Sustainability as competitive advantage in higher education in the UK

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Abstract: This paper draws on a series of five ESRC-funded seminars held between 2006 and 2008 on 'Sustainability as competitive advantage in higher education in the UK'. We sketch the background to sustainability in HE, distinguishing between teaching *about* and *for* sustainability and arguing that the move to latter has prompted questions about the sustainability performance of universities themselves. We outline the rationale for the seminar series – an analysis of the degree to which the reluctance of senior managers to embrace sustainability can be overcome by the promise of competitive advantage – and then discuss the lessons we learned from the seminars regarding the successful implementation of sustainability strategies in HEIs. We then analyse what 'establishing competitive advantage' in the HE sector might entail, generically and offer some suggestions as to what a specific instantiation of this might look like, guided by the idea of creating 'sustainable communities'.

Keywords: sustainability; university management; higher education; competition; UK.

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1   Introduction

This paper outlines the rationale for, and findings of, a two-year series of five seminars on the theme of sustainability as competitive advantage in higher education (HE) in the UK. We also aim to put this rationale and these findings in the wider context of sustainability in HE. The seminars were funded by the Economic and Social Research Council and ran between 2006 and 2008. Three seminars were held at Keele University, one at the University of Leeds and the final one in London. The authors of the present paper were the principal investigators on the project.

2   Two paths

In general, research on sustainability in higher education has taken one of two paths. Initially (and predominantly), a great deal of work was done on sustainability in the curriculum. Early anxieties about teaching *for* rather than simply *about* the environment, dissipated in the wake of a series of high-level, multinational declarations – culminating in 2002 with the announcement by the United Nations of a decade of education *for* sustainable development (SD), to run from 2005–2014 (our emphasis). Followed by a succession of regional and sub-regional declarations [Corcoran and Wals, (2004b), p.xiii], SD is moving in to the same league as equality of opportunity and widening participation as far as its broad acceptance as a desirable socio-educational objective is concerned. SD has become relatively commonplace in university curricula (Tilbury, 2004; Glasser, 2004, O'Sullivan, 2004). The evolution of sustainability declarations in HE is well-documented by Tara Wright (2004). She writes that, 'The development of ecologically literate staff, faculty and students is a popular theme, as is the development of partnerships with all levels of government, non-governmental organisations and various industries' [Wright, (2004), p.13]. Significantly for the purposes of this article, she also notes that, "Surprisingly, the notion of developing more sustainable physical operations on the university campus does not seem to be a priority for the majority of the declarations" [Wright, (2004), p.13]. Naturally this has given rise to multiple accusations of 'greenwash', as universities seek to ride the green tide without doing anything about their own environmental impacts [Wright, (2004), p.17]. This phenomenon – and what to do about it – will be a key theme of this article.

So if the first major strand of research has dealt with the 'greening of the curriculum' and the associated regimes of legitimation that have accompanied it, the second has focussed on the issue that Wright notes has been less apparent: the practice of sustainability in HE institutions themselves. This is the issue we focused on in our seminar series. The connection between the two strands is that the legitimation of the discourse of education *for* sustainability opens the way for questions to be asked about the sustainability performance of universities themselves. Once the apparently

dispassionate enquiry into education about sustainability turned into a more committed education for sustainability, the door was opened to asking questions about the lived environment in which students were being asked to learn about the promotion of sustainability. This is indeed one of the ways in which otherwise reluctant university senior managers might be persuaded to take the sustainability agenda more seriously: by pointing out the disparity between what the institution says it is doing and what it is actually doing. The idea is that the dissonance between promoting courses on sustainability, and doing nothing about it on site, eventually becomes apparent, to the point at which it could affect student recruitment. We will come back to this point later.

3   The seminar series and its *raison d'être*

The point of departure for the seminar series was that appeals to HE senior management to promote sustainable development on campuses for 'good citizen' reasons [e.g. Rees, (2003), p.93] were unlikely to work. We also assumed it unlikely that senior managers would be converted *en masse* to the belief that 'industrial society is on collision course with biophysical reality' [Rees, (2003), p.89], as some political ecologists would have it and that ideological persuasion was thus also an unlikely route to campus sustainability. Our working assumption was that there were too many real-world obstacles – real or perceived – to taking such action for these types of reasons. For example, the up-front cost of investment in new hardware and buildings combined with the strategic risks associated with transforming established managerial practices and business models, often makes both public and private sector managers wary of embracing the agenda for sustainable development. This is as true of universities as it is of any other organisation.

As far as SD more widely is concerned, in the long term, the paradigm shift towards a more sustainable economy will involve a complex interplay between changing public attitudes, infrastructure overhaul and more stringent processes of government regulation. But a more immediate problem is how to fund beacons of best-practice: organisations which demonstrate the viability of the ecological paradigm and its relevance and possible application to the wider economy. One obvious solution is for governments to subsidise high profile eco-demonstrations. However, this is expensive and not always popular with either politicians or taxpayers. Despite the increasing willingness of the Higher Education Funding Council of England (HEFCE) to offer earmarked funds for sustainability projects (such as the Revolving Green Fund), there is little sign of large amounts of government money, being made available to universities, to fund 'whole campus' eco-demonstration projects. So we asked ourselves another question: is there another way of generating the necessary capital investment?

