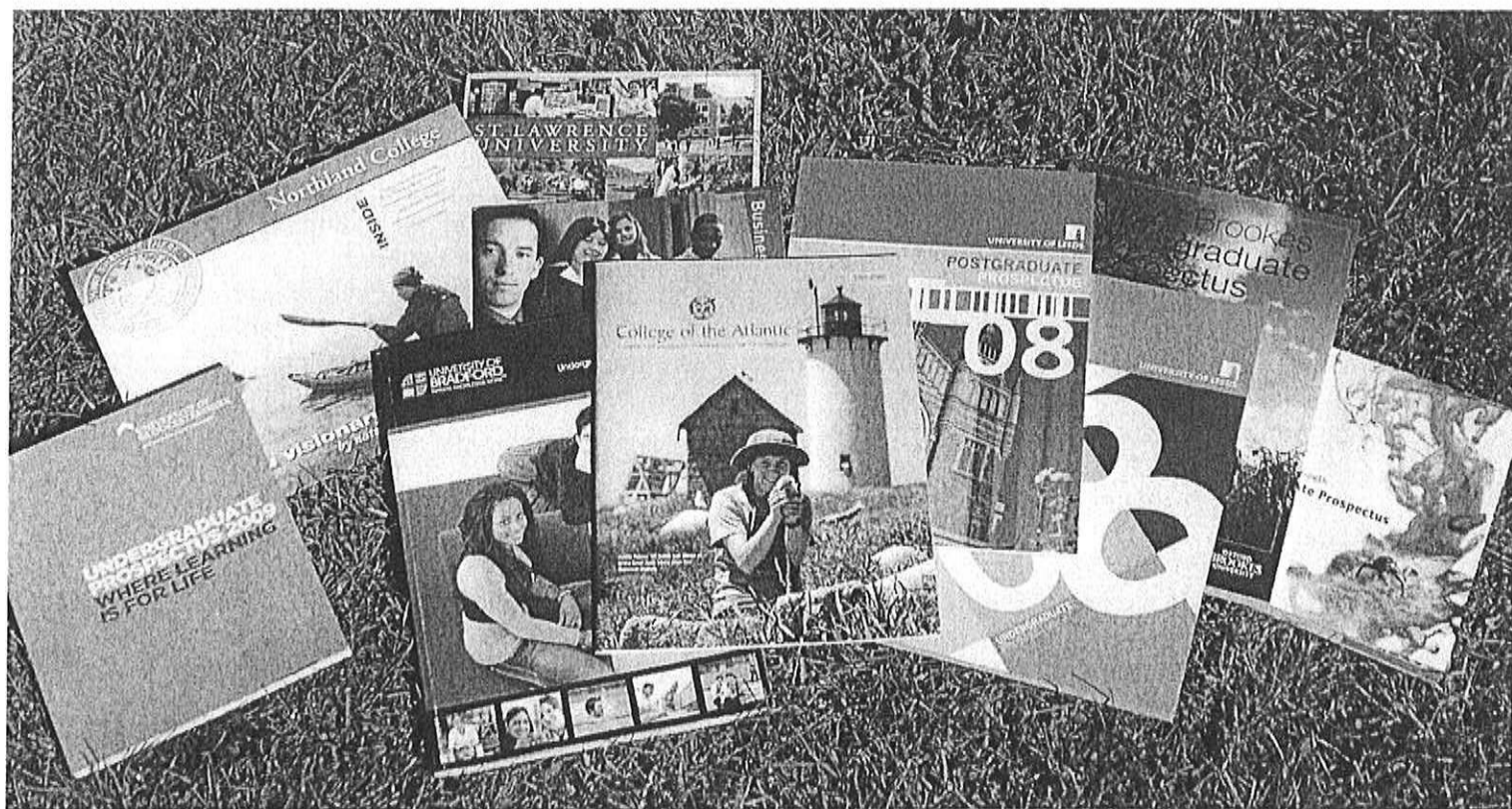


A Big Hairy Audacious Goal-Marketing university sustainability credentials

A Big Hairy Audacious Goal: Marketing University Sustainability Credentials

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Authors:

David Selby
Paula Jones
Fumiyo Kagawa

With

Harriet Sjerps-Jones



EXECUTIVE SUMMARY

In the light of the University of Plymouth's commitment to becoming 'an institution modeling university-wide excellence' in sustainability, this paper explores the potential recruitment and retention benefits arising from the marketing of the university's sustainability credentials. It attempts this by reviewing academic and professional literature on higher education, sustainability and marketing; by reviewing surveys on whether a university's sustainability credentials matter to prospective students and by reporting on a University of Plymouth small-scale survey; by case studies of five UK and four US higher education institutions that market their sustainability credentials; and by an artifact and media analysis of University of Plymouth paper-from, electronic and web-based marketing and promotional media.

There is a paucity of literature on marketing higher education. Literature on marketing university sustainability credentials is even thinner on the ground. The literature suggests that sustainability marketing needs to be organically integrated with whole institution change towards sustainability. A recent research report on the links between sustainability and employability suggests that skills-focused marketing of sustainability credentials might carry great potential. In terms of criteria students hold as important in choosing a university, sustainability ranks much lower than academic and teaching reputation. But while not a deciding factor, sustainability credentials can be a significant determining factor for many, other things being equal. Females are more likely to respond positively to sustainability marketing. The situation is in flux given new sustainability-related school curricula and a different picture may present itself in a few years.

The nine case studies of marketing and branding approaches of higher education institutions with a high sustainability profile point to: the importance of calibrating marketing according to the emerging realities of sustainability adherence and performance; melding vision with a 'work in progress' narrative and giving high profile to student sustainability narratives; the importance of marrying internal marketing with external marketing so the university community is appraised and on board; given that sustainability consciousness is an emerging phenomenon, the case for 'subtle' or 'between the lines' marketing (thus sending signals to those attuned to the sustainability agenda without deterring others) as well as niche and segment marketing; the marketing potential in linking skills, employability and sustainability.

Another case study finding, and a finding from a further snapshot survey of UK universities, is that many higher education institutions are beginning to question the sustainability appropriateness, usefulness and costs of the traditional prospectus. Approaches such as tailored-to-need and designed-to-demand printing are being experimented with as are electronic and web-based forms of marketing. An artifact and media analysis reveals that the University of Plymouth is lagging behind in these regards. It is also failing to market its sustainability credentials in any coherent and thoroughgoing manner, its leadership position in the field of sustainability in higher education notwithstanding.

The study closes with a series of recommendations for sustainability marketing at the University of Plymouth (pp.44 -6) and a methodological note.

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1. Background

The University of Plymouth increasingly enjoys a national and international reputation for its path finding approach to embedding sustainability within its programs and operations. Awarded a Centre for Excellence in Teaching and Learning - Education for Sustainable Development (CETL ESD) by the Higher Education Funding Council for England (HEFCE) in 2004, the work of the now-named Centre for Sustainable Futures (CSF) has taken forward, on a variety of fronts, the university's commitment to HEFCE to transform 'the University of Plymouth from an institution characterized by significant areas of excellence in Education for Sustainable Development (ESD) to an institution modeling university-wide excellence' (Dyer & Selby, 2004, 1).

Through its buy-out of (so far) 38 academics representing 7 faculties and 13 schools, CSF, the only CETL dedicated to university-wide transformation towards a sustainability ethic in England, has helped embed a sustainability agenda in undergraduate and graduate curricula in many disciplines across the university. It has also worked alongside Learning Facilities and other professional units in further building sustainability into estates (buildings and landscaping), information and library services, procurement practices, transport and travel arrangements, and energy and waste disposal practices.

In policy terms, CSF has been responsible for orchestrating a 'wide and deep' consultation on the University Sustainability Policy (University of Plymouth, 2007a), as approved by the Board of Governors in July 2007 and now attracting attention across the higher education sector nationally and internationally for its comprehensiveness and innovation. The consultation had the effect of raising the profile of the sustainability agenda across the university (Selby *et al.*, forthcoming). A Sustainability Strategic Plan (University of Plymouth, 2007b) containing some 73 actions for the 2007-10 period, 38 led from elsewhere than CSF, was also drawn up and approved in summer 2007, likewise following a 'wide and deep' consultation. Since the inception of CSF in June 2005, Centre staff have also worked to ensure that sustainability is embedded in university policies and plans as they come up for renewal: for instance, the Corporate Plan, the Development Plan, the Learning and Teaching Policy, the Skills Plus Policy, the Research and Innovation Policy.

In drawing up the Sustainability Strategic Action Plan, it was felt that advances in the process of transforming the University along sustainability lines had reached a degree of significance and impact in terms of both range and substance that it was time to consider the issue of marketing the University's sustainability credentials. After all, the University had come second in the 2007 People and Planet Green League Table of UK Universities (People and Planet, 2007) and Plymouth itself had come first and fourth in October 2007 green city surveys

conducted by, respectively, the World Wide Fund for Nature (2007) and Forum for the Future (2007).

Accordingly, two actions were included in the Sustainability Strategic Action Plan – 7.9(1) and 7.9(2) – relating to marketing (University of Plymouth, 2007b). In discussions with the then Director of Marketing and Communications in December 2007, it was agreed that the Centre for Sustainable Futures would trigger these actions by conducting a research and development project aimed at identifying the means, potentials and cautions connected with marketing the University's sustainability credentials.

The research and development questions identified for the project are as follows:

1. What does academic and professional data say about the recruitment and retention benefits and/or disbenefits of branding a university as a 'sustainability university' or using a similar ethical branding?
2. How do intending applicants to the University of Plymouth respond to the prospect of Plymouth branding itself a 'sustainability university'?
3. How do other universities, in the UK and elsewhere, project and brand themselves according to sustainability goals and commitments, and to what effect in terms of student and staff recruitment and retention?
4. What does an artifact/media analysis of the promotional/marketing materials of sustainability-branded universities reveal?
5. What does an artifact/media analysis through a sustainability lens of current University of Plymouth promotional/marketing materials (Marketing Department and faculty-produced) reveal?
6. How could University of Plymouth marketing/promotional materials of sufficient quality be produced more sustainably, and at the same or less cost?
7. What development implications and recommendations follow from questions 1-6 for the University of Plymouth?

In addressing the above questions it was determined to:

1. Conduct a review and analysis of academic and professional literature on marketing the sustainability credentials of an academic institution.
2. Conduct a survey of prospective University of Plymouth applicants to identify the importance and attractiveness to them of green or sustainability branding.
3. Review and analyze sustainability branding and marketing approaches of universities in the United Kingdom and United States, as well as lessons learned regarding recruitment and retention, through semi-structured interviews with marketing-related personnel from each institution.
4. Analyze paper-form, electronic and web-based sustainability-related promotional materials from the same sample of universities, exploring text, images and textual/image juxtapositions and synergies.

5. Analyze paper-form, electronic and web-based promotional materials of the University of Plymouth through a sustainability lens.
6. Conduct interviews with personnel attached to the University of Plymouth Document Production Centre and other informed parties within the university as well as document production personnel at sister institutions to identify potential ways forward for the university to produce more sustainable promotional materials.

The research work took place between December 2007 and March 2008, with recommendations being fashioned in early April 2008.

2. Review of Literature

A recent paper systematically reviewing the literature on higher education marketing suggests that 'HE marketing is incoherent, even inchoate and lacks theoretical models that reflect upon the particular context of HE and the nature of their service' (Hemsley-Brown & Oplatka, 2006, 318) while research into higher education marketing 'is still at a relatively pioneer stage with much research still to be carried out from both a problem identification and strategic perspective' (ibid. 334). Its review of 15 empirical papers suggests, *inter alia*, that:

- A substantial information gap exists between the choice factors important to student consumers and the information provided by universities in their print form communications (ibid., 325);
- New, and lower ranking, universities might do better to re-position their marketing rather than trying to adopt the image of 'high stratified' higher education institutions (ibid., 326);
- As against transactional (price, place, promotion, product) marketing models, relationship marketing (based on building an ongoing relationship between customer and service provider) might be a more viable and ethos compatible approach for university marketers in that 'encouraging students to be actively involved in school activities and improving or maintaining a level of university prestige encouraged the formation and development of a university identity, which in turn encouraged students to engage in supportive behaviours in the future'. Relational marketing, the authors add, 'promotes the involvement of students in the marketing and image-building of their institutions' and goes beyond economic justifications to encompass emotional satisfaction and shared ideals (ibid., 328-9).
- The power and flexibility of electronic databases was now allowing for 'segment profiling,' streamlining marketing practices behind multiple brand differentiations (ibid., 330-1).
- Universities may need to re-position themselves to attract successive generations of students (ibid., 331) and to direct marketing efforts at 'developing longer-term institutional visions and missions that incorporated marketing as an integral component of development plans' (ibid., 332).

'The notion of branding,' the authors assert, 'has barely made its mark in higher education marketing' (ibid., 333).

Veloutsou *et al* (2004, 161-2) point out that there is still very limited data on the kind of information applicants to UK universities require so as to enable them to make an informed decision about where to study, a paucity of data that becomes ever more acute given widening access and the consequent growing diversity of needs, outlooks and perspectives. Reviewing existing literature, they identify six attributes beyond information on the institution, its courses and overall academic quality that research suggests prospective students require:

- Reputation of the university
- Location of the university and information on the geography of its surroundings
- Institutional infrastructure
- Costs
- Future career prospects and opportunities
- Quality of life during their studies

Their empirical study of what information university candidates look for, based on interviews and a questionnaire, identifies the three most important informational requirements as: course to be studied (content and quality of the learning experience), institutional (university and departmental) reputation, and campus details. Also significant were information on career prospects (average earnings of graduates and percentage of graduates employed within a year), suggesting students are applying a cost/benefit approach to their decision-making, and details of local social life (ibid., 165-7). The waters are muddied, the authors maintain, by the increasingly heterogeneous nature of the student population in the light of widening access initiatives (ibid., 168).

Literature on marketing the sustainability credentials of a university is even thinner on the ground. A research report by Adam Cade, StudentForce for Sustainability, commissioned by the Higher Education Academy (Cade, 2008), explores the links between sustainability and employability, and carries significant implications for student recruitment strategies of universities. Its findings are based upon questionnaire surveys, structured interviews, focus groups and workshops involving students, graduates, university career staff and employers. Drawing on data indicating that the graduate job market is being influenced by growing employer adherence to both sustainability and corporate social responsibility agendas and citing evidence that for students the environmental and social responsibility of the prospective employer is 'not the main deciding factor' but a 'differentiating' factor in choice of job, the report concludes that, while higher education institutions are responding to the sustainability agenda in terms of campus changes, curriculum development and community partnerships, they are lagging behind in terms of giving prominence

to sustainability competencies and careers (ibid., 3). While there were differences in the weighting of importance given to sustainability amongst students and graduates depending on gender, nationality, graduation year and subjects studied, the overall findings suggest that students 'are concerned about their preparation for their employment provided by universities and believed that sustainable development and corporate social responsibility (CSR) should be taught more at universities' (ibid). Employers, for their part, actively considered social and environmental ethics in their graduate recruitment, felt universities should do more to prepare students in this regard including incorporating interdisciplinary approaches into teaching about sustainability, and expressed the need for graduate recruits possessing specific competencies that would enable them to lend support to their organization's CSR initiatives (ibid., 3-4).

Marrying the findings of Veloutsou *et al* (2004) and Cade (2008), there would seem to be potential for marketing the skills and career opportunities, and overall professional advantage, arising from studying at a sustainability university. At the University of Plymouth, the Skills Plus Policy (University of Plymouth, 2007c), linked to Personal Development Planning (PDP), provides a potentially rich marketing vein that marketing personnel might do well to tap.

The Forum for the Future/University and Colleges Admission Services (UCAS) 2006/7 Future Leaders Survey, more fully described in the next section, reports as follows about the career intentions of prospective 2007 entry students:

Overall, 46% say that environmental considerations are important or very important when deciding what organization to work for, and 42% say the same when deciding what type of career to go into. These figures go up dramatically for 20 and 21-year-old respondents to 52% and 50% respectively (Forum for the Future/UCAS, 2007, 12).

The work of Hitchcock & Willard (2006) with regard to embedding sustainability in corporate sector marketing carries significant implications for a university intending to market its sustainability credentials. For them sustainability can enhance the image and brand of an organization. Referring to the sustainability branding of Honda and Toyota, they argue that sustainability can play a proactive and energizing role for an organization, galvanizing the employees while building a new loyalty in customers. 'Sometimes,' they aver, 'you have to go beyond what your customers are asking for' (Hitchcock & Willard, 2006, 201). They identify four important aspects to sustainability marketing:

- *Timing.* Avoiding going public with a sustainability branding before there are substantive developments on which to ground claims made.
- *Focus.* Determining whether to attach the sustainability brand to all products and lines or to a restricted number of products and lines (with the danger of making non-encompassed lines 'look bad in comparison').

- *Target.* Determining whether to target a particular segment of population or to opt for broad scatter marketing.
- *Framing.* Framing a raft of messages some of potentially wide appeal and some enticing particular interest groups (ibid., 202-5).

These four aspects need to mesh with an institution's sense of the width and depth of its actual and aspired to sustainability credentials. The literature on sustainability in higher education offers multiple renditions of the sustainability university. Velasquez *et al* (2005) offer 'a comprehensive managerial model for a sustainability university' (810) achieved through 'a process of continual improvement in environmental, social and economic performance that should be made through incremental steps' (818). Key elements in the model include: a sustainability vision, mission statement, a high level sustainability committee, sustainability strategies, external networks and partnerships, a sustainability audit. The implications for marketing are that the breadth and depth of the outgoing (and internal) messaging should be finely tuned so that it reflects the vision but is also finely calibrated so as to accord with the actual sustainability performance at any point in time. Interestingly, Velasquez *et al* assert that none of the 80 higher education institutions they researched around the world included all elements of their comprehensive model (818), something that Plymouth has the potential to do.

Other studies point to the 'work in progress' nature of the sustainability university. Adomssent *et al* (2007) emphasize sustainability as an ongoing process of transition energized by interaction between levels and elements within an institution:

As the quest for sustainable university development essentially revolves around learning processes at various levels of the system, the diverse relationships and interactions of these various dimensions among one another play a central role, and one which is all too often neglected (389).

Beringer (2007) writes of the 'dynamic, evolutionary nature' of best practice, stating that 'what constitutes sustainability within higher education is a moving target; the transpired categories of practice are signposts at a given point in time, for one part of the world' (454). That said, he identifies the following key elements in the sustainability university:

- Has adopted sustainability as a major guiding principle, championed by senior administration (the principle being manifest through, *inter alia*, a strategy, sustainability-oriented multi-stakeholder committees; dedicated academic and professional staff, regular sustainability auditing and reporting)
- Has a sustainability-related research centre or institute;

- Offers sustainability-related and sustainability-infused undergraduate, graduate and doctoral studies, each with a significant interdisciplinary element
- Has one or more sustainability-related student groups
- Develops a green campus
- Has external sustainability-related educational outreach
- Provides faculty and staff development in sustainability

The above studies offer, on the one hand, checklists of key dimensions of the sustainability university while at the same time speaking of emergence and transition, an ever-unfolding picture. It is noteworthy that marketing *per se* fails to figure in any checklist (although internal and external communication features) and that the potential role of marketing personnel in contributing to the process of change, on the one hand, and projecting and, hence, confirming, achievements emerging from that process, on the other, is not considered. The role of a marketing department in developing shared understandings through effective internal marketing is, likewise, not addressed. While pointing to 'a lack of empirical evidence with respect to sustainability communication in higher education institutions,' Franz-Balsen and Heinrichs (2007, 403), argue that the robust sustainability university has 'an open way of managing sustainability communication' (433), a point picked up in the emphasis on internal marketing in several of the case studies below (see pp. 11-34).

3. Student Surveys

There is a paucity of surveys of whether a university's sustainability credentials matter to prospective students.

In conjunction with Forum for the Future, the leading UK sustainability charity, the Universities and Colleges Admissions Service (UCAS) published Future Leaders Surveys for 2006/7 and 2007/8 to ascertain what those applying to universities and colleges in 2006 and 2007 respectively thought about the future, themselves and their prospects.

54, 240 'future leaders', i.e. intending applicants to UK universities and located in the UK, responded to the 2006 on-line survey (Forum for the Future/UCAS, 2007, 2). This constituted a response rate of just over 23%. Asked what the world would be like in 2031, 78% felt that climate change will make their lives a little or a lot worse, 66% expect oil to have run out, 52% anticipate a war will have been fought over access to water, 80% expect global inequalities to have widened while, according to a number yardsticks, respondents expected a more technologically advanced world (*ibid.*, 4-5). 85% believed human civilization will survive into the next century but 76% felt that lifestyles needed to radically change for this to happen (*ibid.*, 6-7). Compared to their parents, respondents expected that they would be: more materialistic (65%), more concerned about the environment (55%), and more worried about the future (42%) (*ibid.*, 8-9).

The survey reveals 'stark differences in behaviour between men and women,' with 55% of men but only 39% of women thinking that human civilization will survive into the next century, and 70% of men compared with 82% of women believing that radical or substantive change will need to take place to ensure survival.

Respondents to the 2006 survey were asked how important was a sustainable development focus in university course choice. Sustainable development was held to be important in greater proportion among applicants to: architecture, building and planning (74%), social studies (64%), education (62%) and engineering (61%). It was least important for historians and philosophers (37%), language and literature applicants (32%) and linguists, classics and religious studies applicants (31%). 45% of those intending to study architecture, building and planning, education, and social sciences reported that a university or college having a 'good track record on sustainable development was important or very important in choosing where to study' (ibid., 16-17).

Over 25, 301 intending students at UK universities located in the UK and elsewhere responded to a similar but by no means identical 2007 on-line survey (response rate: 7%). The survey 'paints a picture of a generation that is intensely aware of the big challenges facing the planet and eager to see broader social and political change, but which is less willing to adapt individual personal behaviour' (Forum for the Future/UCAS, 2008, 3). 84% of respondents think human civilization will survive another century with 78% holding that survival prospects need radical or substantive lifestyle change. Respondents expect that, by 2032, oil will be in short supply and prohibitively expensive (89%), anthropogenic climate change will be impinging on their life (84%) and global inequality will have grown (75%) (ibid., 4-5). 86% support the idea that material consumption must be reduced (ibid., 8) and 40% believe that society would benefit from less flying (ibid., 9). Reflecting paradoxes and contradictions in society at large, such ethical stances are not matched by aspirations; 82% wanting to visit exotic places before they disappear and only 16% expecting to avoid air travel for environmental reasons in the next ten years.

The 2006 question concerning the importance of a sustainable development focus in course content and in university environmental performance was not repeated in the 2007 survey. In its place respondents were asked to identify which of twelve factors were 'very important' in choosing a university or college. The conclusion drawn is that 'reputation is still king' with highest scores being given to quality of teaching (54%), reputation of the course (44%), reputation of the university/college (43%), position of course in league tables (23%) and position of university in league tables (23%). 'How seriously the university or college takes environmental issues' was held to be an important factor in choice of institution by a mere 5%, a figure to be set against attractiveness of location (25%) and nightlife (8%). These findings more or less echo findings from earlier

research into university choice indicating that students choose their university on the basis of programme, price, place and prominence (Maringe, 2006).

Muddying the waters somewhat, however, is, first, the growing prominence of national league tables and other forms of recognition for environmental and sustainability performance (which respondents may or may not have had in mind in placing some importance on league table positions) and, second, the reticence of higher education institutions to profile their sustainability adherence and performance. A third of all respondents reported they had received no information from their chosen institution on its environmental policies and performance and 42% expressed that they would like to be given more information.

Student priorities and some of the paradoxes and contradictions elicited by 2007/8 Forum for the Future/UCAS survey are broadly echoed in a small-sample December 2007 survey of year 12 and 13 students conducted by the Market Research Manager of the University of Plymouth Department of Marketing and Communications on behalf of the Centre for Sustainable Futures (Burton, 2007). The questionnaire, which was devised by CSF researchers, was administered to students in six schools in the South West of England. There were 64 responses in all.

