

Cultivating Sustainability Citizenship? Transdisciplinary Transitions in an Irish Third Level Institution

Metaphors of Transformative Change Symposium

Environmental Research Institute, Lee Road

15th September 2017, 11am – 4pm

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Edmond Byrne, Aine Ryall, Niall Dunphy

What does Green Mean?

- Why is environmentalism GREEN?
 - Verb - Old English *grenian* "to become green, **flourish**"
 - Noun - Specific sense "piece of grassland in a village belonging to the **community**"
 - Same Germanic root as the words "grass" and "grow"
- **Ancient Egypt**, hieroglyph for green represented a growing papyrus sprout.
- A **Greek** word for green was *cloron* (the root of *Chlorophyll*),
- For **Romans** it was the colour of *Venus*, goddess of gardens, vegetables and vineyards
- **Romanticism**: in the romantic movement in the 18th and 19th century, green was contrasted to the smoky grey and black of the Industrial Revolution.
- **Environmental Movement** from the 1970s



Other associations

- Middle ages green worn by **merchants, bankers and the gentry**. The colour of the cloth in royal counting houses from late 14c., later on gambling tables.
- Associated with money, finances, banking, **ambition, greed, jealousy**. Symbolic of **envy** and jealousy since Middle English. Shakespeare's green-eyed monster of "Othello"
- **Irish Nationalism**: the traditional colour of Irish Nationalism beginning in the 17th century. The green harp flag became the symbol of the movement.

Green has become a **metonym** for sustainability (Miller and Nilsen, 2011)



Sustainability champions?

Academic identities and sustainability curricula in higher education

Bronwyn E. Wood and Sue Cornforth

Faculty of Education, Victoria University of Wellington, Wellington, New Zealand

Fiona Beals

*School of Health and Social Services, Te Hau Tapu me te Puna Oranga,
Wellington Institute of Technology, Wellington, New Zealand, and*

Mike Taylor and Rachel Tallon

Faculty of Education, Victoria University of Wellington, Wellington, New Zealand

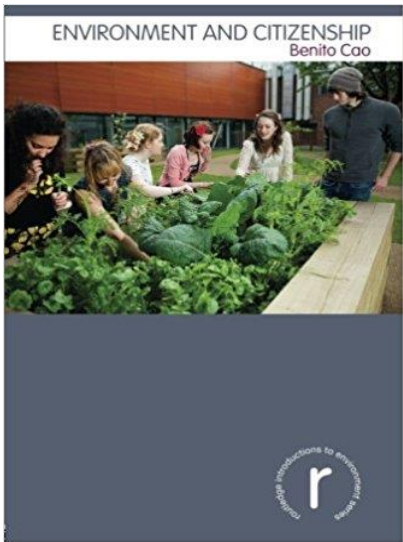
- three “waves” of sustainability in higher education (Wood et al. 2016)
 - (1) 1970s and 1980s: development of environmental engineering and environmental studies or **Environmental Education**, e.g. *Diploma in Environmental Science and Social Policy* in UCC (circa. 1982)
 - (2) 1990s: response to a growing number of declarations e.g. the **Talloires Declaration** (1990), typified by the growth of **Green Campus** movement in the 2000s e.g. **UCC Green Campus** 2007, first Green Flag awarded to UCC in 2010.
 - (3) The third wave of **Education for Sustainability** requires a re-orientation of curriculum and pedagogy for sustainability e.g. recognition of UCC Green Campus in national policy: ***Education for Sustainability 2014***.

‘Education for Sustainability’

The National Strategy on Education for
Sustainable Development in Ireland, 2014-
2020



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Varieties of Green Citizenship

Environmental Citizenship

Ecological Citizenship

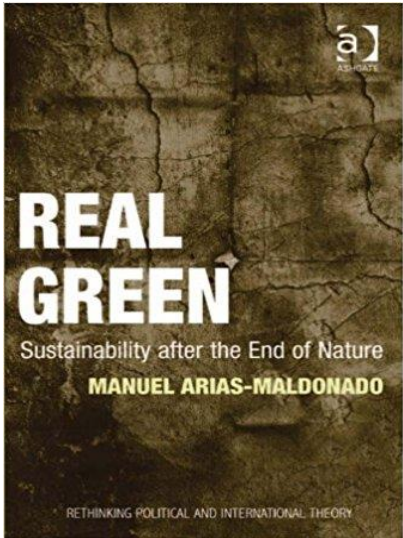
Sustainability Citizenship:

‘pro-sustainability behaviour, in public and in private, driven by a belief in fairness of the distribution of environmental goods, in participation, and in the co-creation of sustainability policy’



Sustainability Citizenship

Andrew Dobson



- **Sustainability transformations** in universities involve **transformative rather than transmissive education:**

- critical thinking;
- emphasis on interdisciplinary and transdisciplinary research and science;
- a societal problem-solving orientation through university community-interfaces, research-policy interfaces; research-teaching interfaces; operations-research etc.;
- leadership and commitment to the transformation of the university, responsive to the changing needs of society (Ferrer-Balas et al. 2008, p.296)

These transformations build on interdisciplinarity and transdisciplinarity (Khoo 2017).

