Whole system change towards sustainability: embedding sustainability education at the University of Plymouth

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Outline

- Context and challenge
- CSF’s approach
- Barriers and plusses
- Progress
- What we’ve learnt/implications for others
- Some deeper questions...
Context and challenge
Responsibility

‘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
Varying views....

‘Universities already make a significant contribution to the UK’s sustainable development strategy and have played an important role in researching the challenges, in developing new approaches to those challenges and also in improving organisational operations’.

- A university leaders’ statement of intent on sustainable development, UUK, 2010

‘It is a huge challenge to get VCs to see this as core business’

- Patricia Broadfoot, Chair of UUK SD Task Group
ESD – or EUSD?

‘at present most of our universities are still leading the way in advancing the kind of thinking, teaching and research that...accelerates un-sustainability’

Tensions: *add-on or transformation?*

- Technical issue relating mainly to estates and resource use
- Principally an environmental issue

- Requires add-on, or reformatory 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 area
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

• get all this to be a central part of the HEI’s culture
CSF’s vision (2005)

‘The transformation of the UoP - from an institution characterised by significant areas of excellence in ESD - to an institution modelling university-wide excellence and hence able to make a major contribution to ESD regionally, nationally and internationally.’
The context – the UoP

Largest university in the southwest with over 30,000 students and is the fifth largest UK university based on student population.

Almost 3,000 staff and an annual income of around £160 million.

Currently markets itself as ‘the enterprise university’.
Centre for Sustainable Futures: Key features

- Five-year ‘Centre for Excellence in Teaching and Learning’ (2005-10)

- £ 4.5 million (2M Capital spend in first 18 months); from Higher Education Funding Council for England

- Core Team of 9 (Director, Associate Director, Reader, Centre Manager, Research Coordinator, 2 Research Assistants, Administrator, 1 Student Assistant)

- Probably largest sustainability-related pedagogical and institutional change research team in UK

- CSF directly linked to the Office of the Vice Chancellor

- 2005-9: 48 bought-out academics normally on a .2 basis, across all 17 Schools and 5 Faculties

- Centre a once-derelict building retrofitted to high sustainability standards
E’sing into the future?

- **Economy** – instability, cuts and pressure to deliver ‘more for less’
- **Energy** – ‘peak oil’...price and supply shocks in the pipeline
- **Environment** – climate change and carbon reduction strategy

How can universities adapt to and anticipate a tightening ‘triple crunch’?
CSF’s approach
ESD has implications for....

- Curriculum
- Hidden curriculum and learning environments
- Most (all) disciplines
- Interdisciplinarity
- Pedagogy
- Research-teaching linkages
- Student engagement
- Campus operation and management
- Procurement
- Community links
- Institutional governance
- Corporate policy and plans
Proposition

Whole system change depends on developing a sufficient critical, collective and connective intelligence - with regard to both systematic and systemic aspects of organisational change.

‘Leadership is shifting the collective attention at all levels’ – Scharmer, 2006
Towards holistic change - the 4C model developed by CSF at Plymouth
And some more Cs....
centre for sustainable futures
transforming a university
the holistic 4 C approach

Community: Engaging with local and regional communities and networks to envision and realise sustainable futures
- Knowledge exchange
- Action research partnerships for sustainability
- Sustainability collaborations involving staff, students and rural and urban communities

Curriculum: Weaving the sustainability agenda into the student learning experience
- New programmes, modules, and podules
- Interdisciplinary learning challenges
- Active and empowering pedagogies

Campus: Making sustainability key to environmental and social decisions and practices
- Sustainable building, landscape, energy use, transport, procurement, catering and waste disposal
- An equitable, inclusive and healthy campus environment
- Student and staff participation in decision making processes

Culture (embracing the other Cs):
Transforming the university into a sustainability learning organisation
- Sustainability Policy and Strategic Action Plan emerging from ‘wise and deep’ consultation
- Sustainability woven into all university policies and strategies
- Open and transparent sustainability messaging across the university community

