Changing Behaviour Towards a Sustainable Future.

Robbie Nicol
Moray House School of Education
The University of Edinburgh
January 2013

Robbie.nicol@ed.ac.uk
www.education.ed.ac.uk/outdoored/



For further information and articles relating to this presentation and for access to a number of policy documents, research reports, literature reviews etc., please visit the website below.

In particular go to the resources section and to the publication lists for each member of staff.

Robbie Nicol, Peter Higgins, Simon Beames & Beth Christie
Moray House School of Education
The University of Edinburgh

www.education.ed.ac.uk/outdoored/

My Starting Point

O Human activities are fundamentally altering the planet's ability to sustain us in the long term.



Photo –Google images

O I believe that the outdoors provide places where individuals can rediscover their direct dependence on the planet through embodied experiences.

Not just rational and intellectual.

What is the Role of Outdoor Education in Changing Behaviour Towards a Sustainable Future?

Looking in the Rear View Mirror.

Some historical observations



Research shows a strong tendency towards personal and social education outcomes of:

- O Self-esteem;
- O Self-awareness;
- Interpersonal relationships.

The argument behind the research goes:

- O Industrial society creates anxieties,
- O Children lack self-esteem,
- Outdoor activities are designed to challenge people physically and mentally,

- O Participation in Outdoor Education raises self-esteem,
- O Right? Wrong!
- O Flawed logic supported by flawed research.

Assumption - self-esteem is low to start with.

- people who do not necessarily have training in psychology can recognise and diagnose it.
- does joy riding raise self-esteem?
- there are people in our societies who may well suffer from an inflated egos.
- Not specific to an outdoors setting

Self-esteem: lessons from the past

- We cannot simply assume we know what self- esteem is (or any other human quality).
- O Positive/humanistic psychology and 'teaching happiness' peaked some time ago.
- What about humility and humbleness?
- Outdoor experiences are more than people having a good time.

I am not saying anything new but what I am saying is important for how we think about practice

- o "It is often assumed that there are all these benefits, particularly for youngsters, in having high self-esteem whereas there aren't. It is overrated. There is no link between self-esteem and academic success..."
- O Carol Craig. Chief Executive of the Centre for Confidence and Well-Being
- o www.centreforconfidence.co.uk

[&]quot;If you try and protect kids' by boosting their self-esteem...you are not teaching them the skills they need (e.g. critical thinking) it is counterproductive" Both quotes from TESS 11/1/2013

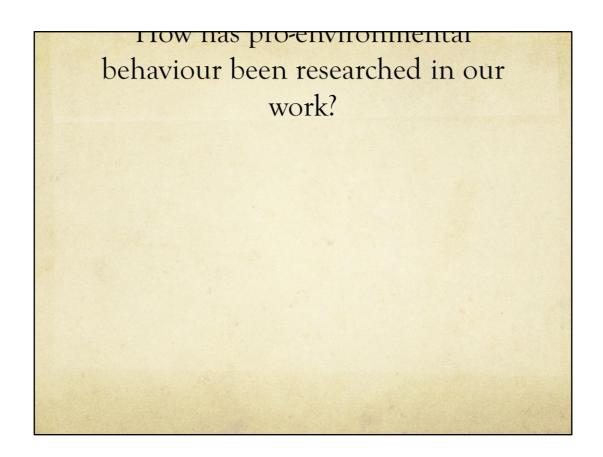


Photo – Pete Higgins

Science Education

- O Is knowledge enough?
- O Environmental problems are not caused by ignorant people (David Orr)
- The IPCC findings represent the greatest scientific consensus of all time yet...