56% of respondents agreed that the ability to support and promote sustainability in their future chosen career mattered to them and 67% valued the ability to lead a sustainability-friendly lifestyle (Burton, 2007, 4-5). For 52% the University of Plymouth would rank higher in their choice of university if they were to learn that it was a 'sustainability university', a figure not replicated were it to project itself as a 'green university' or 'eco-university' (56% indicating that neither epithet would encourage them to give the university a higher ranking). However, when set against other factors influencing university choice, environmental and sustainability commitments on the part of the university were the least likely to be factors in their decision making. Using a ranking of 10 (highest) to 1 (lowest), a commitment to listening to the student voice (8.38), frequent active learning (7.61), extra-curricular activities (7.56), frequent off-campus learning (7.52), links to industry (7.24), the university research reputation (7.05) and international links (6.5) all came in higher than a university commitment to 'reduce, reuse, recycle' (6.08), to tackling global warming (5.64) and to sustainability (5.42) (Ibid., 17).

Their sense of the importance of sustainability in their lives outside of and beyond university notwithstanding, the majority of respondents reiterated their lack of interest in the sustainability credentials of the university when over half (52%) reported that they would not be interested in a course at the University of Plymouth that challenged them with sustainability issues; when 55% reported that they were indifferent to whether their course had a smaller carbon footprint or included international travel; when 53% stated that it was not important to them whether they could buy locally sourced, organic food on campus; when

82% reported that the university's commitment to reduce energy consumption and chemical use would not make a difference to their choice of university; when 70% of respondents said that it would not make Plymouth a more attractive choice if they know that all new buildings would be built to the highest sustainability standard; when 53.1% said it would not influence their consideration of Plymouth that it is working towards being a carbon neutral university (Ibid., 5, 28, 33, 36, 37, 38, 39). On the other hand, for 57% Plymouth was judged more appealing in that the university is working to minimize waste production while 72% said that they would be attracted to study at a university which values partnerships with communities and local schools to create more sustainable lifestyles (ibid., 40-1).

Although a university's sustainability credentials are clearly a secondary factor in university choice amongst current cohorts of prospective students, the obverse side of these figures points to a substantial minority for whom such credentials are of some significance, perhaps a tipping or differentiating factor all things being equal between two institutions. 48.4% would be interested in being challenged by sustainability issues within their chosen course; 14% would choose a course with a small carbon footprint; 46.9% said that the availability of locally sourced, organic food mattered to them; for 18.8% a university's commitment to energy and chemical use reduction would make a difference in their choice of institution; 29.7% said that if they knew that all new Plymouth University buildings were built to the highest sustainability standard then that would increase the likelihood of their choosing Plymouth; 46.9% said it mattered that Plymouth was working towards becoming carbon neutral. Such significant minorities would seem to speak, in marketing terms, to 'segment profiling' (p.3) or the 'subtle messaging' of Ithaca College (pp. 22-5) which, whilst acknowledging the low level of sustainability interest amongst many students and avoiding being heavy-handed, recognizes the recruitment potential of signaling to a committed and active 'sustainability' minority that the College is the place to come.

A finding of both the 2006/7 Forum for the Future/UCAS Future Leaders survey and the Plymouth survey is that females are more sustainability-attuned than males (Forum for the Future/UCAS, 2007, 15; Burton, 2007, 11), the Plymouth survey making clear that the sustainability credentials of a university matter somewhat more to females than males in terms of their choice of where to study. Females prefer the term 'sustainability university' to males (Burton, 2007, 14); females are slightly more likely to want the challenge of sustainability within their courses (ibid., 28); almost double the number of males want international travel in their course (ibid., 33); more females (53%) than males (40%) think the availability of locally sourced, organic food on campus is important; more females (53%) are attracted by the idea of Plymouth seeking to achieve carbon neutrality than males (40%). Some 'technical' aspects of a university's sustainability credentials, such as energy consumption reduction and sustainable buildings, reduce the gap between males and females while still leaving the females taking a slightly more pro-sustainability position (ibid., 37-8) but, interestingly, knowing

that Plymouth is minimizing its waste production makes the university more appealing to 67% of females as against 43% of males.

These findings accord with the conclusions of Schultz *et al* (2001):

Empirical findings of gender differences within environmental socio-economic research demonstrate that women show different environmental concerns, more awareness, more skepticism towards technology and more environmentally friendly behaviour because their specific situation and motivations tend to enable the acceptance of strategies for sustainability (133).

They also synchronize with a key finding in Kagawa's (2007) survey of perceptions of sustainable development and sustainability among students at the University of Plymouth: that while male students preponderantly favour technological solutions for achieving a better future, females tend to prefer a decentralized, small scale approach. The implications of gender differentials in perceptions of and responses to sustainability need to be thought through in developing and finessing institutional marketing of sustainability credentials.

Survey findings, then, suggest that institutional sustainability credentials are presently of secondary importance for students in choosing where to study but are of differential importance to a significant majority. In weighing the findings in the balance, those responsible for marketing need to reflect upon the impact new Key Stage 3 and 4 sustainability and climate change school curricula will have on the perceptions and perspectives of future cohorts of applicants. They should also recall Hitchcock and Willard's (2006, 201) insight that 'sometimes you have to go beyond what your customers are asking for'. It is important to anticipate and be ready to ride emerging trends that current students are only just discerning and are only articulating in a limited or hesitant way. A sustainability commitment and branding by a business or university may additionally have the potential to galvanize staff, bring fresh energy and purpose to an institution, and thereby attract more and better qualified personnel with consequent heightened recruitment potential.

4. Sustainability Marketing and Branding at UK and US Higher Education Institutions

Introduction

In this section the sustainability marketing and branding approaches of five universities in the United Kingdom and four colleges/universities in the United States of America are reviewed, drawing upon interviews with marketing-related personnel and analysis of paper-form, electronic and web-based sustainability materials. The UK universities are: the University of Bradford (Ecoversity), Durham University, the University of Gloucestershire, Leeds University and

Oxford Brookes University. The US universities and colleges are: the College of the Atlantic, Ithaca College, St. Lawrence University, Northland College. Each institution was chosen because it prominently features its sustainability credentials in its electronic and/or paper-form marketing and promotional materials.

UK Case Study 1: The University of Bradford (Ecoversity)

Bradford Institute of Technology, founded in 1882, became the University of Bradford in 1966. Located in the north of England, the city of Bradford is among the ten largest cities in the U.K. Well-known for its multicultural heritage and ethos, it was named Britain's 'greenest city' by the Sustainable Cities Index in 2007 (University of Bradford 2008c).

The university mission, 'Making Knowledge Work,' seeks to capture its intention of being 'a forward-thinking, modern and student-oriented university with thriving and vibrant student communities.' It expresses a strong commitment to 'confronting inequality and celebrating diversity' (University of Bradford, 2008a). (With three campuses all located within the city of Bradford, it has six academic schools (Design Technology, Engineering; Health Studies; Informatics; Life Sciences; Lifelong Education and Development; Social and International Studies). The university itself enjoys a multicultural learning environment with over 8, 500 undergraduate and 1, 500 graduate students from very diverse backgrounds, faiths, nationalities and age groups. It employs around 2, 000 full-time and 1, 300 part-time staff.

The University's commitment to sustainable development has recently been underlined by its 2006 achievement of Fairtrade status and the launch of a new Ecoversity Programme in 2005. The Ecoversity aims at 'embed[ing] the principles and practice of sustainable development across the entire institution by getting people involved, taking the lead on issues, and encouraging and making it easier for people to adopt sustainable behaviours and lifestyles' (University of Bradford, 2008c).

Peter Hopkinson, the Director of Education for Sustainable Development at Bradford explains that data gathered over years from prospective students at Open Days revealed a general disappointment with the physical campus. Therefore, initially, Ecoversity was focussed on the immediate task of improving the physical nature of the campus and student environment, whilst at the same time preparing the groundwork for campus developments to be linked to curricular innovation and student well-being.

He explains that the vision of Ecoversity 'captured the imagination and commitment of senior management, in particular the previous Vice Chancellor' from the outset of the initiative.

This initiative, which has always been strong on vision and aspiration, has gone through certain learning curves in terms of its marketing strategy, as well as undergoing a recent fundamental shift concerning where and how the initiative sits within the institution. One reflection is that early stage marketing activity around the dissemination of Ecoversity was, in retrospect, overly enthusiastic and therefore created expectations that were not only ambitiously high but at times 'ridiculously so'. However, for the past 12 months there has been a significant amount of activity that has closed the gap between vision and reality.

In terms of change, the arrival of a new Vice-Chancellor in July 2007, strongly supportive of Ecoversity, brought about 'a dramatic change' especially in 'the way the university operates and sees itself' (Director, Education for Sustainable Development). The appointment of the Pro Vice Chancellor for Learning and Teaching as the head of Ecoversity led to an immediate shift in the Ecoversity marketing message. The Director of Education for Sustainable Development explains:

Its not that we should cut the marketing and outward facing altogether but what we need to make clear is that we are not there yet. In fact, that's the point: the message is in part about celebrating the commitment to change, in part about how we are finding the journey, as well as flagging up the concrete positive changes that are definitely being brought about, of course.

Having started from such a low base, an aspect of seeking to become a beacon is to consciously untangle the journey, fold the learning back in, share the lessons – because that's what's most useful to the sector. And that *is* the message going out internally and externally and I think it is the right one because that's the reality of what we're doing.

When you raise too many expectations too soon, and perhaps over focus on one aspect of what sustainable development might mean, the danger is that the marketing machine can go into overdrive and you end up with an unhelpful version of what you supposedly are. We've struggled a bit with the legacy that past marketing tendencies unintentionally left us with, but as a consequence have become much more thoughtful.

Secondly, a greater emphasis has latterly been put on developing internal marketing strategies and using communication mechanisms creatively. Ecoversity's earliest experiences were that of failing to exploit internal opportunities for marketing the initiative and so contributing to a build up of cynicism, skepticism and disaffection due to lack of available and up to date information. The Director of Education for Sustainable Development thinks that 'more appropriate and fit-for-purpose marketing opportunities can and do arise from actually engaging with change processes. An example might be the development of the Peace Garden project: rather than just an estates led landscape project, we have been trying to use the development of the garden

and its existence as a mechanism for raising awareness of, and engagement with, Ecoversity.'

Difficulties experienced in marketing and messaging around Ecoversity, notwithstanding, positive and important changes have emerged. A crucial development has been a successful funding bid to the Higher Education Funding Council for England (HEFCE) for £3M to develop formal and informal curricula innovations around sustainable development. A second development has been the provision of strong managerial support for those working on ESD at the university. A third has been the development of more consultative decision-making structures. The Director of Education for Sustainable Development reports that 'we have just issued our first Ecoversity newspaper which, rather than a corporate style publication, has been designed with the purpose of developing a two-way conversation with the staff and students around Ecoversity.' Fourthly, Ecoversity has acted as a proactive catalyst for overall cultural change in terms of the modus operandi and ethos within the university.

Contemporaneous with and designed to underpin the above has been the appointment of two researchers whose brief includes the systematic development of research programmes to explore engagement with Ecoversity as well as impact on the student experience. Impact data that emerges along these lines will be primarily qualitative, and will enrich the more quantitative measures of outputs that are also in place such as the monitoring of recruitment and retention figures that are attributable to the Ecoversity as well as the full range of Key Performance Indicators that are in place for Education for Sustainable Development.

Ecoversity's increasing emphasis on demonstrating a solid, everyday commitment to sustainable development has led to improvements in the production of the annual prospectus. There is increasing insistence on using electronic media and recycled paper in paper-form promotional materials. The 2009 undergraduate and graduate prospectuses include clear statements that recycled paper and water-based and vegetable-based ink have been employed in their production. People are even beginning to ask more fundamental questions about why print brochures in the first place.

The Director of Education for Sustainable Development's advice for universities and colleges wishing to market their sustainability credentials is to take a 'very cautious, thoughtful approach, to review regularly and always make room for organic development'. A checklist might look something like:

- What are you going to market? If it is aspirational, can you subsequently live up to it? If it is to celebrate an achievement, what's your evidence base?

- Underlying messages should have long enough shelf lives: you may want an overall message that allows room for substantial changes of foci in terms of local projects.
- Have you conducted a risk assessment in terms of getting the marketing wrong? This can be useful when trying to get it right, as you learn what to avoid.
- Be honest about failures without over-selling them. Do enough reflection to see the learning curves in all 'mistakes'. Market them externally as recommendations, internally as evidence of reflective and consultative management.
- Exploit all sources of data that tell you something is changing for the better without losing transparency as to the method of data collection and size of effect.

When sustainability means a comprehensive process of change, as it does at Bradford, internal and external marketing messages need to be backed by demonstrating the vision of sustainability step by step, hence, the need to 'walk the talk'.

UK Case Study 2: Durham University

Situated in North East England Durham University occupies two locations: the city of Durham and Queen's Campus in the town of Stockton-on-Tees. The University was founded in 1832 and developed in the cities of Durham and Newcastle until 1963 when the University of Newcastle upon Tyne was established. The University has three faculties: Arts and Humanities, Science, and Social Science and Health. There are over 15, 000 students on the Durham campus, the undergraduate population totaling over 11, 500 with over 3, 500 engaged in postgraduate study. The University employs just over 2, 400 staff.

Adam Brown, the Marketing Manager at the University considers it important that prospective students see that the University is aware of its environmental responsibilities, and believes that this forms an additional factor in helping potential students to choose Durham. On the main University website (Durham University 2008) the 'Environment and Sustainability' page can be easily accessed. It highlights the use of 100% renewable energy, the yearly increase in proportion of waste recycled, environmental and ethical procurement, and the Sustainable Living Action Group, a student led initiative.

The University provides an online personalized PDF version of the prospectus for students to download: 'Your Prospectus: Create Your Prospectus - Durham University.' This personalized prospectus is held online to re-access for 7 days. The Marketing Manager thinks that this is a better approach since individual students can decide whether they want to/need to print it off for their own use or read it on-screen. He also highlights that they produce a 'mini prospectus' (24 pages) that they use at recruitment events, instead of the full prospectus (216

pages), that drives students online to 'Your Prospectus'. The website has quite a corporate look with frugal use of photographs. The gender and ethnicity diversity of the student population is well represented within the images used but there is no representation of mature students and those with disabilities.

The promotion of sustainability is something that 'we have been looking at for a long time, over a number of years,' says the Marketing Manager. He highlights the issue of recycling used cooking oils at the university linked with bio-fuel use as an example. Emphasizing the importance of linking the external marketing of an institution's sustainability credentials with changing the culture of an institution through effective internal communication to that end, he adds:

With many universities and colleges it is an evolving process. It is something that is happening over a number of years. There needs to be a certain amount of internal communication to get people involved. Because not only is it about demand, i.e. people requiring us to enter into sustainable activity, we have to make sure that people actually engage with it internally and then make it part of the culture.

The impact that promoting the university's sustainability credentials has had on the recruitment and retention of students and staff has not yet been formally measured ('too early to say at this stage'). Nonetheless, offering and communicating a clear commitment on the direction the university is moving with regard to sustainability is considered as motivational for students: '...they are actually more likely to get involved if they know that the institution has a positive attitude towards [sustainability].'

The promotion of sustainability credentials at Durham is at present more focused on internal rather than external promotion. There is evidence that the university is embracing ways and means to reduce its impact on the environment through recycling, exploring greener energy sources and changes in prospectus production practices. The university recognizes its 'environmental responsibilities' as an institution rather than being led by a vision and mission grounded in notions of sustainability.

UK Case Study 3: The University of Gloucestershire

The University of Gloucestershire is a reasonably small UK university with some 10,000 students, 600 of whom are postgraduate, and over 1,000 members of staff. It is situated across four campuses: three are located in the spa town of Cheltenham and a fourth in Gloucester. The county of Gloucestershire is situated in South West England and is a relatively rural area of the country. Students have the chance to study across campuses that are very different in look and feel, a free bus service operating between them. Gloucestershire University is one of eight Christian foundation universities in the UK, Jill Sturt, the Head of

Marketing and Communications linking this to the university's motivations for sustainability:

We have taken an ethical stance on many things over the years, but since the nineties we have bought green electricity. We were the first English university to obtain ISO 14001. We have got Fairtrade status. We bank ethically. We have ethical investments. And as such, we thought taking sustainability out as far as we can into the way we do business and into the curriculum was the logical next step.

The 2008/9 prospectus marks a clear move to market the university's sustainability credentials. The small square prospectus has a manila card cover and comes in a thin plastic envelope notifying the recipient that it is biodegradable. The prospectus is printed by Belmont Press, a UK based company with ISO 14001 accreditation. Throughout the prospectus an *S symbol is used to highlight 'sustainable facts' communicating information on, for instance, student placement opportunities, volunteering, bicycle schemes and the Centre for Active Learning (designed to foster active styles of learning) the Centre is built to very high environmental standards in terms of energy efficiency, water use, heating, cooling and lighting).

The evaluation feedback on the University of Gloucestershire 2009 Prospectus became available internally in April 2008. Participating, mainly year 12, students generally think positively about the use of the recycled paper in the prospectus. The majority of students (45 out of 52 in the sample) think it a good thing that the University of Gloucestershire has positioned itself as a 'green' university (University of Gloucestershire 2008d).

The Head of Marketing and Communications questions the very production of paper-form marketing materials:

And one of the things that we are trying to drive through as an area, as a unit, is to get people to question whether they should even be producing this collateral in the first place.

In the prospectus the use of photographs are carefully limited to full page images rather than appearing on every page, thereby reducing ink use in the production process. The degree course catalogue section, which dominates so many UK University prospectuses, is organized by degree programme area, avoiding additional pages with duplicate information on each degree course. These pages are uncluttered and printed in two colours, thereby further contributing to a reduction in ink used in the printing process.

On the University website (University of Gloucestershire, 2008a) the institution's sustainability credentials figure among the 13 reasons to choose the university. The free bus service and commitment to sustainable transport is number 4 in the

list whilst 'going green' comes in at number 13. Reason 8 on the list refers to 'values', with a statement including the line 'Founded on Christian values, the University welcomes students from all religious faiths and none.', and closing with 'University staff are here to help, no matter what issues you face.' Throughout the website there is commendable diversity in terms of gender, ethnicity and age of students represented.

From her experiences at Gloucestershire University, the Head of Marketing and Communications offers the following advice to any institution wishing to market its sustainability credentials, emphasizing both the necessary commitment of the institution and the importance of internal marketing and communication within the institution.

I think you have got to believe it and I think you have got to want to do it because it is a good thing to be doing, rather than think, how is this going to get me anything quickly to sell us. You have got to really, really believe it. And I think you have got to get by and across the whole organization.

In the case of the University of Gloucestershire the decision to market its sustainability credentials can be seen as a modern day expression of a founding philosophy, involving ethical and environmental decision making and moving to address issues of sustainability in its curriculum development.

UK Case Study 4: Leeds University

Leeds University, situated in the north of England, has some 8,000 staff and some 30,500 undergraduate and postgraduate students (with an additional 31,380 students on short courses).

In its 'About the University' website, there is a page with the title 'Environmental Management' (University of Leeds, 2008b) in which the University 'recognizes the importance of the environment' and lays out its environmental management credentials in the areas of carbon reduction, energy and water, transport, waste management and recycling, fair-trade and sustainable purchasing. The page has a hyperlink through to a *Green Guide Towards Sustainable Living in Leeds* (University of Leeds, 2008c) for students. One page (p.26) in the *Guide* is devoted to answering the question 'How Green is the University?' The emphasis on the page again focuses on environmental management while also flagging the sustainability orientation of much academic research at the University. The February 2006 University Environmental Policy, also hyperlinked from the 'Environmental Management' page, similarly focuses on campus environmental impacts and their management, embracing learning only in terms of awareness raising about impacts. There are hyperlinks on the page to specific University academic units and programmes with an environmental focus. Ranked the top university in the region for its environmental management performance by Business in the Environment, Leeds won the 2006 Green Gown

Award for waste management (HEEPI, 2008a) and the 2007 Continuous Improvement Award (HEEPI, 2008b). The University has some thirty staff dedicated to environmental management. Clearly, for Leeds, sustainability is synonymous with environment.

According to Helen Clapham, the Head of Student Recruitment and Marketing, although Leeds has made considerable efforts in terms of environmental management, sustainable procurement and transport, there have been no concerted efforts to embed sustainability more widely, nor, correlatively, to promote a wider range of sustainability credentials. 'It is not,' she says, 'within the DNA of the organization yet.' Internal promotion of sustainability has been restricted to poster campaigns urging more sustainable behaviours.

There is, though, more than a premonition that the promotion of the University's environmental management performance and achievements needs further honing, given the importance new generations of students are attaching to the issue. While the university is unlikely to adopt a more comprehensive approach to addressing the sustainability agenda, the Head of Student Recruitment and Marketing is aware that, unless rising student expectations in this area are seen to be met, there could be an adverse impact on recruitment:

I think what will happen is that particularly with students we are trying to attract who are becoming increasingly sustainability aware, that it will be an expectation that we meet various standards and meet an obligation. I don't think it will be a point of differentiation for us. I think it will just become an expectation that you are doing these things. I think some institutions are planning to be the first really sustainable institution and this is how they are positioning themselves. And I don't think we will go down that route. That is not where our strengths lie. But I think increasingly if you can't answer questions about your carbon footprint, recycling, etc., you may lose students in the future because universities are funded by taxpayers and are about tackling global problems, one of which is climate change. We do have a strong responsibility there.

Marketing sustainability or corporate social responsibility credentials, even where the agenda is professedly less than comprehensive, requires a backcloth of genuine good practice and achievement. 'When it comes to marketing, you need to be absolutely authentic because people will find you out' (Helen Clapham).

UK Case Study 5: Oxford Brookes University

Oxford Brookes University, set in southern England with over 18,000 students and some 2,500 staff, commits 'to making sure the University is an environmentally sustainable and ethical place to live and work' (Oxford Brookes University 2007b, 25). In the 2007 People and Planet Green League Table of UK Universities (People and Planet, 2007), Oxford Brookes was placed fifth.

The University was the first UK higher education institution to achieve Fairtrade status. According to the University's Environmental Coordinator, 'we have put a lot of effort into sustainability and we have achieved a lot'.

These sustainability credentials are represented in the University prospectus in a one-page section with the title 'Our environment'. Sustainability initiatives canvassed on the page include the University's city centre to campus bus service, a project with the Carbon Trust to calculate and reduce carbon emissions, the production of 20% of energy requirements through on-site energy production, environmentally sustainable campus redevelopment, recycling schemes, planting projects, a solar heated swimming pool and the derivation of 100% of energy from renewable sources (Oxford Brookes University, 2007b, 25). There is no reference on the page to a curricular dimension to the University's sustainability endeavours.

So far, the University has not gone forward with embedding its sustainability credentials more widely and deeply within its marketing materials. According to the Environment Coordinator, there is no structure or process in place for environmental marketing and no tools in place to monitor and assess the impact on recruitment and retention of promoting the University's sustainability track record. Should the University begin to promote its sustainability record in a more thoroughgoing way, she says, it would be important to be able to verify all claims made. 'If you are shouting about it you need to make sure you can back it up.'

US Case Study 1: The College of the Atlantic

The College of the Atlantic (COA) is a small liberal arts college of some 325 students and 30 faculty situated on an island off the coast of Maine, half of which falls within the Acadia National Park. The College mission statement concerns enriching the liberal arts tradition with a 'human ecological perspective' focusing on human beings within their social and natural communities.

Opening in 1969, COA's engagement with environmental studies was woven into its founding philosophy. According to Sarah Baker, the Dean of Admissions, more recently the College had become complacent in its promotion of its environmental credentials. 'We didn't have to do much in order to secure that identity,' she says, 'but as we saw other schools starting to revamp everything from serving organic food in their dining halls and changing their practices on what paper they used for publications and checking their curricula, we recognized that we needed to make some leaps forward if we were going to stay at the front'. Some of the complacency, she acknowledges, was a sub-text of a desire to mainstream the College, playing down the 'hippy and crunchy' image to attract a broader range of students.