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Two dimensions of change

- **Systematic** – ‘frameworks’
  - policies, strategies, rules, procedures, assessment, evaluation, structures etc

- **Systemic** – ‘glue’
  - collegiality, social learning and exchange, informal networks, collective intelligence, ethos, self-organisation etc

‘converter role’

‘enabler role’
Two arenas of learning

• **Structured learning:**
  - intentioned learning amongst students in formal education which arises from educational policies and practices

• **Organisational learning:**
  - the social learning response to sustainability in organisations, institutions and their actors
CSF’s approach - action keywords

Learning
Mentoring
Valuing
Challenging
Opportunism
Connecting
Initiating
Dialoguing
Facilitating
Supporting
Platforming
Barriers and plusses
Advantages of CSF 2005-10

- Well funded. Some prestige as CETL
- Well connected, knowledgeable staff
- Initial chancellery support; Corporate plan
- Unusual status in university, belonging to no faculty, and no previous baggage
- Free rein and encouragement from HEFCE to be innovative
- Quite fertile ground – levels of interest, awareness and existing activity
- Funded connection with HE Academy ESD Project
- Reputation in wider field and expectations on UoP
- Supportive context: increasing sustainability profile in HE and wider society
Barriers

UoP barriers included
- Uncertain institutional commitment
- Other agendas at senior level (compatibility?)
- Communication
- Policy incoherence
- Limited understanding of sustainability outside the converted
- Little interdisciplinarity, and patchy pedagogic innovation
- CSF small part in large institution & end of funding looming

Plusses

Positives included
- Support/progress at senior management level – growing recognition of strategic benefit
- CSF 5 yr funding and experience
- Pockets of expertise and enthusiasm across university
- Funded connection with UK HE Academy
- External recognition of UoP’s reputation – profile
- Rising expectation, initiatives and interest in HE and wider society around sustainability
Progress
Self-imposed criteria (CSF)

- Sustainability vision – policy statement
- Whole institution strategy and action plan
- SEO 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
- 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
How are we doing (roughly)?

- Sustainability vision – policy statement - 4
- Whole institution strategy and action plan - 3
- SEO with known responsibility for implementation – 4
- Senior executive committee - 3
- Regular sustainability and environmental auditing - 4
- Sustainability applied to all aspects of campus operation – 3.5
- Ethical investment policy – 2.5
- Excellent internal communication - 2
- Excellent external communication of sustainability message - 3

- Holistic perception and management of 4 Cs - 2
- Embedding sustainability in formal and informal learning of students - 3
- Sustainability principles and pedagogy in L&T policy - 4
- University sustainability research centre and research strategy – (potentially) 4
- Culture of organisational learning and improvement – 3.5
- Concern for wellbeing of whole community as well as achievement – 3
Highlights to date include:

- Sustainability adopted as one of three platforms – Corporate Plan
- Sustainability policy March 2008
- Sustainability Strategic Action Plan, with 72 actions and tracking facility
- Sustainability Advisory Group in chancellery
- ISO14001 and BS8900
- New Sustainability Office including procurement
- Signed Earth Charter in 2008
- Sustainability as key theme in Teaching and Learning Strategy, and in Research Strategy
- Campus developments and CAALR project
- Student engagement – Sound Impact, Green Week
- Curriculum innovation
- External recognition e.g. HEFCE, HEA,
- National schemes performance: Green League; Green Gowns; Universities that Count.
UoP ‘Green Agenda’

‘Through our development plan and key policies we have committed to:

• **Conservation of natural resources** used by the university
• Minimising adverse **environmental effects of travelling**
• **Ethical and sustainable procurement**
• The **well being of our people** and employee relations
• Enhancing our **community and public engagement**
• Developing **sustainability-literate graduates’**
CSF’s curriculum related work has included...

