

NZAEE Workshop

Educating for Climate Change Adaptation: Exploring what this might mean

Hilary Whitehouse

Peter Smith

Apologies from Bob Stevenson

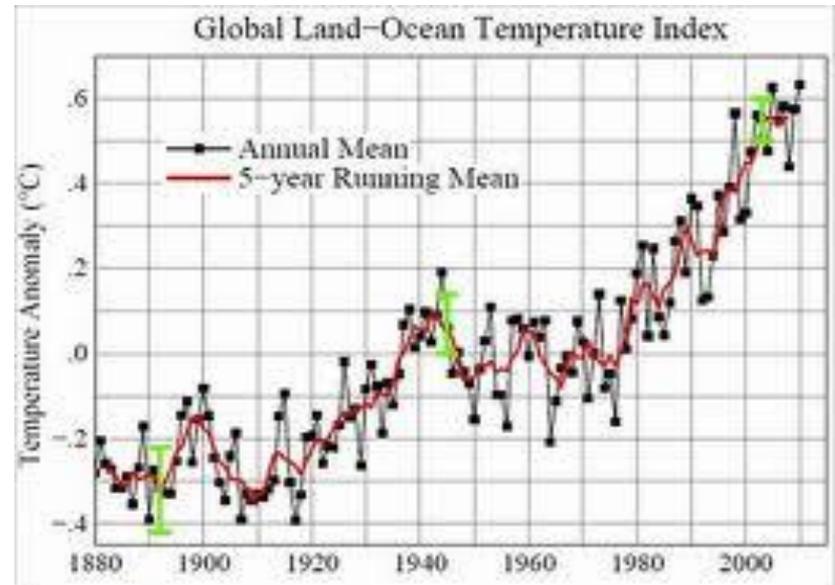
James Cook University

Cairns, Queensland

People are acting ...

Climate Governance at the Crossroads: Experimenting with a Global Response after Kyoto (2011, OUP)

Matthew Hoffman documents that while negotiations for climate mitigation at international level have stalled, a multitude of initiatives at all levels, corporate, municipal, NGOs, schools (etc) are addressing carbon mitigation. Unfortunately, the myriad of responses may not be coherent enough globally to avoid thinking about the necessity for **adaptation** as well as mitigation.

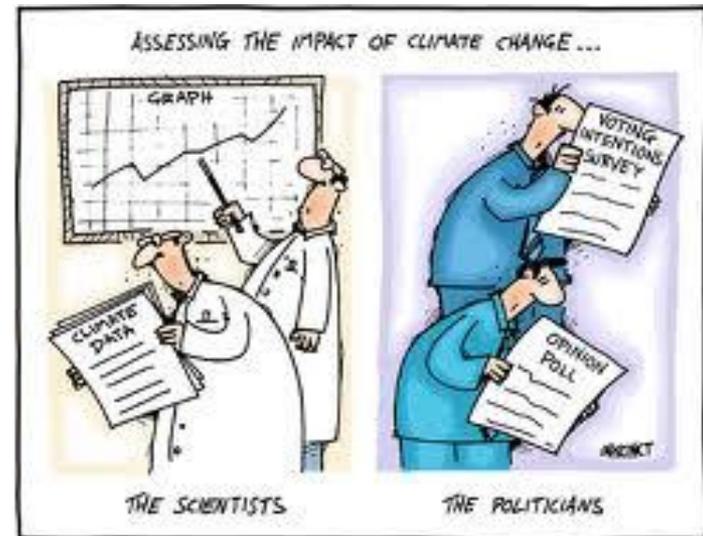


But predictions remain dire...

