

Global Issues and Sustainable Solutions

1 of
20

Join us on Wednesdays and Fridays for Skills for Everyday Living, a series that goes beyond the classroom to prepare students for the many challenges of the real world. Our current topic is **Global Issues and Sustainable Solutions**, developed by *Facing the Future*. Series ends June 13.

"The essence of global issues is a recognition that the people of the world are inexorably linked and that, in today's world, that which touches some touches us all."

— Paula J. Dobriansky, U.S. Undersecretary of State for Global Affairs, 2002

What are Global Issues?

Global issues are significant issues involving most or all of the earth. Local issues, on the other hand, involve only a single specific location or geographic region. Most global issues affect people locally all over the world.

An issue is likely to be global if it:

- persists or is long-acting
- occurs across national and regional boundaries
- affects large numbers of people
- is an underlying cause of events
- is connected to other issues that meet these criteria

What are some global issues you have read or heard about? Take a look through the newspaper and use these criteria to find global issues in the news today.

Climate Change as a Global Issue

Climate change is a good example of a global issue. Climate change is a result of both natural and human-induced factors. Natural events such as volcanic eruptions can contribute to climate change. One major way that humans contribute to climate change is through activities that release greenhouse gases such as carbon dioxide and nitrous oxide. Greenhouse gases are released into Earth's atmosphere when we burn fossil fuels (such as coal, oil and natural gas) for energy to heat our homes or run our cars. When greenhouse gases build up in the atmosphere, they trap heat from the sun near Earth's surface, causing temperatures on Earth to warm. Climate change is persistent and long-acting in that

it may take many years to be fully felt, and it will require similar time frames to be resolved. Climate change has proven to be "transnational," meaning that its effects are felt well beyond the borders of countries that contribute to it most. Climate change can significantly affect millions of people and is an underlying cause of many events such as desertification (spreading of desert areas), crop failure and diminished water supplies.

Climate change is also interconnected to many other issues such as food security and forced migration. For example, as sea levels rise, citizens of island nations such as the Maldives, Tuvalu and the Solomon Islands are moving to areas of higher elevation, abandoning low-lying areas. Some of these climate refugees have migrated to New Zealand and other larger islands, where they must find new homes and jobs.*

Because climate change is interconnected to other issues, efforts to reduce climate change could in turn positively impact other issues. For example, reducing carbon dioxide emissions through use of more sustainable energy sources such as solar power would also reduce air pollution and smog.

The Iceberg Model

One model that is helpful for understanding global issues is the iceberg model. An iceberg is a large piece of ice floating in the ocean. We know that an iceberg has only 10% of its total mass above the water while 90% of it is underwater. But that underwater 90% is what the ocean currents act on and what creates the iceberg's behavior at its tip.

Global issues can be looked at in this same way. If we apply the iceberg model to climate change, we would say that at the tip, above the water, are "events," or things that we see or hear about happening in the world, such as flooding below glacial regions in Nepal or increased desertification in Chad. Events we hear about in the news often represent the iceberg tip.

If we look just below the water line, we often start to see patterns, or the recurrence of events. This might be multiple floods around the world or years of

worsening desertification. Patterns are important to identify because they indicate that a given event is not an isolated incident.

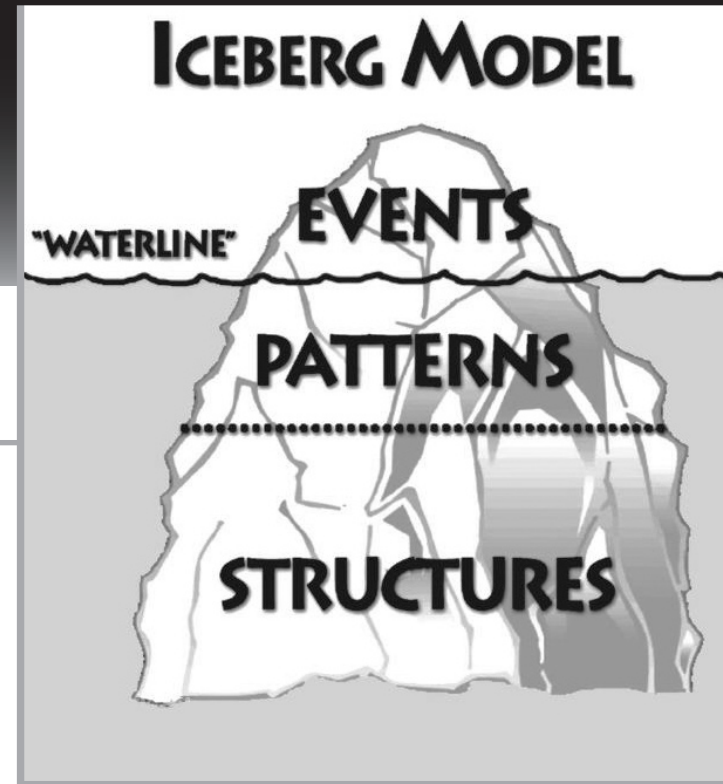
Like the different levels of an iceberg, deep beneath the patterns are the underlying structures or root causes that create or drive those patterns. For example, the flooding of New Orleans from Hurricane Katrina may be a symptom of a much larger problem of increased hurricane frequency and intensity.** These observed changes in weather are thought by many to be the result of long-term climate change. The devastating effect of Hurricane Katrina on the poorest citizens of New Orleans also highlights the potential of climate change to disproportionately impact the poor.

Finally, at the very base of the iceberg are the assumptions and worldviews that have created or sustained the structures that are in place. The important thing to understand is that in solving problems, changing the underlying structure will have the greatest effect on the events at its tip. To reduce human contributions to climate change, we will need to examine the assumptions and worldviews that have contributed to climate change. Can we use cleaner sources of energy for electricity? Can we build cities in such a way that people can walk or ride their bikes more easily? Can governments regulate the amount of greenhouse gases released into Earth's atmosphere?

Tune in on Friday for a more in-depth look at climate change and a closer look at solutions to this global issue.

* Alex Kirby, "Pacific Islanders Flee Rising Sea," *BBC News Online*, October 9, 2001. <http://news.bbc.co.uk/1/hi/sci/tech/1581457.stm>

** P. J. Webster, G. J. Holland, J. A. Curry, and H.-R. Chang, "Changes in Tropical Cyclone Number, Duration, and Intensity in a Warming Environment," *Science*, September 16, 2005, 1844-1846.



Activity

- ❖ Visit World Wildlife Fund's Climate Witness Web site www.panda.org/climatewitness to read about the effects of climate change witnessed by people all over the world. You can also learn what people are doing to stop climate change from further impacting their homelands.

Take Action!

- ❖ Interview a *climate witness*. Ask an older relative or community member to explain how climate (temperatures, rainfall, long-term weather patterns) has changed during his or her lifetime.