

WITH EYES TO SEE



GLOBAL WARMING THE ISSUES AND THE LIVES OF STUDENTS

ideas for
teachers

who want
to
integrate
social
justice
concepts

into what
and how
they teach

October
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Welcome back to a new school year! *With Eyes to See*, Concern America's social justice education newsletter, brings a global perspective to the challenging issues of our day. Each edition provides ideas and activities to engage students to act justly in their classroom, school, home, neighborhood, and into the world community. For this 2007-2008 school year, three editions of *With Eyes to See* will be produced and will cover some of the pressing issues surrounding **Global Warming**. The three editions are:

GLOBAL WARMING

1. The Issues and the Lives of Students
2. Thinking Globally, Acting Locally
3. The Politics and Global Dimensions

The term "Global Warming" first appeared in our vocabulary in 1969 in an article by United Press International. Since that time, the existence and severity of global warming has been debated by politicians, studied by scientists, and is a serious focus of environmentalists. With the release in 2006 of Al Gore's widely viewed documentary "An Inconvenient Truth" and the recent awarding of the Noble Peace Prize to Mr. Gore and the Intergovernmental Panel on Climate Change, coupled with the fact that nearly every scientist throughout the world studying climate change agrees that our earth is indeed getting dangerously warmer due to human activities, it seems the time has come for substantive and far reaching responses to climate change.

Will the media specials, celebrity speeches, and dinner table conversations be enough to motivate individuals, the business community, and governments around the world to make the changes necessary to turn around the current and coming climate changes that threaten our collective future? What role can our children and youth play? What are the biggest causes and threats? What actions will make the most impact?

The following pages and subsequent editions of *With Eyes to See* contain activities that can be infused into classroom curriculum to begin to answer these and other global warming-related questions together with our students.

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IDEAS

"It is the sense of the scientific community that carbon dioxide from unrestrained combustion of fossil fuels potentially is the most important environmental issue facing mankind."
-U.S. Depart. of Energy, Apr. 1979

"There is no debate among any statured scientists of what is happening. The only debate is the rate at which it is happening."
-James McCarthy

Define the Terms

There are many different terms used in association with *Global Warming (GW)*. Most students would probably recognize them but may not know what they mean. A good place to start when beginning to explore *GW* is a simple "define the terms" exercise.

1. Start with the existing knowledge of the students. Ask them to list on a sheet of paper all of the words they associate with *GW*.
2. As a class, create a comprehensive list of terms to be defined (have a set ready to add to the class list as needed).
3. Have the students, in small groups, find definitions for each term (using the internet, dictionaries/encyclopedias, the library, each other).
4. Compare definitions as a class. As different definitions for the same terms arise, use these moments to discuss the concepts. For each term, attempt to create comprehensive definitions. For carbon dioxide, for example, talk about what it is, what causes it (naturally and human made), how it interacts in the world (with plants, the atmosphere), and therefore its relation to *GW*.

(Relevant *GW* terms: global warming, climate change, carbon dioxide, CO₂, methane, greenhouse effect, emissions, atmosphere, green, stewardship, fossil fuels, ecological footprint)

Internet Resources

There are many books available that relate directly to *GW* and some are profiled on page four, along with relevant movies/documentaries. There are also unlimited *GW*-related resources that can be easily found on the internet from renewable energy to transportation to environmental organizations. Here are just a few:

- www.climatecrisis.net: the accompanying website to Al Gore's *An Inconvenient Truth* that contains a free educational guide for the movie, relevant links, and ideas about how to take action.
- www.ucsusa.org: the website of the Union of Concerned Scientists contains a variety of resources on *GW*. Relevant items include a "Migrating Climates" feature that illustrates climate projections in the Great Lakes region, as well as curriculum guides including: "Confronting Climate Change in California" and "Global Warming: Early Warning Signs" are just two of the free resources offered.
- www.ecojusticecollaborative.org: the website of the Eco-Justice Collaborative has a section on *GW*. Part of this section is dedicated to articles on the many impacts of *GW* around the world including rising sea levels, disease propagation, weather changes, etc.
- www.stopglobalwarming.org: this site contains ideas for taking actions to "stop global warming," including a section dedicated to the classroom.
- www.climateark.org: is a "Climate Change and Global Warming Portal: The Original Biocentric Climate Science, Policy & Advocacy Search Engine."
- www.grist.org: an independent environmental news source that covers a variety of environmental-related articles and discussions. A recent column is about green, home-made cleaning products.
- And many more.....

Footprint Exercises

A very useful exercise for helping each of us understand our role in causing *GW* is to calculate our "ecological footprint." There are many versions of this tool, one of which was created by American Public Media entitled "Consumer Consequences" (<http://sustainability.publicradio.org/consumerconsequences/>). The internet-based game asks questions about our energy use, transportation, food choices, waste production, and shopping habits. As the game is played, the background graphics change to reflect the player's "world of consumption," i.e., what the world would look like if everyone lived exactly like you. As well, after each section of the game, it shows how many "Earths" of natural resources are needed to sustain this lifestyle. As an added feature, the game enables the user to compare her/his lifestyle with other players, and gives the chance to modify choices to reduce one's footprint.