The point of departure for this seminar series was the extent to which the costs of environmental 'good citizenship' could be off-set, for first movers, by short-term marketing opportunities as well as the longer-term benefits that may come from anticipating the wider trajectory towards environmental regulation. To this end, we engaged a range of participants including academics, university managers and private sector consultants to explore the implications of sustainability for universities. While the technical dimensions of the problem relating to energy usage, construction methods, recycling and 'campus metabolism' etc. provided a context for this discussion, there was also an important focus on business/marketing and research/teaching opportunities. The

seminars addressed issues such as the built environment, logistical systems and procurement, competition in the global HE sector, marketing and eco-branding, funding and the environment as an integrating theme in teaching and research.

4   Implementing sustainability in HEIs

Earlier we pointed to the relative lack of attention that has been paid to sustainability in universities' operations, as opposed to in the curriculum and in research. Despite this, our seminar series did not operate in a complete vacuum. Although no other research of which we know has made a systematic attempt to assess the 'competitive advantage' for universities of pursuing sustainable paths, there have been attempts to 'green' universities' operations and to learn the lessons from those attempts. And by 'greening', here, we do not just mean sector-specific greening – such as in the field of energy, waste, water, or procurement – but institution-wide greening in which every aspect of the university's operations comes under critical scrutiny.

One striking example of this 'whole institution' approach is Tufts University's CLEAN! project. Sarah Hammond Creighton explains that,

> "In 1990 the US Environmental Protection Agency awarded a research group at
> Tufts University's environmental center a grant to undertake an effort, known
> as Tufts CLEAN! (Cooperation, Learning and Environment Awareness Now!),
> to reduce or eliminate the environmental impacts of the university's own
> operations. Tufts was chosen because of its leadership role in environmental
> education and research and its commitment to environmental programs"
> [Creighton, (1998), p.1].

It is worth reflecting for a moment on this last sentence since it is an example of 'first mover competitive advantage' in action. Creighton notes that Tufts was chosen by the EPA because of its track record in sustainability. In other words, advantages accrued to Tufts by being recognised as a leader in the field: competitive advantage was conferred on the institution by its first mover status.

The 'CLEAN!' project is especially interesting for us because of the lessons that were drawn from the five years it lasted. Although we were more interested in the degree to which the idea of competitive advantage can be deployed to get otherwise sceptical university managers to take sustainability seriously, than in how to implement sustainability once it had been accepted as a viable objective, we were nevertheless curious to see the extent to which the Tufts lessons were replicated in, or differed from, what we heard from predominantly UK-based higher education institutions in the five seminars and two years that our own project lasted. Creighton distils 'the essential ingredients for university environmental change' [Creighton, (1998), p.17] and the first one to which she refers is 'university commitment' and leadership:

> "Top-level commitment is as important for universities as it is for corporations
> … At many schools, faculty and staff are skeptical about their administration's
> commitment to environmental initiatives and may even delay their own actions
> until they see top-level administrators demonstrate their intentions through
> actions, policies and the investment of resources." [Creighton, (1998), p.17]

Creighton's conclusion, for Tufts, is amply supported by evidence we gleaned from our seminar series and from experience at our own institutions. Perhaps naively, we had

originally thought that the key ingredient for university sustainability would be pressure from below – citizen action, if you will. This squares with the received wisdom that progressive causes are brought onto the agenda 'from below' and that the leadership has no more than a reactive and largely defensive role to play in respect of them.

We learned that 'reaction and defence' certainly is one option open to university senior managers (to use the UK terminology) when confronted with the sustainability agenda, and that this can lead to frustration, incomprehension and disillusionment on the part of those who are trying to promote it from below. But we also learned that a responsive and engaged set of senior managers can make things happen extremely quickly.

One striking example came from a large northern UK university in which calls for a university-wide recycling system were being made. Over quite a long period of time the ground was laid for the implementation of the new waste strategy and part of the preparation involved bringing the senior management team – right up to and including the Vice-Chancellor – on board. This paid dividends when the inevitable resistance to new ways of doing things occurred. The strategy adopted was to have waste bins removed from individual and collective office spaces and to replace them with recycling bins in public spaces such as corridors and atriums. Some members of staff – including, in this case, a senior academic in a social science department – were aggrieved at having their bins removed and refused to hand them over. At this point, the ground work done in involving senior management in the project, and having them commit to it in a proactive way, bore fruit. For the Vice-Chancellor himself made a point of telephoning the recalcitrant social scientist and told her in no uncertain terms that today was not the same as yesterday, that everyone else was participating in creating the new recycling reality and that she would too. Without this intervention it is not too hard to imagine a series of lengthy and corrosive disputes at the local level in the university, at best and only a very partial implementation of 'campus-wide' recycling at worst.

Although anecdotal this does illustrate quite powerfully Creighton's Tufts finding that, 'For environmental stewardship programs to be successful, the institution's leaders – the president, provost, vice presidents and deans – must make a visible and meaningful commitment to environmental action' [Creighton, (1998), p.17]. In the UK, People and Planet (a student campaigning organisation) are currently increasing the weighting accorded to leadership in their university sustainability league table. Commitment on the part of senior managers is to be assessed in relation to their habitual mode of transport when on university business: a highly visible litmus of environmental concern and an area that is very amenable to public expressions of corporate responsibility. University leaders are well aware that cars make a 'statement'. We heard of one who explained the purchase of a top-of-the-range Mercedes by saying that she needed to make a statement about the university. Indeed, but what kind of a statement? Assuming senior managers do use a university car, it can have more or less impact on the environment and People and Planet plan to test the environmental leadership and example of senior managers by looking at the cars they drive. This is an implicit recognition of the truth of Creighton's assertion that, 'A failure by top-level administrators to assume personal action can stymie more comprehensive efforts and discourage participation' [Creighton, (1998), p.17].

