did this happen?
 - v. What could the Once-ler have done differently to avoid this destruction?
 - vi. After learning his lesson, the Once-ler says that “unless someone like you cares a whole awful lot, nothing is going to get better. It’s not”. What does this mean?
 - vii. The Once’ler offers different solutions on how to rebuild the land, what are these solutions? What would their impact look like?
 - e. Once the students have discussed the story, apply these learnings to global warming and climate change. Ask students to compare how this story relates to their world and climate change.
 - f. Allow students to return to their desks.
 - g. In a written reflection, ask them to write about what they can learn from “The Lorax” and how they can change their actions to help prevent climate change.

Communication

1. Grabbing Attention (estimated time: 30 minutes)
 - a. The Global Voices column states that when issues are really complicated, people often try to avoid the crisis altogether.

- b. Ask students to explain what this means and list the consequences this would have on the earth if everyone ignored climate change.
- c. Tell students that today they are going to grab the attention of everyone around them by creating posters on climate change.
- d. Ask students to offer suggestions around what their posters should look like and what items and words they can include. Write suggestions on the board.
- e. Distribute blank paper and colouring utensils to each student in the room.
- f. Ask them to individually create a poster that will grab the attention of students, teachers and parents in the school, and cause them to think about climate change.
- g. Display completed posters around the school.

Application

1. Ecological Footprint (estimated time: individual assignment and 20 minutes of class time)
 - a. Explain to students that your ecological footprint is a measure of your demands on nature based on your lifestyle choices and consumption habits.
 - b. Ask students to calculate their ecological footprint either at home or in the classroom on a computer. Students must record their final results.
 - c. Ask students to visit <http://islandwood.org/kids/impact/footprint/footprint.php> to take their quiz.
 - d. Once all students in the class have had a chance to calculate their footprint, bring the class together for a discussion.
 - e. Divide the class into small groups and encourage them to discuss the following suggested questions:
 - i. How many football fields will it take to grow all the food, provide materials to make everything you use and wear, and then clean and recycle the waste and byproducts you use?
 - ii. If everyone on the planet lived your lifestyle, how many earths would we need?
 - iii. What were the suggested ways you could reduce your footprint?
 - iv. What did it look like after you changed just one of your behaviours?
 - v. What will the consequences be if you continue to live the way you do?
 - f. When these discussions are complete, bring the class back together and discuss students' results and findings. Ask the class to compare their results to those of their classmates.
 - g. Together, create a list of things students plan to do to decrease their ecological footprint.
 - h. Retake the quiz in a month to see if their footprint has decreased.

Additional Resources

In addition to the above lesson plans, you may want to share some additional resources with your students. Listed below are some links to useful online resources:

Free The Children – www.freethechildren.com

We Day Teach - <http://www.weday.com/teach>

United Nations Framework Convention on Climate Change - http://unfccc.int/kyoto_protocol/items/2830.php