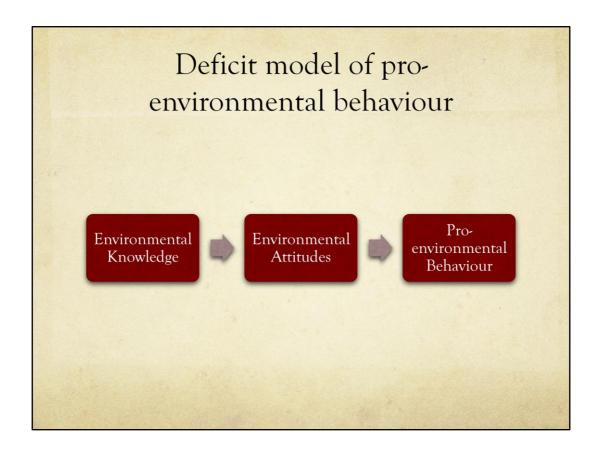
Global average temperatures continue to rise. People/governments are not sufficiently motivated to act



New Ecological Paradigm (NEP) Scale

- O Survey Based Metric
- Measures individuals' worldviews (attitudes, values, beliefs)
- Assumption: worldviews influence behaviour

Dunlap, R., Van Liere, K., Mertig, A., & Jones, R. E. (2000). Measuring endorsement of the New Ecological Paradigm: A revised NEP scale. *Journal of Social Issues*, *56*, 425-442.



Flip side - lack of knowledge was responsible for a lack of pro-environmental behaviour.

Criticism - based on *rational* thought i.e. if people become aware of their impact they will change their behaviour

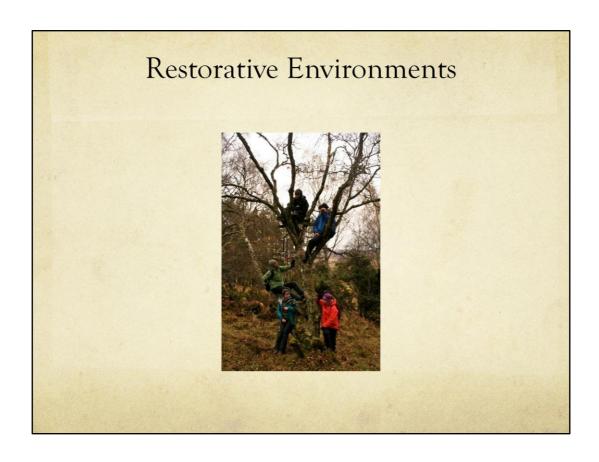
Linear

Kollmuss and Agyeman, 2002)

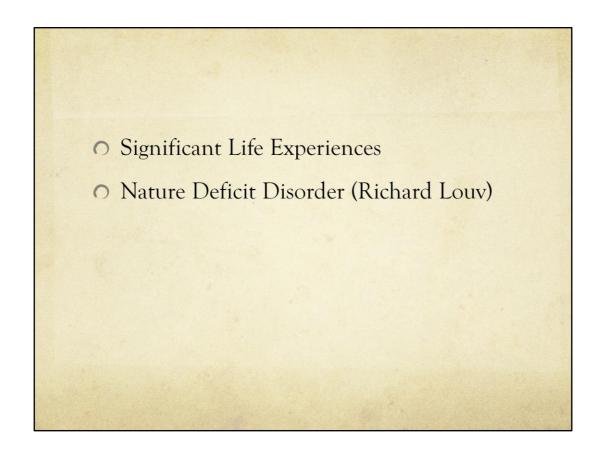
Connectedness to Nature Scale (CNS)

- O Survey Based Metric
- A measure of individuals' emotional connection to the natural world
- Nature-based experiences are important in determining environmental behaviour
- Personal well-being is linked to naturebased experiences

Mayer, S. F., & Frantz, C. M. (2004). The connectedness to nature scale: A measure of individuals' feeling in community with nature. *Journal of Environmental Psychology, 24,* 503-515.