A second finding from the Tufts project was that a 'university-wide committee can help institutionalise environmental stewardship efforts and bring stakeholders to the table' [Creighton, (1998), p.21]. A common theme in the relatively successful examples of sustainability implementation we came across in our seminars was indeed the presence

of a committee structure reaching down into the institution and right across it. Without such a structure, the good intentions of 'environmental citizens' in the university are unstructured and unfocussed. Energy is easily dissipated and disillusionment sets in as initiatives and questions are pushed aimlessly round the institution.

We found two further, related, factors to be important as well. The first is that the committee structure must have 'teeth'. There is no point in an elaborate structure if its recommendations are not taken into account at the highest level in the university. At the apex of the sustainability structure we might typically find a 'sustainability officer' (SO) and that person should have a place on the senior management team. The second factor is the 'sustainability officer' him/herself. During the seminar series we came across a number of examples of institutions where attempts were being made to implement sustainability 'on the cheap', by passing responsibility over to 'project officers' and the like - people with good intentions but with no specific sustainability expertise. If this *modus operandum* is combined with the lack of a committee structure, the institution is left with the worst of worlds, where initiatives from below lack coordinating direction from above, resulting in wasted energy and eventual disillusion. Interestingly People and Planet has concluded that a sustainability officer (or the like) is one of the four most important factors in the implementation of sustainability in HEIs. The evidence we have gathered over the past two years suggests that they are right to attach importance to such a post.

We also heard, though, from those who argued that the appointment of an SO should never be regarded as a solution to the problem of sustainability implementation on its own. There is a danger that, absent the other factors we are considering (e.g. institutional commitment, committee structure), the SO will be a token – isolated and ineffective. Creighton herself makes the same sort of point:

> "Increasingly universities are hiring recycling coordinators or energy managers, some of whom have assumed personal responsibility for spearheading environmental action campus-wide. These positions are extremely valuable, but their existence does not substitute for members of the entire university community taking responsibility for their part in the problems and their role in the solutions'. [Creighton, (1998), pp.26–27]

We would support this view, and argue that the factors we are discussing should come as a total package; establishing just one or another of them is not sufficient for sustainable development in HEIs.

The SO and committee structure also mean that the biggest sustainability issues facing that particular institution can be prioritised, avoiding the problem of ad hoc and unfocused projects. As with companies, universities need to address those problems with the greatest environmental impacts, especially in areas where the institution has significant control or leverage and where there are easy/low cost hits. This process is documented in various industry standards such as ISO14031 Environmental Performance Evaluation and ISO14001 Environmental Management Systems. But it should be remembered that these standards were developed by industry for industry not for the public sector, that they only focus on environmental issues and can be overly bureaucratic, leading to a focus on the process (i.e., paperwork) and rather than the desired outcome (i.e., reducing impacts).

A third conclusion drawn by the Tufts researchers and activists was that, 'Most successful environmental efforts on college and university campuses rely on leaders

throughout the institution' [Creighton, (1998), p.24]. This has certainly been borne out by the evidence we received during our seminar series. First mover initiatives seem generally to have been taken by individual 'champions' who take up an issue in some sector relating to the university's environmental performance and follow it through. The eventual success of the champion in making an impression on the issue thereafter depends on the kinds of factors we have been discussing above and it is all too easy even for champions to lose focus and enthusiasm in the face of the lack of an institutional response.

One example we heard of – at a UK HEI which has an international reputation for its research and teaching on environmental issues – involved a local attempt (local within the university, that is) to run a pilot recycling project. This university had (and still has) no campus-wide recycling policy, and the idea of the pilot was to test the willingness of staff and students in this particular school in the university to recycle their paper, cans, glass and plastics. The pilot ran for three months and was maintained by two full-time members of the academic staff, assisted by the school's support staff. The project involved these academics emptying the recyclables at appropriate facilities on and off the campus.

The project was successful beyond the initiators' wildest dreams, in that not only did the school's staff and students use the bins that were provided, but so did staff and students from outside the school. It was this, indeed, that caused the project to come to an end because neither the recycling bins in the corridor nor the staff charged with emptying them could cope with the amount of 'waste' that was being recycled. The success of the pilot was even recognised outside the university. The initiators entered it in a county 'Green Awards' competition and it won a prize in the education category.

Despite this, 18 months on, the university still has no recycling policy and no campus-wide recycling facilities. We shall discuss below the degree to which prospective students are influenced by the environmental record of HEIs when it comes to deciding which university to attend, but there is evidence that the effect is especially acute when it comes to students applying for environment- or sustainability-related courses. The particular university we are discussing here – already known for its environment-related research and postgraduate teaching – is about to add to its teaching portfolio by introducing an environment and sustainability course at the undergraduate level. The evidence from student surveys suggests that managers would be well advised to close the gap between what is taught and what is actually done on this particular campus, as recruitment can benefit positively from observed synergies (and be affected negatively by dissonance).

