

# Learning for Sustainable Futures? Turning literacy into action

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NEW

FAMILY

SCIENCE

UNIVERSITY

ARTS

SOCIAL  
MEDIA

PERSONAL

POLITICS

# Education for Sustainability?

- Global challenges
- Post-Rio agenda
- EfS = educational change and equip learners to address challenges
- **Beyond knowledge** – more about **what we do** and **how we respond** ...
- Embedding this throughout learning – where and how?

EDUCATION FOR SUSTAINABILITY: FIVE ESSENTIAL PEDAGOGICAL PRINCIPLES	
Futures thinking	Futures thinking engages people in imagining preferred visions for the future. It involves the exploration of assumptions and of meaningful understandings and interpretations of sustainable development. This process of envisioning futures leads people to take ownership and responsibility for more sustainable futures.
Critical and creative thinking	Critical and creative thinking enables people to explore new ways of thinking and acting, make informed decisions, and create alternatives to present choices. It involves reflecting on how people interrelate with one other, understanding cultural differences and creating alternative ways to live together.
Participation and participatory learning	The engagement of people is needed to build sustainable futures collectively. Engaging diverse stakeholders and communities is essential, as they value and include differing knowledge systems and perspectives. The process of participation is also important for creating ownership and empowerment.
Systematic thinking	Thinking systemically is essential to sustainable development, as piecemeal approaches have proved not to work - instead resolving one issue while creating other problems. Sustainable development requires approaches which go beyond analysis in terms of 'problem-solving' and/or 'cause-effect'.
Partnerships	Partnerships are a motivating force towards change. They empower people and groups to take action, to take part in decision-making processes and to build capacity for sustainable development. Intercultural and multi-sectoral partnerships in particular are often highlighted as critical in EfS approaches.

SOURCE: These five components are reflected in the IUCN publication prepared for use worldwide during the UNESCO *Decade of Education for Sustainable Development* from 2005-2014. See: Tilbury, D & Wortman, D (2004) *Engaging People in Sustainability*, IUCN - The World Conservation Union, Gland, Switzerland.

# 'Indicative EfS entry points into sustainability'

Alternative futures  
Responses to climate change  
Cultural diversity and equality  
Human rights  
Leadership and managing change  
Citizenship, democracy, governance  
Ecosystems and ecological principles  
Corporate social responsibility  
Waste, Water, Energy  
Community resilience  
Peace, security, conflict resolution  
Millenium Development Goals  
Globalisation of trade  
Learning organisations and communities  
Social justice  
Biological diversity  
Natural resources management  
Accountability and ethics  
Cultural heritage  
Intercultural understanding  
Food security  
Health and wellbeing  
Rural and urban development  
Consumerism and ethical trade

## = Geography?

1.1 Geography occupies a distinctive place in the world of learning, offering an integrated study of the complex reciprocal relationships between human societies and the physical, chemical and biological components of the Earth. Geographers study place, space and time, recognising the great differences and dynamics in cultures, political systems, economies, landscapes and environments across the world, and the links between them.

3.7 Geographers are able to use critically a systems framework to conceptualise patterns, processes, interactions and change in the physical world. They know how to incorporate into this framework:

- natural environmental impacts on human activity (for example natural hazards)
- human impacts on biophysical systems (for example air pollution, deforestation, desertification), and on components of the climate system
- the management of environments and landscapes.

3.8 Geographers demonstrate knowledge of the main dimensions and scales of economic, social, political and environmental inequality and difference, are familiar with a range of interpretations of these processes, and are aware that scale itself can be contested and politicised. A critical evaluation of the concepts underlying development and sustainability needs to be an integral part of the knowledge base of the student.

