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Chapter 2 An institutional approach: education for sustainable development at the University of Leeds Martin Purvis, Claire Marsh, William Young and Julia Clarke, University of Leeds

Edited by Richard Atfield and Patsy Kemp



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Summary

Central to the strategic vision of the University of Leeds is the reaffirmation of the University's commitment to provide an exceptional student experience centred on inspirational learning and teaching, grounded in world-class research. A key component of this vision is a major curriculum enhancement project. This chapter outlines the intent of this project, which reinforces existing provision that challenges undergraduate students to broaden their academic horizons and develop their capacity for critical thought. The chapter explores the project's implications for sustainability education and notes the mutually reinforcing effects of the Curriculum Enhancement Project and a range of other institutional initiatives, including the staff-student Education for Sustainable Development Network, and groups reviewing the university's own environmental impacts.

Introduction

The University of Leeds is engaged in a major review and enhancement of its undergraduate curriculum. We will outline the scope of this project, before exploring its impact on reinforcing the study of sustainable development. The Curriculum Enhancement Project, together with the established staff-student Education for Sustainable Development Network (ESDN), is key to the university's commitment to promote a co-ordinated approach to sustainability education. The work of the Network ensures that this educational provision has a practical as well as an intellectual dimension, harnessing academic insights into sustainable development to inform all aspects of university activity. Our approach reflects the United Nation (UN)'s emphasis on the role of education for sustainable development in fostering care for the Earth's ecosystems, and in the related pursuit of social and economic justice, and inter-generational responsibility (UNESCO, 2005).

The Leeds Curriculum Enhancement Project

The Leeds Curriculum Enhancement Project reflects an institutional commitment to excellence in learning and teaching, which is at the heart of the University's strategic vision (University of Leeds, 2012). At a time of external uncertainty concerning the future development of higher education, a decision was taken to initiate a comprehensive review of the overall structure of the curriculum that would confirm the distinctive qualities and value of a University of Leeds education. The project thus aims to ensure that the University continues to attract high quality students in an increasingly competitive market, that Leeds students receive the best possible experience of higher education, that our students are well prepared for life and employment after study, and that employers continue to recognise the University of Leeds as a significant source of graduate recruits. The University was also mindful of the investment in curriculum enhancement being made by other leading higher education institutions (HEIs) around the world (LEAP, 2007; Ramsden, 2008; University of Melbourne, 2006); this added weight to the strategic imperative to review the design and delivery of its undergraduate teaching to ensure it continues to meet the needs of students, employers and wider society. The Curriculum Enhancement Project is ambitious and comprehensive, involving attention to assessment, feedback and the structure of the academic year, as well as to programme ethos and content. Without threatening the primacy of the disciplinary focus of University of Leeds degrees the project aims to ensure that:

- all undergraduate programmes foster student awareness of contemporary societal challenges and the values associated with a positive response to these challenges;
- the university's achievements in harnessing its research to create learning opportunities for students are further reinforced;
- the programme design puts increasing emphasis on fostering deeper, less 'pocketed' knowledge;
- students can access increased opportunities to add value to their studies by taking modules which transcend conventional disciplinary boundaries, so extending their academic horizons and capacity for critical thought;
- students understand and can articulate the benefits of this educational approach for their own personal development, employability and future contribution to society.

The Curriculum Enhancement Project thus reflects a commitment to enhance the student experience by making creative use of the academic resources of a large, research-intensive university, and to respond positively to a changing external environment. Graduate employers increasingly value students' capabilities as independent learners and flexible problem solvers, their confidence and judgement in challenging received wisdom, their capacity to deal with complexity, and to make sense of competing analyses of pressing contemporary issues. It is precisely these qualities which the Curriculum Enhancement Project seeks to foster among Leeds graduates.

The increased attention to sustainability skills and knowledge demanded by both employers and students (Drayson et al, 2012) is an excellent example of the need for the society-responsive, interdisciplinary, and problem-focused curriculum supported by

the Curriculum Enhancement Project. It follows that the project further reinforces the rationale for academics across the university to engage with the aims of education for sustainable development. Indeed, these aims coincide perfectly with wider aspirations to develop teaching which crosses disciplinary boundaries, engages proactively with societal concerns and uses action-orientated pedagogies.

