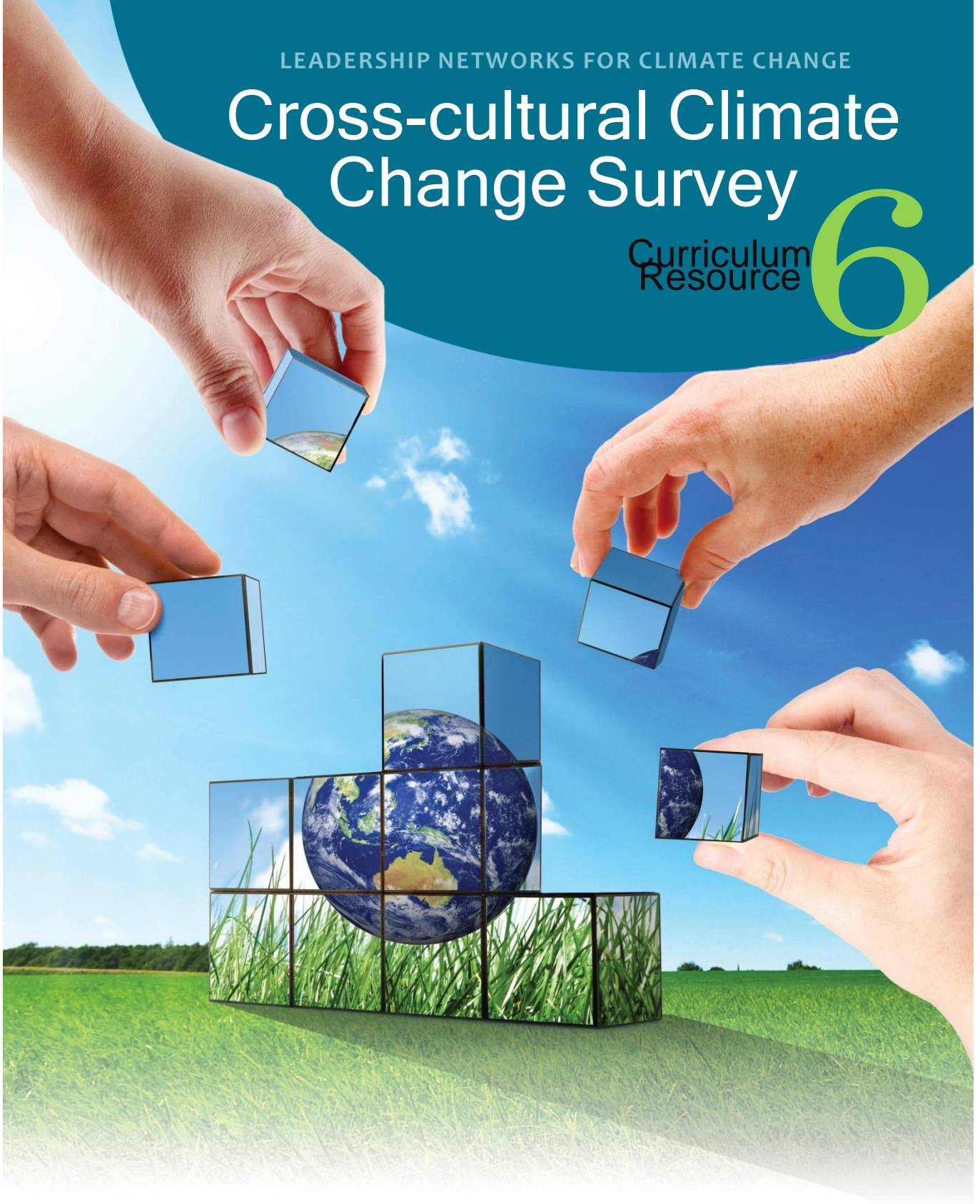


LEADERSHIP NETWORKS FOR CLIMATE CHANGE

Cross-cultural Climate Change Survey

Curriculum Resource

6



UNIVERSITY OF
WOLLONGONG



AUSTRALIAN
LEARNING
& TEACHING
COUNCIL
Promoting excellence in higher education

Climate change survey

A cross-cultural learning activity

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Themes

- Interdisciplinarity
- Problem-based learning

Description

The University of Wollongong's network activator collaborated with a colleague in California to survey two undergraduate classes about their attitudes and perceptions of climate change. This international, cross-cultural activity was designed to get first year climate change students in Wollongong to talk to first year earth science students in California about their carbon footprint, lifestyles and perceptions of climate change in their respective countries.

Both groups of students completed the survey before talking with each other via a video link. The survey was then used for four additional UOW classes and the results are being explored with respect to differences in attitudes and correlations with the students year level and area of study.

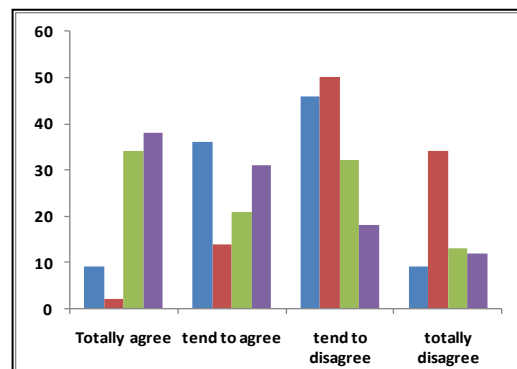
The learning objectives for this activity were for students to:

- **explore their own attitudes to climate change;**
- **research their impact by calculating their ecological footprint; and**
- **contextualise by discussing with their own cohort as well as other classes.**

Students and staff reported being surprised about the results of the survey. Some assumptions about attitudes were challenged as a result of sharing and discussing the results.