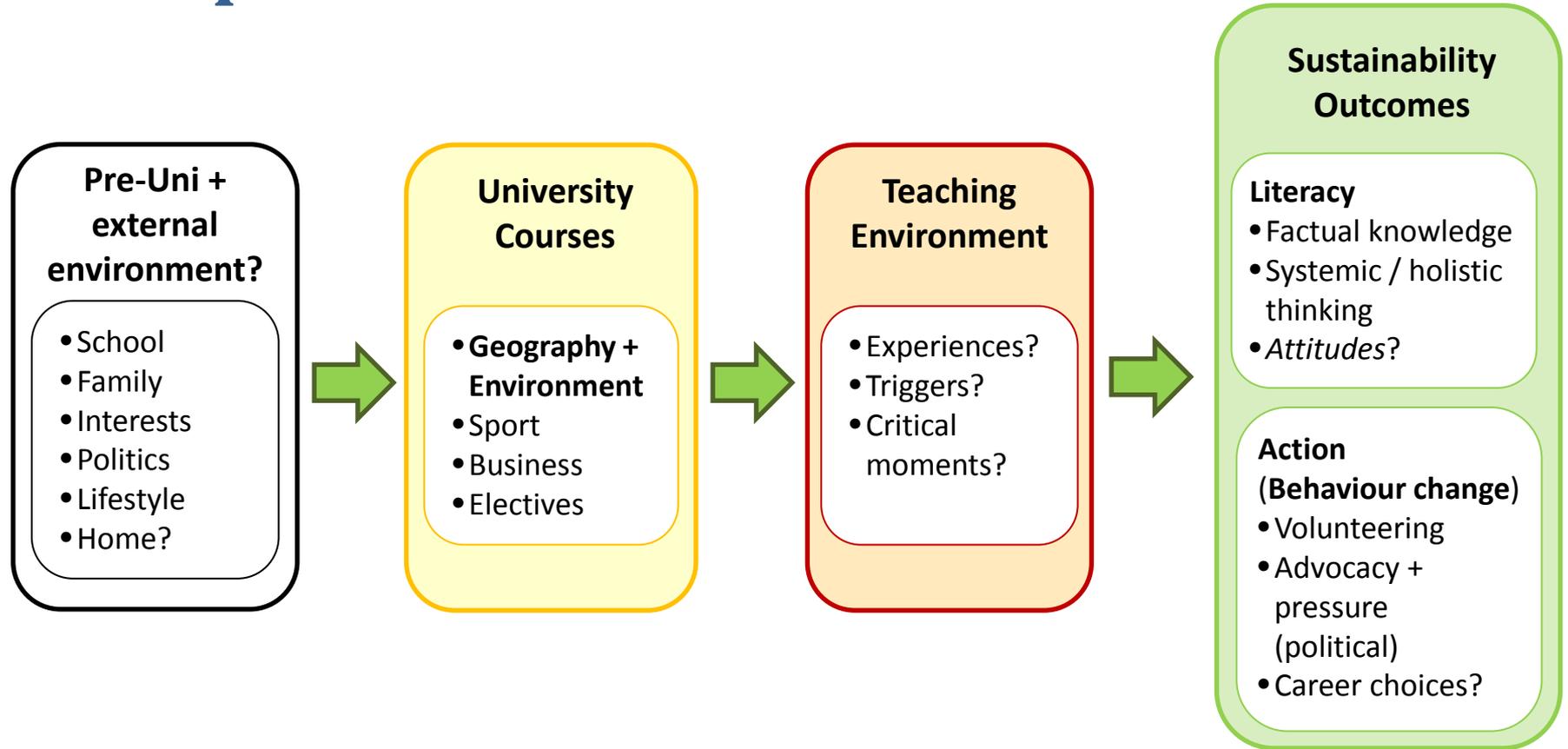
- Geographers as paragons of sustainability learning? ...
- If so, why and how? (and if not, why not?) ...



# Project Aims

1. Identify the **range of activities that students engage in that evidence sustainability literacy and action for sustainable development;**
2. Identify the **'critical moments'**, triggers or learning experiences **within the university** environment that have precipitated this engagement;
3. Explore how these experiences **differ between cohorts of students from different courses** and hence **different 'disciplinary' learning environments;**
4. Identify the extent to which **sustainability literacy and action is influenced by a range of factors external to the university learning environment**, e.g. family experiences, personal interests, lifestyle choices etc.
5. Identify areas of **best teaching and learning practice for facilitating sustainability literacy that leads to *'taking ownership and responsibility for more sustainable futures'*.**

# Conceptual Framework



# Methodology

- Questionnaires (n=245)
- ISE, ISES, WBS
- 2<sup>nd</sup> + 3<sup>rd</sup> year classes
- Four sections:
  - 1: Attitudes towards sustainability
  - 2: About you
  - 3: Learning experiences at UoW
  - 4: Behaviour and action
- Focus group

**“Student Attitudes towards Sustainability”** 

The University’s ‘Learning for Sustainable Futures’ scheme aims to explore and develop the connections between curricula and active engagement in sustainability learning. We would be very grateful, therefore, if you could spare five minutes to answer a few questions about your attitudes towards sustainability as part of this project. Please be reassured that all responses are voluntary and confidential, and your anonymity will be assured unless you indicate that you would like to be contacted again to participate in follow-up discussions or focus groups. If you have any questions or concerns please contact the Project Co-ordinator, Katie Amey at: [amek1\\_14@uni.worc.ac.uk](mailto:amek1_14@uni.worc.ac.uk), or Dr Alan Dixon: [a.dixon@worc.ac.uk](mailto:a.dixon@worc.ac.uk).

