

Education for Sustainability:

A Guide for University Managers on Needs and Opportunities



As Higher Education faces difficult changes and contraction in its resource base over the coming years, it must reappraise how it can best meet sector expectations and commitments in sustainability.

This briefing outlines the way that the University of Gloucestershire can respond to the challenge through its leading practice in Education for Sustainability (EfS). It explores key questions about emerging needs, opportunities and benefits for the university and its partners and stakeholders.

- Q: How is the sustainability agenda impacting on HE and the university?
- *Q: Why is Education for Sustainability important for HE?*
- Q: What are the market needs and opportunities in Educaton for Sustainability?
- *Q: How does Education for Sustainability serve students' needs?*
- Q: What strategic actions are we taking at the university?

How is the sustainability agenda impacting on HE and the university?

Since the UK government produced its sustainable development strategy *Securing the Future* in 2005, the devolved administrations have developed policies and plans to improve sustainability practice in universities. Corporate sustainability measures and rankings are increasing in prominence and this is likely to become more significant in an era of greater university competitiveness and accountability. The University of Gloucestershire has performed well to date:

- No 1 and No 2 rankings in the studentdriven *People & Planet Green League* of UK Universities - the only university to have been consistently placed in the top five since the League began.
- Improved score and sector average rank in the BITC *Universities that Count* scheme since 2008 plus No 1 ranking (91.6% score) for teaching, learning and research in 2010.
- National *Green Gown* award for continuous institution-wide improvement in 2008.
- National *Green Gown* award for strategic institutional development of EfS in 2010.



Why should universities engage with sustainability?

- to meet expectations of sector funding agencies in carbon reductions and sustainability performance
- to improve sector profile and market differentiation as well as international visibility
- to improve employability rates and recruitment by focusing on graduates' professional skills for sustainability
- to provide leadership on local sustainability enterprise, innovation and engagement

The HE Funding Council for England sets out its rationale and expectations in its 2008 *Sustainable Development in Higher Education* strategy and action plan.

As sustainability agendas enter the mainstream, universities are accelerating their performance and opportunities to show leading practices are shrinking.

The University of Gloucestershire has increased its commitments by incorporating sustainability in its *Strategic Plan* (2009) and developing its sustainability strategy *Promising Futures 2009-2015*, spanning all areas of core business.

At the university, sustainability goes beyond reducing our footprint and environmental impacts – it is about improving prospects and quality of life for students and staff, and in the local, national and global communities we serve. In EfS, the university has gained sector recognition, several awards and valuable funding - a significant platform for further innovation.

EfS - Background and Origins

The EfS movement emerged from global forums such as the Rio Summit in 1992 and Johannesburg World Summit on Sustainable Development in 2002, gaining momentum via the United Nations Decade of Education for Sustainable Development (UN DESD) 2005-2014. International HE declarations such as Talloires (1990) and Lüneberg (2001) have gained the support of growing numbers of Vice-Chancellors, with promises to reorient courses to support sustainability.

Why is Education for Sustainability important for HE?

Universities hold civic responsibilities to act as beacons for society, leading innovation and illuminating pathways towards more sustainable futures. These duties are fulfilled on the widest scale through the education they provide for future leaders and decisionmakers. To date the academic success stories in sustainability have mainly been in:

- sustainable development research with small scale curriculum offshoots.
- generic student 'taster' initiatives such as introductory elective modules.
- named 'sustainable development' programmes suited to niche markets.

However, strategic work to embed sustainability thinking across universities is not common. Worldwide, few universities have attempted large scale educational innovation in line with EfS. This is where the University of Gloucestershire has distinctive expertise and future opportunities lie. EfS uses approaches to learning and change that engage people in thinking critically and creatively about the future. Its principles are used in all forms of learning, from formal to community education and across all fields of professional training and development.

There are signs that both students and employers are demanding action from Higher Education on this agenda, so that the university sector plays a decisive role in shaping future capabilities to address sustainability across professions and organisations.