Peters et al. (2011) Rapid growth in CO₂ emissions after the 2008-2009 global financial crisis. *Nature Climate Change* correspondence. DOI:10.1038/nclimate1332

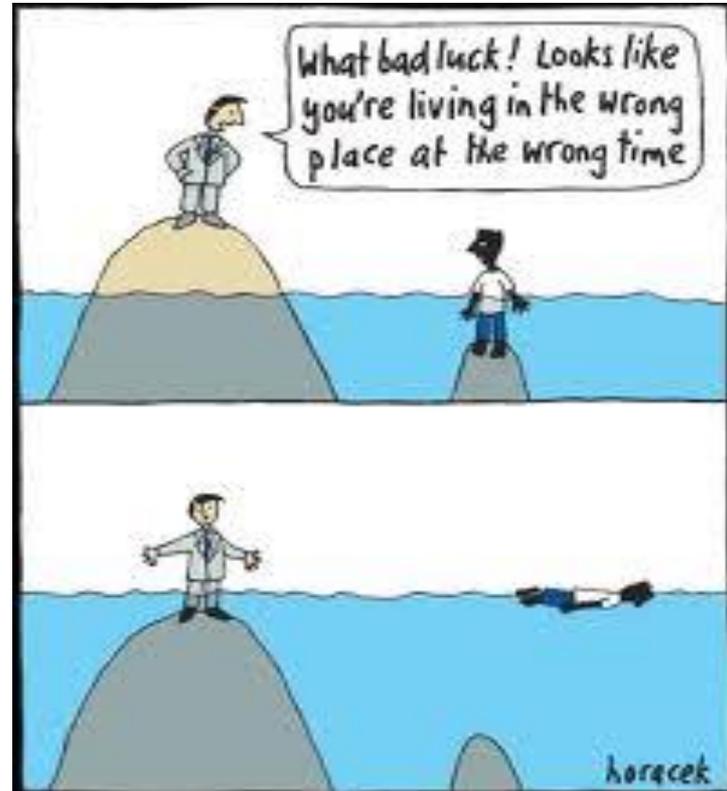
2010 “highest total annual growth” of carbon emissions ever recorded and “the highest annual growth rate since 2003 (and previously 1979)” ... “The **GFC has had little impact on the strong growth trend of CO₂ emissions** that characterized most of the 2000s”.

2009 was the first year that CO₂ emissions from developing countries exceeded those from developed countries.

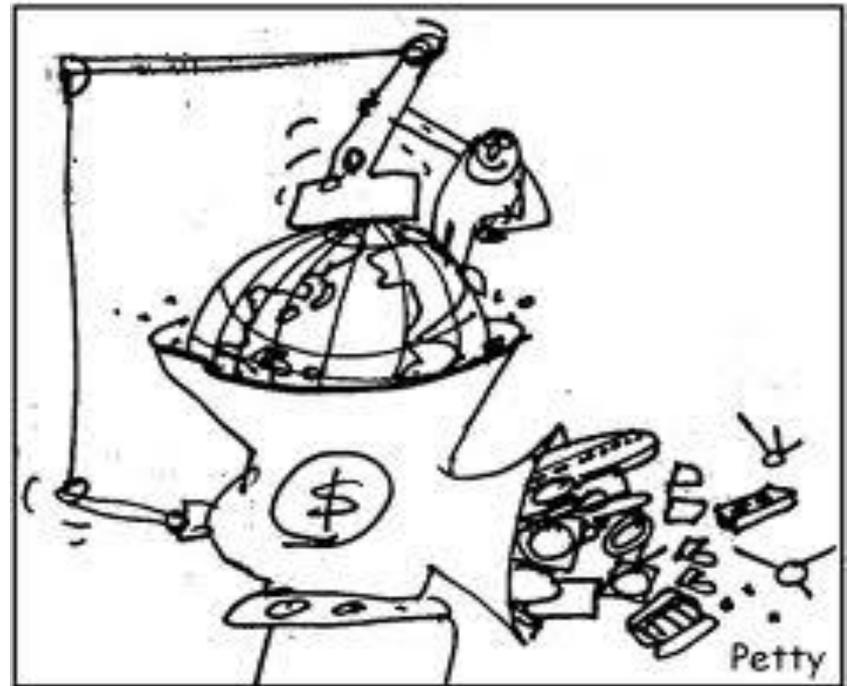


*The National Adaptation Strategy
and Plan of Action on Climate
Change for Nigeria (NASPA-CCN)
November 2011 Executive
Summary*

“Climate change is the latest
challenge to sustainable human
development” (page 1)



Cecilia Lundholm (2011, SRC) argues environmental education is largely missing the interrelated issues of ecosystem services and human well-being: **“We are facing problems that are inherently complex and unpredictable.** Students should therefore be introduced to system dynamics thinking and how everything in a social and ecological system is interlinked”.