**Section 1: Your attitudes towards sustainability**

Please read each of the following statements & tick the most appropriate box:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Don't know
1. I worry that our planet is damaged beyond repair	<input type="checkbox"/>					
2. Learning about sustainability is not important	<input type="checkbox"/>					
3. The University of Worcester does enough to encourage sustainability	<input type="checkbox"/>					
4. Climate change will not affect me in my lifetime	<input type="checkbox"/>					
5. I am interested in sustainability issues	<input type="checkbox"/>					
6. Sustainability is about:						
a. protecting the environment	<input type="checkbox"/>					
b. community engagement	<input type="checkbox"/>					
c. social equality	<input type="checkbox"/>					
d. economic development	<input type="checkbox"/>					
e. recycling	<input type="checkbox"/>					
7. What does sustainability mean to you?	<input type="text"/>					

**Section 2: About you**

8. What is the title of your degree?

9. What year are you in? 1st  2nd  3rd

10. If you are taking an elective module, please specify it here:

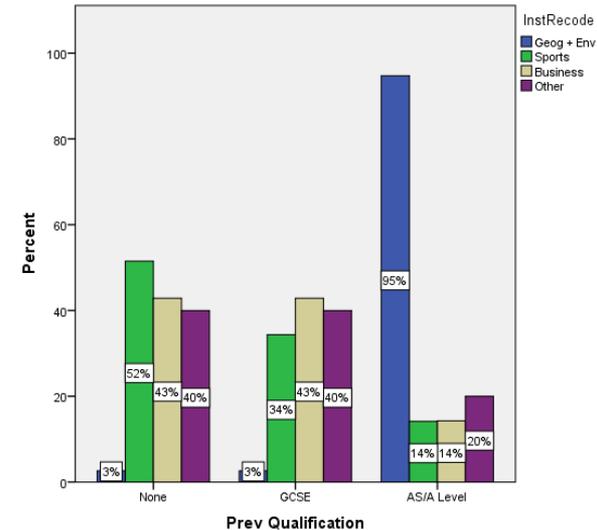
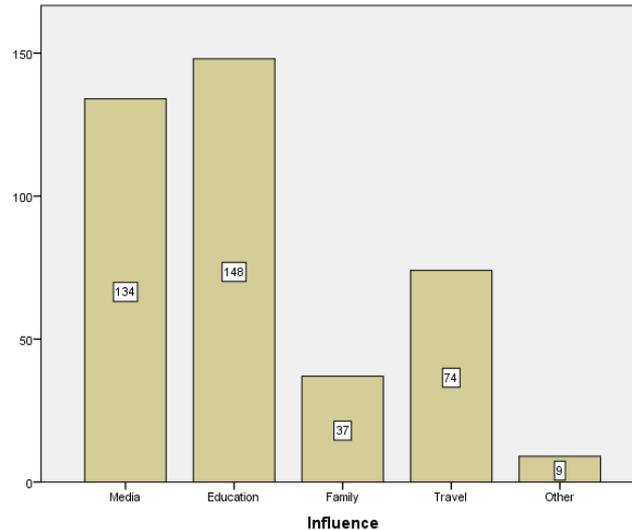
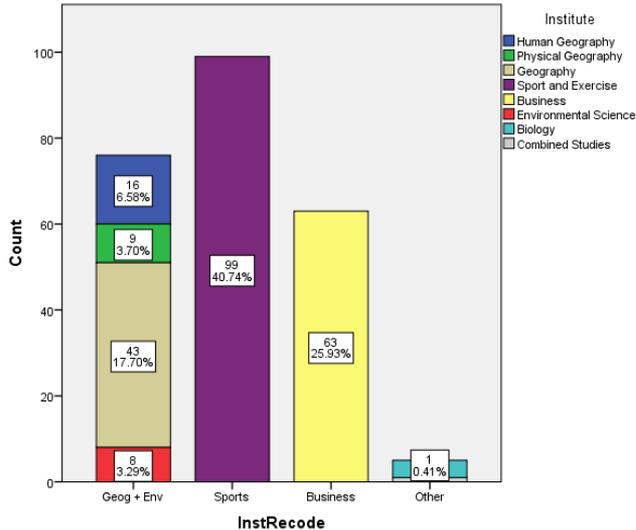
11. What qualifications do you have in geography/environmental sciences? None  GCSE  AS/A Level