The growing 'competition for that market interested in environmentalism' brought about a sea change. Sustainability became a key message, included in the College President's speeches to different constituencies and folded into press releases and recruitment sections of the website. In the Dean of Admissions' view, a potentially powerful marketing tool is the College *Viewbook*, reviewed and overhauled every three years, and currently undergoing a radical reorientation:

We are actually doing an issue-centered *Viewbook*. We are not treating it as a 'here is our beautiful library, here are our happy students sitting under a pretty tree having fun', that sort of thing. Instead, we are working on picking out half a dozen issues – things like poverty, hunger, suburban and urban sprawl, water rights, and preservation of biodiversity. Picking some key issues and using those as a launch pad for telling the story of COA and using examples of student projects, from courses on campus and things our alumni are doing in those fields. It is really saying there is some stuff that is happening out there that is not good and we are addressing that, we are not flinching away from that. Here is the very real way we are impacting that. ...To try to be in some ways more realistic and less glossy.

The *Viewbook* is, perhaps, the flagship development in efforts to promote the College's sustainability credentials by adopting a distinctive slant. It was early recognized that marketing distinctiveness would only work were there actually distinctive features in the College's sustainability efforts to draw upon. As the Dean of Admissions puts it: 'we have to make sure that we are always at the forefront and that we are always articulating the fact that we are at the forefront'. In this regard, the College has proved very imaginative. New courses have been brought in with an accent upon community development and practical and marketable skills for sustainability. These include a Practical Activism course. A Director of Sustainability was hired who has headed up much-vaunted Dark Skies (reducing lighting on campus) and net-zero carbon emission initiatives. New student housing, built to high sustainability standards, and co-designed by students and staff, is soon to open. An island organic farm staffed by students and alumni is linked to the College and brings students and youth on the island into working contact. A student-led community light bulb exchange, subsidized by the State of Maine, looks set to make the island an exclusively compact florescent light community within eighteen months.

The College's embrace and promotion of such initiatives, formal and informal, has, in the view of the Dean of Admissions, led to 'more applications and applications from stronger students' (a shift in the last ten years from 25% to 50% of students being of the 'top grade'). News stories have been particularly important in exciting the interest of prospective students. The December 2007 announcement that the College had reached net-zero carbon emissions led to 25% more hits on the recruitment website. A pronounced sustainability ethic has also led to heightened competition for academic jobs and improved staff

retention at the College even though salaries are \$5,000-10,000 lower than at major state universities.

Key to marketing, it appears, has been, first, the projecting of the College as a place where rhetoric is matched by concrete developments, 'that has principles that walk the walk instead of just talk the talk' (Dean of Admissions). Second, it has been very important to be able to convey to prospective students and staff that the College is a community that has a solid record of sustainability action ('hard facts and examples at the ready'). For this latter reason, an institution needs 'a year or two of examining and changing practices before you can really trot out that label of "we are a sustainable institution"' (Dean of Admissions).

Promotional materials - that address economic and social and well as environmental dimensions of sustainability - include an attractively designed and well-illustrated prospectus (with more 'active people' images than 'nature' images), and a dull but fairly standard course catalogue. All materials are produced on recycled and chlorine free paper. The shift, according to the Dean of Admissions, is towards Internet and e form promotion and recruitment, another means of projecting the College 'walking the walk'.

US Case Study 2: Ithaca College

Ithaca College, situated in Ithaca, New York State, describes itself as a 'liberal arts and professional preparation college'. Founded in 1892 as a music college, it has some 6,000 undergraduate and 400 graduate students with 460 full-time and 210 part-time faculty members. There are five academic schools (Business, Communications, Health Science and Human Performance, Humanities and Sciences, and Music).

According to Marian Brown, the Special Assistant to the Provost, Ithaca's marketing of its sustainability credentials has been a 'back-handed' approach. Over a number of years there had been 'a grassroots effort to get sustainability embedded in the College fabric and have it embraced as a core institutional value'. The accumulating effect of initiatives in the curriculum, community and operations spheres had led the College Marketing/Communications Group to sit up and take note. 'Our Marketing Group is catching up with us, so we are beginning to see, in the last two years, more marketing pieces beginning to infuse more sustainability messaging into recruitment for new students.' The approach remains, however, 'a little scattershot ... it is not cohesive and it is not yet strongly under-girded, and the messaging is not consistent throughout'. The Assistant to the Provost identifies both differences in perceptions of the relevance of sustainability between schools and insufficient central capacity for supporting departmental prospectus and website development as obstacles in this regard.

For the Marketing/Communications Group:

Sustainability presents an evocative image, what we call a BHAG ('a Big Hairy Audacious Goal'), a larger vision. Sustainability is very inspirational and aspirational for students and faculty. Our development people really like that kind of idea, something beyond the College that is great to hang marketing efforts on (Special Assistant to the Provost).

The attractiveness of the big vision notwithstanding, the question follows of how to concretely embed sustainability within the marketing strategy. Here Ithaca has come up with a range of noteworthy approaches.

First, acknowledging that recipients of the College's recruitment materials have varying levels of interest in and commitment to sustainability, the College has lighted upon what the Special Assistant to the Provost calls a subtle messaging approach:

It is a matter of how to incorporate sustainability themes but not overwhelm the marketing pieces. ... How can the messaging be very subtly reinforced throughout the media so if they are looking for it, they can see it? If they are not looking for that message in particular, you are still using the communication as an opportunity to teach more about it without being heavy-handed.

Another learning concerns the importance of enabling students already on campus to tell their own sustainability-related stories through the marketing materials as a persuasive means of recruitment. *Fuse*, a new and very attractively produced paper-form and on-line magazine appearing each semester (Ithaca College, Spring 2007, Summer 2007, Fall 2007), does just that and is received by all prospective students. There are also student stories in the brochures of the academic schools. Students from the Ithaca Communications School are being invited to help out with marketing development support.

Recruitment materials are seen as but the initial level of a three-tier approach to marketing sustainability. At the next level is internal marketing to maintain the sustainability profile and further build a sustainability culture but not least with an eye to student (and staff) retention. *Intercom*, an internal electronic message system, is used to communicate sustainability activities across the institution in addition to press releases and other announcements. A 'Green Thumbs-Up' citations scheme gives regular recognition through *Intercom* to student and staff members of the Ithaca community who have contributed to sustainability endeavours. At the third tier, the 'back end', sustainability is marketed to alumni, donors and corporate sponsors through the quarterly, *ICView* (Ithaca College, 2007a, 2007b)

At the second tier, it has been very important to ensure that students encouraged to attend Ithaca because of the promotion of its sustainability image not only

receive a first year immersion in sustainability but also find the availability of sustainability-related courses 'carrying through' to all subsequent years.

Ithaca is not yet tracking recruitment and retention trends based on marketing sustainability credentials. The data available is anecdotal but does suggest that, in some schools, for instance, Business, sustainability marketing is having an upward impact on recruitment. There is 'very definite trending upward in terms of graduate employability in sustainability fields'. While there is considerable anecdotal evidence of staff being galvanized ('freshened up') by the emerging sustainability ethos of the College and the wide range of curricular and extra-curricular sustainability initiatives, there is no 'good tracking mechanism' to identify any impact on staff retention.

The Special Assistant to the Provost acknowledges that students are increasingly gravitating towards web-based recruitment and promotional materials but concedes that the College has still much to do by way of framing sustainability messages through the student voice and through preferred student media:

I had some students in our Communications School come up with a portal design, one that they would like to use. I looked at their mock-up, and honestly, the hair on the back of my neck went up. Someone in my demographic wants to have clean, organized screens, with logical links to other screens. These kids want to enter a portal that is sort of the Yahoo site where everything comes up at once, with lots of interactive choices: pictures, graphics, multiple icons all on one screen, a 'one stop shop' they can view to select their next shop. The degree of screen clutter and information overload makes me nuts. But I have to step back and stay focused on the needs of the audience. ... I would caution people to examine very carefully how you market and appeal to students. We are not doing a good enough job of that yet. The students are telling us that. We need to use all the communications channels that students use. Should we be podcasting content or You-Tube-ing video messages, for instance? We are not doing that now, but why couldn't we be doing that? ... We do not need to appeal to the sixty-something professor; it is the twenty-something student we need to be attuned to.

One side-effect of the College's embrace of a sustainability ethic and the trend away from paper-form marketing has been the switch to 'on-demand printing':

We used to produce many thousands of prospectus pieces, store them in pallets in the warehouse, and then send them out to various sectors. Admissions have slashed the number of prospectuses they are producing. Our print shop is now able to print those pieces on campus, so we can do on-demand printing. You can tailor content in a piece for a specific audience and then print out.... It is very consumptive of our Marketing

Group's time to try to customize these pieces. But it enables us to vastly reduce the number we are tossing out at the end of a particular marketing campaign.

This development has been accompanied, at no extra cost, with the adoption of '100% recycled content paper' as well as 'soya inks, and other green printing strategies' for all College paper-form materials, including letter headed paper for formal correspondence to applicants to tell them they have been accepted at the institution. 'To me,' says the Special Assistant to the Provost, 'the really powerful but subtle message is that the watermark embedded in this new letterhead is the recycling symbol.'

For Ithaca 'sustainability' is projected as primarily about the natural environment but its promotional materials are gender balanced while reflecting the ethnic and age (if not ableness) diversity of the student and staff population.

US Case Study 3: St. Lawrence University

Located in the city of Canton in the north east of New York State, close to Lake Placid and the Adirondack mountains and fifteen miles south of the St Lawrence River and the Canadian border, St. Lawrence University (SLU) offers a four-year liberal arts undergraduate programme. There is, additionally, a graduate programme in education. There are presently 2,198 undergraduate and 121 graduate students taught by 171 full-time and 19 part-time academic staff. A Sustainability Coordinator is charged with overseeing and taking forward sustainability-related developments and is supported by a second full-time appointment.

Founded as a seminary in 1856 and becoming a university that same year, LSU has long aligned itself with environmentalism. This has been, in part, a matter of laying out the attractions of its lake and mountain setting. Set in an outstanding wilderness area, outdoor extra-curricular and linked-to-curriculum opportunities have long been flagged to prospective students. Second, LSU has drawn many of its students from rural communities in the north east of New York State, students in the main seeking an experience with a rural undergraduate education. 'We have been green before green was popular,' comments, the Associate Vice-President for University Relations, the officer responsible for marketing. 'Our rural location has contributed to the ethos on campus as well as to the founding of the university and the founding principles of the university all contribute to what we now call sustainability. ... So being more obvious about our sustainability credentials is rooted in the history at St. Lawrence. ... It is part of our culture.' That culture has been reinforced, she adds, by the fact of having so many students coming from communities 'that have a greater connection to the land ... a very important core market for us'.

Interestingly, there are five LSU prospectuses sent in response to enquiries, two of which directly respond to the environment. The first, titled *Place* (St. Lawrence University, 2007a), devotes its 24 pages to describing the environmental and cultural attractions of the campus, the Canton Lakeland area and 'North Country' of New York State, Lake Placid and the Adirondack wilderness park, attractions across the Canadian border, as well as the well-developed LSU 14-country study abroad programme. The emphasis throughout is on culture, nature and their inter-linkages as well as on the importance of place in developing identity and love of nature. The second, titled *Welcome to our World* (St. Lawrence University, 2007b), describes in 28 pages the academic programmes offered at LSU through the narratives of its students, its other 8 pages, forming a centre pull out section, describing major and minor programmes in some detail. The pull out section aside, the two prospectuses are replete with beautiful natural and people images, embellished with lively text. There is a good gender balance and ethnic mix across the images, many depicting strenuous outdoor pursuits. The university appears somewhat reticent about letting prospective students know that all prospectus materials are printed on post-consumer recycled materials using vegetable based inks, no statement to that end being included.

LSU offers an interdisciplinary environmental studies programme but, according to a survey conducted by the Office of University Relations, courses with an environmental focus are offered by a further 36 other departments within their major programmes. On last inspection, says the Associate Vice-President, it was possible to 'scan our catalogue and find environmentalism pervading every department'. A flagship course, prominently publicized in both prospectuses is the Adirondack Semester, a three-month wilderness immersion experience. As the Associate Vice-President describes it:

They go deep in to the woods, they live in yurt villages, they have no electricity, they have no connection to the outside world for many weeks. They are completely self-sufficient. They do their own cooking, their own washing, and it is done the old fashioned way. They live off the land if you will. For periods of several weeks they takes courses connected to sustainability. ... And those who are accepted for the programme talk about it in ways that are transformative. They just completely change the way they look at the world. ... There aren't very many programmes like this at all so we have really created something innovative. And if you attend the Adirondack Semester you really are able to talk about a change in lifestyle that is dramatic and sustains them for years to come.

According to the Associate Vice-President, there had been no systematic data collection to assess the impact of the LSU sustainability image upon student recruitment. Drawing upon anecdotal data, her view is that the branding has enabled LSU to become a magnet for students from or with experience of rural

areas or natural areas: 'St. Lawrence has been in that niche market for a long time and we are pretty solidly there'.

The Associate Vice-President also points to the recruitment potential of being able to show that sustainability-focused learning enhances employability:

Many of our graduates go on to take leadership positions in organizations that have either sustainability as their core mission or who need and believe in sustainability as one of the aspects of their business whether it is a commercial business, a corporate entity or non-profit. ... If you scan every organization that has sustainability ... in a core mission statement, it is where you would find a St. Lawrence graduate somewhere in the mix.

This claim appears credible in that LSU has become linked to a career-related business, founded by a graduate from the 1970s, the remit of which is to place 'environmental interns and environmental professionals across the nation'. The business:

Has been able to use St. Lawrence as a core of very highly qualified young graduates and place them in internships that have launched their careers and then whose interns continue on in environmental industries or industries with environmental commitment (Associate Vice-President).

There is less indication of any impact on staff recruitment but 'job candidates for faculty as well as professional staff have begun to ask about our sustainability commitments'.

For LSU, applying sustainability criteria to campus developments is also important. This has extended, according to the Associate Vice-President, to making sustainability 'a core value in all our campus construction projects' as well as in renovation projects and procurement decisions. She explains the decision to be sustainable in construction as having only relatively recent tangible impact in that decisions about planning precede construction by several years. Campus developments are prominently featured in the Spring 2008 number of the *St. Lawrence University Magazine*.

The University is located in one of the economically poorest regions of the United States. According to the Associate Vice-President, this has led to some tensions with local communities when an issue, as often happens, places environmental sustainability and economic development at loggerheads:

When it comes to making decisions that benefit families for income and making our region more economically viable, we often see conflict and so when St. Lawrence stands up and says 'environmentalism is a core value and we are making decisions for environmentalism' a lot of people say that is terrific and other people say, that decision could cost us.

The key to good community relations, the Associate Vice-President avers, is transparency about tensions within both the University and wider community:

Environmental decisions are not easy ones to make. Often students come to us and believe that the environmental choice is the only choice. But when you are going to pay more for that environmental choice, something else is not going to happen. You might not have as much money for scholarship assistance for example and you might not have enough money for a renovation to a laboratory or a classroom that they also want. ... The tensions are very real and they are going to be stronger and stronger as sustainability gains higher visibility among out general culture and especially our young adult culture.

Of vital importance in marketing the sustainability credentials of any higher education institution, maintains the Associate Vice-President, is depth of commitment allied to evidence that backs up sustainability claims:

Unless you have a very strong and deep commitment to it you are going to be found out to be a bit of a fraud and that is going to work very much against you. ... If you are going to use sustainability as a marketing credential, have a lot of evidence behind you because people who believe in sustainability will want to see that evidence.

US Case Study 4: Northland College

Northland College is set in rural Wisconsin. Situated on the shore of Lake Superior, surrounded by 800,000 acres of forest, and looking out on a chain of twenty-one islands comprising a pristine national park, it is a small liberal arts college of 700 students, 93 full-time and 6 part-time staff. With a commitment to environmentalism stretching back to the early 1970s, Northland brands itself as 'visionary by nature'.

In an 18-page pamphlet (Northland College, 2008b) exploiting that branding and with a preponderance of the pamphlet given over to photographs depicting nature and students engaged in active learning and active pursuits, principally out of doors, the College asks the prospective student:

Are you independent-minded? Do you view the world differently from your classmates? Do you often find yourself on the road less traveled? Do you stand up for what you believe in? Do you want to attend a college that gives you the tools to succeed in life?

According to David Wahlberg, Vice President of Marketing and Communications, the aim of Northland is to differentiate itself in the market place by emphasizing that it offers a 'liberal arts education with an environmental focus'.

We specifically seek to appeal to students who meet that market. We are not a mass marketer. We are not a school that tries to be all things to all people. We think that the best way to serve the retention needs of the institution is to make sure that the students we recruit have a clear understanding of what is unique about Northland. ... We are committed to finding students who already have a passion for sustainability, for environmental concerns ... (it's) less of a numbers game and more of a focus game for us.

In setting about attracting such students, it is seen as important to point up the congruence between the College message (its 'talk') and what the College actually does (its 'walk'). In its promotional literature, the College emphasizes that it employs processes and products that are environmentally friendly and that, like the College of the Atlantic, it has a Director of Sustainability with the role of orchestrating sustainability initiatives. Prospectuses announce that they are printed on 100% recycled fibre while much is made of the College commitment to locally grown and organically produced food and to environmentally-friendly cleaning supplies. Another significant aspect of its promotional materials is the highlighting of ongoing student leadership and initiatives in the further greening of the campus (including the students charging themselves a \$40 per student annual fee to reduce campus use of fossil fuels). 'I am a big believer in showing people what you are doing rather than telling people what you are doing,' says the Vice President of Marketing and Communications. It is both honest and helpful to 'use visual means of presenting yourselves so that people see the substance to the claim'.

The reward of this approach, says the Vice President, is a student body 'who have a pretty good understanding of what it is they are coming here for,' leading to a robust record in terms of student retention.

Prospective candidates are mailed a folder of small pamphlets, both folder and pamphlets being attractively presented and highly visual, strong on inspiration and vision but thin on course detail (for which they are referred to the College website). Against a backcloth of wilderness representation, there is a good gender but not self-evidently ethnic balance in the depictions of an actively engaged student body.

Sustainability is represented as a concept synonymous with environmental concern, with other sustainability dimensions such as social justice and health much less apparent.

Reflections on the Case Studies

Taken together, the nine case studies raise some important lessons and issues concerning the sustainability branding and marketing of a higher education institution. They can be summarized as follows:

- i. ***Calibrate the level and volume of the marketing to accord with the realities of sustainability adherence and performance.*** In all the cases are warnings against raising expectations through marketing and promotional materials when the sustainability substance is lacking. Looking back on the early days of the Bradford Ecoversity, the Director of Education for Sustainable Development rues the then 'reckless' marketing that ran the risk of institutional embarrassment and, in fact, provoked cynicism internally. The Head of Student Recruitment and Marketing at Leeds University speaks of the 'need to be absolutely authentic because people will find you out' while the Environmental Coordinator at Oxford Brookes University declares that 'If you are shouting about it you need to make sure you can back it up'. As the Dean of Admissions at the College of the Atlantic points out, marketing sustainability credentials needs to be finely tuned to match definite and distinctive sustainability features. These warnings and recommendations speak for a studied and incremental sustainability marketing strategy that is never nearer than one step behind actual concrete sustainability developments. This, according to the Vice President of Marketing and Communications at Northland College is one important way to 'walk the talk'. For the Dean of Admissions at the College of the Atlantic, an institution launching into sustainability initiatives needs 'a year or two of examining and changing practices' before it 'can really trot out the label of "we are a sustainable institution"'.
- ii. ***That said, it is entirely appropriate to market sustainability intentions and an as yet unrealized vision (as long as the institution really means it).*** As the Director of Education for Sustainable Development at the Bradford Ecoversity indicates, it is entirely appropriate to promote a vision of comprehensive and thoroughgoing institutional transformation, as long as the vision is accompanied by transparency with regard to the current 'state of the art' and to the challenges lying ahead. The four US cases featured here also marry sustainability vision with an account of 'work in progress', the Associate Vice-President for University Relations, St. Lawrence University, emphasizing the importance of being transparent about the tensions and conflicts that will arise as vision is translated into action. Cautions about building from solid achievement aside, it should not be overlooked that vision is both galvanizing and persuasive, what the

Marketing and Communications Group at Ithaca College calls a 'Big, Hairy, Audacious Goal'.

iii. ***Determine, and be at ease with, what the institution is marketing.***

The nine cases feature institutions where very different determinations have been made regarding what is being marketed. Three of the four big English universities featured here, Durham, Leeds and, to an extent, Oxford Brookes, are basing their image and marketing upon their environmental management record. Recognizing that students are increasingly expecting institutions, including the university they are likely to favour, to demonstrate environmental prudence and responsibility, the three universities are working hard on improving environmental management performance, showcasing their record of success within marketing and promotional materials. The wider adoption of a sustainability ethic, as the Head of Recruitment and Marketing at Leeds University puts it, 'is not within the DNA'. At Bradford University and the smaller, University of Gloucestershire, on the other hand, the goal is to position and differentiate the institution as a 'sustainability university'. The same is true of the four US institutions, all of which, like Gloucester, can build upon a long-standing institutional ethic (Christian and/or nature protection foundation or mission statement) in comprehensively embracing sustainability. It would seem that institutional size is a factor here with larger universities tending to follow the environmental management route primarily to demonstrate environmental responsibility on campus, and smaller universities and colleges tending to take a cross-institutional, holistic approach to sustainability (that also includes working on environmental management). Bradford stands out as different here, as does the University of Plymouth. Should Plymouth, one of the largest UK universities, successfully embrace the holistic approach, it would achieve clear market differentiation nationally and internationally.

iv. ***Whatever the marketing pitch, internal marketing must go hand in glove with external marketing.***

A number of institutions featured in this study emphasize the importance of marrying internal marketing with external marketing not least to ensure that the university community understands and by and large embraces the marketing pitch and so the pitch is a more or less solid one. Mentioned above was the cynicism engendered at the Bradford Ecoversity by over-inflated external marketing in the early stages with insufficient heed being paid to internal marketing so as to ensure the university community was appraised and on board. For both Durham University and the University of Gloucestershire, changing the university culture through effective internal communication was a *sine qua non* if external marketing efforts were to be successful. Ithaca College has a three-tier approach to marketing. External recruitment and promotional materials form the first tier. Internal marketing and communication to build the institutional sustainability

culture forms the second. Communications to alumni, donors and corporate sponsors forms the third. The second tier anchors the first and third tiers in that without a dynamic culture of sustainability there is insufficient for marketing efforts at the other two tiers to draw upon.

- v. ***Given that sustainability consciousness is still an emerging phenomenon, by no means universally shared, there is a case for subtle marketing, including appealing to niche markets.*** Recognizing the varying levels of interest and commitment to sustainability amongst intending applicants, Ithaca College has adopted a 'subtle messaging' approach, allowing its sustainability credentials to be clearly discerned 'between the lines' by those who are clued in while avoiding deterring applications from those who are indifferent to the sustainability agenda. Other US institutions featured here have consciously gone about tapping sustainability enthusiasm within their wider programme provision, the Practical Activism course at the College of the Atlantic and Adirondack Seminar at St. Lawrence University being cases in point. All the US institutions show great skill in linking nature location to course provision in appealing to a niche market. One way forward, then, is an admixture of background and foreground marketing, promoting overall institutional sustainability credentials subtly but sufficiently while engaging in strong marketing of niche programmes that build upon the institution's history, locale and specific areas of sustainability expertise and enthusiasm. For those not in beautiful wilderness areas, the locale for sustainability study immersion can be campus and immediate (urban/suburban) community.
- vi. ***There is, so far, precious little systematic collection of data, or availability of data, on the link between marketing sustainability credentials and student and staff recruitment, retention and satisfaction.*** Asked what evidence they had that marketing sustainability credentials impacted upon recruitment and retention, all interviewees relied upon what several referred to as 'anecdotal' evidence. The Bradford Ecoversity has appointed a research team of two to explore, amongst other things, the sustainability<>recruitment connect but data collection instruments are still under development. Durham University so far has no formal means of measurement. Oxford Brookes University has no measurement or evaluation tools in place. Of the US higher education institutions, only the College of the Atlantic can cite figures for heightened interest in sustainability in the form of website hits following the College sustainability achievements featuring in the media. The others, like their UK counterparts, rely at this point on anecdotal data. Even anecdotal data on the links between high profile commitment to sustainability and staff recruitment and retention is in short supply across the cases.