Kaplan and Kaplan Research demonstrates that nature helps to promote pro-environmental behaviour. Photo-Outdoor Environmental Education: Concept-Based Practice Course 2012-13

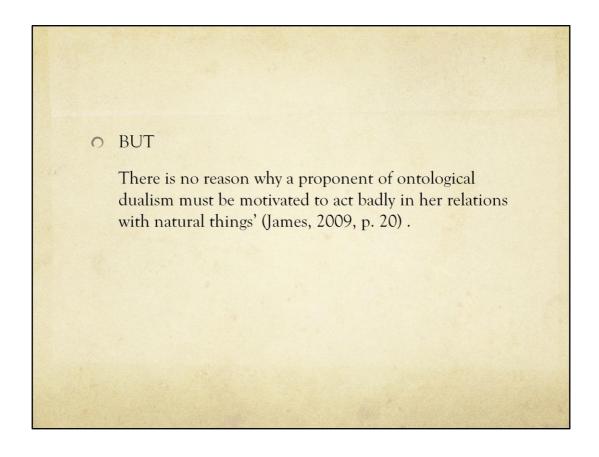


^{&#}x27;SIGNIFICANT LIFE EXPERIENCES' (PARTICULARLY OUTDOORS) ARE IMPORTANT IN STIMULATING INTEREST IN GREENSPACES AND IN ENVIRONMENTAL ORIENTATION (E.G. KAPLAN & TALBOT, 1983; PALMER & SUGGATE, 1996; PALMER, 1998; HUNGERFORD & VOLK, 1990).



This is a dualism. Charactersied by...

A change in worldview from Anthropocentrism to Ecocentrism required



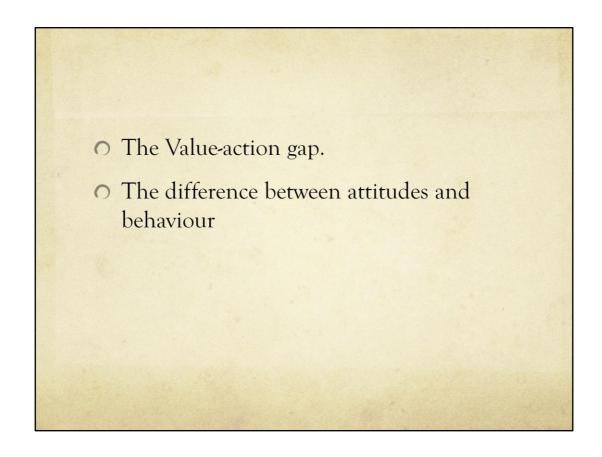
You don't need to be deep green.

This fits with EL i.e. start with where people are at: emotional, intellectually, spatially etc

Much research suggests this

James, S. (2009) The Presence of Nature: A Study in Phenomenological and Environmental Philosophy

(Basingstoke, Palgrave, Macmillan).



High level value placed on experience of nature but a low level action to protect nature.

Because of the range of choices open to us as consumers it is difficult to identify why this gap exists. Theories of rational behavior suggest that knowledge will guide us.

Linear theories based on psychological methods are of limited use to understanding our work. They do not account for situational factors, processes and social contexts. The main criticism is that they are based on rationality and the human condition is not simply rational (even when they acknowledge the importance of emotions).

Different views

- One person might join an NGO to save Pandas
- Another may purchase local food
- O Someone else might have pledged not to fly
- All may share and express an ecological worldview
- YET their motivations may not be ecological

Lessons from the Past

- O Research has been superficial
- O The world has changed
- O The shift in focus from the green environment to the triple bottom line (social, environmental and economic)

Looking in the rear view mirror we can see we have come a long way

It All started Here!

- O Jan Amos Komenský (Comenius)
- A founding father of modern education (17th century)
- "Education according to nature" (predates Rousseau)

I want to say something of the country we are in and acknowledge its contribution to the wider world





WWF's 2012 *Living Planet Report* shows that globally, humanity is currently using 50% more resources than the planet can sustain.

http://www.wwf.org.uk/what_we_do/about_us/living_planet_report_2012/
Lets not dwell on these figures

Photo-Google images

The difference between being nature-based and nature-attentive.

Nicol, R. (accepted) Returning to the Richness of Experience: Is Autoethnography a Useful Approach for Outdoor Educators in Promoting Pro-Environmental Behaviour?

Journal of Adventure Education and Outdoor Learning.

Nicol, R. (accepted) Entering the Fray: The Role of Outdoor Education in Providing Nature-Based Experiences that Matter. Educational Philosophy and Theory.