Recent major funders of EfS projects at the university

- Marie Curie Fellowship
- Higher Education Funding Council for England
- Kraft Foods
- Grundtvig Programme
- Environmental Association of Universities and Colleges
- UNESCO
- Rikkyo University, Japan

Total grants won over 24 months: £523,385



What are the market needs and opportunities in Education for Sustainability?

The report *Leadership Skills for a Sustainable Economy* (BITC/EDF Energy, 2010) shows that sustainability issues have now permeated both the public and private sectors. To take one contemporary sustainability issue, the Stern Review indicated in 2006 that not acting on climate change equates to the loss of at least 5% of annual global GDP. Businesses are recognising that action to reduce emissions and build resilience creates opportunities in low-carbon technologies, goods and services, whilst reducing costs and generating resource efficiencies.

Of 700 organisations across different industry sectors, 93% stated their business is likely to do more in the next five years to incorporate sustainability into their strategies. (BITC/EDF Energy)

There are two key markets in learning for sustainability whilst also improving graduate employability:

- 1. Graduates are needed with specific technical skills in the 'green jobs' arena:
 - ARUP reported in *Mind the Skills Gap* (2007) that England faces a skills shortage across 100 occupations needed to deliver on national sustainable communities plans.
 - The IPPR report *The Future's Green* (2009) raises concern that the workforce is not ready to seize the opportunities these jobs present for economic recovery.



- 2. There are systemic challenges in leadership and management capabilities:
 - The IPPR data, supported by 39 'green' employers, points out that every business must now make strategic and operational changes to respond to the sustainability agenda.
 - The BITC/EDF Energy report highlights the pressing need for classical leadership skills applied in more complex scenarios to meet sustainability challenges.
 - In the CBI *Ready to Grow* (2010) report, 48% of 694 employers (73% in the public sector) identified inadequate leadership skills to support the future UK economy.

Linking educational processes to the challenges of finding more sustainable ways of living is a critical task of the 21st century. Graduates in all subjects will be faced with these issues in their professional lives, which has implications for their generic capabilities. This requires more work-based learning opportunities across university programme offerings.

How does Education for Sustainability serve students' needs?

As university tuition fees rise, student concern with employability is paramount. As the UUK/CBI report *Future Fit* (2009) points out, the UK has very low work placement rates compared to the rest of Europe, although students would gladly take up more internships and professional learning opportunities during their studies.

EfS is responsive to this priority: its aim is not just to provide knowledge about sustainability problems, but to equip learners with the competences and abilities to tackle them. These learning needs connect with recent signs that students are beginning to factor whether courses are geared toward sustainability into their Higher Education choices.

Student interest in sustainability and future careers

- 42% of students think sustainabilitylinked learning will help them get the jobs they want and two-thirds want to see more attention to sustainability in the curriculum (*Future Leaders Survey* 2007-08, UCAS/Forum for the Future)
- 80% of a sample of 5,763 students nationally and across varied subject areas think that sustainability skills are going to be important to future employers
- 65% think that this should be delivered by reframing the existing curriculum rather than by offering stand-alone modules in sustainable development
- Between 75-90% of students see the relevance of a range of sustainability-related skills to their degree courses, with little variation in their opinions across different subject areas.

(First-year attitudes towards, and skills in, Sustainable Development, 2011, HE Academy/NUS) In EfS, 'sustainability' is a tool for thinking critically about current practices, engaging in debate about more positive futures and fuelling innovation to improve quality of life for all across the globe.

Teaching and learning in EfS is 'real-world', engaged, futures-focused and oriented towards action and implementation. This goes beyond a simplistic 'skills' agenda, towards a 21st century curriculum where graduates are able to apply skills in their specific professional setting.

Every subject area is relevant to EfS and can contribute to enhancing teaching and learning opportunities for students. The indications are that these links between employability and sustainability will be an important determinant in future student choices of course and of university.

EfS also encourages inter-disciplinary and inter-professional thinking, so that different sectors and groups can collaborate more effectively on sustainability issues. Increasingly, professional bodies need specific support to help develop their professional practice for sustainability, which is opening new avenues for collaborative work with universities.

The BITC/EDF Energy report (2010) states that only 36% of 700 organisations currently engage with Higher Education on sustainability via sponsorship, placements and internships. The needs of organisations in this area include leadership support, mentoring and best practice guides to help extend their capacity in sustainability.