As Creighton recognises, first movers are – almost by definition – working 'beyond the realm of duty' [Creighton, (1998), p.24]. But it is worth pointing out that such 'out of hours' initiatives, which seem to be so important in catalysing wider institutional sustainability efforts, are likely to be undermined by the increasing 'auditisation' and codification of university life. Work Allocation Models (WAMs) and the like are increasingly a part of the way universities organise themselves. As far as a WAM is concerned, if an activity is not credit-bearing it does not exist – and the kind of seed-corn, catalysing, work done by sustainability champions is not the kind of work that finds its way into a WAM. Of course sustainability champions are not moved to act by credits on a WAM – that is not the reason they act – but WAMs have the effect of converting even the best-intentioned people from 'do-it-all citizens' into bean-counting individuals. Given the importance we have observed of individual environmental champions for

sustainability within HEIs, the generalised disincentives brought into play by WAMs and the like will do specific damage in the sustainability context. We saw little sign that senior managers are aware of these kinds of unintended consequence of the wave of auditing that is sweeping HEIs.

5   Sustainability as competitive advantage

These, then, are just some of the factors for the effective instantiation of sustainability projects in universities that were found to be important by the Tufts group and that we are able to corroborate and comment upon as a result of our seminar series. But of course we were not only interested in the 'how?' of sustainability. Indeed, our primary interest was in finding out the degree to which reluctant university leaders (such as those we referred to above) could be enjoined to take on a sustainability agenda by the promise of competitive advantage – that's to say, stealing a march on competitor universities by using sustainability as a niche-marker of brand distinctiveness. One way of expressing this is to follow Creighton's observation that,

> "Like it or not, the language of the world is money and thus we must often communicate our efforts to green the university in financial terms. It is nearly impossible to assign a dollar value to the benefits of clean air, potable water, and open space, but, happily, many of the most important environmental initiatives can have real financial benefits that are usually related to cost avoidance or avoided liability". [Creighton, (1998), pp.41–42].

We did indeed collect many examples of this dynamic at work. The most obvious sector where 'greening' and 'saving' come together is energy. Hardly anyone in the entire world was unaffected by the price hikes of oil and gas during the summer of 2008 – and prices were of course rising before then. Suddenly, measures that seemed either uneconomic or impractical – or even too wild and woolly, such as wind turbines – found themselves on the realists' agenda. But just 'saving money' or eco-efficiency is not the same as establishing competitive advantage (see Hoffman, 2000 for a discussion). We were not so much looking for examples of good 'green' practice, or of how best to enact sustainability in HEIs, as for evidence that there are benefits to be accrued by aggressively pursuing a sustainability agenda. As we shall see, these benefits can in part be expressed in financial terms, but some of them are 'softer' and are hard to translate into the language of finance. One way of organising the discussion that follows is in terms of benefits to be accrued in the following areas:

1   student and staff recruitment

2   research grants

3   infrastructure funding

4   reputation.

5.1   Student and staff recruitment

The competition for students in UK higher education is already fierce – and it is set to become more acute still. A recent report by Universities UK foresees the number of

potential undergraduate students falling from 1,198,800 to 1,128,700 by 2019, with the 5.9% drop accounted for by a declining birth rate (Universities UK, 2008). Universities should be looking at their recruitment strategies in the light of these numbers and wondering where competitive advantage might be established. In this context it is interesting to see that there is some evidence that university choices for prospective students in certain subject areas are affected by sustainability considerations.

Recent large scale surveys (with over 50,000 respondents) carried out by the environmental charity Forum for the Future and the Universities and Colleges Admissions Service found that a track record in sustainability was important or very important for 45% of prospective students in education, architecture, social science, building and planning (2007, p.15). Data from a second study the following year also seemed to imply that, although not a defining factor for the majority of students, two thirds of them did accord sustainability at least some significance in their decision making. Furthermore 42% of respondents indicated that they would like to receive more information with regard to environmental and social performance [Forum for the Future/UCAS/Friends Provident, (2008), p.12]. Clearly, while sustainability issues might not be a 'high priority' among students, they are still of sufficient salience for university recruiters to ignore them at their peril.

One area where students themselves in the UK have made a big difference is in auditing universities' sustainability. In 2007, People and Planet ran its first 'Green League' for universities, assessing their environment-sustainability performance across a range of indicators and then categorising them as universities categorise student degrees – first, upper second, lower second and so on. The Green League garnered plenty of publicity in 2007 and won the award for the best campaign of the year at the British Environment and Media Awards ceremony.

The visibility of the Green League in its first appearance was something of a surprise to most UK HEIs and many of them felt bound to work more proactively in the face of the 2008 exercise. According to People and Planet, the results were significant: "The Green League 2008 shows dramatic improvements in the sector with 71% of universities cutting their carbon emissions and a 25% increase in full-time environmental staff. With many UK universities leading the research on the environmental threats facing our planet, it's common sense that they also lead in environmental performance" (People and Planet, 2008). University managers are very sensitive to league tables; rightly or wrongly they believe that it makes a real difference to an institution's prospects whether it is near the top or near the bottom.

So while there may be issues regarding People and Planet's criteria and survey methodology, universities seem less bothered about the research niceties and more bothered about league table position. Those that are successful make a big play of the fact and those that are not keep very quiet about it. The 'reputation factor' for sustainability issues seems to be very high, so we find a wide range of institutions proclaiming their success – in the belief that it really will make a difference to how they are perceived. So while we might expect Loughborough University (for example) to make a show of its achievements ('The University rose a staggering 28 places in this year's league table of 121 universities, providing a clear demonstration of the university's burgeoning position as one of the country's leading higher education institutions for environmental awareness and activity'; Loughborough University, 2008), it may be more of a surprise to find an august university like Cambridge also displaying its sustainability laurels: 'For the second year running, Cambridge has received a First for its environmental performance

in the People & Planet Green Universities League Table. The University was placed fifth equal out of around 120 higher education institutions in this year's league table published last week in the Times Higher Education Supplement (up from 8th equal last time)'. And just to make sure that no opportunity to establish competitive advantage over its rival universities is lost, Cambridge goes on to point out that, 'Cambridge was the highest-placed of the Russell Group Institutions, with Oxford being placed 50th equal' (Cambridge University, 2008). So with the 2008 survey covering 129 UK HEIs, the Green League is turning out to be a potent way indeed for sustainability agitators within universities to persuade otherwise reluctant senior managers to take sustainable development seriously.