Key components of the Curriculum Enhancement Project

One of the first outcomes of the project is a requirement that all undergraduate degrees explicitly demonstrate the ways in which they deliver the common core components of the Leeds curriculum. This entails provision which:

- · develops the knowledge, skills and capabilities required for graduate employment;
- encourages students to reflect on the ethical issues raised by the study of their primary degree discipline(s);
- locates the specifics of disciplinary study within an international context, both academic and societal.

The vast majority of undergraduate programmes at Leeds already meet these requirements. The challenge is to make this fully evident to students, ensuring they understand the benefits of this approach to programme design. Although sustainable development is not identified as a core curriculum component in its own right, many students will encounter relevant ideas through their attention to ethics, and their exploration of contrasting international viewpoints. Some individuals will be encouraged to seek out other opportunities to increase their understanding of sustainable development, whether through involvement in the co-curricular initiatives outlined later in this chapter, or through academic study.

Access to study opportunities will be increased by a second main plank of the Curriculum Enhancement Project, which aims to reinforce existing opportunities for students to broaden their intellectual horizons. Many Leeds degrees already offer undergraduates studying a particular discipline the chance to take modules from a university-wide pool, chiefly drawn from other degree programmes. Individuals frequently find this a rewarding experience, but the Curriculum Enhancement Project has confirmed the need for additional institutional investment to ensure that all students appreciate the full range of opportunities for study and personal development available to them. To clarify these opportunities, in future, 'broadening' modules will be grouped into ten themed strands (Figure 1), which together reflect the range of research and teaching at the University of Leeds.

Figure 1: Broadening strands.	
Challenging Global Inequalities	Languages and Cross-Cultural Understanding
Creating Sustainable Futures	Media, Culture and Creativity
Enterprise and Innovation	Mind and Body
Ethics, Religion and Law	Power and Conflict
Exploring the Sciences	Technology in Society

The strands do not represent a single block of teaching – as is the case in some other institutional models for broadening the curriculum – but a series of related opportunities. With academic support and guidance students will be able to identify the specific modules which best meet their particular interests. Typically, a student would devote between 10% and 15% of their total study time to teaching drawn from the broadening strands. As well as highlighting important societal issues, the strands have been designed to cut across traditional disciplinary boundaries, forging novel connections which may in turn give rise to new teaching. Indeed, individual strands are not intended to be wholly self-contained.

Some of the modules included in the Creating Sustainable Futures strand will also form part of related strands which explore issues including uneven global development, ethics, and the societal and environmental impacts of technology. As their interests evolve, students may thus map out progression pathways for their studies which move between, as well as within, the specific strands. Some individuals may come to select more advanced modules in sustainable development as a result of introductory study of the science of climate change, or the economics of international trade. Equally, an introductory module on the concept of sustainable development might lead some students to investigate other aspects of economics, ethics, or health policy in more detail.

Developing the Creating Sustainable Futures strand

At the time of writing the Creating Sustainable Futures strand is still under development, but initial discussions provide an indication of its likely intellectual agenda. Students will have the opportunity to select from modules which address key issues, including:

- the meaning of sustainable development as a concept;
- sustainability as an environmental challenge at scales from the local to the global;
- current obstacles to sustainable development;
- the consequences of continuing unsustainable development;
- how economic development might be re-imagined to respond to demands for social and environmental justice;
- potential tensions between inter- and intra-generational equity;
- the political and ethical dimensions of resource use and management;
- the ways in which science and technology may both threaten and promote more sustainable development.

It follows that there is scope to make innovative use of existing teaching offered by schools and institutes drawn from across the University of Leeds. An initial review suggests that around 50 relevant elective modules are already on offer. Contributing departments are likely to include Earth and Environment, Geography, Biological Sciences, Chemistry, various branches of Engineering, Politics and International Development, Transport Studies, the Leeds University Business School, Philosophy, Healthcare and Medicine. The task of co-ordinating a partnership on this scale is formidable and an academic leader will be appointed for each broadening strand to provide the necessary vision and intellectual impetus. Strand leaders will also allocate funding to help develop new teaching specifically designed for students from varied disciplinary backgrounds. Such teaching not only opens up exciting possibilities for interdisciplinary collaboration – perhaps reinforcing existing research links, and creating new ones – but should also ensure that students gain the necessary pre-requisite understanding for the study of more advanced and specialist modules in the later years of their degree.