The most difficult part of the activity was to get discussion moving between groups of students who were not face to face, especially when those students had not met previously. Participants nevertheless felt that it was worthwhile for bringing a personal aspect to the issue of climate change and many of the students from a science background were less familiar with discussions about attitudes than those from humanities schools.

“The seriousness of climate change has been exaggerated”



Responses of students enrolled in science, social science, indigenous studies and accounting subject at UOW

CLIMATE CHANGE SURVEY PART I

My country of residence is::

Australia United States

My age is

<18

18-20

20-30

30-40

40-50

Above 50

I am:

Female male

My intended or declared major is:

My intended or declared minor is:

My primary method of travel from my home (during the teaching semester) to class is (Please choose one only):

car (sole occupant)

car (car pool)

bicycle

train

bus / tram / trolley

ferry

walk or run

The approximate distance between my home (during the teaching semester) and campus is

<1.6 km

1.6 - <8 km

8 - <16 km

16 - <32 km

>32 km

When compared with pre- 1800s levels, do you think that mean global temperatures have generally risen, fallen, or remained relatively constant.

risen

fallen

remained constant

Do you think human activity is a significant contributing factor in changing mean global temperatures?

Agree

Disagree

Personally, do you think that you are well informed or not about human induced climate change?

Very well informed

well informed

Not very well informed

Not at all informed

Don't know

"Climate change is an unstoppable process, we cannot do anything about it"

totally agree

tend to agree

tend to disagree

totally disagree

"The seriousness of climate change has been exaggerated"

totally agree

tend to agree

tend to disagree

totally disagree

"Emission of CO₂ (Carbon dioxide) has only a marginal impact on climate change"

totally agree

tend to agree

tend to disagree

totally disagree

"Fighting climate change can have a positive impact on the economy"

totally agree

tend to agree

tend to disagree

totally disagree

How serious a problem do you think climate change is at this moment?

Please use a scale from 1 to 10, 1 would mean that it is not a serious problem at all and 10 would mean that it is extremely serious. Fill in the Blank

How serious a problem do you think climate change will be in 50 years time?

Please use a scale from 1 to 10, 1 would mean that it is not a serious problem at all and 10 would mean that it is extremely serious. Fill in the Blank

The media portrays climate change science in a responsible way

- Agree
- Disagree
- Don't know

My actions can make a difference to reducing global anthropogenic carbon emissions

- Agree
- Disagree
- Don't know

In your opinion, would you agree or disagree that doubt exists over the general level of scientific agreement on human induced climate change?

- Agree
- Disagree
- Don't know

PART 2 – Carbon and Ecological Footprints Overview

According to EPA Victoria's website "the Ecological Footprint measures how much nature we have, how much we use, and who uses it. It shows us how much biologically productive land and water a population (an individual, an organisation, a city, a country, or all of humanity) requires to support current levels of consumption and waste production, using prevailing technology."

"In general, the Ecological Footprint measures resource consumption of human activities across the whole lifecycle of a product or service and converts this to the amount of land needed to supply the resources consumed and assimilate the waste generated. Ecological Footprint accounts for our global nature of our economy by capturing the impact of imports and exports.

The Ecological Footprint does not account for hazardous impacts of products such as the impact of dioxins released in the atmosphere, nor does it measure water usage against water availability. The Footprint tool does, however, measure the land required to eliminate Carbon dioxide (CO²) emissions and the impact of the energy required to provide the water we consume.

Ecological Footprint accounts calculate humanity's demand on nature in specific, understandable terms, using official government statistics. The accounts are helping hundreds of individuals, businesses, governments and sustainability practitioners around the world to more effectively manage the earth's ecological assets and move society toward a sustainable way of living."

SURVEY PART II

Go to EPA Victoria's Ecological Footprint calculator and calculate your ecological footprint. Complete the survey as honestly and accurately as you can as you proceed.

Click on the [EPA ecological footprint calculators](#) and then on [Calculate your personal ecological footprint](#) and complete as you proceed.
(<http://www.epa.vic.gov.au/ecologicalfootprint/globalfootprint/index.asp> - flash version)

Where possible use your own individual estimates for:

1. Electricity and gas usage in kWh - usually found on the respective bills
2. If you travel by car, the fuel consumption of your vehicle
3. The total number of km you travel in your car per week
4. If you travel by public transport, the total number of km you travel per week

What is the breakdown of your Ecological Footprint? Fill in the values in Table 1 after you have completed calculating your ecological footprint.

Table 1. My ecological footprint

Category

Global hectares

Food
Transport
Shelter
Goods/Services
Total

If everyone lived like you, how many planet Earth's would be needed to provide the resources (complete the online ecological footprint calculator)

0.5 earths
1 Earths
1.5 earths
2 Earths
2.5 earths
3 Earths
3.5 Earths
4 Earths
4.5 Earths
5 Earths
5.5 Earths
6 Earths
6.5 Earths
7 Earths
7.5 Earths
8 Earths
8.5 Earths
9 Earths
9.5 Earths
10 Earths
More than 10 earths

Comparing students just like yourself, from Australia and the USA, which group of students do you think would have the higher carbon footprint?

Australian students
Students from the USA
Their carbon footprints will be about the same