Just as students on environment-related courses are interested in the sustainable development performance of universities, so too are university staff who teach and research in that area. This is so obvious that it hardly needs saying, but it was surprising to learn of institutions that were attempting to build an environment-related base for their teaching and research while ignoring their sustainability performance on the ground. In contrast, several seminar participants drew to our attention letters of invitation to apply for posts at other institutions they had received, where sustainability claims bulked large. One example came from a university in the south-west of England, advertising for a Professor of Sustainability in the institution's Sustainability Institute. The letter of invitation contained the following statement:

> "The University of X is at a key stage in the reorientation of its strategic priorities for the next five years. We are the first university to attain the international standard for sustainability (ISO 14001) and were Highly Commended for 'Outstanding Contribution to Sustainable Development' in the Times Higher awards last year. Sustainability is at the core of our institutional priorities for the future." (Confidential, 2007)

The very fact of 'strategic orientation' organised around the principle of sustainability is itself interesting, since it suggests that senior managers at this university have decided to 'brand' their institution in a specific way which they believe will enhance all aspects of the university's core business. It was noticeable during the seminar series that most of the institutions that had gone down this path were the 'new' universities (i.e. only recently accorded university status). These institutions seemed lighter on their feet than traditional universities – more nimble and entrepreneurial in their approach to finding a niche in the ecology of UK higher education. In this particular case, the strategic orientation leads to a competitive advantage in the recruitment of staff to sustainability-orientated posts: an aspiring Professor of Sustainability is much more likely to want to work in an institution with a demonstrable commitment to sustainable development than one which does not. And while it might be argued that this attraction applies to a vanishingly small number of posts (i.e., Professors of Sustainability), we will suggest later that a truly visionary, imaginative and exciting commitment to sustainable development on a university campus would make that campus attractive to a much wider range of potential staff than just those with a professional interest in teaching and researching sustainable development.

5.2   Research grants

The growth in research funding opportunities for sustainability-related work is obvious to anyone working in the field. What is of special interest to us is the degree to which

sustainability research in an institution is related to the sustainability practices of that institution. It is of course not impossible to imagine sustainability research being carried out in unsustainable institutions – indeed this is exactly what has been happening up until now. But during the seminar series we became increasingly aware of a growing niche of action-oriented research calls, applications in respect of which would be enhanced by demonstrable good practice at the university sponsoring the application. This can happen in two ways. First, some of the action research could be carried out at the university itself. A call might go out for expressions of interest regarding innovative ways of catalysing pro-environmental behaviour, for example. It is not hard to imagine a university already embarked on a sustainability trajectory building on its practices to make a credible application. There is some evidence that this approach will be welcomed by funders. We heard of one anonymous ESRC referee, for example, who wrote of one grant campus-focused research application that, 'Use of the University of X campus as a real world laboratory for research into the social and techno-scientific dimensions of the problem of ecosystem services is very novel… this is a very imaginative proposal'. Another for a large ESRC grant application stated, 'I also think that the…[proposal]… needs to fully consider how it will ensure that its own practices and behaviours are sustainable – as such it could act as an exemplar for the academic community at large'.

Second, more diffusely but at least as importantly, the funders are likely to hold an application for such a project in higher regard if it comes from a university which is recognised as an iconic pathfinder than from one which has made no effort to change its own practices in regard to sustainable development. Credibility is the key word. Just as there is evidence that students respond negatively to dissonance between what a university says and what it does, so there is an ever-enlarging research space in which the same relationship holds.

In summary, positive feedback loops between environmental teaching (including student recruitment) and research, and sustainable development measures on the ground, can be established. Likewise, negative feedback loops (weak links between environmental teaching and research and a university's actual practices) are increasingly being exposed by surveys and other evidence and can affect success in both the research grant and student recruitment markets.

5.3   Infrastructure

The opportunities for making bids for sustainability-related infrastructure development are increasing in number. We were made aware at an early stage of the seminar series of the guiding role being played by the Higher Education Funding Council of England in this regard. In July 2005 HEFCE produced a report entitled 'Sustainable Development in Higher Education' (HEFCE, 2005), which outlined four roles that HEFCE should play: engage stakeholders to bring about policy synergies in SD, build the capacity of people to manage SD in higher education, share and develop good practice and reward sustainable good behaviour. It is the last of these that has opened up opportunities for universities which have established, or aspire to establish, competitive advantage in the SD context.

In June 2008, HEFCE published a follow-up document, 'Sustainable Development in Higher Education: consultation on 2008 update to strategic statement and action plan' (HEFCE, 2008), which contains the same four roles and gives examples of where HEFCE funding has been used to promote SD in universities. So centres of excellence for teaching and learning (CETL) in SD have been established in Kingston and Plymouth

Universities, infrastructure funding for sustainable buildings has gone to University College, London, the University of East London and to the University of East Anglia. (These infrastructure grants are often related to academic initiatives such as new buildings for environment institutes and the like). Leadership, governance and management awards have been made to Hertfordshire and Bradford Universities. Money for Higher Education Environment Performance Indicator work (HEEPI) has been granted to Bradford, Loughborough and Lincoln universities, among others, and Bradford, South Bank, City and Kingston Universities have benefited from HEFCE's Strategic Development Fund.