The role of the Education for Sustainable Development Network (ESDN)

Initial institutional interest in sustainability at the University of Leeds concentrated on practical changes to infrastructure and services, through measures aimed to increase recycling, shorten supply chains and reduce greenhouse gas emissions. A next logical step was to promote sustainable development through the University's teaching and research. This led to the launch of the ESDN in 2010. It aims to harness the enthusiasm and leadership of self-selecting champions in subjects across the institution, to strengthen coverage of sustainable development in the curriculum. The Curriculum Enhancement Project provides an opportunity to reinforce this effort, incorporating education for sustainable development into the institutional DNA, rather than continuing to rely on the efforts of an enthusiastic minority.

One of the ESDN's earliest tasks was to develop and communicate a coherent vision of education for sustainable development at Leeds (Figure 2). The vision statement reflects an allegiance to a broad definition of social, as well as environmental, sustainability. The accompanying strategy statements indicate a focus on the development of staff as well as students; a concern that action should accompany an awareness of issues; and a desire to influence the culture of the institution itself, so that education for sustainable development becomes part of the daily life of all who work and study at the University of Leeds.

Subsequent pilot work with the Faculties of Business and Environment has begun to flesh out the Network's vision by developing a framework for incorporating education for sustainable development within a range of disciplinary teaching (ESDN, 2012). Drawing on the results of internal trials in curriculum review (using audit techniques outlined in Lozano and Young, 2012) and sector-wide studies (Sterling, 2012), the framework provides guidance about the role of localised forums for dialogue, action and reflection in fostering curriculum changes that reflect the interests of stakeholders, including employers, in particular disciplinary fields. The framework thus reflects the ESDN's concern with conceptualising the process of staff and student engagement necessary for success, as well as securing specific change in practice.

Figure 2: Vision and strategy statement for ESDN. (ESDN, 2012)

Vision statement

By 2020, all Leeds students will be able to engage, contribute to and lead changes towards sustainable development, which increase the quality of the natural environment and the quality of life of individuals across the globe, today and in the future.

Strategy

All staff and students of the University of Leeds will be able to develop their personal capacity for contributing to the inter-related environmental, social and economic challenges of sustainable development through:

Awareness raising activities:

Exposure to key issues, challenges and debates, especially the role of their own discipline in responding to these, and the need to work with other disciplines on complex, interconnected, and contested issues.

Support for making a difference:

Opportunities for individual and collective actions for change within disciplinary, and extracurricular, contexts will be provided and supported.

Supportive institutional culture:

Staff and students will be part of a University committed to developing its institutional role in sustainable development, enabling and encouraging its members to reflect critically on the development of sustainable practices in all aspects of their lives, particularly as they work and study.

The ESDN is also committed to facilitation of interdisciplinary links and the sharing of experiences between academics with different perspectives on sustainability, as they develop relevant research and teaching. The ESDN website is used to publicise best practice examples from different disciplines across the university (Figure 3). The primary aim is to promote cross-fertilisation between different perspectives on sustainable development as a route to novel interdisciplinary teaching.

Education for Sustainable

Development Network

Figure 3: Two best practice examples from the ESDN website.



www.esd.leeds.ac.uk

By 2020 all Leeds students will be able to engage, contribute to and lead changes towards sustainable development, which increase the quality of the natural environment and the quality of life of individuals across the Globe today and in the future'

Experiencing & contributing to sustainability strategy in real organizations

Summary

Students on School of Earth and Environment BA and MSc programmes are provided with opportunities to learn about the challenges of achieving sustainable organizations first-hand through placements and applied research projects which seek to address reallife challenges. Programme leaders and module staff located in the Sustainability Research Institute work to develop long-term relationships with organizations from the public and private sectors as well as non-governmental organizations, so that these experiences can be provided. The organizations value the contemporary knowledge and enthusiasm of our students working on difficult sustainability problems. Students value applying their knowledge to real world situations and gaining career insights and work experience. Examples of placements include students fulfilling the roles of sector strategy analyst for the Carbon Trust, and Environmental Consultant for the construction services company Halcrow. An example of a research project is the evaluation of sustainable procurement policy for the University of Leeds' own catering department which helped inform its development.

Net Impact Chapters

Summary

Net Impact is a network of Masters Degrees of Business Administration (MBA), University students and professionals committed to using the power of business to improve the world. With more than 200 student and professional chapters on 4 continents in 75 cities and 120 schools, Net Impact is one of the most innovative and influential networks in existence today. The University of Leeds Net Impact Chapter was established by a group of MBAs to be an inclusive body that exists to develop the Social Responsibility and Sustainability agenda within the University of Leeds and act as a bridge to the community in the Yorkshire region in order to have a positive impact on business and society globally. The Net Impact Chapter provides University students with an opportunity to develop an understanding of Sustainable Development which is delivered outside of the taught curriculum and has provided its members with insights of how to incorporate the concepts into future career choices and options.