- vii. ***Sustainability marketing based upon emerging evidence and understandings of the links between sustainability skills and dispositions and graduate employability is largely lacking.*** As this report has indicated (see pp.4-5), there is a growing employer interest in graduates who are skilled in, informed about and committed to sustainability. In the light of that evidence, it is interesting that only St. Lawrence University amongst the nine universities featured here promotes its sustainability credentials as a potential means of achieving heightened employability, its close association with a career-related sustainability career agency being path finding in this regard. For the Special Assistant to the Provost at Ithaca College, there is 'very definite trending upward in terms of graduate employability in sustainability fields' but this sample of higher education institutions with a strong sustainability emphasis is, in the main, falling short of exploiting the trending.
- viii. ***UK institutions could well follow their US counterparts by giving rein to student voice in marketing their sustainability credentials.*** Reviewing the paper-form, electronic and web-based marketing and promotional materials of the four US cases in this study, it is noteworthy how much emphasis is placed on students describing in their own words their own on-campus and off-campus formal and informal sustainability learning experiences. Additionally, all four US institutions take pains to flag examples of student-led sustainability initiatives: the student-staffed organic farm at the College of the Atlantic, the 'Green Thumbs-Up' scheme at Ithaca College, the self-imposed fossil fuel tax at Northland College, to cite but three examples. There is both an explicit and implicit message about student empowerment. UK universities canvassing their sustainability credentials do not seem to have latched on to the potential of employing student sustainability narratives.
- ix. ***The marketing landscape is changing with an emerging shift away from paper-form marketing and towards electronic marketing using modalities that chime with student culture and environmental concerns.*** All the institutions featured in this survey walk their sustainability talk by using recycled and/or chlorine-free paper, vegetable-based inks and, in one case, biodegradable plastic in paper-form prospectus production although St. Lawrence University fails to flag its use of recycled materials. Some (Durham, Ithaca) are forging ahead with tailored to need and designed on demand paper form prospectus materials leading to substantial reductions in paper usage (and paper waste). Some, such as St. Lawrence University, have moved towards short beautifully illustrated brochures and prospectuses that link to web-based or paper-form programme catalogues. Scattered across the interview data is recognition that electronic marketing should and will replace paper-form materials. At the very least those responsible for marketing are questioning the continuance of the paper-form prospectus.

At Bradford 'fundamental questions' are being asked 'about why print brochures in the first place' given the institutional commitment to sustainability, questions taken up by those responsible for marketing at the University of Gloucestershire and the College of the Atlantic. The Special Assistant to the Provost at Ithaca College warns of the dangers of moving to e-form marketing through the eyes of 'the sixty-something professor' arguing that the forms of interactive web-based communication largely favoured by students should be the chosen channels of communication.

- x. ***Sustainability messaging tends for the most part to treat 'sustainability' as synonymous with 'environment'.*** While sustainability is widely construed as multi-dimensional, having cultural, economic, health, and social justice as well as environmental dimensions (e.g. UNESCO 2004), university sustainability marketing is preponderantly uni-dimensional. The College of the Atlantic and St. Lawrence University excepted, all the UK and US institutions featured convey sustainability as primarily about the environment. It would amount to spectacularly significant market positioning and differentiation were a major, large-size university to project itself as a sustainability university committed to addressing the multi-dimensionality of the concept.

5. Marketing and Branding: the University of Plymouth

In this section, research question 5 is addressed:

What does an artifact/media analysis through a sustainability lens of current University of Plymouth promotional/marketing materials (Marketing Department and faculty-produced) reveal?

The criteria making up the 'sustainability lens' are set within a multi-dimensional understanding of sustainability that embraces cultural, economic, health, social, technological, and, fundamentally, environmental dimensions. The criteria include: references to a sustainability mission and vision, expression of equality and diversity; programmatic references to sustainability; references to campus sustainability, references to sustainability in procurement, materials usage and disposal; references to sustainable transport policies and practices; references to university/community partnerships for sustainability; an overall impression of sustainability adherence and commitment

The Plymouth undergraduate prospectus was one of the first 2008/9 university prospectuses in the UK to become available according to Francis Reis, Manager of the university's Document Production Centre (see p. 40). Both this document and the postgraduate prospectus are designed in house by the Centre and provide summary information on courses across the university. Faculties at the university have their own marketing personnel with responsibility for the design of

marketing materials for the faculty in question. All marketing materials are developed to agreed corporate guidelines developed by the university's Marketing and Communications Department. Draft faculty marketing materials are not, however, run by the Department for comment, let alone approval, prior to publication. 'I only see the end product, the printed job,' says Andrea Walters, Head of Marketing and Communications (Undergraduate and Postgraduate Marketing). 'I would like to see things.'

Prospectus

The 2008/9 prospectus has been selectively updated since the last edition. The prospectus has a clear white cover featuring small full-length images of students and an illustration of the new Roland Levinsky Building. A swirling pattern not dissimilar to that used on branded surf wear has been incorporated into the illustration. This continues the 'location' theme of the 2007/8 prospectus (surfing on ink). The prospectus is produced on recycled stock, as somewhat obscurely indicated on the outer back cover: 'Made of paper awarded the European Union Eco-label'. The Plymouth prospectus is small (half the size of many UK university prospectuses) and has a particularly high gloss finish to the cover but matt inner pages. Its appearance does not particularly convey the impression of the recycled paper that has, in fact, been used. 80,000 copies of the 2008/9 prospectus were produced and printed in one print run by Emirates Printing Press LLC based in Dubai and shipped to the UK. According to the Manager of the Document Production Centre, post-consumer behaviour (in particular, the recycling of the used prospectus) is an issue. He is keen to discuss with Marketing and Communications the addition of a statement encouraging post-use recycling in the next prospectus edition.

A PDF version of the 2008 Undergraduate prospectus is available in CD-ROM format and can be requested through the main University website. At present the 2009 Undergraduate print version of the prospectus appears on the online request form by default if the drop down menu is not accessed to display alternative options. In addition there is a CD-ROM available with the title 'University of Plymouth Publications 2008'. This contains both the undergraduate and postgraduate prospectuses and additional hyperlinks and video clips of students explaining elements of life as a student at the University. This CD is not available in the drop down menu options on the online request form. It is distributed mainly to prospective international students, a link for which is provided on the main university website.

The content of the prospectus is in line with most other UK university prospectuses including in addition to programme details information on accommodation, the city/location, social life and finance. The University is introduced in first person by the Vice Chancellor, adding a somewhat personal welcome to students. The university is described as 'friendly and dynamic with a

strong reputation for excellence in teaching and research, and our graduates have an enviable employment record' (University of Plymouth, 2008a, 4).

While the South West location and its natural delights are highlighted in the Vice Chancellor's message, there is no reference in the message to sustainability commitment or vision. That follows in a small section with the title 'A green focus' (ibid., 5).

In the undergraduate prospectus most pages are given over to degree programme information. A standard format has been employed including basic summary information on the course, entry requirements and fieldwork opportunities through the stages of the programme. Every degree programme page uses a bright colour as background and a photograph occupying a relatively large amount of the total page space available. Photographs are generally uncaptioned and use literal images, for example a student sitting at a computer for computer studies. The quality of images is wide ranging. In some cases the photographs work well to tell a story, for example a captioned photograph of students undertaking fieldwork at Start Point in Devon alongside information on Applied Biosciences (Plant Science) while elsewhere poorly chosen photographs (a pen in focus, a flip chart, a person with a calculator) do little to stimulate the imagination and inform the prospective student of the learning experiences they might encounter.

In general there is a good balance of male and female students represented in the prospectus, however the majority of students represented are young and white with the exception of those featured in the section for international students. The ableness of students and access provisions are not highlighted in the prospectus. Students are mainly pictured studying in isolation or interacting through a computer interface. There is little portrayal of forms of learning and teaching, however photographs taken on fieldtrips are featured heavily in the Science Faculty pages.

Website

The homepage of the university's website is uncluttered and offers a number of ways to access information through the following menus: Information about (including: the University, courses, working here); Information for (including: UK and EU students; Schools and Colleges; The Community); News & Events; Popular Links. An alternative means of negotiating the site is by clicking on the tabs across the top of the page (including: Internal Staff; Help & Terms; Site Map). A large colour photograph covering a quarter of this page is used to highlight an event or an aspect of student life.

In general the university website is text heavy; once any of the menus on the homepage have been accessed .12 size text in aerial font dominates the page. Black writing on a white background is presented with the inclusion of images on

some pages. Photographs are not offered in place of text but as additional to the written information.

Owing to the overall lack of images, including photographs, on the website diversity among the student body is only text-conveyed. An opportunity to convey more subtle messages concerning gender, age, ethnicity, ableness, and to signal commitment to diversity and equal opportunities, is lost.

The university webpage, 'Mission Statements and Values,' conveys sustainability messages to some degree. For example, it describes the university's commitment to developing graduates who 'are sensitive to environmental and social needs.' 'Community' is one of the six values embraced. Under the value of 'Community', promotion of the well being of all students and staff at the university, demonstration of social responsibility, and collaboration with others within the region and beyond are highlighted. Under another core value, 'effectiveness,' 'good management to make sustainable use of our human, physical, technological, and financial resources' is articulated.

On the university website, it is not easy to find information on sustainable use of transport or on the newly launched Centre for Sustainable Transport. Nor can one readily find general information on the sustainability credentials of the physical campus.

What follows is a review of the recruitment and promotional materials of two faculties, Science and Arts, chosen as a purposive sample representing the 'two cultures'.

Science Faculty: Prospectuses and Website

The University of Plymouth Science Faculty produces a great many brochures and prospectuses for its courses. Prospectuses are compiled according to areas of study, for example Marine Sciences, Chemistry, Geosciences. The materials are A4 format with large colour images often filling half the page. The majority of the photographs used are unaccompanied by captions, thereby in some cases losing their impact. Literal images are mainly used on the front cover of each brochures creating a feeling of study of the natural world: for example images of the sea, sky and boats, as well as scientific equipment. The use of technology in learning is emphasized in brochures, with students in the field or in the laboratory 'doing things'. Female students do appear in the prospectuses, but noticeably the same student using a piece of surveying equipment features in more than one prospectus (Marine Science prospectus, BSc Ocean Exploration and MSc Hydrography prospectus). There is a student group photograph included in the Marine Science and Sport Studies prospectus depicting one female student in a group of thirteen. In the main, the photographs used are of white, young males. There is one photograph of two black students with the university logo on a

building as background. This is included in both the Psychology prospectus and Marine Sciences prospectuses.

In the first pages of each prospectus, there is an introduction written by the Dean, Director or teaching team using the first person, accompanied by a photograph of the author(s). In some cases these pieces are written in quite a generic way and so could equally apply to a similar degree programme at any university in the UK. The exceptions are the Marine Sciences prospectus and the Science Faculty Dean's piece in which the location, maritime history of Plymouth and course components are all drawn out to present a distinctive flavour to prospective students.

The Science Faculty website pages have an 'environmental' look to them using optimistic vivid colours in an image-rich first page which stands in contrast to the rest of the University website. The first page offers the opportunity to enter this part of the site through a choice of 'our courses' or 'our schools' as is normally the case with faculty pages on the website. There is however an additional 'special features' menu showing small enticing picture icons linked with items such as 'Iain Stewart – Earth: Power of the Planet' and 'Sign to take part in paid psychology experiments'. On the first page of the site there is also a link inviting students to share case studies concerning their academic success. This offers an interactive element to the site and contributes to making this part of the website more enticing for prospective, current and recently graduated students. The 'special features' menu suggests to a prospective student that they would be opting for distinctiveness in choosing to study at Plymouth.

In general the Science Faculty area of the main University website offers a balance of text and images, including photographs. Students are photographed undertaking fieldwork, the photographs projecting a good gender balance. There is some representation of diversity in terms of student age and ethnicity, but not diversity in ableness.

Arts Faculty: Prospectuses and Website

The additional prospectus material produced by the Faculty of Arts is relatively minimal and is presented in a format similar to brochures found accompanying an art exhibition. The images and text used are mainly black, white and red offering a bold image and identity helping to create a 'brand' for the Faculty. The use of only three colours reduces the printing complexity and costs. There is a general absence of people. Where photographs of students have been used in the marketing material (double sided course flyers) the pictures are accompanied by detailed captions. The photographs thereby tell a story with consequent increased impact.

Short staff biographies are included in the course information for Masters programmes. This works well in offering a sense of uniqueness attached to the

learning and teaching experience at Plymouth. More recently produced marketing materials include the recycling logo and give the percentage of recycled paper used in production. The paper feels recycled with a matt rather than high gloss finish. In general the materials produced by the Faculty of Arts are akin to leaflets rather than brochures and there is one for each programme of study rather than information compiled under areas.

The Arts Faculty website area is functional and, hence, consistent with the rest of the University website pages with creativity compromised (although a trace of the red colour theme remains). The generic information blurbs associated with each degree programme do not offer a particular sense of distinctiveness. There is a general absence of photographs on the website, the dearth of images offering little by way of messaging about age, gender and ethnic diversity in the student population.

Discussion

Given that the University has committed to becoming an institution characterized by sustainability excellence (p. 1) and given that there have been substantive steps forward towards realizing that goal (Selby, 2007), current paper form and web-based marketing falls short of conveying both the vision and the achievement.

In contrast to the case studies offered in this paper (pp.11-34), the university's marketing falls short in a significant number of regards:

- There is an absence of a 'Big Hairy Audacious Goal'. No comprehensive sustainability vision is offered (as at Bradford and Gloucestershire and as at the four US institutions described) and there is no sense of sustainability as a 'work in progress' towards that vision with attendant transparency concerning obstacles, setbacks, dilemmas and consequent learning curves (as at Bradford and St. Lawrence University). Plymouth thereby fails to convey itself as a learning organization in terms of one of its acknowledged referents.
- Anyone reading the prospectuses and/or visiting the websites will fail to come away with a sense of how sustainability is becoming embedded in learning and teaching programmes across the university, in campus developments, in procurement and transport, in research, and through community and regional partnerships. The ethos of sustainability that emanates from the marketing materials of the US institutions featured in this study is noticeable by its absence in Plymouth marketing. Plymouth marketing materials fail to project a dynamic sustainability narrative (although such indubitably exists). An overall impression of sustainability commitment and adherence is not conveyed.

- In extension of the same point, Plymouth is not giving voice to student sustainability narrative as a marketing tool, unlike the four US institutions depicted here. There is no 'peer to peer' transfer happening.
- Recognizing that sustainability is an emerging phenomenon and that, at this juncture, there is a case for 'subtle messaging' allied to niche marketing (p. 23), that an institution needs to calibrate its sustainability marketing according to achievement (p. 30), and that there are clear gender differentials in responses to sustainability (p. 11), it would seem appropriate to plan for an unfolding and, where appropriate, differentiated marketing of sustainability credentials. Evidence would overwhelmingly suggest that this is far from the case.
- Although the university has an excellent employability programme through Skills Plus (University of Plymouth, 2007c), highlighting the sustainability<>employability nexus, Plymouth marketing materials fail to profile increased employability prospects through sustainability skills acquisition. A 'selling point' of potential is not capitalized upon.
- While the university has strong diversity and equality commitments, and correspondingly strong diversity and equality initiatives and achievements, messaging in marketing materials tends to be tokenistic in terms of gender, ethnicity and age, while by and large ignoring ableness.

6. Prospectuses: Plymouth and the Wider Picture

This section addresses the sixth research question: How could University of Plymouth marketing/promotional materials of sufficient quality be produced more sustainably, and at the same or less cost? Data was collected by means of interviews with key Document Production and Marketing personnel at the University of Plymouth and a small-scale telephone and email survey involving 18 UK universities.

The University of Plymouth uses a number of printing firms for the production of marketing materials and is currently investigating another two specialist print firms to add to the list. The majority of these companies are based in the UK in the South West region; for example, Deltor, in Saltash, Cornwall.

Emirates Printing Press, Dubai, undertakes the printing of the undergraduate and postgraduate prospectuses. This has been the case for the past six years and the company has just been awarded the tender for a further three years. The company ships the 80, 000 prospectuses to the UK in time for Plymouth to be among the very first universities in the country to have its new prospectus available for the next academic year. The competitive advantage in part derives from the Christmas holiday period going unobserved in Dubai allowing the comparative early production and subsequent distribution of the prospectus.

This year the 2009 prospectus was available on 22 February 2008. Also important in choosing Dubai is its low tax economy.

Once the centimeter thick 2/3 A4 prospectuses are received by the University, they begin to incur storage costs as the University does not have on site storage facilities for such a large volume of printed material. Smaller numbers of prospectuses are delivered to the University on a weekly basis contributing to further expense. According to the Head of Marketing and Communications (Undergraduate and Postgraduate Marketing), this arrangement costs around £14, 000 annually. An increase in postage costs (due to the Royal Mail re-setting postage according to both weight and size) has also added to the expense of sending out print prospectuses to schools and colleges, open day events and in response to individual requests. Some 48,000 – 50,000 prospectuses are posted out to individual enquirers, 20,000 go to events in the UK and the rest are mailed out to schools.

The undergraduate prospectus is available on CD-ROM as is the postgraduate prospectus. The latter, however, appears on a CD-ROM alongside additional materials (University of Plymouth, 2008b) thought to be of particular relevance to overseas students. The CD-ROMs are produced from start to finish by a local company Twofour, based in Estover, Plymouth, some time after the hard copy of the prospectus is made available.

According to both the Head of Marketing and Communications (Undergraduate and Postgraduate Marketing) and the Document Production Centre Manager, a paper-form prospectus is overwhelmingly preferred. The primary consideration in producing the CD-ROM materials was to meet overseas student requirements in a more cost effective way than by posting a print copy prospectus. A Braille version and a large type version of the prospectus can also be requested: the former is very expensive to produce and is not offered on the drop down online prospectus request form; the latter is a basic document printed on non-glossy paper.

Plans are afoot to send the hard copy prospectuses in a biodegradable plastic envelope, with a statement to this effect appearing on it. It is considered by the Head of Marketing and Communications (Undergraduate and Postgraduate Marketing) to be important to retain the notion of a prospectus rather than to direct those interested in courses back to the website where all the information contained in the prospectus is admittedly both more up to date and available in far greater detail. In future it is anticipated that paper-form, CD-ROM and on-line versions of the prospectus will all be available rather than one format having primacy.

At the University of Plymouth, the idea of Print Basket Project has been in the air for the last few years. This project is about producing a customized on demand version of the prospectus to be saved online and printed if requested so as to

meet the diverse interests and needs of stakeholders in a very flexible manner. Mandy Goss, Web Service Manager, states that the idea has not been supported by senior managers of the university so far and there has not been enough demand for her team to pursue the project. The scheme, she considers, would not be technically difficult to implement. Being aware that other universities have already been moving in this new direction, she is only waiting for 'vision' from the university to move away from the traditional printed version of the prospectus.

This capacity for customized printing of the prospectus has apparently been a key point that suppliers competing for business have recently emphasized. This could lead to reductions in print, paper and storage usage and costs. One of the 'unique selling propositions' of Plymouth University however is that all enquiries are fulfilled in 48 hours and this customization process, if a print copy is requested, would take longer. The message coming through from University's Marketing and Communications Department is that customers want immediacy, and that a decreased ability to offer that might have a detrimental effect on student recruitment, which is risky. It is not clear why an electronic bespoke prospectus would lack immediacy.

It appears that even though 80% of enquiries come through the online form, it is the print version that is overwhelmingly requested. The website may well be the biggest communication tool the University has but the print prospectus is seen as the corporate brochure, a showpiece for 'who we are, what we are and how well we do it' (Head of Marketing and Communications, Postgraduate and Undergraduate Marketing).

UK higher education institutions involved in the small-scale email and telephone survey did not have plans to remove the paper choice option of their prospectus in the future, although some talked about a reduced print run and a continued process of re-consideration in the light of shifting student demands.

Some UK universities have begun to offer their prospectus materials in alternative formats. Durham University, as previously mentioned (see p.15), offers a customized online version, 'Your Prospectus', which remains available to download in PDF format for seven days. Durham also uses a reduced prospectus of 24 pages at recruitment events to direct students towards using the online prospectus facility. Anglia Ruskin University offers a tailored print version of their prospectus that has reportedly reduced the number of pages printed from 196 to 136, with consequent impact on postage, paper and print use.

The University of Gloucestershire's new 2009 prospectus was available this year from Monday 25 February 2008 (two working days later than the Plymouth prospectus). Belmont Press Ltd., a UK based company produced the prospectus.

On the company's website <http://www.belmont.co.uk/home.php?noflash=yes> appears the following:

Accredited with ISO 9001:2000 Quality Assurance System, ISO 14001:2004 Environmental Management System, FSC and PEFC Chain of Custody and Sustainability Awards, our objective is always to exceed the expectations of our clients.

In the small-scale telephone and email survey of UK universities it was found that the majority of participating institutions printed their prospectus in the UK, one of the universities stating 'environmental credentials of the printer was weighted as being as important as price in our tender process...'

At Worcester College of Technology the decision was made to produce the 2008 full-time further education student prospectus in CD-ROM format with cartoons, 20, 000 copies being produced. Rachel Gowers, the Head of Marketing at the College tells of how an increase in online hits to their website and rising postage costs helped inform the decision to change to CD-ROM from paper-format version. In previous years the normal cost of producing the full time further education prospectus had been £25,000 – 35,000 and had involved the work of an in-house graphic designer. For various reasons an agency was used for the complete production of the 2008 CD-ROM format prospectus costing a total of £17,000 which, as the Head of Marketing remarks, is a significant saving.

Positive feedback from prospective Worcester students (year 11 pupils) has been received concerning the cartoon design and the ease of access through the menu options (rather than flicking through lots and lots of information). Some not so positive feedback, mainly from A-level and GCSE teaching staff, has been noted concerning the cartoon design but not, it seems, about the change of format itself. Teachers of more vocational courses have in contrast offered much more positive feedback on the cartoons.

In acknowledging the negative feedback concerning some adults' reception of the CD-ROM, the Head of Marketing at Worcester College makes the point that, extensive research informed their decision to focus on selling to the students rather than their parents, a point echoing the sentiments of the Special Assistant to the Provost, Ithaca College (p. 24).

Worcester has experienced the biggest criticism of the CD-ROM version of the prospectus from Connexions career advisors who dislike the format in that they do not always have computer access in the schools they visit. In a bid to overcome this problem, Worcester has provided print copies for each advisor but this, apparently, has not fully resolved the matter.

At present a decision concerning the future of the CD-ROM prospectus has not been made. The College also produces a range of other prospectuses - for full-

time higher education courses, part time courses as well as three adult education prospectuses. There are no plans to move these prospectuses over to CD-ROM format. There has, however, been a change in the way requests are dealt with on the information system. Instead of sending a hard copy of the required prospectus, wherever possible a PDF version is forwarded via email. A print version is forwarded if subsequently requested. At this point it is too early to say whether this change in procedure is a success, but again this is another way in which Worcester College is experimenting interestingly with alternatives to traditional full version print prospectuses.

Two institutions approached in the email/telephone survey have shared their ideas on the possibility of putting their prospectus on a USB stick rather than using the CD-ROM format. A branded stick (bearing the university name, logo, website address) would offer the capacity to store a lot more information than a CD-ROM with the additional benefit that for open day events or to meet other special needs, further materials could be added to the memory as required. Furthermore such a device would not be rendered defunct after the application and acceptance process was over. On becoming a student, its usefulness would continue as the memory stick would act as a handy informational and storage device containing documentation useful to the student during their academic studies and beyond.