In summary, the external trends point to two distinct areas of opportunity:

- 1 Signs that demand will increase for graduates who are more employable as they are not only aware of sustainability issues, but have the competence to tackle them, and that future students will factor this into their HE choices
 - This requires the strategic approach to embed generic capabilities into courses and tailor learning for sustainability to each subject area.
- 2 Likely growth in demand for the delivery of professional development programmes for sustainability, geared to the needs of specific groups
 - This requires expertise in using EfS approaches to design and facilitate bespoke training and development offerings in sustainability.

The University of Gloucestershire has established itself as a distinctive player in EfS, with its No.1 ranking in the *Universities that Count* index and winning the *Green Gown* award in 2010.

Leading Curriculum Change for Sustainability

From 2010 to 2012 the university is hosting an ambitious strategic project funded by the Higher Education Funding Council for England to bring EfS more deeply into the arena of quality enhancement and curriculum development, working with five partner universities.



Consideration needs to be given to areas of risk and most fruitful investment of effort, but there are several potential benefits to be gained by continuing to develop this profile:

- *Drawing on Tradition* the university's history and profile in teaching and learning innovation
- Securing the USP the university's strategic work in EfS is distinctive and sector-leading
- Income Generation bespoke and professional courses, consultancy and partnerships in EfS
- *Improving Efficiency* EfS promotes unified academic enhancement processes
- Sector Fit EfS aligns with global trends towards integrated curriculum change
- Graduate Employability responsiveness of EfS to student employability concerns



What strategic actions are we taking at the university?

Promising Futures 2009-2015 sets out strategic targets for action to improve profile and expertise across the university in EfS.

These actions are designed to provide a coherent learning experience for students. They encourage unity of approach around teaching and learning principles, but allow the freedom for programme innovation to be driven by subject specialists. They also aim for better alignment of EfS with the drive to improve employability, entrepreneurship and internationalisation strategies across the university.

EfS approaches are embedded in the principles of the university's Learning and Teaching Strategy and its set of Graduate Attributes. Colleagues at the university are supported by a framework for effective teaching and learning in EfS which includes subject guides linked to national quality benchmarks and the priorities of individual academic areas. Our current priorities in this area include:

- identification of graduate capabilities and attributes in EfS, derived from the learning needs identified by students and employers
- development of 'real-world' workfocused and community-focused learning activities and placement opportunities geared to sustainability
- leading a national project to bring EfS into the quality enhancement arena and to change academic practice across five partner universities
- strategic support to embed sustainability across core courses, including staff development activities to build capacity in EfS
- development of major funding bids and research consultancy work through the International Research Institute in Sustainability (IRIS)
- opportunities for curriculum projects and for co-curricular learning linked to our corporate operations, campus activities and Employable Gloucestershire Graduates Scheme

GUIDANCE AND INFORMATION

HEFCE strategic statements and action plans: www.hefce.ac.uk/lgm/sustain

University Sustainability Strategy Promising Futures 2009-2015: http://insight.glos.ac.uk/sustainability/Pages/SustainabilityStrategy.aspx

Education for Sustainability at the University: http://insight.glos.ac.uk/sustainability/Education/Pages/default.aspx

Education for Sustainability Guides: http://insight.glos.ac.uk/sustainability/Education/Pages/EducationforSustainabilityGuides.aspx

University Teaching and Learning Strategy: http://insight.glos.ac.uk/tli/Pages/default.aspx

UN Decade of Education for Sustainable Development: www.desd.org

This briefing was produced by Dr Alex Ryan and Professor Daniella Tilbury with funding from the Marie Curie project 'Learning and Living for Sustainability'. It contributes to the university's commitment in Promising Futures 2009-2015 to implement actions to help staff 'make sense of sustainability' across the institution and 'embed EfS learning opportunities into core course offerings'.

Following the advice of the Teaching, Learning and Assessment Committee, two EfS briefings have been produced: one to inform university managers and the second to guide academic teaching staff, in relation to practice and issues in their respective areas of work.



FP7 Marie Curie Actions



European Commission