International Journal of Sustainability in Higher Education

Emerald Article: An international comparative analysis of sustainability transformation across seven universities

D. Ferrer-Balas, J. Adachi, S. Banas, C.I. Davidson, A. Hoshikoshi, A. Mishra, Y. Motodoa, M. Onga, M. Ostwald

Sustainable Knowledge
Transformation in and through
Higher Education

A case for transdisciplinary leadership

Su-Ming Khoo

National University of Ireland, Galway

International Journal of Development Education and Global Learning 8 (3) 2017

REVIEW

Open Access



Education, sustainability and social learning

Pedro Roberto Jacobi^{1*} , Renata Ferraz de Toledo¹ and Edson Grandisoli²

Discourse and Communication for Sustainable Education,
vol. 7, no. 2, pp. 68–91, 2016

Envisioning Complexity: Towards a New Conceptualization of Educational Research for Sustainability

Anita Pipere

Education *for* Sustainability: enlarges possibilities of education and learning to actively engage citizens in sustainability (Jacobi et al 2016).

Education *as* Sustainability: education as sustainability advancing critical, systemic and reflective thinking, creativity, self-organization and adaptive management (Pipere 2016)



Putting sustainability in its place:
put yourself in the picture.

A Journey in Sustainable Development in an Urban Campus

Darren Reidy, Maria J. Kirrane, Barrie Curley, Denis Brosnan, Stephan Koch, Paul Bolger, Niall Dunphy, Michelle McCarthy, Mark Poland, Yvonne Ryan Fogarty and John O'Halloran

A Journey from Green Campus Initiator to Sustainability Officer

Abstract

University College Cork is located in an urban setting in the heart of Cork city. The university was the world's first Green-Campus awarded by the Foundation for Environmental Education (FEE), Copenhagen, in 2010 (renewed 2013) and the world's first university to achieve ISO50001 standard certification for Energy Management Systems: we are student led, research informed and practice focussed on matters of sustainability and this ethos is embedded across the entire university. During the period campus recycling rate increased from 21 to 75 %, total energy consumption decreased by 9 %, the number of staff choosing to cycle to work- increased from 6 to 12 % across campus. €1,000,000 on waste costs was saved and a saving of over 7,50,000 m³ of water. We are also committed to engaging in training our staff in environmental awareness in biodiversity and environmental management. Student led initiatives range from food production in on-campus poly-tunnels to collaboration with our estates to maintain biodiversity. This paper describes the journey for the university staff and its students in advancing our Green-Campus, with a wider impact on our stakeholders and service providers.



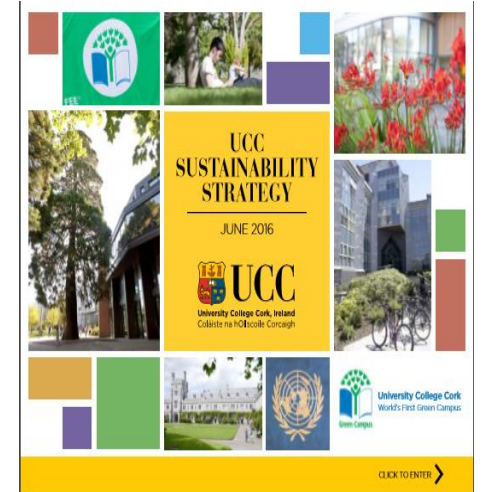
Office of
the VP for Teaching and
Learning

Green Campus Forum



Buildings and Estates
Office

- The UW Sustainability is built on
 - A student-led, research informed and practice focused approach;
 - Openness to contributions and participation across *all* of UCC and available to the public;
 - A favourable institutional ecosystem;
 - A co-created design, with a built-in mechanism for evaluation, review and re-design;
 - Prior experience of interdisciplinary and transdisciplinary collaboration.



Putting sustainability in its place:
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