The Stockholm Resilience Centre:
Resilience is defined as the capacity of a system to continually change and **adapt** and yet remain within critical thresholds.

We remain hope-full that that severe climate change may still be mitigated. However, focus of this workshop is on **education for adaptation** taking the view that the laws of thermodynamics (cause and effect) may work faster than the human capacity to mitigate in a locally, nationally and globally meaningful ways.



A starting point for thinking about education for climate change adaptation ...

The focus of education for adaptation is an approach that builds sources of resilience and adaptive capacity to enable adaptations to climate change that do not further degrade environmental resources. (from Carl Folke)

<http://environment.yale.edu/climate/news/SixAmericasMay2011/>

Executive Summary:

“The research segments the American public into six audiences that range along a spectrum of concern and issue engagement from the Alarmed, who are convinced of the reality and danger of climate change, and who are highly supportive of personal and political actions to mitigate the threat, to the Dismissive, who are equally convinced that climate change is not occurring and that no response should be made. The Six Americas are not very different demographically, but are dramatically different in their beliefs and actions, as well as their basic values and political orientations.” (page 5)



1. Alarmed (US 12%) 😞
2. Concerned (US 27%)
3. Cautious (25%)
4. Disengaged (10%)
5. Doubtful (15%)
6. Dismissive (10%)

1. Hilary's immediate family analysis

Alarmed (= freaked out): son, brother

Concerned: son, husband, brother-in-law

Cautious: daughter, sister-in-law

Disengaged: mother-in-law, brother-in-law

Doubtful: mother, brother in law, sister-in-law

Dismissive: brother-in-law, sister-in-law, father-in-law

Is it wise to raise climate change at family gatherings?

2. Friends go across all categories

The dismissives and doubtfuls actively dislike talking about climate change because it changes relationships - Hilary no longer so agreeable 😞

Hilary has made new acquaintances from the alarmed and concerned category who are happy to have a climate change conversations 😊

First Workshop task

Conduct an Personal Analysis estimate of range of views held by your strongest social group (family and/or friends but NOT your fellow environmental educators): 20 minutes max.

Use a six point scale and rate each person you know

1. Highest level of acceptance of climate change **ALARMED**
2. Second highest level of acceptance of climate change **CONCERNED**
3. Considering the evidence sincerely **CAUTIOUS**
4. Not interested in thinking about it **DISENGAGED**
5. Doesn't think that it is happening **DOUBTFUL**
6. Climate change is just a crock to active denial **DISMISSIVE**

Then let's talk about the range of opinion you have to deal with ...

Second Workshop task

Peter, if it's not in my backyard I don't give a shit.

If I believe in climate change then I'd have to do something about it.
(social group comment to Sally)

I don't give a fuck about climate change I want to fish where I want.
(dinner party comment to Hilary)

Education levels, socio-economic status do not necessarily influence people's willingness to engage with climate change. Acceptance of threat of climate disorder more related to political beliefs and viewpoints and acceptance that humans are powerful enough to influence planetary systems.

Share the most outrageous or personally shocking thing somebody has said to you about climate change in any social context. 10 minutes

Third Workshop task

Starting a Conversation

- As environmental educators, where are you at in thinking around the issues of climate change adaptation?
- How do you think educators can respond to this educational challenge? What would you need?
- How do we move to inform and teach for climate change adaptation when the spectrum of people's acceptance is so diverse?
- What is an appropriate role for school and community education in developing adaptive capacity and socio-ecological resilience within our communities?

Resources we find useful

Centre for Research on Environmental Decisions (2009) *The Psychology of Climate Change Communication: A Guide for Scientists, Journalists, Educators, Political Aides and Interested Public*. New York.

<http://www.cred.columbia.edu/guide>

Climate Literacy Network

<http://www.climateliteracynow.org>

The Stockholm Resilience Centre

<http://www.stockholmresilience.org>

A Toolkit for Designing Climate Change Adaptation Initiatives. UNEP

<http://www.undp-adaptation.org/projects/websites/docs/KM/publications/>