## The Sustainable University

Prof Stephen Sterling



Centre for Sustainable Futures/PedRIO Plymouth University

5 June 2013

**EAUC** Webinar



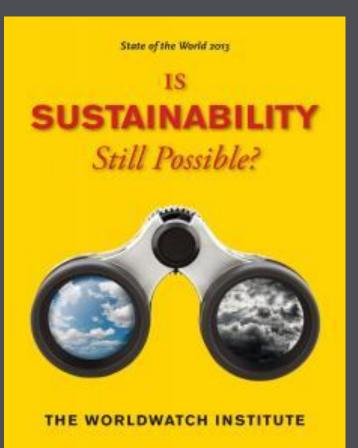








## **Context!**



WITH PLYMOUTH UNIVERSITY

### WINNER OF THE NOBEL PRIZE AL GORE AL GORE THE FUTURE 'If you are concerned about the massive changes the world is just heading into, then you should read this book. If you aren't, then you must read it!' - Tim Berners-Lee THE FUTURE

WH



A complete overhaul of the way the planet is managed is urgently needed if the challenges of global sustainability are to be met for seven billion people.'

'The second most pressing emerging issue is **Transforming** Human Capabilities for the 21stCentury: Meeting Global Environmental Challenges and Moving towards a Green Economy.'

The Foresight Report: Global Environment Outlook-5 http://www.unep.org/publications/ebooks/foresightreport







## Launch of the international Platform for Sustainability Performance in Education

"It's encouraging that around the world there is a fast growing realisation that universities and colleges urgently need to find new models to help them evolve their leadership and operation to ensure success in a very different and disrupted further and higher education and global climate.

In the face of a multitude of economic, social and environmental crises, the old models and systems are being found wanting and we cling onto them at our peril. Education is being reinvented and we desperately need 'turn-around' leadership which is up to the challenge of delivering institutions and graduates which are fit for the economic, environmental and social complexity and challenges we now face."



- Iain Patton, CEO, EAUC

## The double learning - challenge/opportunity

- Structured learning:
  - designed formal learning amongst students arising from educational policies, programmes and policies
- Organisational learning:

the social learning response to sustainability in organisations, institutions and their actors

## **Sustainability goals**

- a) Integrating actions of conservation and human development.
- b) Satisfying basic human needs.
- c) Achieving equality and social justice for all.
- d) Facilitating social self-determination and cultural diversity.

- e) Managing our legacy for future generations.
- f) Maintaining ecological integrity.
- g) Developing new technologies and product manufacturing processes

- The Sustainability Professional: 2010 Competency Survey Report A research study conducted by the International Society of Sustainability Professionals

http://www.sustainabilityprofessionals.org/system/files/ISSP%20Special%20Report\_3.10\_final\_0.pdf

## The student voice

- Over two thirds of 2011 first and second-year respondents (66.6% and 70.3% respectively), as in 2010 (70%), believe that sustainability should be covered by their university;
- There is a continued preference among students for a reframing of curriculum content rather than additional content or courses
  - Student attitudes towards and skills for sustainable development
     A report for the Higher Education Academy

Rachel Drayson, Elizabeth Bone & Jamie Agombar (2012),

WEATEA<u>http://www.heacademy.ac.uk/assets/documents/esd/Student\_attit</u> Removale and skills for sustainable development.pdf UNIVERSITY



## What's it got to do with HE?



'HE institutions bear a profound moral responsibility to increase the awareness, knowledge, skills and values needed to create a just and sustainable future....

...why is HE so averse to risk and difficult to change? Because the change sought is a deep cultural shift....

### - Anthony Cortese 2003

(Founder of Second Nature) http://www.secondnature.org/about/



## Tensions: add-on or transformation?

- Defined issue relating mainly to estates and resource use
- Principally an environmental issue
- Requires add-on, or reformative approach
- Involves a few key disciplines
- Is an additional agenda, easily accommodated
- Has clear goals, measurable

- Broad relevance to all aspects of HE operation and provision
- Also encompasses social relations, justice, ethics, economic viability etc
- Requires holistic and transformative approach
- Implications for most disciplinary areas and requires interdisciplinarity
- Is an overarching agenda and challenges existing policy and practice, involving organisational change
- Emerging and contested arearea



# **Sustainability at Plymouth**

- Sustainability in new corporate strategy
- Sustainability Strategy under revision 2013
- Sustainability Executive; and Sustainability Advisory Groups
- Sustainability Research Institute (ISSR)
- Office of Procurement and Sustainability
- ESD research key part of Pedagogic Research Institute (PedRIO)
- Sustainability key area in Research and Innovation strategy
- Sustainability education(ESD) in Teaching and Learning Strategy
- ISO 140001 and Fair Trade Status
- Commitment to Carbon Neutrality 2030
- New Green Travel Plan and Sustainable Food Policy
- Green Gowns Award winner in 2011
- Second in Green League 2011 and 2012
- 2010 and 2012 curriculum reviews indicate strong sustainability orientation in some subjects and good coverage in other subjects
- Pool of committed and enthusiastic staff across academics, professionals, administrators and service providers in relation to sustainability
- Centre for Sustainable Futures supporting the sustainability curriculum