7. Recommendations

In the light of key themes and issues raised across the first six sections of this study, the following recommendations are made:

- If the University of Plymouth intends to become an institution 'modeling university-wide excellence' in sustainability (p.1) and to exploit its leadership position in sustainability in higher education, then the marketing implications need to be pursued. This means a more leitmotiv marketing of sustainability across paper-form, electronic and website promotional materials, on the one hand, and, on the other, connecting marketing personnel to sustainability developments in a more integral and formative way (p.3), perhaps, at a senior level, through a high level multi-stakeholder sustainability committee, a feature noted at sustainability universities internationally (p.6).
- In marketing its sustainability credentials, the university needs to convey a sustainability vision, not through a short prospectus paragraph but more ubiquitously in both explicit and implicit ways. That vision needs to go hand in glove with a dynamic narrative of struggle and achievement. Within that narrative, the student voice and experience should be given a high profile so that 'peer speaks to peer'.

- Given that sustainability is a 'work in progress', its marketing should be carefully calibrated to be one step behind concrete achievement so the university is seen to 'walk its talk'. That does not preclude the marketing of vision or transparency in terms of what has yet to be achieved.
- A multi-stakeholder marketing group, led by the Director of Marketing and Communications, should consider the potentials and processes for 'subtle marketing' of sustainability and segment and niche marketing of flagship sustainability-related programmes, i.e. an admixture of background and foreground sustainability marketing. The group should also look at ways in which sustainability initiatives and achievements in terms of policies and strategic plans, campus (buildings, energy use, landscaping, waste disposal practices), procurement and catering, transport, student participation, and community partnerships can be subtly but effectively woven into marketing media.
- As a leader in student employability thinking through its Skills Plus programme, the university should exploit emerging evidence of the link between sustainability skills and employability. This may well prove hugely attractive to prospective students. As has been noted (pp. 4-5), future career potentials matter to university applicants.
- The university needs to review internal marketing of sustainability and ensure it goes hand in glove with external marketing. While the Centre for Sustainable Futures has done much in this regard, the Centre lacks the authoritative voice that centrally inspired internal marketing would carry. The Centre also has only two years left and new mechanisms for internal sustainability marketing need to be put in place. As literature reviewed earlier (p.7) and the Bradford experience (pp.12-15) suggest, the internal marketing ethos should be one of openness and transparency.
- Given the paucity of research on the importance of university sustainability credentials for prospective students, university market researchers should revisit this question in a more thoroughgoing and extensive survey on an annual basis. An annual survey will enable the university to be appraised of, and react sensitively towards, attitudinal shifts that are very likely to happen given the increasing attention and importance being attached to sustainability. The new sustainability orientation in UK school curricula underlines this point. It should not be overlooked, too, that for a university bent upon internationalization, sustainability credentials appear to matter more to prospective international students than to UK students (Forum for the Future/ UCAS, 2008, 13).
- Plymouth University should also institute recurring enquiry into the impact of sustainability marketing on student and staff recruitment, retention and satisfaction. This would be path finding in that none of the cases

featured in this study so far have established systematic processes of data collection and analysis in this regard.

- Given that a new three-year contract has just been signed with the Dubai prospectus publisher (p. 40), the university should institute pilot projects to explore the feasibility, efficacy and cost-effectiveness of an electronic and web-based prospectus, also customized on-demand prospectuses. Ready to run is the Print Basket Project (pp. 41-2) which should be given executive support on a piloting basis. A business case for alternatives to present arrangements should be drawn up. Paper-form prospectuses should carry a more obvious and prominent message about recycled paper and give prominence to an exhortation to recycle after use.

8. A Methodological Note

In responding to research question 1 (see p.2), a comprehensive search was undertaken for literature on marketing university sustainability credentials, followed by the collection and analysis of the (limited) available literature.

The academic literature search through the major library databases in the field (e.g. Business Source Premier; Emerald; Australian Education Index; British Education Index; ERIC; Web of Knowledge) using combinations of keywords that linked 'sustainability' or 'green' with 'marketing' or 'communication' or 'branding' with 'university' or 'college' or 'higher education' elicited only a few articles and papers. Responses to an enquiry put out through the Environmental Association for Universities and Colleges (EAUC) mailing list in January 2008 also confirmed the paucity of academic publications on marketing the sustainability credentials of higher education institutions.

In responding to research question 2 (p.2), available surveys were drawn upon and an additional small-scale questionnaire survey of 64 year 12 and 13 school students in the South West of England was undertaken by the Market Research Manager of the University of Plymouth Department of Marketing and Communications.

A case study methodology was applied to answering research questions 3 and 4 (p.2).

Selection of participating institutions occurred in two stages. First, UK and US universities and colleges with sustainability credentials were searched through the Internet using the descriptor 'sustainability (eco/green) university/college'. Institutions were also identified using the following websites: the Grist list of the 15 top international Green Colleges and Universities (Grist, 2008); and the US Eco League site describing a consortium of five US liberal arts colleges specializing in education directed towards building a sustainable society (Eco

League, 2008). Additionally, an inquiry was put out via the EAUC mailing list in January 2008 asking members for their recommendations for UK higher education institutions with a track record in marketing their sustainability credentials.

After coming up with a long list of potential participating universities and colleges, each institution was approached by email to ascertain their preparedness to participate in the study. Once availability and preparedness were confirmed, and the degree of sustainability marketing confirmed as 'significant' through an initial perusal of paper-form and website promotional materials, the long list was whittled down. The non-availability of any senior personnel for a semi-structured interview further helped narrow down the list to the five participating UK and four participating US higher education institutions.

The following data from each institution were accessed/gathered and then systematically analysed: the university/college website; paper-form prospectuses; additional paper-form marketing materials; a transcribed semi-structured interview per institution (see **Appendix 1**, pp. 53-54, for Semi-Structured Interview Schedule).

For the interviews, one person closely connected with sustainability marketing within each institution participated in a semi-structured interview of between 30-45 minutes. Interviews were conducted over the telephone and audio-recorded with prior permission. Interview data were fully transcribed for analysis, each interviewee being given the opportunity to amend the transcript of their interview as they saw fit. The interviews were analysed according to emerging themes and the analyses synthesized.

Participants were asked whether they would prefer themselves and their institution to be anonymized. All opted for their institution to be named. All, save one, the Associate Vice-President for University Relations, St. Lawrence University, asked to be identified by name.

In answering research question 4, but, in a more in-depth way, question 5 (p. 2), artifact and media analysis was conducted using the following sustainability-oriented criteria: reference to sustainability and a sustainability mission in opening/mission statements; gender and ethnic representation; implicit and explicit representation of diversity and equality; programmatic references to sustainability; representation in sustainability terms of the physical campus; references to community involvement/partnerships around sustainability; sustainable transport references; references to materials usage and to sustainable procurement; representation of people in interaction as they take forward institutional sustainability commitments and focuses; overall impression of sustainability adherence and commitment.

One researcher focused on image analysis of artifact data while another focused

on textual analysis and the juxtaposition and synergies of text and image. Their initial analyses and findings were brought together and discussed at a meeting of the Centre for Sustainable Futures Research Team on 7 March 2008.

In answering research question 6 (p. 2), a meeting with the Document Production Manager, and an interview with the Head of Marketing and Communications (Undergraduate and Postgraduate Marketing), at the University of Plymouth were undertaken. A request to universities and colleges that have investigated changes in the production of their student prospectus in terms of an online version, reduced print version, DVD or CD-ROM replacement, was put out on the EAUC mailing list on 11 March 2008. A small-scale telephone/e mail survey was undertaken in March 2008 to find out about other UK universities' prospectus production, 18 universities responding to the survey by 31 March 2008 (see **Appendix 2**, p. 54, for survey questions).

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10. Appendices

Appendix 1: Semi-Structured Interview Schedule for Case Studies

1. What are the rationales and motivations behind your university's/college's decision about marketing its sustainability credentials?
2. To what degree do you consider yourself as a university/college that promotes or markets its sustainability credentials?
3. What is the structure in place for marketing at your university/college?
4. a) Since you have started to market your university's/college's sustainability credentials what have been the benefits in the following areas, if any?

- Student – recruitment, retention, satisfaction and graduate employability
- Staff – recruitment, retention, satisfaction
- Curriculum
- Campus
- University/College community relationship
- Organisational structure and management
- Culture and ethos of your university/college

b) In particular has there been a change in the student or/and staff recruitment strategy associated with your marketing sustainability initiative? If so, please could you explain?

5. Do you have any qualitative or quantitative data which shows the positive effects of your marketing initiative regarding the university's/college's sustainability credentials, including student recruitment? If so, would you share some of the key information please?
6. What have been the barriers encountered in marketing/branding your university/college's sustainability credentials, if any?
7. In connection with marketing your university's/college's sustainability credentials have there been any changes to greening the supply chain regarding the production of marketing materials? If so, please could you explain?
8. With regard to the promotion of your sustainability credentials what are the areas you would like to develop more?
9. Based on your experience so far, what advice would you give to a university/college wishing to market its sustainability credentials?
10. If there are any other important points that have not been explored through these questions can you address them?

Appendix 2: Telephone/Email Survey Questions for UK Universities regarding Print Alternatives

1. What forms do you have the current (2008) prospectus available in: paper; on-line; and/or CD-ROM? If you have the prospectus in different forms, what are the approximate proportions for the different forms?
2. Is the prospectus currently printed: locally; within the region; within the UK; within Europe and/or elsewhere ?

3. Is the prospectus printed on recycled paper? If so, is this information stated on the prospectus and what percentage of the paper is recycled?
4. Are there any plans to remove the paper choice of prospectus in the future? If so, what form is the prospectus likely to take?

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ABOUT THE AUTHORS

David Selby is Professor of Education for Sustainability and Director of the Centre for Sustainable Futures (CSF), University of Plymouth. **Fumiyo Kagawa** is Research Coordinator and **Paula Jones** Research Assistant at CSF.

Email contact addresses: <david.selby@plymouth.ac.uk>
<fumiyo.kagawa@plymouth.ac.uk> <paula.jones@plymouth.ac.uk>



Centre for Sustainable Futures
 University of Plymouth
 Drake Circus
 Plymouth
 Devon PL4 8AA
 United Kingdom
 Tel: +44 (0)1752 238 664
 Email: csf@plymouth.ac.uk
 Website: csf.plymouth.ac.uk

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Exploring Effective Ways of Engaging Students with the Sustainability Agenda

Exploring Effective Ways of Engaging Students with the Sustainability Agenda

Harriet Sjerps-Jones

Abstract

Although a lot of valid research about sustainable development and how it should be embedded in education has been published, it still remains unclear how students could be engaged with an issue that may not be clearly linked to their subject area or their future career development. During the 2006 and 2007 academic year design students from the University of Plymouth and its Partner Colleges were involved in a research project to investigate student engagement with sustainability and how their involvement can be promoted. Additionally, the participants designed and piloted a website that invites students at this University to collaborate on ideas, knowledge and projects about sustainable development. A group of students at Somerset College also participated in a project to engage them with sustainability. Working closely with students highlighted the need for a clear and positive communication strategy for sustainable development in the areas of policies, curriculum and social networking. It also reveals that there are three types of students with regards to sustainability: the 'engaged' student, the 'receptive' student, and the 'sceptical' student. Patterns of student engagement, which emerged during this research, and how to influence those, will also be discussed.

Introduction

The present global environmental emergency, of which *climate change* is currently the most discussed, will without a doubt have a big impact on the lives and careers of today's students. Therefore it is important that they have the opportunity to learn about sustainable development (SD) as a way to divert or minimise the worst effects of environmental catastrophes and to engage with the underpinning common values for SD. The meaning of sustainable development that is used here is the same as the one that was formulated in the influential Brundtland report, 'Our common future':

"'Sustainable Development' is development that meets the needs of the present without compromising the ability of the future generations to meet their own needs." (World Commission on Environment and Development, 1987)

The research focussed mainly on student engagement outside the subject-linked curriculum and as such didn't investigate the formal assessment of 'sustainability' skills. Informal and extra curricular learning are important contributors to the learning in Higher Education (HE) and to the learning for Sustainable Development. The radical environmental educator David Orr comments "that students are taught in various and subtle ways beyond the overt content of courses" (Orr, 1994:7), it is therefore important to consider extra-curricular activities and non-assessable curriculum linked activities to promote awareness.

Since the students' engagement and experience was at the heart of the research their practical involvement with this project was essential, justifying a collaborative inquiry approach that comprised an on-line survey, inquiry group discussions, a collaborative website trial and a hands-on 'engaging' sustainability project with exit questionnaire.

The aims of the research were to investigate:

- How Universities and Higher Education in Further Education (HE in FE) colleges can engage students with the sustainability agenda in an effective way;
- How students can be encouraged to become ambassadors for sustainable development within their own subject area and beyond;
- The role of Internet technology as a possible tool for engagement.

The objectives were

- To enhance the understanding of how Higher Education Institutions (HEIs) should effectively communicate sustainability issues with students;
- To identify possible strategies to improve students' engagement whilst at university or college;
- To collaboratively build and launch an interactive student website on sustainability issues.

The research presented here will also address why universities and HE in FE colleges should engage students with the sustainability agenda, the wider context of the ideas behind Education for Sustainable Development (ESD) and what educational institutions can learn from the outcomes of the inquiry groups.

Why is it important to engage students with the sustainability agenda?

The current need for knowledge and understanding of sustainable development requires commitment for a transformation in teaching and learning from educational institutions. With the United Nations (UN) Decade for Education for Sustainable Development (DESD) from 2005-2015 as an international catalyst for change, this challenge has now, more and more, been recognised by various Government papers. Even earlier, in 1998, the Sustainable Development Education Panel (SDEP) was established to consider issues on education for sustainable development in schools and in further and higher education. The Panel reported directly to the Deputy Prime Minister and its terms of reference included:

- to promote a strategic approach to sustainable development education in England
- to identify gaps and opportunities in the provision of sustainable development education and consider how to improve that provision
- to highlight best practice and consider the means of disseminating it more widely (SDEP, 1998)

The Panel has called for all FE institutions to be accredited to a recognised sustainable development management systems standard by the year 2010 and to have all staff fully trained and competent in sustainable development. They should also be providing all students with relevant sustainability learning opportunities. In 2000, the Government set up the Sustainable Development Commission as an independent watchdog with a brief to keep an eye on ten policy areas, including education. Since then the UK Government has published a new strategy for sustainable development including ESD, *Securing The Future* (update 2007).

The SDC recommendations were clear:

"sustainable development principles must lie at the core of the education system, such that schools, colleges and universities become showcases of sustainable development among the communities they serve. The strategies, which are being developed following extensive processes of

consultation, aim to encourage institutions within the college and university sectors to embed sustainable development within their teaching and learning, their management and leadership, and their engagement with the wider community" (SDC, 2005)

The Learning and Skills Council (LSC) agrees in a consultation paper, that not only made the case for why sustainable development is so important to colleges and training providers in terms of buildings and estates, but also called for it to become a curriculum responsibility. The LSC's vision is one in which the post-16 sector will commit to embedding sustainable development within:

- the learning opportunities it provides
- its management of resources
- its engagement with communities (LSC, 2004)

The LSC strategy that followed uses even stronger language and argues that "today's problems cannot be solved if we still think the way we thought when we created them" and "the need for all learners to acquire SD skills that will equip them to lead their lives and work in a sustainable way and to influence others to do the same". (LSC, 2005)

It states that the culture of the sector will have to change so much in the years up to 2014 that all providers and learners will know about sustainable development and expect it to be part of normal practice. Additionally, the SDC recommends to the Department for Education and Skills (DfES) that a

"change to the wording of the indicator from the impact of formal learning on *knowledge* and *awareness* of sustainable development to a broader measure of the extent to which individuals have developed the *skills, knowledge* and *values* to be active citizens in creating a sustainable society" (SDC, 2006)

Finally, the Higher Education Funding Council for England (HEFCE) has now also put emphasis on the importance of sustainable development in their policy paper 'Sustainable development in higher education':

"We want to make sustainable development a central part of our strategy for the future development of the higher education sector. Our vision is that, within the next 10 years, the higher education sector in England will be recognised as a major contributor to society's efforts to achieve sustainability - through the skills and knowledge that its graduates learn and put into practice, and through its own strategies and operations." (HEFCE, 2005)

Variable levels of commitment

The fact that governmental organisations recognise the importance of engagement with the sustainability agenda doesn't mean that all players in education agree. Working as a 'sustainability champion', promoting SD amongst colleagues and students, at Somerset College and involved with institutional change towards creating a sustainable college and curriculum has exposed a significant difference in level of commitment amongst staff and students. A recent survey amongst University of Plymouth staff reveals that about 45% of the participating lecturers considered including elements of sustainable development (SD) in their teaching in the coming year. The researchers conclude that:

"Support from lecturers can also by no means be taken for granted. Academics are likely to resist attempts to impose an ESD agenda which does not take their views into account, hence the importance of research which

considers the extent lecturers feel ESD is a worthwhile and appropriate addition to the HE curriculum." (Bissell, Cotton, Warren, Bailey & Maiboroda, 2006)

The level of support for SD identified in this survey, less than 50%, might look disappointing to some, but it must be acknowledged that there is often confusion about its concept and meaning as often 'sustainability' is confused with 'eco-friendly' or being 'green'. As recommended in The Earth Charter, the declaration of fundamental principles for building a just, sustainable and peaceful global society, there are four main values that underpin a sustainable future (The Earth Charter, 2000):

- Respect and care for the community of life
- Ecological integrity
- Social and economic justice
- Democracy, non-violence and peace

Because *inclusion* and *equality* are expected to be a part of university culture and are embedded in the curriculum, one could argue that most lecturers are using at least a few of the principles of SD in their teaching, perhaps without being aware of it. The holistic nature of ESD makes it difficult to pinpoint it to one subject area or to a defined assessable element in a subject area. Daisaku Ikeda, founder of the Soka Education System and instigator of the Decade for Education for Sustainable Development (DESD) that was launched by the United Nations in 2005, sees education for sustainable development as having the following three broad goals in mind (Ikeda, 2003):

- to learn and deepen awareness of environmental issues and realities
- to reflect on our modes of living, renewing these towards sustainability
- to empower people to take concrete action to resolve the challenges we face

Looking at these three points there is an argument that ESD applies to everything in the curriculum and that it therefore makes sense to address it as a shift of paradigm in the teaching and a change of attitude at educational institutions, ranging from preschool to university and start to think latterly. So how does the curriculum need to change to 'fit' sustainable development? David Orr observes that

"We educate many in-the-box thinkers who perform within their various specialities rather like a dog kept in the yard by an electronic barrier. And there is a connection between knowledge organised in boxes, minds that stay in those boxes, and the inability of those minds to perceive the causes of degraded ecologies and global imbalances" (Orr, 1994)

Huckle, in his briefing paper for the Teaching Training Agency, called for a new approach that seeks to reshape the economy and society in ways that respect ecological limits and global justice:

"education will need to reorient itself radically, shifting its emphasis from the past, industrialism, modernity and the nation state to the future, post-industrialism, postmodernity, and global society. It will need to embrace new forms of knowledge, new ways of organising knowledge and new ways of teaching and learning." (Huckle, 2003)

Stephen Sterling reveals his vision of how this new approach to teaching and learning should take shape:

"From concern with promoting knowledge (and often factual knowledge at that), the shift needs to be towards developing critical and systemic understanding and pattern recognition. From concern with practical skills we need to develop broader and higher order capabilities. The key assumption in this approach remains that we 'need' to see differently if we are to know and act differently, and that we need learning experiences to facilitate this change of perspective." (Sterling, 2001)

However, although we have seen more governmental commitment to change the contents of the curriculum to accommodate ESD, not everyone at Higher Education Institutions (HEIs) are convinced that a change of paradigm in teaching is needed. This was noted in the report of the First International Meeting on Implementation of Education for Sustainable Development for Higher Education Institutes (IMESD, 2007):

"There is more of a perception in HEIs that sustainability requires accommodation as regards curricular content, with less agreement that ESD needs to involve pedagogic change and renewal, interdisciplinarity and appropriate policies at the level of the institution."

This shows how complex it is to introduce and address sustainability issues at colleges and universities since it is not just the contents of the curriculum that is gradually changing, but at times the whole approach to teaching and learning is under review at educational institutions. This process of change will certainly have an impact on the student experience of ESD and the way they relate to it. The insecurities and challenges it brings to educational institutions could provide an excellent opportunity to involve students in the process towards a new paradigm.

Engaging with information

Outside the issues around the approach to the teaching and adaptation of the contents of the curriculum, colleges also need to understand the different culture of learning and engagement with information that students have today compared with previous generations. The popular introduction and use of the Internet as well as instant and remote communication via mobile technology in this time of change is an influence that should not be ignored. The popular author and Internet critic David Weinberger proclaims that the Internet not only allows people to connect and interact, but also, as normal constraints fall away, to invent and improvise. He describes the importance of how the Internet allows people to collaborate in a new way:

"Far more important is the way we reinvent what it means to be together as human beings. We are sharing this world not because we find ourselves next to someone due to inevitable accident of proximity but because we have chosen to join with someone on the common ground of shared passions." (Weinberger, 2002)

From the perspective of Design and New Media communication about sustainability is particularly interesting since visual communication plays a major role in young peoples lives. To engage effectively with students it is important to understand what matters to them. Adolescents and young adults have different priorities and different worries than middle-aged lecturers, they tend to fret more about short-term problems and relationships. Moreover, each generation has a different cultural baggage. Current students have been brought up with mobile phones, 24/7 television and the Internet. This has influenced the way they communicate and absorb information. The majority of today's lecturers had to rely on books or other printed publications for

information when they were studying. If they were lucky they had a good well-stocked library in close proximity. Today students have infinite amounts of information accessible at the click of a mouse, but somehow it seems more difficult for them to find the information they need, and even more importantly, to engage with it. More than often I find students glaring at the computer screen, aimlessly trawling through Google generated search results and then produce anything posted on Wikipedia as evidence of research. The question emerging here is how educational institutions should make use of this new technology to enhance learning about sustainability and to stimulate community sense?

Methodology

The focus of the research, student engagement and the desire to involve students with institutional change, dictated an 'action research' methodology. Heron & Reason's approach of co-operative inquiry, as successfully practiced at the University of Bath, seemed to suit the nature of the research since

"Co-operative inquiry is a way of working with other people who have similar concerns and interests to yourself in order to understand your world, make sense of your life and develop new and creative ways of looking at things, learn how to act to change things you may want to change and find out how to do things better." (Heron and Reason, 2004)

The co-operate inquiry approach, or *participatory research*, seemed completely appropriate since it not only aims to produce knowledge that is useful to all participants, but as Reason states it also aims to "empower people at a second and deeper level through the process of constructing and using their own knowledge" (Reason, 2003). Additionally, according to Judy Marshall, it contributes through this practical knowledge to

"...the 'increased well-being economic, political, psychological, spiritual of human persons and communities, and to a more equitable and sustainable relationship with the wider ecology of the planet of which we are an intrinsic part.'" (Marshall in Reason & Bradbury, 2001)

Therefore the research not only investigated how students can be engaged with the sustainability agenda, but also aimed to contributing to a heightened awareness and a more sustainable future for the students themselves.

To get a picture of how ESD is communicated with students, student inquiry groups were formed at three colleges that were willing to collaborate: Somerset College of Arts and Technology, University of Plymouth at Exeter, and Cornwall College (Camborne). All selected students were design students and their heightened awareness of how visual communication works was a useful contribution to the discussions. The selected students, 38 in total, were not necessarily pro-sustainability and mature students were included to get a rounded picture.

