

Institution: University of Derby

Unit of Assessment: Earth Systems and Environmental Sciences (07)

Title of case study: Lived Experience of climate Change e-Learning (LECH-e)

1. Summary of the impact (indicative maximum 100 words)

Lived experiences of ordinary people and how they rationalise events provides rich insights for several disciplines e.g. medicine. With climate change, whilst the value of anthropogenic activity is increasingly recognised, models based on positivist scientific rationality still dominate. What is yet unclear is how a global citizenery understands climate change through its own individual and group "lived experiences". This research is significant in that it seeks to conceptualise and theorise what is meant by the "lived experience" of climate change and how this shapes the "lay rationality" and actions of people in both the developed and the developing world.

2. Underpinning research (indicative maximum 500 words)

The notion that, above all, people's "lived experiences" are the key to behaviour and action around climate change emerged from (a) discussions within the Sustainable Development Network, a coalition of UK academics (of which Abbott was one) and African practitioners; (b) consequent workshops that took place at Makrere University, Uganda and (c) the production of an academic/practitioner collection (*Environment, Development and Sustainability in the 21st Century*). It became increasingly evident that whilst ordinary people take some note of scientific analysis of climate change, both in the global South and the North, it is their own "lived experiences" that shape how they rationalise climate change and respond to it. Many in the South who live in poverty, rely on subsistence cropping, for instance, are likely to tap into existing indigenous knowledge that is not underpinned by academia. Equally in the North, whilst there may be recognition of wider climate change events, people may not be so keen to make changes that impinge "in their backyard". It is therefore critical to recognise the "lived experiences" of a diverse global citizenry and how this influences the lay rationalities which influence behaviour and action around of climate change.

A successful application for funding (October 2009- October 2011) to develop the concept and theory of "lived experiences of climate change" was developed through a collaborative partnership between eight EU universities and the European Association of Distance Teaching Universities. The project created a climate change postgraduate curriculum (LECH-e) which would allow a global reach through virtual learning communities aiming to (a) contribute to an informed, active European citizenry and the United Nations Decade on Education for Sustainable Development; and (b) inform European Union policy. As "climate change" cannot be reduced to a singular disciplinary understanding, LECH-e drew on different disciplinary strands including physics, chemistry, economics, political sciences, sociology, engineering, natural resource management and development geography. It also ensured that both academics and practitioners were involved in the production of Open Resources for virtual communities across the world as well as research publications that arose from it (see http://www.leperiodche.open.ac.uk/people).

Critical insights from the above and research publications that followed are about the importance of knowledge diversity and public legitimacy including:

- 1. Knowledge diversity with respect to climate change is a key resource for effective policy and practice: It is important to cross cultural, methodological and subject boundaries for multi-level analysis and transboundary competences to create inclusive, effective policy and practice.
- 2. That the knowledge created by both natural and social scientists is necessary but insufficient. The ways in which public throughout the world engage with scientific



knowledge about climate change is through experiential "lived experiences" (a very under researched area).

- 3. Knowledge derived from "lived experiences" is instrumental in public legitimacy for climate change policy and action.
- 4. Climate change knowledge therefore requires new methodological approaches as a synthesis of scientific understanding and "lived experience".

This necessitates innovative approaches to draw out experiences of people framed around citizenry participation through virtual interaction and virtual communities.

3. References to the research (indicative maximum of six references)

Funding:

The project initially developmental support from the European Association of Distance Teaching Universities (EADTU) Netherlands taskforce for facility and administration. A full award (being 75%) ERASMUS grant of Euro 386,905 plus additional travel and subsistence monies was achieved in October 2009. University of Derby share was €38,000 (plus€ 5,500 travel and subsistence) over three years.

Research insights related publications:

Wilson, G. and D. Abbott (co-editors) (2012) International Journal of Innovation and Sustainable Development, 'Special Issue: From Disciplinarity to Interdisciplinarity and Beyond in Higher Education on Climate Change' 6 (1), 1-90

(<u>http://www.inderscience.com/browse/index.php?journalID=33&year=2012&vol=6&issue=1</u>) Inderscience, ISSN (Online): 1740-8830, ISSN (Print): 1740-8822 (50% contribution: compiled and co-edited a whole journal special issue and wrote the preface).