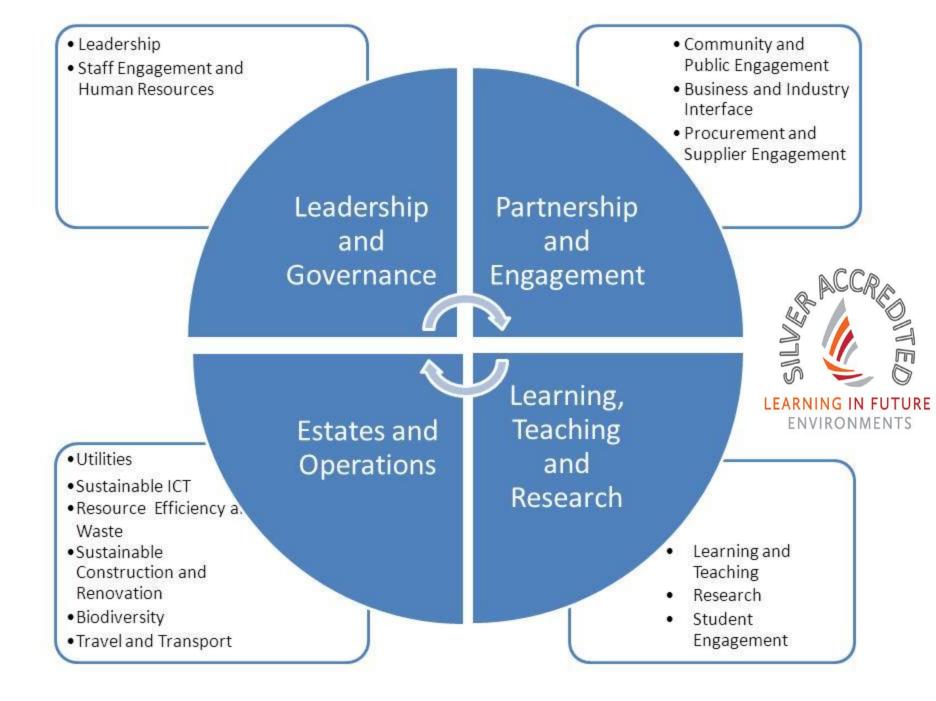




## Sustainability has implications for.

- Curriculum
- Hidden curriculum and learning environments
- Most (all) disciplines
- Interdisciplinarity
- Pedagogy
- Research
- Research-teaching linkages

- Student engagement
- Campus operation and management
- Procurement
- Community and business links
- Institutional governance
- Corporate policy and plans



# Self-imposed criteria re whole institutional change (2008)

- Sustainability vision policy statement
- Whole institution strategy and action plan
- Senior manager with known
  responsibility for implementation
- Senior executive committee
- Regular sustainability and environmental auditing
- Sustainability applied to all aspects of campus operation
- Ethical investment policy
- Excellent internal communication
- Excellent external communication of sustainability message

- Holistic perception and management of 4 Cs (Curriculum, Campus, Community, Culture)
- Embedding sustainability in formal and informal learning of students
- Sustainability principles and pedagogy in L&T policy
- University sustainability research centre and research strategy
- Culture of organisational learning and improvement
- Concern for wellbeing of whole community as well as achievement



'A sustainable university is an open space which is not known by its 'ivory towers'; its rigid traditions, or its allegiance to power, but rather by its creativity, and energy for change; a 'hub' of social transformation and social learning for a more sustainable, just and equitable future.'

-Heila Lotz-Sistika, Chair of Environmental Education and Sustainability WITH at Rhodes University, South Africa PLYMOUTH UNIVERSITY

# Some challenges for the 'sustainable university', how to...



- bring together and reconcile agendas coherently: eg.employment, internationalisation, enterprise and sustainability
- spearhead sustainable development regionally with stakeholders, and support healthy and sustainable economies and communities
- model sustainability on campus, procurement, food and resource use etc
- anticipate social, economic and ecological change, particularly related to climate change
- ensure 'sustainability literacy' of staff and students
- Work to make all this a central part of the institution's culture

(based on Regional Centre of Expertise network slide)



## SUSTAINABILITY EDUCATION PERSPECTIVES AND PRACTICE ACROSS HIGHER EDUCATION

EDITED BY PAULA JONES, DAVID SELBY AND STEPHEN STERLING

# WITH PLYMOUTH UNIVERSITY



An introductory guide to teaching and learning for sustainability in HE

Author: Professor Stephen Sterling. This document does not necessarily reflect the views of the Higher Education Academy.