It is no coincidence that the majority of the universities named above are known for their pathfinder work in the sustainable development context. To those that have, more shall be given – these are the rewards for establishing competitive advantage. Nor is it a coincidence that the university whose name appears most often in the list is Bradford (see Hopkinson in this issue). Bradford has been a leader in the 'whole institution' approach to sustainability and the example is especially interesting to us because the university made a conscious decision to use the narrative of sustainability to reinvent and reposition itself in the ecology of UK higher education. Bradford's image as a city suffered from the race riots that occurred there in 2001 and this had an inevitable effect on student recruitment with around 22% of students citing the condition and appearance of the estate and the surrounding city as a reason for rejecting an offer to join the university (Andrew, 2006). Bradford decided that the best way to overcome this image problem was to deploy the ideas and the practices of sustainable development in the university context, in a joined up way. The vision consists of four interlocking objectives – healthy environment, social wellbeing, thriving local economy and education for sustainable development – which have at their heart the idea of the Ecoversity itself (Bradford University, 2008). In addition to the £6m HEFCE grant for the project, Bradford's Environment Manager Jaime Sullivan makes it quite clear that the Ecoversity was conceived as a niche marketing opportunity: "there was great discussion as to how to give Bradford University some kind of *special appeal*" (in Hastings, 2005 – our emphasis).

Bradford is an excellent example of what can be done to try to turn the idea of a sustainable community (which we shall discuss in greater detail below) into reality. It is encouraging to see that the idea makes sense even in places and spaces that do not seem the most conducive – at first sight – to the idea. We could not help thinking how much stronger the narrative might be at a traditional campus university with the visible boundedness, strong sense of place and the scale and physical integrity that are often to found at such sites. We have yet to see a campus university in the UK follow Bradford's example – and potentially leapfrog it.

5.4 *Reputation*

Earlier we saw Sarah Creighton arguing that a key way to senior managers' hearts is by drawing attention to the financial benefits for universities of pursuing a sustainable development path. However there are also softer and less tangible benefits. We are all aware of the effect that good and bad publicity can have on an institution, for example, but it is very difficult to quantify these effects in such a way that they can find their way onto a balance sheet.

Despite this, we know that there are certain headline issues in respect of which it is self-evidently better to be on the side of the angels than that of the devil. All universities, for example, will strive to be publicly well-regarded in terms of equal opportunities. They are well aware of the negative impact of bad publicity in this context and the same surely goes for issues such as widening participation. By the same token, to be regarded as a leader in these areas is very helpful to a university's image and reputation.

In the contemporary world it is hard to think of an objective with more cachet than sustainable development. In its most general form it is an objective which secures almost universal approval ratings, and attempts to deal with its specific instantiations, such as climate change, will always be well regarded. This background provides a context within which systematic and proactive efforts could be made by universities to generate good publicity. Bradford University's 'Ecoversity' tag, for example, has brought it the kind of tangible benefits to which we have referred earlier, such as development and infrastructure grants from HEFCE. But it has also put it on the map and brought it into conversations to a degree which is almost impossible to measure but which has equally almost certainly been to the benefit of the institution. A more specific example came from a university in the Midlands where a staff-led project to develop community allotments on the campus lead immediately to a full page of positive copy in the local newspaper, along side a large colour photograph of a student holding vegetables and an enthusiastic editorial eulogising the creative and responsible initiative of the university.

In general, sustainable land use is a fascinating area for consideration by universities. The replacement of acres of decorative grass and shrubs with allotments, intensive horticulture and productive fruit trees could easily be used to underpin a positive reputation for imagination, healthy diet and sustainability. This would be 'establishing competitive advantage' in action, providing a demonstrable axis of distinction through which to woo both parents and prospective students.

6   Establishing competitive advantage today

One conclusion we were able to draw from the seminar series was that, during the two years it lasted, quite significant strides were being taken by some HEIs to make their practices more sustainable. This conclusion is confirmed by the data from People and Planet's Green League table for universities, to which we referred earlier. This has clear implications for universities seeking to establish competitive advantage in this area. The bar has been raised, so what would a university seeking to steal a march on its competitors now have to do to be more 'visible' than the rest?

Once the bar has been raised, competitive advantage cannot be established through just sector-specific excellence and far less through just meeting statutory environmental standards. This is the difference between ticking boxes and making an iconic statement laying claim to the *zeitgeist*. Competitive advantage will go to those defining the rules of the future rather than obeying the rules of today. Ground-breaking universities will be those where habits, practices and buildings are iconic, world class and credible. At the very least, the HE sector needs to tackle its carbon footprint to provide an example for its students and reduce the impact of climate change on their futures.

So what does establishing competitive advantage mean in the context of the higher education sector? Like cities, universities are place-bound communities vulnerable to the vagaries of capital that is increasingly mobile in national and global economic space

(Figure 1). The overarching strategic imperative facing senior university managers is to divert flows of capital through the institution. The capital in question is monetary – government grants, research funding, private sector investment, bequests from benefactors and alumni and a whole range of ancillary revenue streams relating to the campus economy. It is also human capital in the form of world class students and staff. New Zealand has now opened a permanent office in London to market New Zealand higher education to British students.