So far only In and About NOT For

Connection

- o 'It is our sensory immersion that most profoundly links us to the land.'
 - Professor Anthony Weston
- O It is the lack of sensory immersion and outdoor experiences that leads people to be unaware of their connection to nature.

Implications for programme design

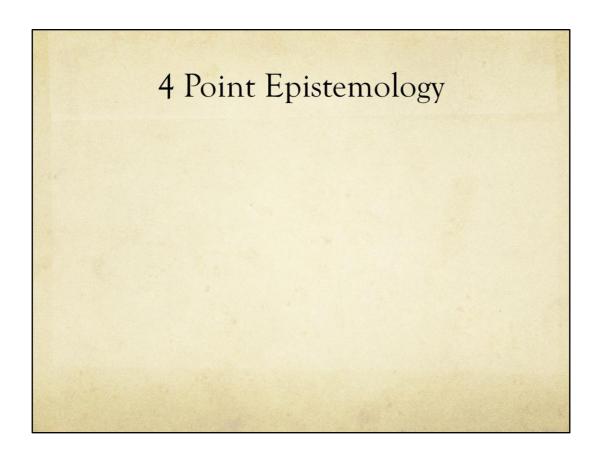
Epistemological diversity

Define epistemology

The 'Three Hs' Education for Heart, Hand & Head

Artwork- Mary Higgins

PESTALOZZI, But Geddes: Strict order – emotional/aesthetic, physical, intellectual.



Experiential knowing

O is through direct face to face encounters with person, place or thing; it is knowing through empathy and resonance.

Presentational knowing

O emerges from experiential knowing, and provides its first expression through forms of imagery such as poetry and storytelling, drawing, sculpture, movement dance and so on.

Propositional knowing

O is knowing "about" something through ideas and theories, and is expressed in abstract language or mathematics.

Practical knowing

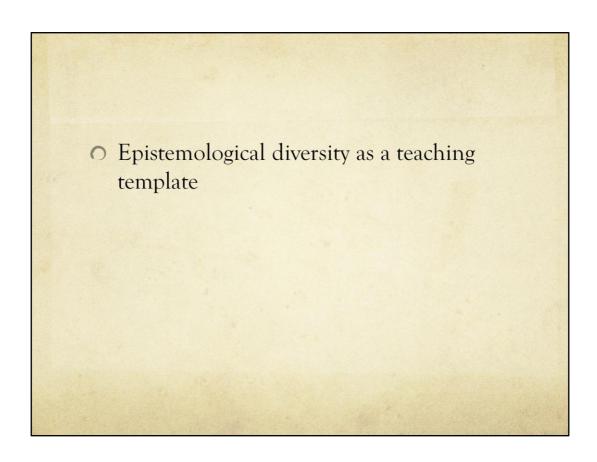
O is knowing "how to" do something and is expressed as a skill, knack or competence.

OACTION

It is time to give up the hopeful belief in the transfer of learning from one place to another. If as educators we cannot see action in our programmes then we are not really engaged in behavioural change.

Note this is not a linear process – like action research it is cyclical with multiple points of entry

Reason, P. (2006) Choice and Quality in Action Research Practice. Journal of Management Inquiry, 15(2), 187-203.



Looking Ahead

O What is the future of outdoor environmental education (or any of its synonyms)?

Just Being there?

- O Previous research has helped us understand the potential of our work
- Models of epistemology diversity offer ways of thinking about programme design
- O Health and Well-Being agenda informed by psychological-evolutionary theory
- O The morale significance of presence in nature (James, Nicol)
- O New research provides even more support

Is Green Good For You?