1. Play the game first to familiarize yourself with it, making note of the questions and the areas that cause the largest footprint.
2. Brainstorm with students the parts of their lives that they believe cause *GW*. It is okay if they miss some of the areas used in the game or come up with others.
3. Have the students order their list of causes in terms of degree of impact, i.e., which lifestyle choices have a greater impact on *GW*, which the least.
4. Present the questions from the game to the class and have each student calculate their own answers. Depending on the age of the students, it will probably be necessary to take time on each question discussing how to answer them.
5. Play the game. This step depends on the classroom's access to the internet. If each student has a computer, each can play the game; if the class can use a limited number of computers, divide the students up in groups and have them choose one of the members to profile for the game; if one computer is available and can be projected on a screen, choose one student in the class to profile; etc.
6. As the students are playing, have them make notes about what is happening after each section, and how they feel. At the end, have them record their final results.
7. Discuss what everyone learned. Questions could be: How many Earths are needed to support our lifestyles? Which activities cause the most impact? Why? How do the scores for different students compare? How do they compare with others who have played the game (this is a feature found at the end of the game)? What could each student do realistically to reduce her/his footprint?
8. Using the last question, have the students list five things they can do to reduce their footprints. If possible, have them replay the game with these new lifestyle changes. How much difference does it make?
9. Have the students refine their action lists. Ask the students to compare lists, and to discuss the feasibility that each will be able to/ be motivated to make these changes. Also, ask if students feel they need to make these changes. Are the changes that really make an impact too difficult for them (based on where they live, or their family's choices, or their family's income, or their own motivation to make changes).

The next edition of *With Eyes to See* will have another related exercise, based on the *Low Carbon Diet*, and will attempt to push students further to help reduce *GW*.

"At its core, global climate change is not about economic theory or political platforms, nor about partisan advantage or interest group pressures... It is about protecting both "the human environment" and the natural environment. It is about our human stewardship of God's creation and our responsibility to those who come after us.
-U.S. Catholic Bishops

RECOMMENDED

"For the first time in history, my community has had to use air conditioners. Imagine that, air conditioners in the Arctic."
-Inuit leader Sheila Watt-Cloutier

"It is difficult to get a [person] to understand something when [his/her] salary depends upon not understanding it."
-Upton Sinclair

RESOURCES

The following book and video resources only scratch the surface, but can be used as a start:

VIDEOS

- Leonardo DiCaprio's 11th hour (out soon)
- Al Gore's An Inconvenient Truth (and companion book)
- Arctic Meltdown/Rising Seas
- Too Hot NOT to Handle
- Who Killed the Electric Car

BOOKS

- David Gershon's *Low Carbon Diet: A 30 Day Program to Lose 5,000 Pounds* (this book will be used in the second edition of *With Eyes to See* this year...stay tuned!)
- *The Down-to-Earth Guide to Global Warming* by Laurie David and Cambria Gordon (ages 8 and up)
- *This Is My Planet: The Kids' Guide to Global Warming* by Jan Thornhill
- *Global Warming: The Complete Briefing* by John Houghton
- *Animal, Vegetable, Miracle: A Year of Food Life* by Barbara Kingsolver, Camille Kingsolver, and Steven L. Hopp
- *Red Sky at Morning: America and the Crisis of the Global Environment* by James Gustave Speth

CONCERN AMERICA

is an international development and refugee aid organization that sends doctors, nurses, engineers, educators, and nutritionists as volunteers to train and empower the materially poor in Mexico, El Salvador, Guatemala, Bolivia, Colombia, Ecuador, Mozambique, and Western Africa.

In support of these projects, Concern America offers educational services in California which include:

- * Walk Out of Poverty
- * Infusion Methodology Workshops for teachers
- * "Training for Transformation" Workshops for adults
- * School and parish consulting for the implementation of the Bishops' Pastoral: "Sharing Catholic Social Teaching: Challenges and Directions" (June, 1998)
- * Lending library for resources of peace and social justice

Feel free to contact the Education Coordinator at Concern America for more information on any of these projects.

11th Annual Walk Out of Poverty: March 15, 2008

For the past 10 years Concern America has held the increasingly successful Walk Out of Poverty, an event that provides education for the participants and a sense of solidarity with our brothers and sisters around the world, while raising money for Concern America's development work in Latin America and Africa. In 2007, the Walk raised more than \$60,000. If you live in the Orange County, California area, join us! Call Concern America to get information, walk packets, posters, flyers, and/or to schedule a presentation for your group.



If you live in the Chicago region, a parallel event will be held on the same day. Contact Concern America's Chicago Branch Office for more details at 773-290-8692.