D. Abbott (2012) 'Enhancing Online Climate Change Education: Distance and Conventional University Collaboration for a Master's Curriculum, *International Journal of Innovation and Sustainable Development*, **6** (1), 78-89. doi: 10.1504/IJISD.2012.046055, ISSN (Online): 1740-8830, ISSN (Print): 1740-8822 (100% contribution).

D. Abbott and Wilson, G. (2012) 'The Lived Experience of Climate Change: Complementing the Natural and Social Sciences for Knowledge, Policy and Action', *International Journal of Climate Change: Impacts and Responses*, **3 (4)**, 99-144. (50% contribution: D. Abbott Lead author).

D. Abbott , J. de Kraker , P. Pérez , C. Terwisscha van Scheltinga , P. Willems and G. Wilson (2011), 'The Lived Experience of Climate Change': Creating Open Educational Resources and Virtual Mobility for an Innovative, Integrative and Competence-based Track at Masters Level', *International Journal of Technology Enhanced Learning*, 3 (2), 111-123, Inderscience, ISSN: 1753-5255 (30% contribution).

D. Abbott (2011) 'Text and Activity books OER: Module 3 *Interdisciplinary methodologies for investigation into the 'lived experiences' of climate', T869 Climate Change: from Science to Lived Experience,* p1-102, online MSc course <u>http://www.leche.open.ac.uk/</u> (100% contribution).

D. Abbott (2011) 'Text and Activity books OER: A Sociological Perspective on Climate Change' in *T869 Climate Change: from Science to Lived Experience*, in Module 1 Text book: Introduction to Climate Change in the Context of Sustainable Development, p143-161, online MSc course http://www.leche.open.ac.uk/ (100% contribution).



4. Details of the impact (indicative maximum 750 words)

The LECHe project narrative

The importance of "lived experience" as experiential meaning framed within specific cultural and environmental contexts evolved from two conference/workshops held in Uganda in 2004 and 2006 (Conference Report, 2006) between academics and NGO development practitioners. This led to a joint Sustainable Development Network for OU academics and MSc Management Masters alumni Sub-Saharan Africa to which U0A7 (Prof Abbott) was invited to join. Simultaneously, UOA7 was invited to explore how formal education reflects on development practice at a "grassroots" level in a consultancy to analyse some 60 MSc projects. These were written mostly by world-wide practitioners from NGOs, public and private services who had studied OU MSc Development Management courses resulting in an important paper "*Development management as a reflexive practice*" (D. Abbott, S. Brown and Wilson, G. 2006).

It became increasingly clear that there was much knowledge value in academic and practitioner partnerships from multidisciplinary fields, evident in the production of a seminal collection of targeted papers, *Environment, development and sustainability: perspectives and cases from around the world* (2009). A key feature is the book's diverse authorship, spanning 12 countries, and bringing together 33 social and "pure" scientists and practitioners in one volume - thus unifying an epistemological narrative drawing on cultural and disciplinary diversity, and expanding the concept of interdisciplinarity by demonstrating the validity of practitioner and academic partnerships.

These partnerships further revealed the importance of "lived" experiential meanings of climate change. For instance, NGOs such as *Food for the Hungry* working in the various conflict and food insecure regions in the Pader region of Northern Uganda, reported that climate chaos and unpredictable events had exacerbated hunger crisis to increasing hunger to the point of desperation to which the poor could only respond through their "lived experiences" (which were also "lay rationalities". Arguably, the rich do the same (e.g. no wind turbines in my back yard!) (See also Abbott 2009). It is therefore "lay rationalities" (rather than scientific ones) that give credence to policy legitimisation and changes in citizenery behaviour, poor or rich. Yet, practitioners needed to articulate the needs of the poor to a global forum but they lacked capacity and educational opportunities to build academic knowledge, especially in developing countries.