The inter-university contacts and examples of good practice already developed by the ESDN create a strong foundation for this particular facet of the Curriculum Enhancement Project. As the Creating Sustainable Futures strand develops and is trialled through its first academic year, the Network will have an important role to play in supporting the work of the strand leader as they review the coherence and coverage of existing teaching, and pursue opportunities for new developments. In turn, the institutional impetus for curriculum review will help to secure a more integrated approach to education for sustainable development than would have been possible through specific disciplinary initiatives.

A further important dimension of the work of the ESDN is its role in giving a tangible expression to an educational commitment to sustainability. In partnership with the university's Operational Sustainable Development team – which coordinates activities to manage the environmental impacts of the University – and Leeds University Union (LUU) for students, the Network fosters the notion of the 'campus-as-a-laboratory' through which to promote practical engagement with sustainable development concepts. Indeed, LUU input has proved crucial in helping staff appreciate that sustainability skills can be developed outside the formal curriculum, and in co-ordinating related student-led initiatives through the Leeds Goes Green Forum. For the past two years 80 student volunteers have been taking part in environmental and sustainability audits of 33 university departments under the aegis of the Green Impact Scheme, led jointly by the Operational Sustainable Development team and LUU. The audits have helped to inform institutional planning on issues including energy and water use, waste recycling and purchasing; resulting, for example, in the installation of water saving devices and new policies on lighting.

The ESDN is assisting in the further development of the scheme by identifying and developing the training students will need as auditors. In future the provision of such training may become a feature of the Creating Sustainable Futures curriculum strand, while the latter should act as a wider reinforcement to informed student involvement in key areas of university planning. This intent is reflected in the recent launch of 'Transition Leeds University', which aims to involve staff and students together in initiatives that will help to create a more sustainable and less carbon-intensive campus.

Reflection

The Curriculum Enhancement Project is still at a relatively early stage as 'Creating Sustainable Futures' and the other strands will not be fully launched until September 2014. The project's ambitions will undoubtedly create new challenges; coherent development of the broadening strands will require that academics drawn from traditionally separate disciplines work together to develop a shared agenda. But there are signs that the necessary discussions are starting to take place, about the scope for creating innovative connections between existing teaching, and the development of new provision. Consultation with staff, students and prospective students has generated generally positive reaction to the development of the broadening strands. Students, in particular, like the idea of a flexible model of broadening, which offers them choices about what and when to study, rather than any more prescriptive system which sets out a defined agenda which all must follow.

The initial ESDN pilot projects in the Faculties of Environment and Business were largely reliant on the goodwill and enthusiasm of individual staff. They have, however, secured some significant curriculum changes. The Environment pilot confirmed the breadth of existing study opportunities for students, but also underlined the need for greater co-ordination in module design and delivery. This has contributed to a more integrated approach to programme planning, generating positive feedback from staff and students. In Business, the pilot highlighted opportunities for reinforcing sustainability teaching for both masters and undergraduate students. New modules dealing with sustainability and business ethics have proved popular with MBA students, prompting further discussions about Environment Faculty input into the programme. Sustainability teaching has also been introduced into core skills modules for first-year undergraduate management students, although this has not generated an immediate increase in the take-up of more advanced optional modules in sustainability. In part this reflects competition with other curriculum content, but continuing efforts will be required to help students – and some staff – to appreciate the relevance of sustainability issues (cf Jones et al, 2010). The Curriculum Enhancement Project will strengthen the challenge to these barriers and, crucially, also provide a coherent framework through which to promote to students the range of opportunities to study aspects of sustainable development.

Concerns remain in some quarters that a commitment to broadening the curriculum could compromise the traditional disciplinary depth and focus of degree study. This is often a particular issue for vocational degrees where the syllabus must meet the requirements of external professional and regulatory bodies. But while this may curtail participation in some 'broadening' opportunities, many regulatory bodies are increasingly keen that students gain an understanding of the implications of ethical and sustainability issues for their future professional practice. The relatively recent emergence of this emphasis on sustainability within the professions means their home academic disciplines may not always themselves possess substantial expertise in education for sustainable development. The Creating Sustainable Futures strand should help to fill this gap.