Initially, all students were asked to participate with an on-line survey. The purpose was to find interesting patterns in the answers. The questions were drafted to find out more about general level of engagement, empowerment, future expectations, fears and influences on thinking and behaviour and were designed purposely to avoid leading suggestions about environmental issues. Because only a small number of students were participating, no hard conclusion could be drawn from the answers, but they did provide interesting data that led to discussion topics for the inquiry group meetings. Questions generated from the outcomes of the initial survey (see appendix A) were put to the students of group A (Somerset College) and discussed. The same

questions as well as comments from group A were then put to the students of group B (Camborne College) and the questions as well as the outcomes from group A and B were discussed by group C (UoP at Exeter) etc. This method allowed the students to look critically at each other's answers and to reflect on why their peers at other colleges responded in a certain way, stimulating a more in depth discussion and leading to meaningful insights. This method is similar to the 'World Café' method, which promotes the connection of people through organising sessions of small in-depth conversations, enabling participants to find wisdom to reshape their future:

"... wisdom emerges as we get more and more connected with each other, as we move from one conversation to another, looking for patterns, suddenly surprised by an insight we share." (Brown, 2005)

The method promotes the cross pollination of ideas through the movement of people between groups of participants:

"Small, intimate conversations link and build on each other as people move between groups, cross-pollinate ideas and discover new insights into questions or issues that really matter in their life, work or community". (Brown, 2005)

In this instance the facilitator transferred the 'conversations' to the next group, so in that sense 'World Café' methods were not followed in the pure sense, however the action research did stick to the same spirit of small conversations and cross-pollination of ideas.

Following the initial discussions, it was decided, as integral part of the inquiry, that it was appropriate to design and pilot a 'sustainability' themed website in collaboration with the students to ensure they had total control over the visual 'look' as well as the contents. This hands-on and empowering approach ensured maximum engagement and learning. Because a lot of students expressed the wish to have more practical 'sustainable design' assignments, it was also decided to put that to the test and explore its potential effectiveness.

Contributing factors to engagement

One thing that stood out in the on-line survey was that the impact of 'climate change' was more often discussed at home than at college. Why? The survey suggested that at home triggers for discussion, such as the evening news, are readily available, while at college such triggers for debate are absent. When discussed at the second meeting, one of the participants responded that being at university, a new and unfamiliar social environment, caused insecurities about the appropriateness to discuss 'political' issues. Since his college didn't offer the discussion up he didn't have the confidence to get out of the usual comfort zone of discussing football, relationships etc.

At this point it was decided to discuss the function of triggers at colleges in more depth and the participants drafted a list with 'turn-offs' and 'turn-ons'. The general impression was that students were turned off by the lack of visible commitment at their college. Most students felt strongly that their colleges should show in practice that they care about sustainability and that it should not be just theory and policy. They were missing practical messages about how they could reduce the use of energy or how to use water efficiently. They were dismayed about the absence of recycling boxes in their studios and workshops. Although acknowledging that recycling is a last resort, they expressed the desire to be able to make a personal contribution to a more sustainable world. It was clear that they were experiencing a

void in communication on how they could personally make a difference at their college. Other 'turn-offs' that were mentioned were:

- Not knowing the facts
- Doomsday or scare tactics
- The subject is too big for comfort
- Not knowing what difference an individual could make
- The subject is not cool
- Naggers
- People who patronise
- Lack of knowledge, understanding
- Lack of confidence
- Lack of communication about sustainability
- Lack of interest from peers
- Not having the money to buy or produce sustainably

A survey amongst university students in the South Pacific Region confirmed that the magnitude of environmental problems and a lack of in-depth understanding contributes to inaction:

"... students in all the countries studied said that the two most common reasons for not acting in an environmentally-friendly way were a belief that their actions would not make a difference and that they felt that there was no practical alternative even when they knew that what they did was wrong. This reflects not only a lack of knowledge of possible alternatives but also a failure of schools to provide students with experiences that teach such knowledge and skills. It also indicates that students have rarely had the opportunity to work with others on practical environmental projects and develop confidence in their individual and collective abilities to successfully bring about change. (Fien, 2006) "

'Turn-ons' mentioned were:

- Teachers, lecturers
- Friends
- Parents
- Children (of mature students)
- Famous people such as Princess Diana, John Lennon, Bob Geldoff, David Attenborough, Madonna and other Live8 musicians
- TV programmes such as Live Aid, Blue Peter, Comic Relief, Planet Earth, news programmes on G8, effects of climate change, poverty, war in Iraq, tsunami, hurricane Katrina hitting New Orleans
- Films such as 'Day after tomorrow', 'Schindler's list', 'An inconvenient truth', 'The colour purple', 'It's a wonderful life'
- The Genesis Project at Somerset College
- Organisations such as Howies, Greenpeace, RSPCA, Friends of the Earth
- Irritation about packaging, overproduction, use of pesticides

At the start of the discussions it had become clear that not everyone understood the concept of 'sustainability'. The meaning that most participants contributed to 'sustainability' was 'eco-friendly'. To make the discussion easier and understandable for everyone the Bruntlandt definition of sustainable development was offered up (see introduction). The students found that very helpful and commented that they would like to see their colleges making mission statements about sustainability and communicate a clear description of what it means.

Amongst all positive influences that were listed, it was very interesting to find that only one student at Somerset College mentioned the Genesis Project. The Genesis building, opened in 2006, is beautifully designed, is made out sustainable materials and is powered by renewable energy sources. It functions as an example for the construction industry and as a hub for a range of sustainability themed educational, business and cultural activities in the South West. When asked, the students told me that they were not aware that there was such a unique building on the campus. What happened? Somerset College put posters up around the college, send e-mails round to staff and organised open days... So, the students didn't read the posters and the staff didn't read the e-mails? As the roman poet and philosopher Lucretius already observed a mere 2000 years ago:

"Even in the case of things, which are clearly visible, you know that if you do not turn your mind to them, it is as though they had never been there or were far away." (Lucretius in De Montaigne, 1987)

Not enough minds were turned to this important development at Somerset College. Giving out information is clearly not the same thing as engaging people with information or making information memorable or 'sticky' as Malcolm Gladwell explains in his bestseller *The Tipping Point* (Gladwell, 2000):

"By tinkering with the presentation of information, we can significantly improve its stickiness."

On a daily basis we get swamped by information and messages, posters become wallpaper and e-mails become clutter. We look at the information, but don't reflect on its meaning. Any communication needs therefore to be considered carefully and colleges have to think about what works best for staff and what works best for students. Somerset College learned a valuable lesson, students and staff are now more actively involved with the Genesis facilities.

Most students mentioned the important role their parents and friends have on their thinking. The students in the Exeter group (group C) also mentioned that their lecturers are playing an important role in engaging them with sustainability and that they're making information about it sticky. Their enthusiasm stimulates them to investigate the meaning of sustainable development and the relevance to their subject area of product design. Interestingly enough, some of those committed lecturers, were perceived as 'naggers' as well as motivators by the same students, however the overall opinion on their contribution to their learning experience was positive. At the other colleges where that commitment from lecturers was lacking or not expressed clearly it was not only leaving students indifferent, but also making engaged students feel insecure.

Another important positive influence on the students in Exeter was that there is a clear element of sustainability within some of the taught modules. Although the participants would like to see it extended to all modules, they had clearly taken it more to heart than their fellow students at Somerset College and Cornwall College. Still, there were insecurities about the place of sustainability in their professional careers as product designers and they questioned whether they should put a lot of energy into it whilst they are at college. As one of the students remarked: '*at our course sustainability is not linked to success as a student or as a professional. We are already very busy with our set course work, why would we put effort into taking sustainability into account?*'

When asked what they would do to engage students if they were in charge of the teaching the following recommendation were made:

- Clear assignments around sustainability subjects
- Information on sustainability should be made easy to obtain
- Stimulation of discussion through watching films, additional lectures, field trips, posters with facts
- Confirmation from lecturers that sustainability and success go hand in hand

Areas of influence

Reflecting on the outcomes from the various inquiry group discussions three different types of students and three principle areas of influence on students' engagement could be identified. As a student enters university he or she is already *engaged* with sustainability issues, is *receptive*, or is *sceptical*. The 'engaged' student is convinced of the importance of sustainable development, has a high level of ethical lifestyle and a good understanding of relating issues. If possible, the *engaged* student will share his or her insights with others or will try to 'convert' them. The *receptive* student is sympathetic towards the message of SD, but does not promote it actively or is 'neutral'. He or she might have some level of ethical lifestyle, but is not sure how an individual can make a difference and lacks significant understanding of sustainability issues. The *sceptical* student is critical of the sustainability agenda, sometimes because it interferes with personal interest and sometimes because there is a lack of understanding of the problems or the will to learn about it. He or she will try to pick holes in the arguments in favour of sustainable development whenever there is an opportunity. These archetypal attitudes are consequently challenged or reinforced by three areas of influence: *the curriculum, college policies & actions* and *social or personal influences*. (Figure 1).

influences on student
at university

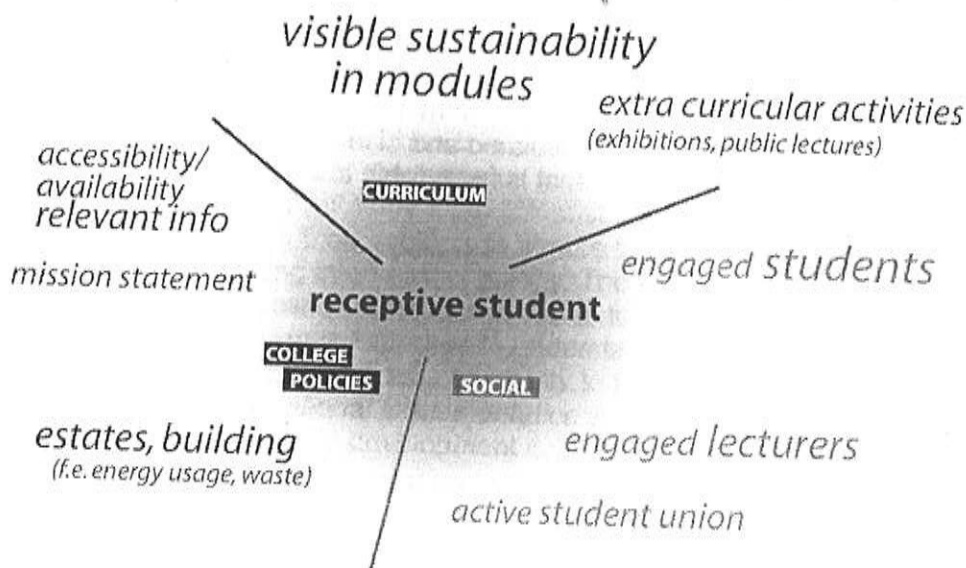
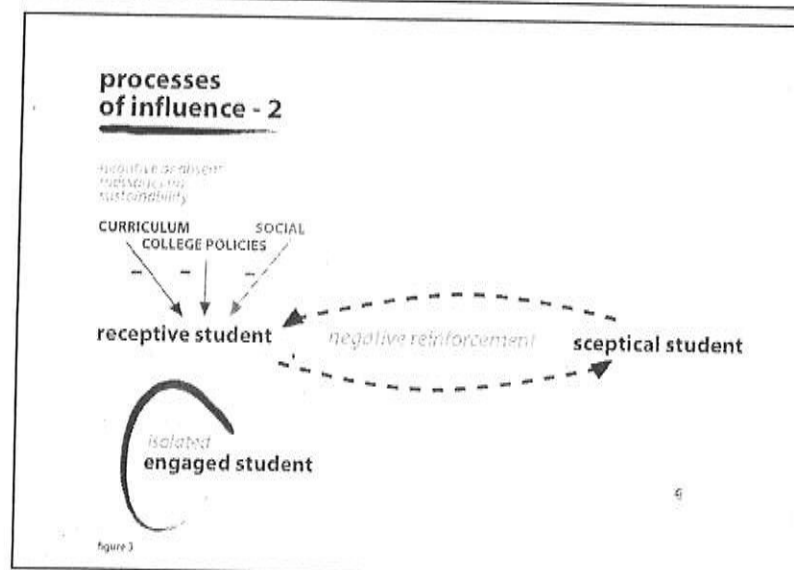
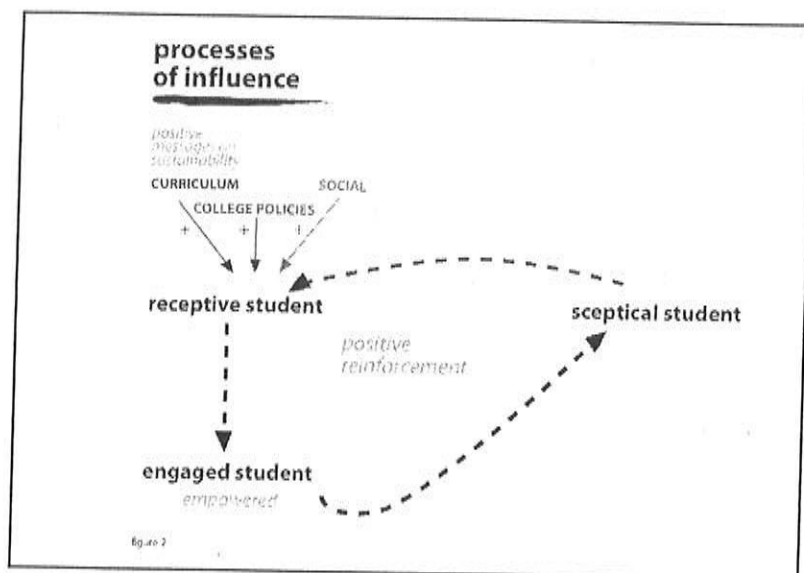


figure 1

Students will have the opportunity to get a better understanding of SD and challenge their own perceptions when it is addressed in the formal and informal *curriculum*, in particular when there is room for debate. Their way of thinking will also be influenced by the messages that their college is giving out about its sustainability *policies*, the visible level of sustainable management of campus and resources and the ease of access of relevant information. An illustration of this is the dismay that students at all three colleges expressed about the lack of recycling facilities at their institutions. They argued that it was difficult to get enthusiastic about sustainability projects when their college failed to facilitate recycling. Besides private *social* influences such as friends and family, lecturers also have a significant impact on how students engage with the sustainability agenda. If they are not convinced of the importance of sustainability the students are not likely to act differently. After all, as Daisaku Ikeda observes in his proposal for Soka (value creating) education:

"Students' lives are not changed by lectures, but by people. For this reason, interactions between students and teachers are of the greatest importance."
(Ikeda, 2001)

It is imperative to understand that we are all very much influenced by our social environment and more so, young adults are very perceptive to peer-pressure. Gladwell argues that contrary to the way we would like to see ourselves, autonomous and inner-directed, "we are actually powerfully influenced by our surroundings, our immediate context, and the personalities of those around us." (Gladwell, 2000). Inspiring *engaged* students have therefore, just as engaged lecturers, an important role to play in introducing the concept of sustainability into their subject of study and to the university's communities. My survey confirmed the influence of peers on the level of commitment to a sustainable lifestyle. The students were more influenced by people in their close social environment than by the news or other media (Appendix B). *Figure 2* shows that *receptive* students, who are open to favourable communication about sustainability, become more engaged, confident and empowered when supportive 'messages' on sustainability are sent out. Once they are empowered they will join the already *engaged* students in influencing the *sceptical* students, who will under increasing peer influence become more receptive to the 'positive' communication at university and will possibly start to question their own thinking. Some students may stay sceptical, but their once overpowering 'voice' will have less impact. However, if there is negative, contradicting or lack of communication about sustainable development in one or all of the three mentioned areas, the *engaged* student will get isolated and disempowered (*figure 3*) and will lose his or her potential influence, that is favourable towards sustainability, on other students.



21st Century communication

Since today's students access and absorb information so differently from previous generations, the second phase of the research focussed on how universities and colleges could make it easier for students to link sustainable development to their own studies and to approach their subjects in a more holistic way through linking it with other subject areas using internet technology. The inquiry groups participated in designing and piloting a website that allows students to add contents and collaborate on projects. Joined up thinking is important to understand the complexity of the global problems we're facing today as well as a necessity to find solutions. As stated in the United Nations' *DESD International Implementation Scheme*, one of the important aims of education for sustainable development is to be

"Interdisciplinary and holistic: learning for sustainable development embedded in the whole curriculum, not as separate subjects" (UN, 2005)

In the inquiry groups ideas for a website were discussed and the participants were asked to contribute with examples of 'cool' websites they thought to be very engaging as well as ideas for contents. The idea was that examining the example websites would help the designers to find the right 'flavour' of visual communication.

For the participants it was paramount that the website should allow students to add contents and enable them not only to find appropriate information through posted weblinks, videocasts and articles, but also to allow them to find likeminded students through personal profiles, cv's, blogs and portfolios. Additionally it was suggested to have related links to sustainable shopping opportunities and resources. Social networking has also been encouraged through the possibility to post events and requests. To maximise the ease of finding relevant information and people, all information that is added to the contents is 'tagged' with a category that relates to a study subject area. For example a profile, weblink or article could be tagged with 'fashion'. When clicking on the 'fashion' tag in the 'tagcloud', a visible cluster of tags on the home page, all information with the 'fashion' tag will be listed. Additionally, a ranking and comments system allows participants to give their opinion on posted materials and guide other users in appraising posted contents.

The suggestions for the contents can be divided in four areas of interest:

- Easy access to relevant information to support study (articles, weblinks, video casts)
- Collaboration (tags, portfolios of work, creating contents)
- Networking (personal profiles, blogs, cv's)
- Information on other relevant personal interests (events, shopping, requests, gallery)

After the consultation a trial website was set up and the participants then contributed with suggestions to make the navigation better as well as adding contents. This fine-tuning process took place over three months and is now ready to use for all students at the University of Plymouth and its partner colleges (<http://csf.plymouth.ac.uk/greenhouse>).

An experimental engaging project

Because the participants suggested to have 'clear assignments around sustainability subjects' to improve engagement, it was decided, for the purpose of the research, to trial an assignment with a group of eight BA Advertising students. The aim of this case study was to find out whether participating in an engaging project would make a difference in their attitude towards sustainable development and the perception of their own responsibility for a sustainable future.

The students were given a brief for a six weeks project to design an advertising campaign aimed to raise public awareness about the over-use of food packaging. They were allowed to use any method of their choice for their campaign and were encouraged to work together. After the formal briefing that took place in the inspiring sustainable Genesis building, the students were encouraged to discuss environmental and ethical issues and to discuss the influences on their own shopping behaviour. During the second discussion it became clear that, although they were all of the opinion that something should be done about the amount of waste produced in their country, they did not see how they could make a difference or why it should be their responsibility in the first place. In the second session they were taken on a 'fieldtrip' to a Tesco's store close to the college, a store they visit almost on a daily basis. They were asked to observe the shopping behaviour of the customers, to ask them questions, to look at the choices of produce, compare prices and to look at how products were promoted, packaged and displayed. After the visit another discussion took place. One student commented: "I never realised how much I was manipulated in buying products." Another commented that shopping would "never be the same" again for him and acknowledged that waste could be reduced through choosing to buy products with a minimal amount of packaging. They expressed appreciation for the 'fieldtrip', something they had never done before in their three years of study, and

said the hands-on experience helped them to understand the complexity of the problem. After the project was completed, the students were asked to fill out an exit questionnaire to assess any change in attitude (appendix C). All students agreed that the project had helped them to understand issues around sustainable design better and thought it was a useful contribution to their learning as design students. More importantly, 6 out of 8 participants were of the opinion that, compared to before the start of the project, they were now convinced that they can influence the public's opinion as designers. The project has therefore significantly improved their engagement and confidence. As one student commented:

"I think advertising, used cleverly and witty, can make a huge difference towards all these environmental issues. People are aware of the problem but need a push into doing something about it, and here's where we can influence them as graphic designers"

and another:

"It's good to try and think about the environment when designing. We as advertisers are the voice so that people can clearly understand and learn things that were not clear to them before. A good thing to take into account in the future"

But the project has evidently also influenced their personal lives:

"I enjoyed the assignment and am now far more aware of over-packaging than I was before. I think it's important to make other people start thinking about over-packaging too"

It is not clear how much the contents and nature of the activities have contributed and how much the fact that the lecturer was pro-sustainable development influenced the students' experience. However, this experimental project has demonstrated how, in a relative short period of six weeks, students can be engaged with subject relevant sustainability issues and change their attitude from 'sitting on the fence' towards taking responsibility for sustainable development in their personal lives and as professional designers. The fact that the project took the students out of their normal learning routine will certainly have contributed to the impact it made. As Sterling observed in his proposal for sustainable education: "... innovative programmes that encouraged deep personal and professional reflection often changed people's lives." (Sterling, 2004)

Lessons learned

The participants' insights and ideas have been an essential contribution to find out how we can engage students with the sustainability agenda. They offered up answers to the posed questions with their initially sceptical participation turned lively engagement. When prompted they were able to identify immediately what turned them *on* or *off* with the sustainability agenda and offered good ideas of what could be done to engage other students. This collaborative inquiry showed how effective it can be when lecturers and students work together in finding new insights to improve education. Indeed, the process of the research project itself was an example of institutional change for ESD as proposed by the United Nations:

"Teaching that is geared simply to passing on knowledge should be recast into an approach in which teachers and learners can work together to acquire knowledge and play a role in shaping the environment of their educational institutions" (United Nations, 2005)

As shown in figures 1, 2 and 3, the correlation and dynamics between the institutions' policies, the lecturers and the students are very important. If the lecturers are not on board it is difficult to keep or get the students engaged even if the curriculum is offering engagement with sustainability issues. If college policies for sustainability are absent or are not communicated clearly, students have an excuse not to engage. Why would they make an effort if the college doesn't lead the way?

The inquiry also reveals the importance of peer pressure, negative or positive, on students' engagement. There will always be students who are already convinced of the importance of sustainable development, but if they are not supported by obvious college policies, the curriculum and lecturers, the constructive contribution they could make to the development of the sustainability agenda at colleges is minimised. Sceptical students have the potential to hinder the engagement of receptive students, however they could play an important role in stimulating much needed critical thinking and should be included in the engagement process. Through a lively debate, instigated by confident engaged students and supported by college staff, they can join in with the SD agenda whether they are pro or against.

The use of internet technology, as applied in the student website, makes it not only easier to find relevant information to their subject areas, it also encourages cross-disciplinary collaboration and the opportunity for engaged students to connect with like minded students across a large geographical area and influence students who are sitting on the fence. Because the students are invited to add contents to the website, it enables them to put their own views on sustainable development across and to make recommendations to other participants. New media and sustainability expert John Blewitt stresses the importance of meaningful dialogue on sustainability:

"Higher education and lifelong learning must develop a culture in which actual and metaphorical conversations about sustainability take place. This view of education requires a cooperative and collaborative approach to learning that is forward looking and may take place in the classroom, the work place or in the community. It may be delivered on a flexible or distance basis via a creative and critical appropriation of e-learning methods and technologies."
(Blewitt, 2004)

The website trialled in this research offers such an environment for metaphorical conversations and it offers an alternative student community which will support students who feel isolated at university in their desire to engage with the sustainability agenda. It will also provide a way to make information about sustainability more 'sticky' and more 'visible', since the students themselves are in charge of the contents of the site. Looking at information that is recommended by their fellow students will have more appeal than a mere bank of information provided by an educational institution. The provision of access to relevant blogs, video/podcasts and forums on the website add another dimension to the level of engagement, since it is using the language that 21st century students enjoy.

The experiment with the *sustainability* themed project to raise awareness about 'over-packaging' has demonstrated how a short project that takes students out of their usual learning pattern can have a significant impact on the students thinking and engagement, however this project, like many similar projects, depended on the personal interest of the lecturer and program leader and is as such not sustainable. If sustainability is taught as an add-on and not as an integral part of the studies, the teaching for sustainability will probably disappear when the lecturer leaves or retires. The projects could have the same fate as any other 'flavour of the month' initiatives.

Only when sustainability skills are formally assessed or when they are required because they are part of educational policy, and only when values for sustainable development become the norm at educational institutions, a serious change in education will take place.

Recommendations

Learning from this co-operative inquiry, what could Universities and Colleges do to improve student engagement with sustainability agenda? The following recommendations would make a good start. Some colleges might already have a few of these suggestions in place, but to engage effectively it is important to consider the correlation between the *policy*, *social environment* and *curriculum*.

Policy

- Define a meaning of sustainable development (SD) and communicate it clearly with all players at college or university
- Include view on SD in university or college policy & strategy such as written by the Centre for Sustainable Futures (University of Plymouth Sustainability Policy & Action Plan, <http://csf.plymouth.ac.uk>)
- Demonstrate that policy is put into practice, make it visible.
- Make information about sustainability 'sticky' for students.