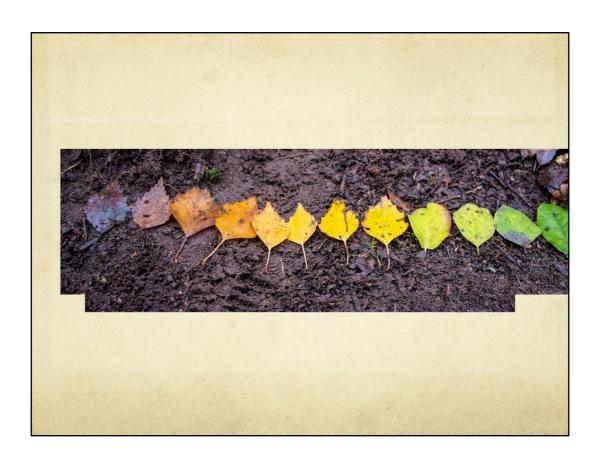
- O Biophilia (E.O. Wilson)
- O Sunlight and Vitamin D
- Recovery from Stress

Catharine Ward Thompson

Catharine Ward Thompson

- Objective measure of the relationship between green spaces and stress based on cortisol levels
- http://www.openspace.eca.ac.uk/researc hteam_cthompson.php

Working with medical researchers

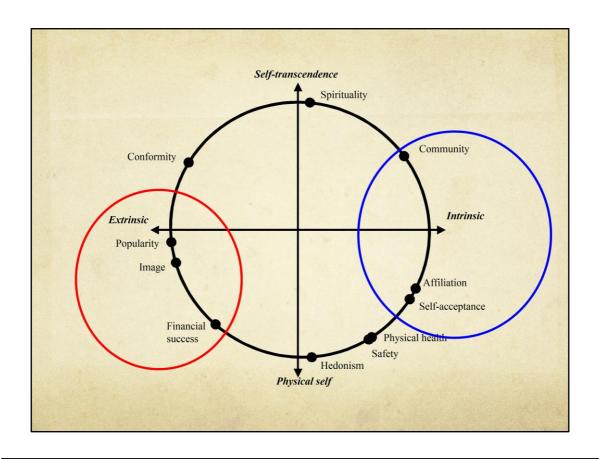


There is a growing body of evidence to suggest that being outdoors is good for us but we are still a long way short of working out the motivating factors to sustainable behaviours might be.

Photograph by Peter Reason

Values and Motivation

- Each of us is motivated by lots of values, but to differing degrees.
- O They are not 'fixed' and are subject to external influences.



The closer the proximity of any one value to another, the more likely that both will be of similar importance to the same person. By contrast, the further a value is from another, the less likely that both will be seen as similarly important. This does not mean that people will not value both hedonism and spirituality, for example – rather, they will in general tend to prioritise one over the other. Values can thus be said to have *neighbours and opposites*. Slide by Tim Kasser

Circumplex Models

- Compatible values are next to each other
- Conflicting values are on opposite sides
- Not theoretical models but established empirically

Idea from Tim Kasser

Which Values?

- empathy towards those who are facing the effects of humanitarian and environmental crises,
- concern for future generations, and recognition that human prosperity resides in relationships both with one another and with the natural world.
- Tom Crompton. (2010) Common Cause: The case for working with our cultural values p5

[&]quot;These values must be championed if we are to uncover the collective will to deal with today's profound global challenges".

http://www.wwf.org.uk/change

- O Values are not character types
- Each of us is motivated by all (to varying degrees)
- O Values can become 'engaged' through experiences
- O 'Reminders' help us to respond in particular ways
- O Strengthening of one helps 'bleed over' to another in close proximity (the constellation affect)



Rachell Howell

- Pro-environmental behaviour is not necessarily motivated by ecological worldviews
- There is little longitudinal research into the effects of interventions
- Interventions may have only short-term effects

"although environmental concern is correlated with PEBs that are low-cost in terms of time, effort, or money, concern is not a good predictor of more costly behaviours" p37

Rachel Howell (2012). Promoting Lower-Carbon Lifestyles: The role of personal values, climate change communications and carbon allowances in processes of change. PhD thesis: University of Edinburgh

Values and Goals -Implications

- O The challenges facing educators is enormous
- O These challenges are not simply about tinkering with content and method

- O Disruptive experiences help to challenge existing values (Kasser)
- The effects of interventions tend to be short lived (Howell)
- O People tend to reject information that conflicts with their exisiting values
- O People resort back to old habits very quickly

What will we need to teach?