Perceived tensions in curriculum development further reinforce, therefore, the case for the flexible approach to 'broadening' – and thus to education for sustainable development – being pursued at Leeds. Allowing students some choice about what and when they study increases the likelihood that 'broadening' will be seen as a valued complement to, rather than a distraction from, the main disciplinary focus of a degree. Also important is the growing range of co-curricular opportunities for students to express their interest in sustainable development, whether as an alternative to more formal academic study, or as a means to give practical expression to ideas explored in lectures and seminars.

A flexible model of curriculum enhancement does, however, require considerable investment of effort in ensuring students have sufficient information about the available strands and modules to be able to make an informed choice. Care is also required to ensure practical concerns about timetabling and resourcing do not undermine the intellectual case for broadening the curriculum.

Main learning points

- it is vital to articulate the value of broadening opportunities within the curriculum to students, staff and other key stakeholders in a clear and accessible manner;
- students must be provided with the necessary information to make an informed decision about the pursuit of
 broadening opportunities. This requires careful consideration of the appropriate vocabulary to be used when engaging
 with a diverse audience. Initial consultation revealed that 'sustainability' and 'sustainable development' are not
 necessarily terms which all students, or staff, understand immediately;
- an institutional approach, embodied here by the mutually reinforcing effect of the Curriculum Enhancement Project
 and the ESDN, is of value in giving coherence to the development of education for sustainable development. A
 commitment from the university and the students' union to review the sustainability of their own infrastructure and
 services has also helped to reinforce perceptions of the relevance of sustainable development as a curriculum
 component;
- education for sustainable development should encompass both curricular and co-curricular initiatives. There are
 benefits both to individual students and staff, and to the university as a whole, from an approach which fosters the
 practical application of sustainable development concepts, and which involves students and staff in institutional
 planning for sustainability;
- plan for the long term; moves to institutionalise education for sustainable development are best regarded as a work in progress. Alongside specific curriculum initiatives, effort should also be devoted to creating structures and spaces within which staff and students can continue to debate the full scope of education for sustainable development.

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Leeds University Business School is a signatory to the Principles for Responsible Management Education and hosts the only UK Net Impact Chapter to have been awarded gold status.

Biographies

MARTIN PURVIS is a senior lecturer in Geography at the University of Leeds, and since 2008 has held the post of pro-dean for Student Education in the Faculty of Environment. He leads the sub-group of the Leeds Curriculum Enhancement Project charged with the design and implementation of the broadening strands. Martin co-edited (with Alan Grainger) *Exploring Sustainable Development: Geographical Perspectives* (Earthscan, 2004). His main research and teaching interests are in political geography and in historical geography, with particular reference to the development of retailing and consumption.

CLAIRE MARSH has a PhD in action research approaches to progressing sustainable development in organisations, with a specific interest in participatory approaches to integrating academic theory into practical strategy development. Since 2010, Claire has been project officer on the University of Leeds Academic Development Fund Project: Education for Sustainable Development, establishing and co-ordinating the ESDN, and supporting pilots for curriculum change in the Faculties of Business and Environment.

WILLIAM YOUNG is a senior lecturer in Environment and Business at the Sustainability Research Institute in the School of Earth and Environment, University of Leeds. He is the Education for Sustainable Development network chair at Leeds and director of the Business and Organisations for Sustainable Societies (BOSS) research group. William's research covers tools and methods to help change organisations and individuals towards sustainability. This includes consumer, householder and employee behaviour change, sustainable entrepreneurship, sustainable supply chains and sustainability management standards. He teaches corporate sustainability at undergraduate and Master's levels.

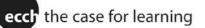
JULIA CLARKE is pro-dean for Student Education in the Faculty of Business at the University of Leeds. Her background is as a chartered accountant and she has taught on a range of undergraduate, Masters, MBA and corporate programmes on Business Ethics, Corporate Governance and Company Reporting. Julia is a founding member of the Education for Sustainable Development Network at Leeds and also of the Centre for Excellence in Teaching and Learning in Inter-Disciplinary Ethics Applied (http://www.idea.leeds.ac.uk/).

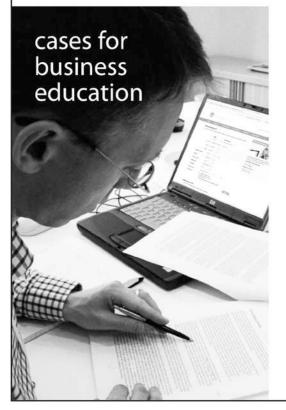
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