Transformative learning and change for sustainability at Plymouth University

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• Transformative learning
• Plymouth University and sustainability
• Our approach
• Campus
• Curriculum, teaching and learning
• Whole institutional change
• What we've learnt
• The broader context
Transformative learning

‘The shape of the global future rests with the reflexivity of human consciousness – the capacity to think critically about why we think what we do – and then to think and act differently.’

Paul Raskin (2006)
World Lines, - Pathways, Pivots and the Global Future, Tellus Institute
Towards a more relational worldview

‘respons-ibility’: an expanded and ethical sense of concern/engagement; (SEEING)

‘co-respondence’ ‘co-respondence’ a closer knowledge match with the real relational world; (UNDERSTANDING)

‘respons-ability’ the ability to design and act integratively, taking wise action in context (DOING)
Learning levels and orders of change

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<th>First order change</th>
<th>Effectiveness/efficiency</th>
<th>‘Doing things better’</th>
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<td>- conformative</td>
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<th>Second order change</th>
<th>Examining assumptions</th>
<th>‘Doing better things’</th>
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<th>Third order change</th>
<th>Paradigm change</th>
<th>‘Seeing things differently’</th>
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Two ways of thinking...

- Problem-solving
- Analysis
- Reductionism
- Closed cause-effect
- Atomism/segregative
- Narrow boundaries
- Objectivism
- Dualism
- Rationalism
- Determinism

- Reframing / alleviation
- Synthesis
- Holism
- Multiple influences through time and space
- Integrative
- Extension of boundaries
- Critical subjectivity
- Pluralism / duality
- Rational / non-rational ways of knowing
- Uncertainty, tolerance of ambiguity
Plymouth University and sustainability

The context – Plymouth University

Largest university in the southwest with over 32,000 students and is the fifth largest UK university based on student population.

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

Currently markets itself as ‘the enterprise university’.
CSF’s goal at Plymouth

‘To develop the transformative potential of higher education at the University and beyond for building towards a sustainable future.’ 2005

Centre for Sustainable Futures, Plymouth University

Strategic Ambition for Sustainability

• ‘…..is to be a customer focused, socially responsible organisation, demonstrating sustainability in our activities and ensuring our staff and graduates are aware of economic, environmental, social and ethical issues including the importance of social enterprise, community engagement and volunteering.’

Creating our Future: Plymouth University 2009–2012
Sustainability at Plymouth University

Sustainability Strategy is implemented through a 3 part approach and structure:

- **Curriculum** - CSF within the Teaching and Learning Directorate (T&L)
- **Operations** - Office of Procurement and Sustainability (OPS)
- **Research** - Institute for Sustainable Solutions Research (ISSR)

Our approach
EUSD?

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

‘In order to break this pattern we need to question and reform deeply entrenched routines, structures and practices by taking advantage of the privileged position universities have in our society and utilizing some of the brightest minds on the planet in finding ways to preserve, rather than to destroy that very same planet (p32)’.


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
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.

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 area
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

Double learning challenge

- **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
Towards holistic change - the 4C model

**Curriculum**
- Knowledge exchange
- Active research partnerships
- Professional development

**Campus**
- Sustainable living
- Active and empowering pedagogies

**Community**
- Educational and social development
- Promoting environmental, healthy, and active lifestyles

**Culture**
- Transforming the university into a sustainable learning community
- Sustainable policy and strategic action plan promoting sustainability
- Open and transparent sustainable decision-making processes across the university community
Campus

Campus-based learning

- **Campus** – ‘A place where learning occurs but is, itself…the source of no useful learning’ (Savanick et al. 2008)

  Or…. ‘A university campus…should facilitate a diversity of teaching and learning styles. Indeed, the campus itself should be of pedagogic value’ (CSF 2009).
Curriculum, teaching and learning

Curriculum – our 3 approaches

• Infusing sustainability-related concepts, cases and issues into existing curriculum

• Devising new disciplinary and interdisciplinary programs, modules (and ‘podules’) and pedagogies

• Undertaking curriculum and pedagogical research
Possible curriculum responses

- Minor modifications
- ESD in PDP
- New “podules”
- New modules
- New programmes
- Generic or common modules
- Cross-disciplinary and extra-curricular events
- Dissertations, projects and work place learning placements
- SD infusion in assessment

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.
Some audit findings

- 76% (13 out of 17) of Schools asserted that developing the ‘sustainability’ literacy of the students was ‘very important’ or ‘important’. 4 out of 17 are in the Faculty of Science and Technology.