Social Environment

- Ensure more lecturers are convinced of the importance of SD and ensure all staff are well informed on sustainability issues
- Employ carefully chosen inspirational student ambassadors
- Utilise student ways of communication
- Give engaged students a voice (student union, internet networking, collaborative inquiry)

Curriculum

- Give lecturers an incentive to include sustainability in their teaching and to make use of appropriate teaching strategies for sustainability
- Encourage cross-curriculum collaboration⁶
- Offer sustainability focussed extra-curricular activities such as films and lectures
- Make use of internet technology to communicate and collaborate with students
- Encourage students to work together on projects to promote holistic thinking
- Make it easy for students to find and access relevant information

Conclusion

Designing and trialling the website in collaboration with students has demonstrated that Internet technologies have the potential to encourage holistic thinking and to empower students. There is a need to monitor whether this website, when successfully launched, has an impact on the development of the value systems of the participating students. According to the Government's Sustainable Development Education Panel ESD should "enable people to acquire the *knowledge*, *values* and *skills* that will help them to contribute to decisions about the way things are done, as individuals, as employees and as part of a larger community." (SDEP, 2003). It is clear that new media could aid people in acquiring knowledge and skills, it will also be interesting to find out whether it could aid in acquiring and developing new values.

Although this research has brought an insight in how student engagement can be improved in a practical sense as was demonstrated for example in the case study with the design students and the student website, there is a need to look further into

how HEIs communicate the message about sustainable development with their students. We can try hard to engage students with this issue in the hope that they take responsibility for a sustainable future in their personal lives and as professionals, but as long as they perceive it as an addition to the taught subject it won't be at the top of a students priority list.

The introduction of education for sustainable development will evidently create uncertainties at universities and colleges, but it also offers great opportunities to involve students with the process of developing a new way of teaching and learning through the method of cooperative inquiry. The dynamics between curriculum, social interaction and college policies as identified by the inquiry groups could provide an interesting starting point to explore the engagement dynamics at educational institutes further.

Harriet Sjerps-Jones, August, 2007

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Appendix A

Questions On-line survey

Appendix B

Answers questions on line survey

Appendix C

Exit questionnaire Advertising students

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Engaging Higher Education Students with Sustainability

The fact that a happy student will complete their degree and not drop out is generally accepted but how highly will they achieve? McKenzie & Schweitzer (2001) found for Australian Science and IT students that the more socially integrated a student was, the lower they achieved academically. For many students 'personal development and achievement' is as important as 'acquisition of knowledge and skills' and 'academic achievement'.

What this study shows is that perceptions of success are relative to the stage of study within the University and to other individual factors which promote highly individual responses. For some passing is of the same priority as getting a first. Finding out if employers' conceptions vary again from students and staff on "student success" is the next step for this study and should make for an interesting comparison.

Engaging Students with Sustainability

Somerset College in Taunton, UK, is well known for the Genesis Project, the sustainable construction resource and learning centre for the South West, designed in order to communicate sustainability issues to students and visitors. In spite of this, student involvement in sustainability issues at Somerset College still appears to be quite low. This brief article looks at why this might be the case; is there something about students which administrators and lecturers don't understand?

There is strong support for Education for Sustainable Development (ESD) across many countries, at the UK governmental level and by the University Of Plymouth (UoP) and its partner colleges including Somerset College. Surveys at the University of Plymouth show that there is support for sustainability by more than 75% of both students and staff. Nearly half of lecturers state that they already include sustainability issues within their modules, while 45% also say they consider including further elements in their teaching. So why aren't students more active? -

A further survey was conducted with 35 Art & Design students in order to get a

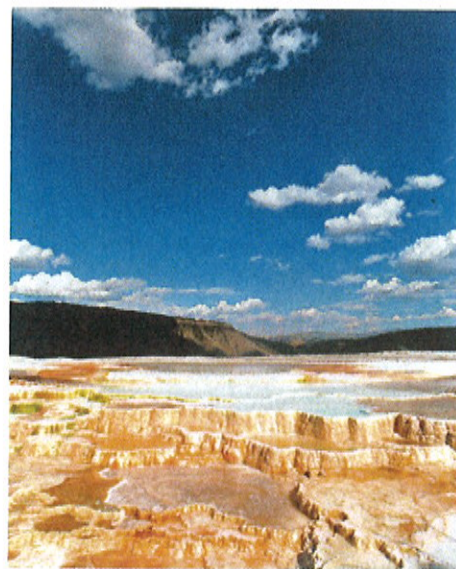
Despite sustainability being high on the agenda as a topical issue, there still seems to be a lack of student participation in sustainability schemes. James Gray-Donald at the Centre for Sustainable Futures, The University of Plymouth and Harriet Sjerps-Jones an academic from Somerset College, try to shed some light as to why.

picture of how they felt ESD is being communicated to them at College. The results were used to design discussion topics with the participating students at the University of Plymouth (Exeter Campus), Cornwall College and Somerset College. One of the main ideas emerging from the focus groups is that there are three types of students with regards to sustainability: the engaged student, the receptive student, and the sceptical student. The majority of students are receptive students, namely they are receptive and sympathetic to messages about sustainability issues, but do not take action themselves. (See figure 1). The receptive student will only become an engaged student if the curriculum, college policies and social influences are favourable towards sustainable development; if they are not favourable, inconsistent or absent, the receptive student will sit on the fence and the engaged student will be disempowered.

Other ideas and concepts included:

Students are less likely to talk about sustainability issues at college, than at home, because no obvious triggers to start a

Staff: if possible, set smaller pieces of work throughout the term rather than one big one at the end.

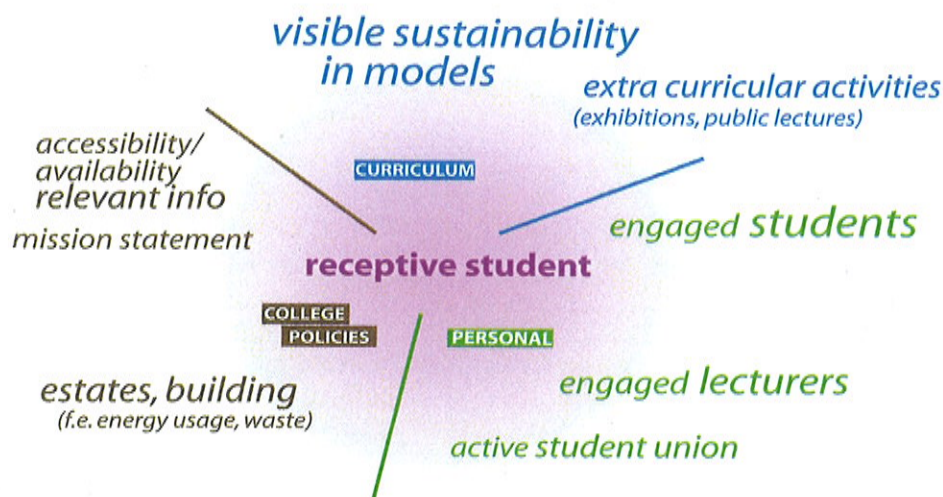


debate are offered.

Most of the information they received did not stick with them. The exception was at Exeter College where the passion of the lecturers to integrate sustainability into Art and Design 'stuck' with students and lead to their wider involvement in sustainability.

Influences on student attitudes to sustainability

The traditional learning mode of students does not seem effective in generating SD awareness and action. The 21st century student accesses and absorbs information differently from a generation ago, or perhaps we are simply more aware of learning methods. Either way, we need to understand what the cues are that hook this new generation of students, how to make information 'sticky', and how to make the campus and classrooms a place where students feel more comfortable talking about, sharing and debating contentious issues. The field of adult education and the concept of conscientization are promising directions to explore. More complete results will be published in a few months.



Engaging students with sustainability issues

Engaging students with sustainability issues

Harriet Sjerps-Jones

Somerset College of Art and Technology

Abstract

Particularly since the launch of the United Nations Decade of Education for Sustainable Development (DESD) in 2005, sustainability has become a key concept in government policies. The Department for Education and Skill (DfES) and the Learning and Skills Council (LSC), amongst others, are looking to educators to take the lead in integrating these issues in the curriculum. Although a lot of valid research about what sustainable development means and how it should be embedded in education has been published, it still remains unclear how teachers and lecturers should be convinced of the importance of sustainability, and how students could be engaged with an issue that is not necessarily clearly linked to their subject of study or a successful career. Although lecturer and student commitment cannot be separated completely, I focus in this article on the latter since universities and colleges cannot claim to promote sustainability if student engagement is not considered seriously. Over the last four months I have worked with student focus groups at University of Plymouth (UoP) Colleges to find out how students engage with sustainability and what colleges should do to encourage it. As the research is still ongoing it is too early to draw strong conclusions, however clear themes are emerging from the discussions, which are interesting enough to publicise in the hope of starting a debate on student engagement in sustainability.

Introduction

As one of many sustainability champions* at Somerset College, I have been involved with institutional change towards a sustainable college and curriculum and have experienced a significant difference in levels of commitment amongst staff and students. A recent survey amongst UoP staff reveals that about 45% of the participating lecturers considered including elements of sustainable development in their teaching in the coming year. The researchers nonetheless conclude that:

Support from lecturers can by no means be taken for granted. Academics are likely to resist attempts to impose an ESD agenda which does not take their views into account, hence the importance of research which considers the extent to which lecturers feel ESD is a worthwhile and appropriate addition to the HE curriculum (Bissell et al, 2006).

These figures might look disappointing to some, but it must be said that there is often confusion about the concept and meaning of sustainable development, as often 'sustainability' is confused with 'eco-friendly'. As recommended in the Earth Charter (2000), the declaration of fundamental principles for building a just, sustainable and peaceful global society, there are four main values that underpin a sustainable future:

Respect and care for the community of life; ecological integrity; social and economic justice and democracy and non-violence and peace. (The Earth Charter initiative, 2000)

Because inclusion and equality are very much a part of University culture and embedded in the curriculum, one could argue that most lecturers are using at least a few of the principles in their teaching without at times being aware of it.

To empower people to take concrete action to resolve the challenges we face (Ikeda, 2003)

To be clear about my own view on Education for Sustainable Development, I would like to use the meaning that the original instigator of the DESD, Daisaku Ikeda (2003), has attributed to it. He has three main goals in mind:

- To learn and deepen awareness of environmental issues and realities
- To reflect on our modes of living, renewing these towards sustainability
- To empower people to take concrete action to resolve the challenges we face (Ikeda, 2003)

Students' voice

As a Graphic Design and New Media lecturer, I was particularly interested in the effectiveness of communication about sustainability. To engage with students it is important to understand what matters to them. Adolescents and young adults have different priorities and different worries from middle-aged lecturers; they tend to fret more about short-term problems and relationships. Moreover, each generation has different cultural baggage. Current students have been brought up with mobile phones, the Internet and 24/7 television. This has influenced the way they communicate and absorb information. My generation - I was born in the sixties - had to rely on books or other printed publications for information. If you were lucky you had a good library in close proximity. Today, students have infinite amounts of information accessible at the click of a 'mouse', but yet it seems more difficult for them to find the information they need.

To get a picture of how ESD is communicated with students across UoP Colleges, I found three colleges prepared to collaborate—Somerset College, University of Plymouth at its Exeter campus and Cornwall College (Camborne). All students are Art & Design students because it is my own subject area, however they could have been from any study subject. The participating students are not necessarily pro-sustainability and mature students were included to get a complete picture.

All students were asked to participate with an on-line survey. The purpose was to find interesting patterns in the answers. The questions were drafted to find out more about general level of engagement, empowerment, future expectations, fears and influences on thinking and behaviour. Because only a small number of students are participating, no hard conclusions can be drawn from the answers, but they did provide me with data that led to discussion topics. For example, I noticed that impact of 'climate change' was more often discussed at home than at college. Why?

Students from all these initiatives suggested that at home triggers for discussion such as the evening news are readily available, while at College such triggers for debate are absent.

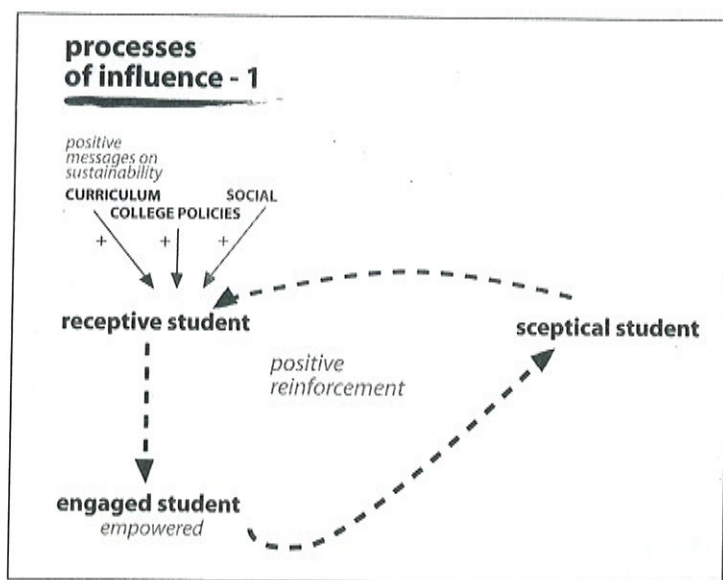


Figure 2

However, if there is negative or lack of positive communication about sustainable development, the engaged student may become isolated and disempowered (Figure 3)

21st Century communication

Since 21st century students access and absorb information so differently, the second phase of my research will focus on how UoP Colleges can help students to make it easier to link sustainable development to their own studies and to approach their subjects in a more holistic way through linking it with other subject areas. Holistic thinking is important to understand the complexity of the global problems we are facing today, as well as a necessity to find solutions. As the deep-ecologist David Orr argues:

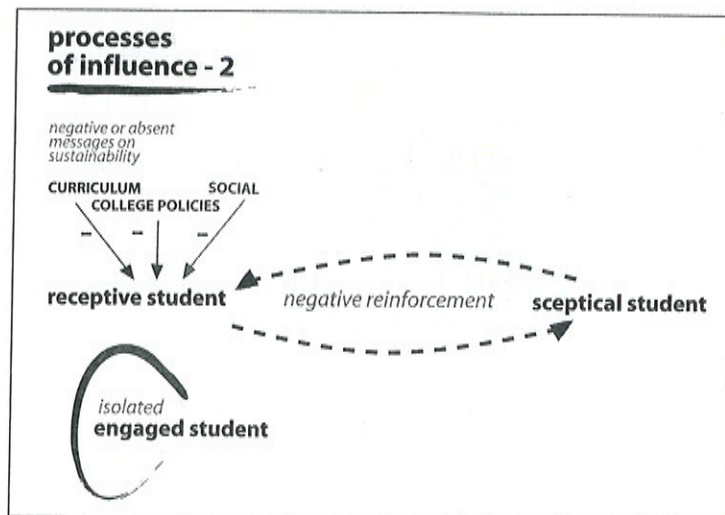


Figure 3

We educate many in-the-box thinkers who perform within their various specialities rather like a dog kept in the yard by an electronic barrier. And there is a connection between knowledge organised in boxes, minds that stay in those boxes, and the inability of those minds to perceive the causes of degraded ecologies and global imbalances (Orr, 1994:7)

Together with the UOP's of Excellence (CETL) in Education for Sustainable Development (ESD) called the Centre for Sustainable Futures and the student focus groups, I am working on an open source website for UoP students, where they can post their ideas related to sustainability; showcase work; find information about local sustainable resources, pod and video casts; and much more. Linking all subject areas together will promote holistic thinking and problem solving. We will also introduce a ranking system to make it easier to navigate through the vast amount of sustainability-related websites that are already on the World Wide Web.

At Somerset college, having learned from what the students in the focus groups have told us, we are now working together to engage students better with sustainable development. At the same time, staff have been involved with strategic planning through participation with 'World Café' sessions in which they had the opportunity to have their voice heard and to exchange ideas with a variety of colleagues from caretakers to governors. It is not a quick fix, but the rocky and exiting journey towards a more sustainable college is on course and I am hoping to share what we learn on the way with all UoP Colleges and more widely.

Harriet Sjerps-Jones

Somerset College

sjerps@eclipse.co.uk

**The sustainability champions are self-selected volunteers who are passionate about the development of sustainability at Somerset College. They have received support and training to tackle sustainability issues at grass-roots level*

*** A process for leading collaborative dialogue and knowledge-sharing, especially in large groups*

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It was also mentioned that being at University, a new social environment caused insecurities about the appropriateness to discuss 'political' issues. Since the colleges did not offer the discussion, students did not want to rock the boat.

This point enticed me to discuss in more detail the function of triggers at colleges, and together we drafted a list with *turn-ons* and *turn-offs*. Most students felt strongly that colleges should show in practice that they care about sustainability and that it should not be just theory. For example, they would like to have recycling boxes in their studios and workshops. Although acknowledging that recycling is a last resort, they wanted to be able to make a personal contribution to a more sustainable world. It would also signal that the college is taking environmental issues seriously.

Lack of communication about sustainability was also mentioned as a negative influence. Just like UoP lecturers, most students thought that sustainable means eco-friendly. They would like to see mission statements about sustainability with a clear description of what it means. It was very interesting to find that only one student at Somerset College mentioned the Genesis Project as a positive influence. The Genesis building at Somerset College, opened in 2006, is beautifully designed, is made from a variety of sustainable materials and is powered by renewable energy sources. It functions as an example for the construction industry and as a hub for a range of sustainability themed educational, business and cultural activities in the South West. When asked, the students told me that they were not aware that there was such a unique building on the campus. What happened? Somerset College put posters up around the college, send e-mails round to staff and organised open days... So the students did not read the posters and the staff did not read the e-mails? As Lucretius observed a mere 2000 years ago:

Even in the case of things which are clearly visible, you know that if you do not turn your mind to them, it is as though they had never been there or were far away. (Lucretius, IV 1994)

Not enough minds were turned to this important development at Somerset College. Giving out information is clearly not the same thing as actually engaging people with information or making information sticky as Malcolm Gladwell explains in his bestseller "The Tipping Point":

By tinkering with the presentation of information, we can significantly improve its stickiness. Simply by finding and reaching those few special people who hold so much social power, we can shape the course of social epidemics. (Gladwell, 2000)

The students in the Exeter group mentioned that their lecturers are playing an important role in engaging them with sustainability and are making information about it sticky through their enthusiasm. It stimulates them to investigate the meaning of sustainable development and the relevance to their subject area of product design. At the other colleges where that enthusiasm is less clearly expressed, it is not only leaving students indifferent, but also making engaged students feel insecure.

Another important positive influence on the students in Exeter was that there is a clear element of sustainability within some of the taught modules. Although they would like to see it extended to all modules, they had clearly taken it more

to heart than their fellow students at Somerset College and Cornwall College. Still there were insecurities about the place of sustainability in their professional career as product designers and doubted whether they should put a lot of energy into it whilst they are at college. As one of the students remarked:

at our course sustainability is not linked to success as a student or as a professional. We are already very busy with our set course work, why would we put effort into taking sustainability into account?

Areas of influence

Through various discussions with the students I was able to identify three different groups of students, and three principal areas of influence on student engagement. As a student enters University, he or she is already engaged with sustainability issues, is neutral/receptive, or is indifferent/negative. The student's attitude is consequently challenged or reinforced by three areas of influence: the curriculum, college policies, and social or personal influences (Figure 1).

It is important to understand that we are all very much influenced by our social environment and that young adults are very susceptible to peer pressure. Gladwell argues that contrary to the way we would like to see ourselves, autonomous and inner-directed,

we are actually powerfully influenced by our surroundings, our immediate context, and the personalities of those around us.
(Gladwell, 2000)

Engaged students, therefore, have an important role to play in introducing the concept of sustainability into their subject of study. My survey confirmed the influence of peers on the level of commitment to a sustainable lifestyle. The students were more influenced by people in their close social environment, such as parents, housemates and boyfriends than by the news or other media. Figure 2 shows that receptive students are open to positive communication about sustainability and how they become engaged and empowered students. When they are empowered they will be able to influence sceptical students, who will then become receptive to positive communication at university.

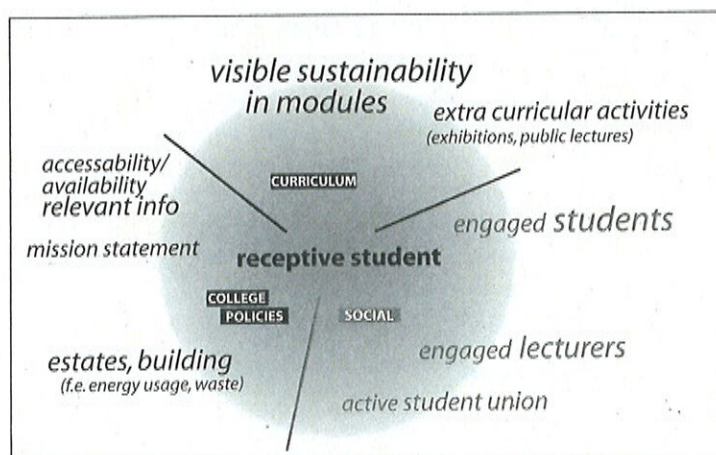


Figure 1

Duurzaam Design

Duurzaam design Nederland op achterstand?

Vroeg of laat zullen ontwerpers over duurzaam ontwerp moeten nadenken. Niet alleen in het belang van de wereld, maar ook in het belang van de concurrentiepositie van Dutch design.

Vijfendertig jaar geleden publiceerde de Club van Rome het rapport 'De grenzen aan de groei'. Daarin werd voor het eerst een verband gelegd tussen de economische groei in de wereld en de gevolgen hiervan voor het milieu. Als de mensheid haar gedrag niet veranderde, zo waarschuwden 's werelds prominentste geleerden, zou de aarde in de 21e eeuw een woestini worden waar het leefmilieu en de populatie zwaar zouden zijn aangetast of vernietigd. Inmiddels leven we in de 21e eeuw.

De verandering van het klimaat is een feit en het leven op aarde wordt ernstig bedreigd. Alarmwekkende publicaties, waaronder Al Gore's 'An inconvenient truth', volgen elkaar in rap tempo op. De voorspellingen komen griezelig dichtbij. Er zullen kordate stappen moeten worden genomen om het tij te keren en er zal bewuster geleefd moeten worden. Ontwerpers kunnen een belangrijke bijdrage leveren aan een ontwikkeling van een duurzame samenleving en de bescherming van onze planeet.

Desinteresse

Milieubewust ontwerpen, dat in de afgelopen decennia in Nederland af en toe nog op belangstelling kon rekenen, lijkt tegenwoordig totaal geen interesse meer te kunnen opwekken. De bijdrage van Dutch Design aan de economische groei krijgt over het algemeen veel meer aandacht, zonder dat daar al te veel vragen bij worden gesteld over wie daar nu eigenlijk baat bij heeft en wat de gevolgen zijn op de lange termijn. Waar 'groen' ontwerpen niet

genoeg permanente aanhang verwierf kan wellicht duurzaam ontwerpen op meer steun rekenen. Duurzaam ontwerpen legt de nadruk op het verband tussen de drie complexe samenhangende belangen van sociale rechtvaardigheid, leefmilieu en economie, of populairder gezegd: people, planet, profit

Duurzaam ontwerpen

Duurzaam ontwerpen is het streven om kwaliteitsproducten te ontwikkelen, daarbij rekening houdend met huidige en toekomstige behoeften van mensen, lokaal en wereldwijd, waarbij het milieu zo min mogelijk wordt belast. Dit betekent dat er ook rekening moet worden gehouden met mogelijke gevolgen – en dus ook kosten – die aan toekomstige generaties gepresenteerd worden, zoals ontbossing, door vervuiling veroorzaakte ziektes, vervuilde rivieren, een tekort aan essentiële grondstoffen en voeding en in het algemeen de gevolgen van klimaatsverandering. Een duurzaam ontwerp kan misschien op dit moment meer kosten, maar is op langere termijn goedkoper en rechtvaardiger. Meerkosten zijn overigens lang niet altijd het geval. Soms kan het aanpassen van een ontwerp vrijwel direct een enorme besparing voor het milieu en de portemonnee opleveren, denk aan de nieuwe generatie spaarlampen. Het principe erkent bovendien dat het niet 'fout' hoeft te zijn om winst te maken en dat een product aantrekkelijk moet zijn voor de consument zowel in vormgeving als functionaliteit.