- UP Sustainability Policy and Action Plan
- Supporting the sustainability key theme in T&L Strategy
- Integrating sustainability into LTHE and PGCAP
- *Sowing Seeds* sustainability module guidance
- Staff ‘wiki’ site on ESD resources and practice
- Web-based interactive learning activities bank
- Professional Support Programme (PSP) as part of Staff Development
- Supporting Centre Fellows’ innovation
- Scholarship scheme with Schumacher College
- Curriculum audit across all Schools
- Learning and teaching framework (in prep)
Sowing Seeds

HOW TO MAKE YOUR MODULES A BIT MORE SUSTAINABILITY ORIENTED

A help guide to writing and modifying modules to incorporate sustainability principles
Teaching and learning

‘We will encourage all disciplines to embed sustainability within their curricula and utilise the learning and research opportunities provided by campus and community sustainability initiatives.’

Teaching and learning strategy 2009-2012, UoP.
Reasons to be cheerful...

As CSF fades away, other structures are coming into focus:

- Sustainability Research Institute
- Pedagogical Research Institute, including an ESD Research Centre
- Sustainability Office
### People & Planet Green League 2010

**First Class award**

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What we’ve learnt – implications for others
What we’ve learnt....

• Don’t over-reach your capacity
• Marketing and communication is vital
• Attract allies and support them
• Create spaces for discussion, exchange and trust building
• Make connections that wouldn’t otherwise exist
• Don’t assume too much
• Slow is the new fast
• Balance \textit{systematic} and \textit{systemic} aspects
• Balance your ‘grit’ function with your ‘integrative’ function
• Value and build on existing things that support sustainability
• Continually learn how the organisation works
• Be exemplary as far as reasonable
• Ensure feedback
• Passion and commitment is key – but hard to sustain
• Keywords: invitation, challenge, persistence, opportunism, profile, external recognition, celebration...
Deeper questions
What makes it green?
Accommodation

There is always a tendency for significant challenges (such as education for sustainability) to be understood and accommodated within the norms of the existing system - rather than change the system to be congruent with the challenge (first order change).
Synergy or clash?
....So how does that square with sustainability?

‘No problem’
‘There are no tensions between the two, enterprise and sustainability are interchangeable.’ [quote from UoP staff]

‘Subsumation’
‘Enterprise should be thought of within the context of sustainability, otherwise it’s likely to be unsustainable.’ [quote from UoP staff]

‘Happy marriage?’
‘at Plymouth, we are particularly interested in the role that we can play in the community, enhancing the impact of our volunteering and that of ethical, sustainable and socially-focused enterprise’
- Wendy Purcell, VC
‘Responsible education for a sustainable tomorrow’

‘As the enterprise university we recognise our wider obligations to society. In this context our aim is to become an exemplar in sustainability, social responsibility and responsible business practice, engaging with our wider community and continually monitoring, improving and sharing our achievements.’

http://www.plymouth.ac.uk/sustainability
UoP: a story of transformation...or accommodation?

- How about your story?
- Differences, commonalities?
- What patterns of thinking lie beneath commonly occurring resistances to change?
- What kind of learning and change needs to occur within policy and practice so that sustainability competencies, understandings and values are more likely to be fostered amongst staff and students?
- How can such learning and change be encouraged rapidly but also deeply and critically?
- How do we balance urgency and practicability?
- What does it take to achieve the really sustainable university fit for our times?
Stimulating new thinking

SUSTAINABILITY EDUCATION
Perspectives and practice across higher education

The Handbook of SUSTAINABILITY LITERACY
Skills for a changing world

Edited by Arran Stibbe
Useful websites

• Centre for Sustainable Futures (CSF) at UP [www.csf.plymouth.ac.uk](http://www.csf.plymouth.ac.uk)

• University of Plymouth sustainability pages [www.plymouth.ac.uk/sustainability](http://www.plymouth.ac.uk/sustainability)

• HEFCE’s online resource for sustainable development in HE [www.hefce.ac.uk/susdevresources/](http://www.hefce.ac.uk/susdevresources/)

• Higher Education Academy ESD Project [www.heacademy.ac.uk/esd](http://www.heacademy.ac.uk/esd)

• Environmental Association for Universities and Colleges (EAUC) [www.eauc.org.uk](http://www.eauc.org.uk)
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