The arguments for (i) the recognition of experiential knowledge in meeting global policy challenges, and (ii) OERs that could reach practitioners and world universities easily were presented to the European Association of Distance Teaching Universities (EADTU) Task Force on Sustainable Development for innovative pathway for teaching and research by Prof Wilson (OU) in 2008, leading to successful funding by the EU. Derby UOA7 actively contributed to all above aspects.

The significance and reach beyond academia

The project ended only a year ago (2011) and as yet it is in its infancy. Its reach has to be understood within that context. A mix of dissemination and exploitation strategies have been utilised to extend reach beyond academia, references and links to which are identified in the section below. For instance

• 14 representatives from European Regional Centres of Expertise (RCEs) with policy remits on climate and environmental change, together with NGO representatives accepted invitations to participate in a joint month long e-forum with project academics and pilot students (June-August 2011) Through collaborative group work in e-forums, they created a joint briefing paper on the importance of "lived experience" of climate change for informing policy (*VCSE link*).

• March 2012 a policy workshop was held at the European Commission in Brussels and attracted significant interest from policy makers within the EU Erasmus Programme and a wider group of higher education institutions who are concerned with the creation of OER, operationalizing virtual mobility and linking virtual mobility to transboundary competence (*Public report of project link*).

• Use by practitioners (who were also students) in their work of skills, knowledge and understanding at were developed in the pilot. One commented explicitly in the evaluation of the

Impact case study (REF3b)



pilot: 'Skills such as creating a CBA [cost benefit analysis] and writing an EU report [were] really excellent and something I can transfer into my working life.'(*VCSE link- evaluation forum*).

• Production of a video about the project by Universidad Aberta for a national television audience which clearly indicates a reach to policy makers and citizenry (*Promotional video link*).

• Currently the workpackage developed by UOA7 (Prof Abbott) on interdisciplinary methodology is being used by 42 institutions of higher education and practitioner agencies (*Google scholar link*).

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The LECH-e project has been nominated for an award by the Spanish National Education for the best OERs through public voting (*Universia Foundation link*).

5. Sources to corroborate the impact (indicative maximum of 10 references)

- Conference Report (2006), Gipwola, G. and Ndezzi, R: beyond the world summits: Environment, development and Sustainability in the 21st century, The Open University and Kulika Charitable Trust.
- D. Abbott, S. Brown and Wilson, G (2006): "Development Management as Reflexive Practice", *Journal of International Development*, Published online Vol 18, 1-17 Dec, Paper version 19(2), 187-203 March 2007, Wiley Blackwell, doi: 10.1002/jid.1323.
- D. Abbott (2009) 'Looking Beyond the Visible: Contesting Environmental Agendas for Mumbai Slums', Furniss, P. and Wilson G. (eds) Environment, Development and Sustainability: Perspectives and Cases from Around the World, Oxford, Oxford University Press, Ch 9, p86-96, ISBN: 9780199560646.
- Nomination for the best Open Course Ware (OCW) by The Spanish Ministry of Education and the Universia Foundation (Web Portal of Spanish Universities <u>http://www.universia.es/index.htm</u>).
- 5. Promotional video : http://www.uab.pt/web/guest/projeto-erasmus-leche-e
- 6. OER access through

http://labspace.open.ac.uk/course/view.php?id=8168; www.opener.ou.nl/

<u>http://repositorioaberto.uab.pt/?locale=en;</u> <u>http://ocw.innova.uned.es/ocwuniversia/ciencias/climate-change-from-science-to-lived-experience;</u> <u>http://derby.openrepository.com/derby/</u>

- Public report of project : "The Lived experience of climate change: interdisciplinary e-module development and virtual mobility" eacea.ec.europa.eu/llp/project_reports/.../era_ecdsp_504269.pdf
- 8. Project website: <u>http://www.leche.open.ac.uk/</u>
- 9. Virtual Campus for Sustainable Europe: http://www2.leuphana.de/vcse/
- **10.** Example of one OER (Workpackage 3 accessed 13/03/2013) which is already used in 42 versions by various universities and practitioner agencies: <u>http://scholar.google.co.uk/scholar?cluster=4049424674468925044&hl=en&as_sdt=0,5</u>