Ideally every pound, dollar, yen or euro spent by a university will result in 'multiple hits' by attracting new staff, retaining present staff, underpinning the credibility of research grant applications and enhancing the brand and sense of place. This all suggests the need for niche marketing: unlocking the potential of sustainability as a carrier for a higher added value product and for the embedding of mobile capital; the shift from a 'do-it-all' to a 'do-it-different-do-it-well' university.

Figure 1   Place-bound universities need to access mobile capital (see online version for colours)
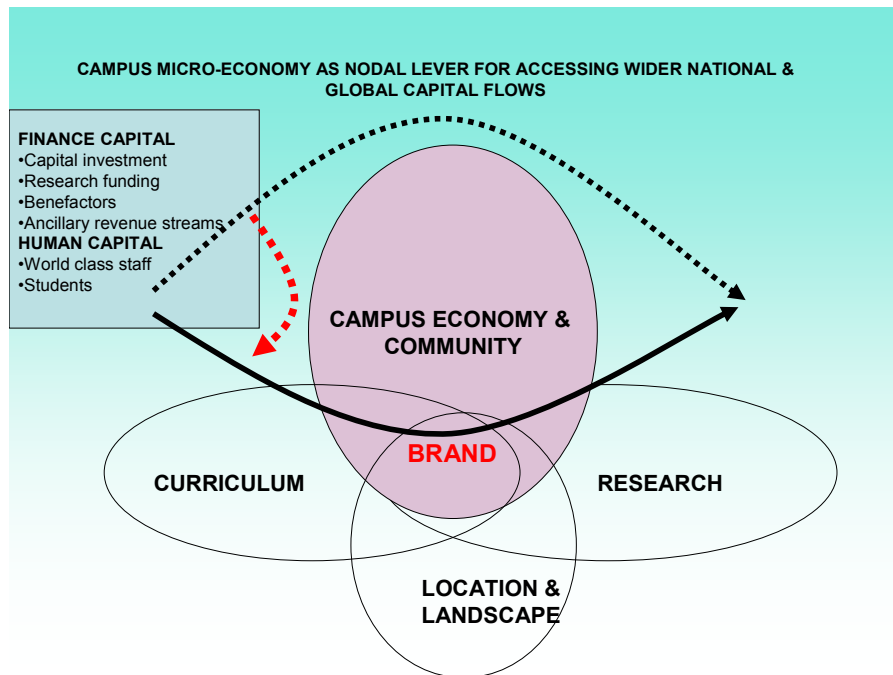

Against the backdrop of this globalising and increasingly competitive HE landscape, the sustainability agenda has the potential to integrate strategic developments across not only teaching and research but the operation and development of the university estate and the culture and economy of the student campus. Figure 2 illustrates the potential for such eco-branding and niche development.

Having said that universities are a rather specific sort of social formation, it is also true to say that there are different types of university. Some are urban, some are campus-based and so on. These differences provide varied opportunities to interpret what establishing competitive advantage via sustainability might entail. But at the same time,

all universities are 'communities' – of a rather special type. This seems to be a helpful point of departure from which to approach the problem of competitive advantage in universities – a point which was made to us in one seminar by Prof. Peter Roberts (University of Leeds), Chair of the Academy for Sustainable Communities (see Roberts and Lane, this issue). The ASC's eight-fold 'definition' of a sustainable community offers a framework for action across the piece which, if pursued vigorously and imaginatively, could produce an entirely new kind of university – one which would be ideally placed to claim a highly visible and attractive niche in the ecology of UK higher education, as well as create a reputation for global good citizenship (never a bad thing for universities with internationalist pretensions). Our seminar series suggests that we are now at the stage where competitive advantage and good citizenship converge on making an holistic, integrated, connected and experimental attempt to make a university a 'sustainable place'. Once again, the ASC provides us with a 'mind map' to guide such an attempt (see Roberts and Lane, Figure 2).

Figure 2   Sustainability as a vehicle for competitive advantage (see online version for colours)
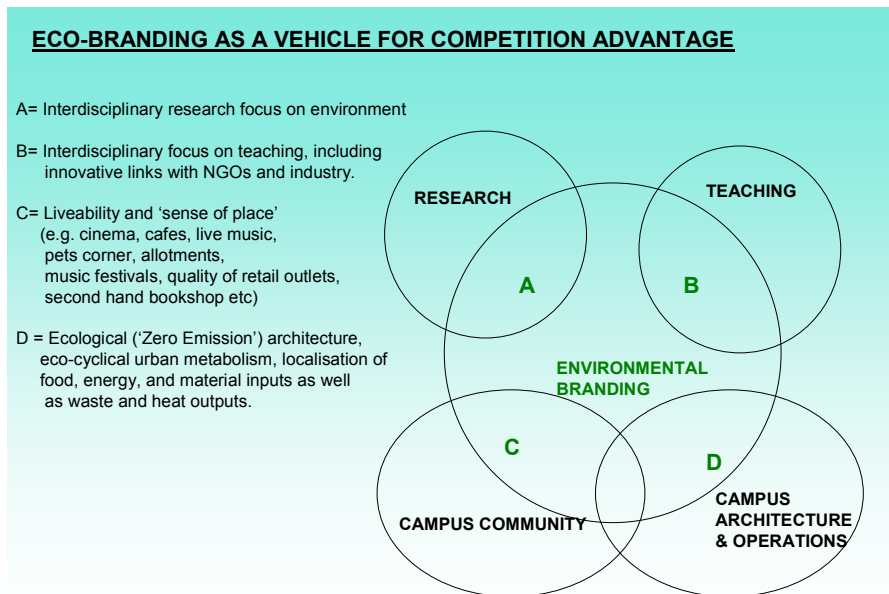
One particularly suggestive interpretation of what the 'University as Sustainable Community' might look like, tying together the various dimensions revealed in the diagram above, was given to us by Roger Levett, of Levett-Therivel sustainability consultants. Levett-Therivel were commissioned by the Higher Education Funding Council for England (HEFCE) to offer a range of scenarios for HEFCE to put to the Treasury as part of the Comprehensive Spending Review in 2007 (Levett-Therivel, 2006). Levett-Therivel are aware of the intrinsic commercial benefits that can accrue to those universities which attend to sustainability issues:

> "Universities have great opportunities to reduce their consumption of energy, water and other resources, waste disposal and transport. This can be done through reducing demand, improving efficiency and developing environmentally less damaging methods. This can reduce universities' running costs and vulnerability to future price rises and disruptions. A coordinated, 'whole organisation' approach to resource management could multiply the benefits." [Levett-Therivel, (2006), p.6]

But they point out a new dimension of possibilities too: 'Universities could go further and become 'pathfinders' for sustainable communities, offering a high quality of life with much lower travel and environmental consumption' [Levett-Therivel, (2006), p.6]. Following on from this, the fourth (of four) scenarios offered to HEFCE by Levett-Therivel takes us way beyond sustainability as the meeting of environmental standards, or the adoption of good environmental practice in specific sectors – such as energy management – in order to save money, and into the kind of territory that will be occupied by what we might call the 'transition university', after the 'transition towns' movement that is making such an impact in various parts of the 'developed' world (Transition Towns, 2008).

In brief, Levett-Therivel envisage a university with the following characteristics:

- based on circular, regenerative nutrient, resource and waste flows

- resilient, resource and energy efficient buildings

- nurturing a local, 'slow', economy and strong links between the University and its immediate locality

- having a density and intensity of population that can sustain excellent on-site amenities (social, cultural, occupational) to minimise need/demand for off-site travel

- health/security 'designed in' to lifestyles – e.g., walking, cycling, food-growing, populated public spaces

Crucially, Levett-Therivel envisage this kind of experimentation 'as an example and test bed for the broader challenge of turning current unsustainable cities and towns into sustainable ones' [Levett-Therivel, (2006), p.55]. A transition university, from this point of view, would be a 'pathfinder' institution and this kind of project would be entirely in keeping with the mission of the university in general: 'Universities have always been 'artificial' societies, consciously structured and managed according to the social, political or indeed theological principles held in particular places and times. ''Social engineering' a university to exemplify a sustainable human community would only be a modern application of a very old idea' [Levett-Therivel, (2006), p.55].

Levett-Therivel gave content to the 'place-making' diagram from the Academy for Sustainable Communities in the following way:

> "Universities could … offer exciting opportunities for greater local productive self- reliance, especially through involving students in (for example) growing and harvesting food and biomass energy and maintaining buildings and equipment. At a time of increasing financial stringency, when students are increasingly needing either to juggle study with part-time jobs (often of pretty poor quality) or to accumulate debt, a university which offered opportunities to students to (at least partly) 'work their passage' by contributing to the university's own 'life support systems' in such creative (and benignly regulated) ways could be a refreshingly attractive alternative. It would also

foster a sense of active participation in a community – and provide valuable experience for the CV. Again it can be seen as an extension of an old idea of more senior students paying for their studies by helping teach more junior ones. It could indeed be seen as a reinvention in modern terms of an even older idea, of the monastic community as a successful economic unit, which by deploying the physical effort of its members efficiently and managing it cooperatively can create enough material surplus to support a very high proportion of time spent on study and prayer". [Levett-Therivel, (2006), p.55]

7   Conclusions

Collating the experience from a number of institutions, the evidence presented through our seminars demonstrated a number of clear strategic prerequisites for those seeking to steer HE institutions in the direction of sustainability. There is also plenty of evidence that sustainability can and has been mobilised as a vehicle for competitive advantage, with benefits accruing in relation to staff and student recruitment, research funding, infrastructure and reputation. And drawing on urban political economy, there is a clear theoretical rationale for focusing on sustainability as an opportunity for niche formation and place marketing.

Levett-Therivel had painted a vivid picture of how this might work in practice. But theirs is a feasible utopianism: all the necessary technologies/techniques exist to make this kind of university happen and there are (municipalist, social democratic) examples of it working. If a university took these characteristics as the template for strategic reorientation it would be in an excellent position to establish competitive advantage over other universities in the sector at large and even over those universities which had decided – relatively half-heartedly in comparison – to pursue the sustainability agenda.

But will it happen? It would surely take a bold senior management team to grasp the Levett-Therivel nettle and organise the strategic direction of a university around these principles and practices. The risks are obvious. As Levett-Therivel themselves ask, 'How attractive would this (in some ways) mediaeval life pattern be in a culture which glorifies hypermobility, choice and globalisation? Would it only attract 'social inadequates'? On the other hand, though, 'might it prove immensely attractive in a world where surveys of life satisfaction repeatedly identify lack of 'rootedness' or belonging' as problems? [Levett-Therivel, (2006), p.56].

Declining student numbers and the ever greater concentration of research funds in an ever smaller number of universities puts the future of many middle-ranking institutions at risk. Perhaps the best chance of survival, for those best-placed to take advantage of it, is in an aggressive pursuit of the twenty-first century's scientific, social and economic holy grail: the sustainable community.

Acknowledgements

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