- 1 How do the ecological systems of the Earth function?
- O 2 How are we personally tied into these systems in our lives?
- O 3 How can we make changes (individually and collectively) in order to lessen our impact upon these systems?

This not new Steve Van Matre was saying this some 30 years ago

Why Outdoor Education?

- O Being *in* 'the environment' and experiencing natural processes
- O BECAUSE WE ARE ALREADY THERE IMMERSED.

Outdoor Experiences are Special BUT.... Not simply doing what we have always done.

- O Programmes longer rather than shorter
- O Clearly challenge the value of consumer culture (Kasser)
- O We need to work harder to know how we will know if our teaching has been successful (the lessons from self-esteem)
- O More community based projects built up over time, repeated opportunities (Kasser)

If outdoor experiences are to have this transformative power then it is likely that they will include these

Outdoor Experiences are Special BUT....

- Nature-based experiences may be good for us BUT
- O In what ways are they good for the planet?
- O Behaviour change is not easy look at the evidence from the medical profession in terms of addiction, look at the evidence of consumer behaviour where psychologists are employed by supermarket changes to make us buy stuff we do not really need

If outdoor experiences are to have this transformative power then it is likely that they will include these

- O Changing the world is an inside job
- The essential nature of this work is spiritual
- The ultimate question is one of identity
- Who are we as a species living on this planet when the glaciers are melting and the atmosphere altering?

Some Conclusions

- O The education systems of the world will have to adapt to prepare young people for an uncertain future
- O Young people will need to be prepared in terms of knowledge and skills, critical awareness, attitudes, personal and social qualities, and above all the capacity to continue to learn.

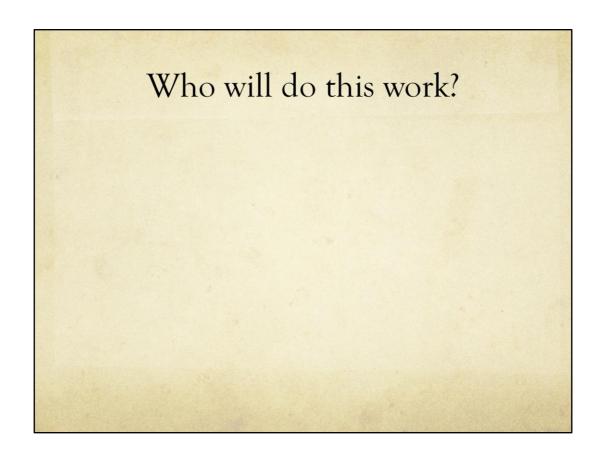
The ecological, economic and social environment of our planet will change considerably in the 21st century

Our young citizens will have to address these issues

WE cannot afford to make claims about the benefits of short programmes in light of this challenge (this helps Richard to support his claim)

http://www.youtube.com/watch?v= j92Tk4xnPb8

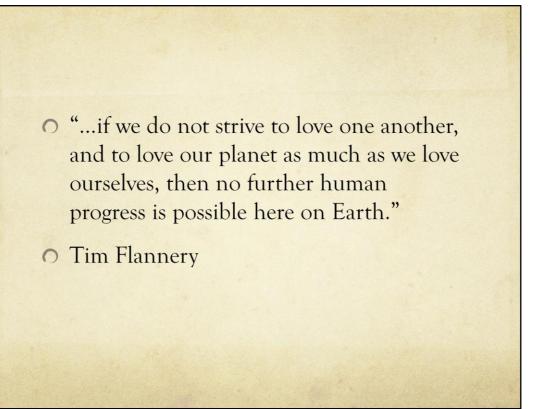
O At the Council of Outdoor Educators of Ontario annual conference (2012), members were asked to finish the statement: Outdoor Education is...



Margaret Mead

O "Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has".

Is this us, in this room?



Flannery, T. (2010) Here on Earth. Allen Lane: London. P281

Changing Behaviour Towards a Sustainable Future.

Robbie Nicol
Moray House School of Education
The University of Edinburgh
January 2013

Robbie.nicol@ed.ac.uk
www.education.ed.ac.uk/outdoored/

