

## A7. Learning about sustainability: An undergraduate perspective

**Lisa Newman**

Sustainability is a labyrinthine buzzword enveloped in a complex maze of meaning. Like a vivid form of elaborate art, sustainability has been crafted, remoulded, interpreted and reinterpreted within a multitude of academic and non-academic frameworks. This is clearly discernable from just merely glancing at the broad range of literature compiled and debates that have occurred about sustainability since the official definition that was devised in 1987 by the World Commission on Environment and Development (WCED).

My initial perceptions of sustainability were generalised, partial and stereotypical. Upon first hearing about 'sustainability' on the television when I was about nine years old in 1994, my immediate thoughts were whether the 'green tree-huggers' at the WCED were actually being serious. As I learnt more of sustainability throughout secondary school and later in university studying geography, I developed an awareness of how it is not just contrived in environmentalism; it is defined by the interdependent processes of everyday society interacting with and impacting on the environment. There is no need to repeat Brundtland's memorable yet notorious definition here. Sustainability as I perceive it incorporates notions of technology, the economy, social activity and also equity, which is inextricably bound to the fairness of these societal processes.

I am third year Geography student at the University of Gloucestershire and will be graduating in the summer of 2007. My particular interests are focused on modern, cultural geographies including cultural representations, human experiences of spaces in everyday life and environmental management integrated with relevant aspects of physical geography.

### **The predicament of defining sustainability**

I believe that part of the predicament of defining sustainability and understanding individual attitudes towards sustainability lies with how humanity perceives itself as being either separate from or as part of the 'physical environment'. This physical environment is commonly observed as

being 'nature', the lifeblood of the earth that can both sustain and forsake the socio-economic processes of human society. In a third year project at university, the group of students with whom I worked created our definition for nature, where it '...comprises the symbiotic physical-human relationship with (and within) the biosphere'. Marxist geographer Neil Smith was one of the first academics who attempted to define nature:

*Nature is material and it is spiritual...the gift of God... and also the product of history, accidental and designed, wilderness and garden.*

(Smith 1984: 1-2).

Nature, we decided, was thus seen to comprise both physical (material) and human (spiritual) characteristics of which the spiritual could be thought of as discursively constructed, imagined space in the mind and as written text:

*Nature is perceived space before it is natural... it has been observed and defined by located human perceptual evidence.*

(Larsen 1994: 286).

It was therefore necessary to incorporate the notion of an interactive, 'symbiotic' relationship existing between living humanity and the living physical world into our definition. James Lovelock (1979) suggested that such a relationship exists with the biosphere and this in turn influences our attitudes towards its biodiversity. Part of the group definition 'and within' was bracketed for emphasis to assert that nature could also be thought of as being universal (as Smith stated, in relation to God) and as a perceived, external concept (as argued by Larsen). One definition which incorporates notions of humans and the physical world is by Johnston *et al.* (2000: 537) who believe that nature is: '...the physical world in its entirety, including humans'.

If such ambiguity and problems are encountered through defining everyday used and 'taken for granted' concepts such as nature, it is clear that it will be difficult for humanity to define the history, position and progress of its own development. Sustainable development in itself seems to be a contradictory term, as the development with which humans are familiar is technically 'unsustainable'; much exploitation is of non-renewable resources

that cannot be regenerated within the time-scale of a human generation and of renewable resources in ways which preclude their regeneration. As 'sustain' means to 'maintain, uphold and preserve' it seems inherently problematic to pair it with 'development' that is indicative of continued growth and expansion in the way with which humanity is presently familiar.

### **Geography and sustainability**

The Earth consists of a delicately balanced, intricate web of everyday life that is both physical and human based. Geography, as a dynamic discipline, has its place in binding together understanding of this nature of everyday life. With concerns for both human and physical elements of the earth, it is no wonder that geography has a concern for sustainability and quality of life in the future. Sustainability as a concept is very significant in geographical terms as it helps to place everyday concerns and emerging integrated socio-economic-environmental in context for both present and future times.

The thoughts of Holloway and Hubbard (2001) regarding how 'everyday life is inherently geographical' highlight how geography really matters. Everyday lives are revealed to be extraordinarily complex through geographical understandings. Yet, geography is visualised by some as 'mundane' and is often ridiculed by the media, as the *Give Geography its Place* campaign (2006) recognises. In fact, geography is the opposite. Geography, as I perceive it, is a multifaceted, dynamic discipline encompassing the inter-dependencies existing in everyday life. A geographer will understand the world through all senses, yet for others, the world may be taken for granted, both environmentally and perceptually.

Geography really is about the everyday and those who dismiss it are superficial in their understandings of their own lives as being interdependent with the wider world. At university, I have learnt just how complex geography really is. Geography is not just colouring in seas on world maps or writing essays in the classroom. It is investigative, analytical, scientific and in touch with human actions, experiences and even emotions. It is also about getting out there, sensing the world and recording it, whether through personal narrative, fiction or photography. Geography thus is not just about the present; it is the preservation of historical knowledge and the environment, for a future that is of good quality.