- More than half of the Schools at UoP offer degree programmes that are validated by external bodies that see sustainability or sustainable development as part of their remit or concern.

- Over a third of the total number of students at UoP are undertaking programmes within Schools that are at the incipient, emergent or advanced stage of embedding sustainability.

- 26.7% (4 out of 15) of Schools ranked the overall stage of embedding sustainability in the curriculum as ‘Emergent’ or ‘Advanced’.

  – [http://csf.plymouth.ac.uk/?q=node/742](http://csf.plymouth.ac.uk/?q=node/742)

Stimulating new thinking
Whole institutional change

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
- 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
Sustainability at Plymouth

- Sustainability in Corporate Plan
- Sustainability Strategy – revised 2011
- Sustainability Executive; and Sustainability Advisory Groups
- Sustainability Research Institute (ISSR)
- Office of Procurement and Sustainability (OPS)
- ESD research key part of Pedagogic Research Institute (PedRio)
- Sustainability education 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
- In top 4 of Green League 2011, and top 5 in Universities that Count re teaching and learning 2010

2010 curriculum survey indicated some 33% of students in receipt of ESD; 2000 modules across 81 programmes now with sustainability content
Pool of committed and enthusiastic staff across academics, professionals, administrators and service providers in relation to sustainability
Centre for Sustainable Futures (part of the Teaching and Learning Directorate) supporting the sustainability curriculum

Gauging staff views

Last September we ran a poll asking staff what the term ‘Sustainability’ meant to them. Sustainability seems a keen issue for many staff and a multi-dimensional understanding of sustainability is adopted by the majority who replied:

A) It’s about the environment and green issues -10%
B) It’s about economic and financial sustainability – 2%
C) It’s about social and community cohesion – 0%
D) It’s about all options a), b) and c) – 63%
E) Nothing – it’s just the latest buzzword 25%

Nearly 500 replies.
What we’ve learnt – implications for others

Top tips

- Understand systemic change
- Harness opportunities and allies externally
- Be opportunistic - but also pragmatic and tactical
- Avoid working in silos and forge new connections
- Curriculum change requires legitimation, dedicated support and appropriate approaches
Bridging the gap

- 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?

The broader context
UK Drivers

• Rising public interest and concern
• Shifting views of employers
• Profession’s requirements
• Student demand
• Corporate social responsibility and + SD links
• Financial savings
• Marketing and recruitment advantage
• Funding council expectations
• Felt obligation to our students as next generation
• Enhanced learning and teaching

WHAT IS the LiFE Sustainability Index?

LiFE has three elements:

□ Performance Improvement System which enables institutional self-assessment.

□ Performance Accreditation Programme which allows institutions to submit to independent assessment, verification and accreditation of their progress

□ LiFE Improvement Centre. A comprehensive resource containing best practice examples and improvement

www.thelifeindex.org.uk
European initiatives and networks

- Regional Centres of Expertise on Education for Sustainable Development,
- The COPERNICUS Alliance - European Network on Higher Education for Sustainable Development.
  http://www2.leuphana.de/copernicus/home/
- Book: ‘Higher Education’s Commitment to Sustainability: from Understanding to Action’ Global Universities University Network for Innovation (GUNI) – 2012

Some websites

- Higher Education Academy ESD
  http://www.heacademy.ac.uk/esd
- Environmental Association for Universities and Colleges (EAUC)
  http://www.eauc.org.uk
- Plymouth University sustainability pages
  http://www.plymouth.ac.uk/sustainability
- UNESCO Decade of ESD
- UNESCO Chair HESD conferences
  http://www.leuphana.de/institute/infu/unesco-chair/conferences-2011/programme.html
- Global University Network for Innovation
  http://www.guni-iímies.net/
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