12. Which of the following has influenced your interest or knowledge in sustainability?  
Media  Education  Family  Travel

Other:

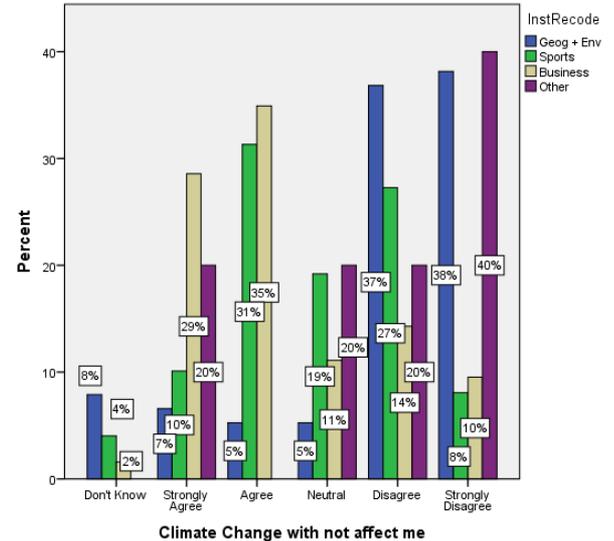
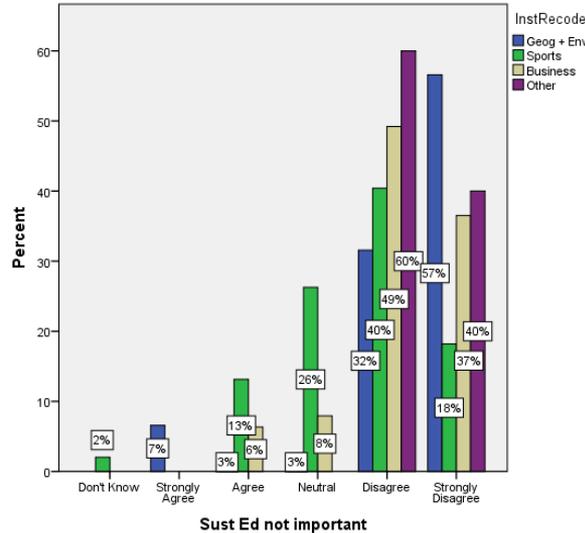
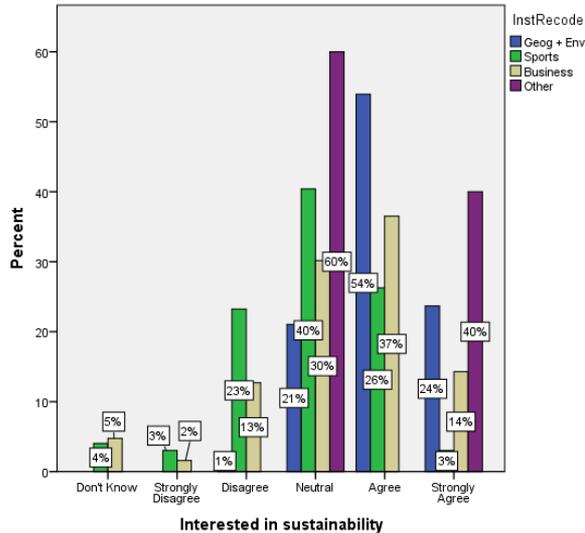
# Respondent profiles

- 63% level 5; 37% level 6
- 96% didn't do elective; 1% for others
- Largely influenced by Education and Media
  - Varied background in Geography or Environmental Studies