e

## **Objectives of book**



- To relate, contextualise and appraise institutional stories of change in HE in relation to the sustainability agenda in recent years and interest in whole institutional responses
- To examine and draw out tactics and strategies for change towards sustainability in HE in the light of common drivers and barriers
- To help identify the meaning and role of 'the sustainable university'
- To reflect on the prospects of sustainability as a key driver of the culture of the university and outline future challenges and possibilities



#### Part I - Context

 The sustainable university: challenge and response Stephen Sterling
 2 EfS: contesting the market model of higher education John Blewitt
 3 Another world is desirable: a global rebooting of higher education for sustainable development Daniella Tilbury

#### **Part II- Aspects**

- 4 Promoting sustainable communities locally and globally: the role of Regional Centres of Expertise (RCEs) 89 Ros Wade
- 5 Leadership

**Chris Shiel** 

• 6 The journey towards sustainability via community: lessons from two UK universities

Rehema M White and Marie K Harder

• 7 Times of change: shifting pedagogy and curricula for future sustainability

Alex Ryan and Debby Cotton



- 8 Sustainability research: a novel mode of knowledge generation to explore alternative ways for people and planet Rehema M White
- 9 The student experience: campus, curriculum, communities and transition at the University of Edinburgh Peter Higgins, Robbie Nicol, David Somervell and Mary Bownes
- **10 Well-being: what does it mean for the sustainable university?** Sarah Sayce , Judi Farren Bradley , James Ritson and Fiona Quinn

### Part III -Institutional change

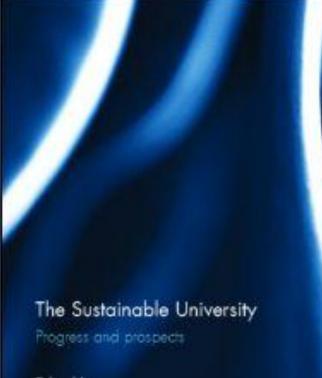
 11 Whole institutional change towards sustainable universities: Bradford's Ecoversity initiative

Peter Hopkinson and Peter James

- **12 Bottoms up for sustainability: the Kingston experience** Ros Taylor
- **13 Towards a Green Academy** Heather Luna and Larch Maxey
- 14 The sustainable university: taking it forward

WITH Stephen Sterling and Larch Maxey PLYMOUTH UNIVERSITY

## **The Sustainable University**



Edited by Stephen Sterling, Larch Maxey and Heather Luna

R



'This is a must-read for every Vice-Chancellor, President and University Trustee of the world's 17,000 Higher Education Institutions(HEIs).

While less than 2% of the world's population will graduate from an HEI, these graduates will form the vast majority of the future decision makers in the private and public sectors and civil society at large.

As such, our HEIs are crucial entry points in the global attempt to create a more sustainable future.'

- Professor Charles Hopkins, UNESCO Chair in Education for Sustainable Development, York University, Toronto, Canada

## **Responding to sustainability: 4 R's**

Regarding *what we do now*:

- What is of value that we need to *keep*?
- Retain
- What might need modification?
- Revise
- What, if anything, might we need to *abandon*?
- Reject
- What *new ideas*, concepts, principles, methodologies, working methods, pedagogies etc are needed?
- Renew





## The Sustainable University

Questions:



- 1 How big is the gap?
- 2 What constitutes the 'really' sustainable university?
- 3 How far should or can this agenda go?
- 4 How can it be advanced (individually, institutionally, nationally)?
- 5 What are the main barriers and opportunities?



## References

Assadourian, E and Prugh, T et al (2013) *Is Sustainability Still Possible?* Worldwatch Institute, Island Press, Washington

Drayson, R, Bone, Agombar, J (2012), *Student attitudes towards and skills for sustainable development,* A report for the Higher Education Academy, NUS/HEA<u>http://www.heacademy.ac.uk/assets/documents/esd/Student\_attitudes\_towards\_and\_skills\_for\_sustainable\_development.pdf</u>

Gore, (2013) A The Future, WH Allen, New York

Sterling, S, Maxey, L and Luna, H (2013) *The Sustainable University – progress and prospects,* Abingdon: Routledge/Earthscan. <u>http://www.routledge.com/books/details/9780415627740/#description</u>

Sterling, S (2012) The Future Fit Framework – An introductory guide to teaching and learning for sustainability in HE, The Higher Education Academy. http://www.heacademy.ac.uk/assets/documents/esd/The\_Future\_Fit\_Framework.pdf

Sterling, S, Jones, P and Selby, D (eds) (2010) *Sustainability Education: perspectives and practice across higher education*, Earthscan, London. <u>http://www.routledge.com/books/details/9781844078783/</u>

UNEP (2012) **The Foresight Report: Global Environment Outlook-5** <u>http://www.unep.org/publications/ebooks/foresightreport/</u>