Waar kan de ontwerper rekening mee houden bij het ontwerpen van een duurzaam product?

De materialen Zo weinig mogelijk gebruik maken van giftige stoffen vermijden, materialen hergebruiken, gecultiveerd hout gebruiken en geen hout uit onvervangbare regenwouden.

Ontwerpen voor hergebruik Een product ontwerpen zodat het makkelijk uit elkaar gehaald kan worden en opnieuw gebruikt gerepareerd of gerecycled kan worden.

Efficiënt energie gebruiken Energiegebruik minimaliseren in zowel productie als in vervoer en vuilverwerking.

Levensduur Ervoor zorgen dat het product of onderdelen van het product, zo lang mogelijk meegaan.

Vervoer De afstand van het transport zo klein mogelijk maken en de manier overwegen waarop dat gebeurt. Vervoer per vliegtuig vervuult meer dan per boot of trein.

Sociaal Design for all, een product ontwerpen dat door zoveel mogelijk mensen gebruikt kan worden, zodat er geen aangepaste ontwerpen gemaakt hoeven te worden.

Rechtvaardig Bevordering van economisch rechtvaardige en veilige productie zoals bijvoorbeeld Fairtrade producten.



**Duurzaam design
erkent bovendien
dat het niet 'fout'
hoeft te zijn om
winst te maken.**

Rugzak, tassenlijf van gerecyclede plastic flesjes

Het combineren van bovenstaande aanbevelingen is natuurlijk erg belangrijk. Het heeft bijvoorbeeld weinig zin om een product milieuvriendelijk en ethisch te produceren, maar niet de consequenties van het vervoer ervan te overwegen.

Nederland op achterstand

In Engeland, waar ik woon en werk, worden plastic tasjes nog royaal uitgedeeld aan de kassa's en nog steeds wordt niet in alle regio's het afval gescheiden opgehaald. Toch heeft duurzaam ontwerpen op het Britse continent een serieuze plek veroverd. Hogescholen voor designonderwijs doen veel onderzoek naar de beste mogelijkheden en oplossingen, en de lesstof wordt voortdurend aangepast aan de nieuwste inzichten.

Ook het invloedrijke Design Council bevordert de ontwikkeling en promotie van *sustainable design* en onderkent dat ontwerpers een belangrijke rol spelen in de toekomst van onze planeet: 'Design is utterly crucial to moving towards a more sustainable future - by rethinking how we deliver products and their benefits without decimating the world around us, or compromising the well-being of others (now or in the future); sustainability is a key to enhanced performance and greater competitiveness.'

Het Design Council vindt er geen doekjes om dat ontwerpers die een succesvolle, lucratieve carrière willen hebben, rekening moeten houden met de behoefte aan de duurzame ontwikkeling in de maatschappij.

De Engelse overheid is terughoudend als het gaat om maatregelen die het milieu moeten ontlasten. Toch nemen, waarschijnlijk als reactie daarop, veel particulieren allerlei initiatieven met betrekking tot duurzaam ontwerpen. Het sportieve internet-kledingbedrijf Howies (www.howies.co.uk) is bijvoorbeeld waanzinnig populair bij jongeren, en in korte tijd uitgegroeid van een klein bedrijfje in Wales tot een invloedrijk merk. Het levert niet alleen ethisch en milieuvriendelijk geproduceerde kleding en accessoires, maar stimuleert zijn doelgroep op allerlei manieren om actie te ondernemen, duurzame ontwikkeling te promoten en bewust te leven.

In Nederland verwacht men dat de overheid wel iets doet aan het milieu en sociale problematiek. Ontwerpers en ondernemingen veranderen niks totdat ze gewongen worden, of op de vingers getikt, en lopen daarom wellicht wat achter. Deze afwachtende houding kan tot gevolg hebben dat de comfortabele positie die Dutch design inneemt op de wereldmarkt in de nabije toekomst verdrongen wordt door het toonaangevende sustainable British design.

Weggoien is zonde

Vroeger of later kunnen ontwerpers er niet onderuit dat ze over de bredere consequenties van hun ontwerpen moeten nadenken. Als dit niet wordt afgedwongen door wetgeving of een tekort aan grondstoffen, dan zeker wel door de groeiende vraag van consumenten. Nederlandse ontwerpers zijn zich niet genoeg bewust van het feit dat zij

bij uitstek geschikt zijn om het voortouw te nemen in deze nieuwe ontwikkeling in de internationale ontwerpindustrie. Duurzaam ontwerpen zit namelijk ingebakken in de Nederlandse cultuur.

Bij mij thuis werd vaak gezegd 'weggoien is zonde', een gezegde dat een duidelijke Calvinistische inslag heeft en niet alleen uit noodzaak of zuinigheid is geboren. Het geeft aan dat het moreel verkeerd is, een zonde, om kwistig om te gaan met Gods schepping. De protestantse cultuur, waar menig ontwerper graag tegenaan schopt, heeft prachtige voorbeelden opgeleverd van sobere, duurzame en efficiënte ontwerpen, zoals de Stijl en de Amsterdamse School in ons land, en de ontwerpen van de Shakers en Amish in de Verenigde Staten. Buiten deze protestantse traditie kunnen we ook putten uit het gedachtegoed van Benedict de Spinoza, de inspirator voor het altruïstische Nederland. Hij stelde in zijn filosofie de natuur gelijk met God, deus sive natura. Hij geloofde niet in een oppermachtige entiteit, maar dat God met de natuur verweven is. Hij had daarom een groot respect voor ieder mens en alles wat leeft. Bovendien zette hij zich af tegen het idee dat de natuur ten dienste staat van de mens. De combinatie van het gedachtegoed van Spinoza en Calvijn is een rijke voedingsbodem voor duurzaam ontwerpen.

Koplopers

Er is een gelukkig een aantal voorbeelden van succesvolle Nederlandse ontwerpen die tot inspiratie kunnen dienen om duur-

Duurzaam design Nederland op achterstand vervolg



Brennels. Kledinglijn gemaakt van brandnetels

Ontwerpers en ondernemingen veranderen niks totdat ze op de vingers worden getikt.

zaam ontwerpen in ons land van de grond te krijgen. Gerard Unger's letterontwerp Gulliver (1992), ontworpen voor USA Today, is negen procent zuiniger dan de Times. De letter is niet alleen beter leesbaar, maar bespaart de krant zo'n 10 miljoen dollar per jaar in papier, energie en vervoerskosten. ID-L maakt onder de naam Ragbag prachtige tassen van gerecyclede plastic tasjes die verzameld worden door 'rag-pickers' in Delhi. Het vermindert niet alleen de enorme berg plastic afval, maar zorgt ook voor inkomen voor zo'n 100 mensen aan de bodem van de Indiase economie. De familie Crébas, die een fortuin vergaarde met Marktplaats, lanceerde de modelijn Brennels, kleding gemaakt van brandnetels. De productie is veel milieuvriendelijker dan die van katoen. Er is minder bestrijdingsmiddel en water nodig, en de plantages, waaronder die in de Noordoostpolder, dragen positief bij aan de biodiversiteit. Op het gebied van energiebesparing levert Philips een grote bijdrage als het gaat om verlichting. De lampen op Bosporusbrug in Istanbul zijn bijvoorbeeld recentelijk vervangen met een nieuw systeem dat gebruikt maakt van hun LED-lampjes. Het is niet alleen mooier omdat het nu het volledig lightspectrum kan gebruiken, maar het bespaart ook nog eens zo'n 50% aan energie en de lampjes hebben een lange levensduur.

Het bovenstaande laat zien dat duurzaam ontwerpen beslist niet oubollig is. Het is hoog tijd voor een herwaardering van de Nederlandse ingetogen bescheidenheid en zuinigheid en om voordeel te doen met

onze eeuwenlange ingebakken degelijkheid. De Nederlandse ontwerpwereld kan putten uit dit rijke erfgoed. Men moet de uitdaging aangaan om aan de rest van de wereld laten zien dat Dutch design duurzaam ontwerpen serieus neemt, en de leiding nemen in deze internationale ontwikkeling. De BNO moet daarbij het initiatief nemen en actief duurzaam ontwerpen gaan bevorderen. Het opzetten van een stuurgroep en het organiseren van thematische tentoonstellingen en conferenties is hard nodig. Succesvolle ontwerpers mogen niet op hun lauweren rusten en moeten laten zien dat ze het lef hebben om met onverschillige opdrachtgevers een gesprek aan te gaan, indien nodig een confrontatie om een weg te banen voor de nieuwe generatie ontwerpers. Een herziening van de lesstof in het kunstvakonderwijs moet toe bijdragen dat het voor jonge ontwerpervanzelfsprekend is om bij elk ontwerp na te denken over de consequenties van de productie, en om aanstormend talent te stimuleren om hun creatief vermogen in te zetten om innovatieve oplossingen, van klein tot groot, aan te dragen. Zo kan een grote bijdrage worden geleverd om de dreigende mondiale crisis die de Club van Rome voorspelde te voorkomen.

Harriët Sjerps

Harriët Sjerps geeft les in grafisch ontwerp aan Somerset College of Arts and Technology en is verbonden aan het Centre for Sustainable Futures als research fellow

Sustainability and Teacher Education

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Authors:

Dr Ken Martin, University of Plymouth; Dr Denise Summers, Somerset College of Arts and Technology and Harriet Sjerps-Jones, Somerset College of Arts and Technology

Contact Address:

Dr Ken Martin, Clouters Cottage, 9, Brook St, Stogumber, Somerset, TA4 3SZ

Tel: 01984 656324

E mail: kenmartin@beeb.net

Sustainability and Teacher Education

Abstract

Sustainability is now a key concept in both government policy and wider global concerns. Issues of climate change and global warming can no longer be ignored in teacher education programmes in the post compulsory education and training sector. Government policy-makers, notably the DfES, LSC and the TTA are all looking to educators to take the lead. This article proposes that sustainability needs to be embedded in a notion of professionalism that has a professional values framework at its heart. This framework should underpin all teacher education programmes and energise professional practice. A college in the south-west of England is used as a case study of how post-16 institutions can embed sustainability not only in teacher education programmes but the whole ethos of the college.

Teacher education programmes in the post compulsory education and training sector are about to go through a sea change as universities and colleges prepare for life after September, 2007. Then, not only will the new LLUK standards kick in but also the considerable changes heralded in the DfES papers (2003 and 2004) that committed the Government to developing a fully trained teaching profession in the post-compulsory sector for the first time ever. From September 2007, all new full-time teachers, tutors and trainers will have to achieve both the QTLS award and professional registration in the Institute of Learning. Teacher education programmes have to change and now is time to take stock of the curriculum of the future for such programmes and, in the light of the world today, it would be short-sighted, to say the least, to neglect the whole issue of sustainability.

The debate about sustainability and education is not new. The UN Rio Summit on environment and development in 1992 led to Agenda 21 (UNCED, 1992), which recognised education as a key tool for sustainable development:

‘Education is critical for achieving environmental and ethical awareness, those values and attitudes, skills and behaviour consistent with sustainable development and for effective public participation in decision-making’
(Chapter 36, p.2)

Chapter 36, on education and training, called for special attention to be paid to the training of teachers and the notion of citizenship. It wants teaching, learning and assessment processes that emphasise values, ethical motivation and the ability to work with others to build a sustainable future. Education for sustainable development is a catalyst for social change and this has, to a certain extent, been recognised by various Government papers. In 2000, the Government set up the Sustainable Development Commission as an independent watchdog with a brief to keep an eye on ten policy areas, including education. The Government’s sustainable development strategy (HMSO 2005, SDC 2005) then identified 250 Government commitments, including sustainable development education. The commitment is clear:

‘sustainable development principles must lie at the core of the education system, such that schools, colleges and universities become showcases of sustainable development among the communities they serve. The strategies, which are being developed following extensive processes of

consultation, aim to encourage institutions within the college and university sectors to embed sustainable development within their teaching and learning, their management and leadership, and their engagement with the wider community' (HMSO, 2005: 37)

In fact, some of this Government concern had already been signalled in the Toyne Report (1993), in which education was encouraged to get into the debate about the environment:

‘After consultation with its staff and students, every higher and further education institution should formally adopt and publicise, by the beginning of the academic year 1994/5, a comprehensive environmental policy statement, together with an action plan for its implementation’

A Department of Environment Review (1996) of this report revealed that most of the institutions and organisations targeted had demonstrated "considerable indifference" to its recommendations. Only 114 respondents out of a possible 756 FHE institutions claimed to have environmental policies in place. Where policies existed, implementation was generally found to be at an early stage with most progress being made on the good housekeeping side, particularly in areas associated with obvious cost savings, such as energy efficiency. As regards the curriculum, only 17 FHE respondents claimed to have set out in general terms what all their students needed to learn in order to be able to take account of sustainable development in their work and daily lives. Of these, less than six were making significant progress. This review made some key recommendations:

- responsible global citizenship (which is the outcome of sustainability learning) should be recognised as core business of learning institutions and a legitimate purpose of life-time learning;
- funds should be made available to establish a national programme to support the further and higher education sector's response to the challenge of sustainable development;
- within three years all FHE institutions should be either accredited to, or committed to becoming accredited to, a nationally or internationally recognised environmental management systems standard, such as the Eco Management and Audit Scheme;
- within three years all FHE institutions should have developed the capacity to provide all students with the opportunity to develop defined levels of competence relating to responsible global citizenship.

In 1998 the Sustainable Development Education Panel was established to consider issues on education for sustainable development in schools and further and higher education. The Panel reports directly to the Deputy Prime Minister and its terms of reference include:

- to promote a strategic approach to sustainable development education in England
- to identify gaps and opportunities in the provision of sustainable development education and consider how to improve that provision
- to highlight best practice and consider the means of disseminating it more widely

The Panel has called for all FE institutions to be accredited to a recognised sustainable development management systems standard by the year 2010 and to have all staff fully trained and competent in sustainable development. They should also be providing all students with relevant sustainability learning opportunities.

The DfES (2003) has begun to implement this strategy, calling upon the TTA to incorporate education for sustainable development into programmes for new teacher trainers. The LSC (2004) joined in with a consultation paper that not only made the case for why sustainable development is so important to colleges and training providers in terms of buildings and estates, but also called for it to become a curriculum responsibility. The LSC's vision is one in which the post-16 sector will commit to embedding sustainable development within:

- the learning opportunities it provides
- its management of resources
- its engagement with communities

The LSC strategy (2005) argues that 'today's problems cannot be solved if we still think the way we thought when we created them'. The culture of the sector will change so much in the years up to 2014 that all providers and learners will know about sustainable development and expect it to be part of normal practice. All staff need to be made aware of and committed to sustainable development. Both the DfES and the LSC now call upon all learners to develop the skills, knowledge and values base needed to be active citizens in creating a more sustainable society.

However, Agenda 21 and the above Government strategy reports have been read by many in a very reformist way, one that seeks only to balance economic growth with considerations of social welfare and environmental protection. Scott (2002) is still a little sceptical about Government priorities. He argues that the DfES has always been reluctant to enthuse about sustainability issues. As he says:

‘It prefers to stress ICT, literacy and numeracy on the grounds, perhaps, that as the good ship Humanity finally steams into the icebergs, we will at least be able to send grammatical SOS messages, read the instructions on the lifebelts, and count the survivors. Of course, if all the prognoses about global warming are correct, there won’t be any icebergs and we shall need a new set of metaphors’ (Scott, 2002:5)

Huckle (2003), in his briefing paper for the TTA, called for a more radical approach that seeks to reshape the economy and society in ways that respect ecological limits and global justice:

‘Education will need to reorient itself radically, shifting its emphasis from the past, industrialism, modernity and the nation state to the future, post-industrialism, postmodernity, and global society. It will need to embrace new forms of knowledge, new ways of organising knowledge and new ways of teaching and learning’ (Huckle, 2003: 5)

This approach implies a radical democratisation of current social relations. It seeks ecological, economic, social, cultural and personal sustainability. It emphasises

sufficiency, not efficiency, eco-centric as well as egocentric values. It stresses the role of community, active citizenship and direct democracy. This multidimensional nature of sustainable development means that its scope or content is no longer confined to what are generally perceived as environmental issues. However, there is much to be debated because, clearly, concepts such as democracy, citizenship, interdependence, quality of life, and sustainability, take on different meanings within different discourses.

The UN recently launched the Decade of Education for Sustainable Development and teacher educators should get involved in this. One of the instigators of this decade, Daisaku Ikeda (2003) sees education for sustainable development as having the following three broad goals in mind:

- to learn and deepen awareness of environmental issues and realities
- to reflect on our modes of living, renewing these towards sustainability
- to empower people to take concrete action to resolve the challenges we face

As Sterling has recently said (2005), the key shift required is from a limited emphasis on 'education for jobs' towards the broader goal of building an ecologically sustainable economy and society. For him, the challenge of achieving a sustainable society in the coming decades demands a wholesale and urgent reorientation of educational vision and practice. Teacher educators have to join in with this change, indeed they need to be at the forefront. They need to resist the current limited and limiting view of policy makers and quangos that surround teacher education at the moment.

For Huckle, education for sustainable development is about understanding the social practices that shape and are shaped by different discourses, and making critical choices amongst them. As such it is a form of empowerment and a key component of both social literacy and a curriculum in and for a democratic society (Carr, 1998). Scott and Gough (2003), in recent evidence to the government select committee, support this view:

‘We ourselves argue that the challenge for learning in relation to sustainable development is to confront learners with competing accounts of human and environmental reality wherever complexity and uncertainty mean that it is possible for competing rationalities to yield competing versions of the truth. This, we suggest, radically revises our view of learning: from a process which acts on individuals’ characteristics in order to change the world; to one which challenges individuals’ views of the world as a means of influencing their characteristics and hence ways of thinking and living’ (Scott & Gough, 2003: 3)

Sterling (2003, 2005) sees this challenging process as transformative learning, a process that will allow an ecologically-oriented educational paradigm to emerge. We need to move from transmissive learning towards transformative learning. This new paradigm distinguishes between first order learning and second order learning:

‘First order change and learning takes place within accepted boundaries; it is adaptive learning that leaves basic values unexamined and

unchanged. Most learning institutions are primarily engaged in this functional first order learning where the stress is on information. By contrast, second order change and learning involves reflective learning, when we examine the assumptions that influence first order learning' (Sterling, 2003: 15)

However, for Sterling, we need to go deeper still to a 'third order learning', where we are able to see things completely differently. The latter is creative and involves a deep awareness of alternative worldviews and ways of doing things. It requires a shift of consciousness and it is this transformative level of learning that is needed for an understanding of sustainability and education. As the deep ecologist, David Orr, puts it, we need to move out of our knowledge boxes:

'We educate many in-the-box thinkers who perform within their various specialities rather like a dog kept in the yard by an electronic barrier. And there is a connection between knowledge organised in boxes, minds that stay in those boxes, and the inability of those minds to perceive the causes of degraded ecologies and global imbalances' (Orr, 1994:7)

Professional Values Framework

Within teacher education programmes in the post-16 sector, an analysis of professional values and professionalism has always been a key ingredient. It's a good place to start embedding notions of sustainability. The new LLUK standards are divided into six domains, the first one being 'professional values and practice'. This domain underpins, supports and informs all the other domains and states that teachers,

tutors and trainers will have to be 'effective in applying the ethics and values of their profession'.

The Institute for Learning (IfL) is developing a code of ethics for the post-16 sector, including ethics of truth disclosure, subjectivity, reflective integrity and humility.

They are also producing a code of good environmental practice, which will, amongst other things:

- promote the conservation and sustainable use of natural resources
- minimise environmental pollution and waste
- build environmental concerns and information into all curricular programmes
- adopt working practices that minimise the impact on the environment
- develop strategies to raise local awareness of environmental issues

Some work has already been done on how education for sustainability could be embedded in teacher education programmes, though it is aimed mainly at pre-16 programmes. The Forum for the Future (1999) was asked by the Government to identify best practice for sustainability in the HE sector. For teacher education, it identified the following key sustainability concepts:

- an understanding of the interdependence of major systems
- an understanding of the needs and rights of future generations
- an understanding of the value of diversity
- an understanding of the quality of life, equity and social justice issues associated with the sustainable development process

- an awareness of the Earth's carrying capacity
- an appreciation of the need for precaution

These concepts are supported by a list of appropriate teaching strategies relating to sustainable development and knowledge of the key issues involved. This will, of course, lead to a greater analysis and clarification of personal and professional values.

Huckle (2003) suggests that personal and professional values should require teachers to conserve ecological resources and services, develop knowledge and skills relevant to sustainable production and consumption, promote social and environmental justice and value cultural diversity alongside biodiversity. These values need to be supported by knowledge that covers:

'Theories of contemporary social / global change, the emergence of new kinds of knowledge and frameworks for knowledge, and the ethics, substance, tools and politics of sustainable development. It should pay particular attention to discourses of sustainable development and relate these to models of democracy and citizenship that are and should be reflected in the curriculum. Teachers should understand the benefits and limitations of liberal democracy and consider other models (eg ecological democracy) that may provide more appropriate foundations for sustainable development' (Huckle, 2003: 56)

The integration of these core values and core knowledge will not be easy at a time, in the post compulsory sector, when professionalism and professional autonomy have been under attack. Lucas (2004) has talked about how teacher education in post-16

built out of sustainable materials and powered by renewable energy sources, it is aiming to promote sustainable construction in mainstream building projects, but it is much more than that. It has inspired the educational strategy at the College to such an extent that Somerset College is now the first in the UK to have an approved Foundation Degree in sustainable construction. It also has a wide range of innovative resource and learning opportunities, university level continuing professional development modules such as Designing Sustainable Buildings, Client Driven Sustainability, Carbon Foot-printing, Resource Efficient Construction, Engineering for Sustainability, Water Management, Micro Renewables and Community Focused Construction.

With the beautifully designed and sustainable Genesis building as an attractive and practical learning resource other programmes have developed the sustainability thread. Genesis has served as an inspiration to the whole of the academic community at the college. Currently, the college curriculum is undergoing a review in terms of embedding sustainability into the teaching programs, so that all students get some form of sustainability education to help them understand the choices they make about the way they live, the impact they have on the environment and the role they can play as critical professionals. The college is now looking at developing a suite of foundation degrees in which sustainable development will be embedded such as textiles, fashion, interior design, graphic design, 3D design, tourism and some of the healthcare programs. Last year the Fashion and Textiles students were asked to design an underwear collection made out of unbleached organic cotton and this year the BA Advertising students are designing a campaign about the overuse of food packaging so as to challenge public buying behaviour.

Teacher Education

The college teaches the in-service Certificate in Education / PGCE (post compulsory education and training) and has approximately 70 students. The programme is committed to reflective practice, reflexivity and critical thinking and, as such, sits well with the notions of sustainability mentioned above. However, until the development of the Genesis Project, the programme team had not considered developing the curriculum to include the sustainability agenda. Recognising that this was a huge gap in both the course philosophy and the curriculum, the teacher education team developed a CPD module entitled Sustainability in Education, with the University of Plymouth, and offered this to a group of staff, which included the sustainability champions and members of the teacher education team. Those who attended this module were then offered the opportunity to attend a four-day Staff Development programme at the Schumacher College which further enabled the teacher education team to develop their thinking. The team is now starting to introduce the concept of sustainability within the Curriculum Studies module, where curriculum models are explored in order to develop an understanding of how they relate to the transformative approach required in Sterling's (2003) vision of sustainable education. Students are now encouraged to take the notion of sustainability further in their research projects, in which they are encouraged to take a critically reflexive approach to their professional practice. The alternative Professional Values model of professionalism outlined above gives ample space for students to do this.

Authors: Ken Martin, University of Plymouth; Denise Summers, Somerset College of Arts and Technology and Harriet Sjerps-Jones, Somerset College of Arts and Technology

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