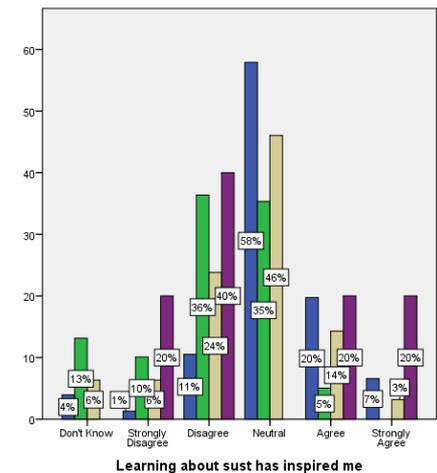
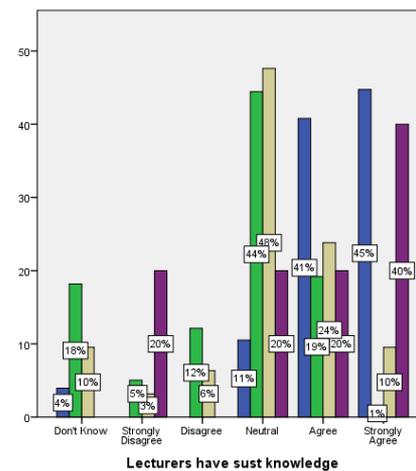
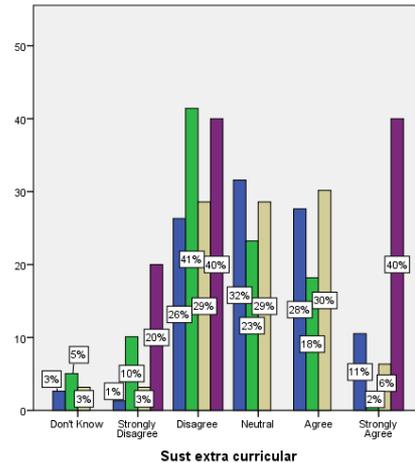
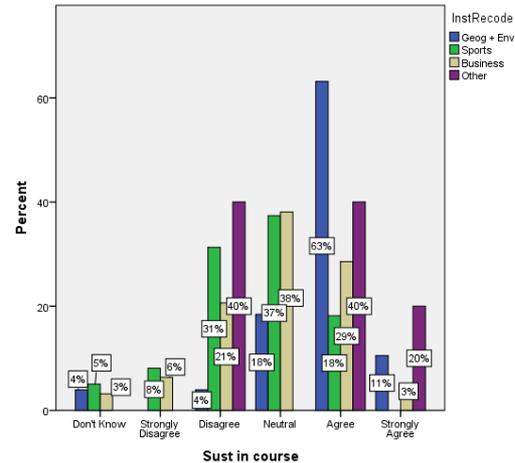
# Attitudes towards sustainability?

- Strong sense of sustainability literacy
- Little difference between institutes
- Geography and Environmental students consistently higher
- Climate Change is very controversial



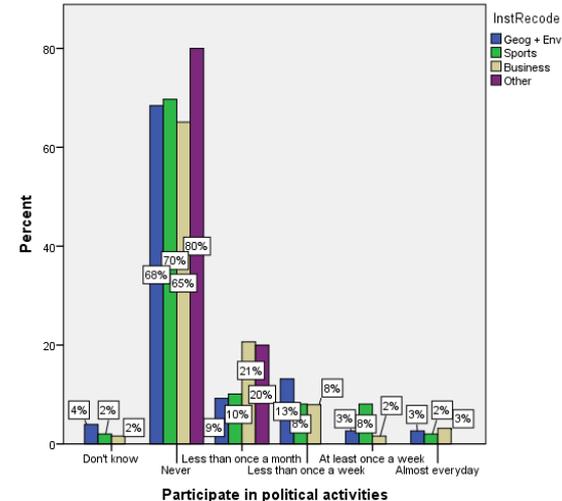
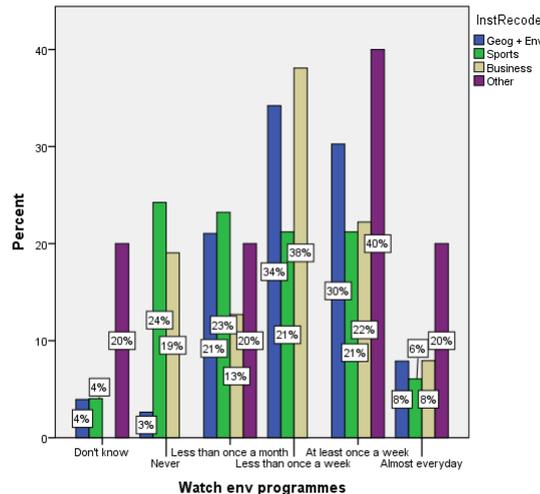
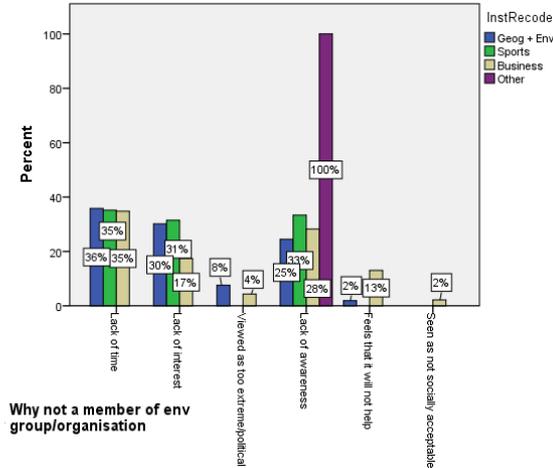
# Learning at UoW?