## **Sustainability as experienced in Higher Education**

A class exercise in a final year module *Environmental Issues in Geography* demonstrated to me how geographers have not reached consensus on sustainability. Some contention arose regarding the perceived importance of justice and equity for people *versus* life quality and biodiversity for the environment. The class were asked to line up in the room according to which issues they personally felt were the most important. The majority of the class were in the middle of the room, a few people were on the justice/equity side and rather more were on the life/biodiversity side. When asked to consider their personal positions according to whether present generations or future generations were the most important, the class was asked to move forwards or towards the back of the room respectively. Some people again stayed in the middle, a few moved towards the front of the room and many moved towards the back, to demonstrate their concern for future generations. My personal position was somewhere in the middle. I believe that in order to take care of the quality of our futures (environmentally, socially, and economically) we must act in the present for this to be possible. A new issue arising for me is the formalised concept of Education for Sustainable Development which is discussed in this book. This introductory section from my early essay, a module on *Environment and Society*, regarding how 'sustainable management of environmental, economic and social capital will be a key issue for professional work in a career relevant to teaching in the next two decades' indicates my original views on education for sustainability:

*The sustainable management of environmental, economic and social capital will be explored from a teaching perspective. This will involve education that is: 'life-long process of learning, action and reflection involving all citizens' (Huckle and Sterling 1996: xiv). In order to slow the unprecedented rate at which our planet is changing, the role of education will be vital in the transition towards sustainability. Progress towards sustainability so far has been limited. Our current uses of environmental, economic and social capital will need to be altered in order to achieve sustainability. This issue relates to Huckle and Sterling's (1996) definition where everyone must be educated in order to generate new ideas upon which to base the first steps towards sustainability.*

My initial understanding of education and sustainability was somewhat limited and I failed to consider the role of other stakeholders and the

variable views that individuals have about sustainability. I achieved this in my final year more effectively as excerpts from my essay on the issue of water metering, written for a module entitled *Managing Water*, demonstrate:

*Water metering as a form of water resources management however can be thought of as a 'wicked problem' characterised by issues of future uncertainty, system interconnectedness and multiple stakeholders, who: '...may have conflicting interpretations of the problem and the science behind it, as well as different values, goals, and life experiences' (Kreuter et al. 2004: 441). Jaffe and Al-Jayyousi (2002: 309) reason that the principal objective of most current water resource management programmes involves: '...ensuring the equitable and economic distribution of water to all current users over the short term, but also ensuring intergenerational equity in developing the resource over the longer term.' Most importantly, as well as ensuring social-economic equity, water metering must also ensure environmental equity as it is perceived as both controversial and conservational. The general public require a clear message regarding water consumption as claimed by Westerlund (1996: 161): '...water is a natural resource that cannot be consumed in unlimited amounts. Metering is a simple and obvious way of broadcasting this message.'*

My conclusion demonstrates my understanding of how water metering could be a fairer and more sustainable approach for future resource management. I now realised the multidimensional nature of sustainability.

*In economic and environmental terms, metering is advantageous. The incentives are that metering is, for most consumers, a cheaper option than fixed rateable values and this 'pay as you use' levy is a powerful behavioural influence on consumers, who lower their water consumption accordingly. This in turn reduces waste water treatment pressures on the environment and helps the realisation that water is valuable and, cannot be unlimitedly consumed. Metering is also an efficient method by which to monitor water flows in the water supply infrastructure, and is not necessarily imposed solely to keep consumption down.*

*Water metering technology however has not yet proven to be a panacea, although meters have proven useful for leakage monitoring. It is obvious from the WRC trials that there are some drawbacks which have not been fully resolved... Metering is seen to be the most equitable and logical method of charging for water usage, although it is questionable as to whether the deal is 'financially fair'. These costs depend on individual household demand, which is impossible to ascertain with average regional bill data that conceal areal discrepancies. The final consensus is that water metering is not wrong, although greater awareness of the potential drawbacks, especially technological, are necessary to facilitate improvements which could then improve consumer confidence in water metering.*

Sustainability is an important framework which can be used as a step towards evaluating everyday issues from the local, small scale and upwards. The majority of modules which I have studied however have not focused on sustainability explicitly; more commonly, sustainability has been implied, but not expressed. I believe that many tutors try to avoid 'sustainability' overtly as a topic because it is so complex and contested; it is capable of distracting from and taking over an entire module. One memorable example of implied sustainability was a fieldtrip in September 2005 to visit the glaciers of Valais in Switzerland. We examined a range of glacial processes and the underlying theme of climate change. Personally, this linked to an implied notion of the need for 'sustainability', as I gazed upon one melting glacier whose poignant demise is inexorably linked to human induced climate change. Being up close and personal with these glaciers has helped me to empathise with their unremitting weeping.

My learning in both modules that focused explicitly on sustainability was largely based on my reading and writing, in addition to the lectures, seminars and class activities. Through researching themes and establishing a basic structure for my understanding, I find I can write freely allowing flexibility for any innovations and inspirations. I believe this is particularly important when writing about sustainability, which I perceive to be a vivid, complex term. This is one of the reasons why, when writing about sustainability, I always try to put ideas across in a new format. For me, it is about originality and trying to analyse literature in my own way, as I am a creative writer at heart, always going with my instinct of what feels to be relevant to the research question asked.

## Concluding thoughts

This piece has been difficult to write because I am conscious of my limited experiences of learning explicitly about sustainability. Sustainability is an incredibly complex concept to understand and for this reason, I believe that explicit coverage may be avoided by some teachers. It has a tendency to open up a tangle of debate between stakeholders with varying social, economic, environmental and equity related philosophies. This debate, and learning to participate in it, is nevertheless at the heart of any degree. It seems the preferred way of teaching about sustainability is implicit, through case study examples, though it is often left up to individual students whether they choose to pursue this underlying theme as part of their studies or not.

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