- 74% of Geog and Env recognise integration of sustainability in course
- Sports and Business much less
- Extra-curricular? 31% overall; Sports less; **Business & Geog similar**
- Lecturer knowledge? <10% overall disagree; Geog 96%
- Feeling inspired? ... Not much.



# Action and behaviour?

- 97% are not members of political or environmental organisations
  - Generally a lack of time, interest and awareness
- Actions showed both positives and negatives
  - Generally, students performed 'traditional' and 'conservative' sustainability behaviours
    - Recycling, turning off appliances, using sustainable transport, etc.
  - Few students went beyond this
    - Attending sustainability events, participating in political activities, not eating meat, etc.



# Key themes emerging from questionnaires

- Good sustainability literacy – knowledge of ‘issues’
- But climate change scepticism ... [or misunderstanding?]
- Sustainability heavy throughout Geog + Env; lecturers knowledgeable; basics covered ... job done?
- Notable [predictable?] differences between institutes
- **But** ... inspired? Sustainable learners? [means what to whom?]
- Overall, poor external participation [is education influential?]
  - time and interest?
  - evidence of “ownership for more sustainable futures”?...

# Focus Group

## Key Themes

- **Disconnection** of people and purchasing [lack of critical and systematic thinking]
- **Personal experience** inspires ESF and action
  - Education forms a baseline for development, but development is lacking

## But ...

- Competition and incentives drive behaviour
- Fieldwork and experiential ... 'going places'
- Knowledgeable people: tutors, guest speakers, case studies etc.
- Perception of negative leads to action [fear vs. hope!]

# Conclusions

- A snapshot ... and it's complicated
- So where is EfS at UoW?
  - Getting there... 'literacy' good; building blocks but not the glue
  - ... even among those who get the most
  - Apathy v enthusiasm? Over-saturation? Despair!?
  - C2013 Sustainability Elective
- Confusing rhetoric of 'sustainability' – multiple meanings?
- Simple and complex. It's everywhere ... you just have to know what it looks like [a bit like *Feedback*]
- Action for Sustainable futures? – some, but conditioned behaviour?
- 'Critical moments' & good practice recognised; how to embed these?
- Module / event-based versus cross-curriculum integration?



- Making it **relevant** (and explicit) to everyone ... but moving from a multi- to a transdisciplinary approach ...

*“...I mean, if we are truly looking to try and help people get educated about sustainability, it’s no good having it somewhere down the line, because the people who are interested in sustainability already, will probably look for it, because that’s part of what they’re looking for in their course. However, if you want to get new converts it’s got to be out there without them looking.”*



*“It’s really hard in the Business School actually, because we had one sustainability module that was again an elective, but I didn’t take it personally, but other colleagues who have taken it say that it had nothing to do with business, and it had nothing to do with engaging future business people with sustainability. It talked only about conservation. It was almost the same elective that you guys did, but done in the Business School, and it shouldn’t be done like this!”*

*“...if they’re gonna put it in a business course, they need to kind of link it to the rest of the course, because sustainability is far more than just recycling. Like, the recycling they use is like recycling plastics, recycling paper, there’s way more to recycling than that!”*

