Review Essay: Growing Environmental Education and Sustainability within Universities

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International Handbook on Research on Environmental Education
R B Stevenson, M Brody, J Dillon, A E J Wals (2013), pp576
Routledge

Sustainability Development at Universities: New Horizons
Walter Leal Filho (Ed.) (2013), pp994
Peter Lang

Early efforts to document environmental degradation that is caused by human activity is widely associated (at least in the countries of the economic north) with the iconic publication, *Silent Spring* (1962). This was authored by Rachel Carson, who, noting that there were no longer birds to sing, documented the impact of industrial processes on wildlife. At this early stage, it was assumed that providing scientific knowledge about the environment and ecological changes would generate 'environmentally friendly behaviour'. This is the origin of the idea and practices of environmental education, and although it remains a persistent view, the field has evolved radically since those early days.

Environmental education is widely viewed as having been formalised at the 1977 Tbilisi UNESCO-UNEP Intergovernmental Conference on Environmental Education. This event set out to promote environmental education as a means 'to create awareness of the complex and urgent problems of the environment as a basis for their solution' (UNESCO Tbilisi Declaration, 1978). Higher education institutions were seen as key in the search for solutions, not least since their own environmental legacies are dubious. Indeed, David Orr is amongst many scholars who lamented (in 1994), '(w)hy is it that those who contribute most to exploiting... the earth's ecosystems and poor communities are those who have BAs, MBAs, MScs and PhDs and not the "ignorant" poor from the South?' (Earth in Mind, 1994). Other global action plans were launched, notably the United Nations Conference on Environment and Development (UNCED), which reiterated the significance of involving universities. At this point, the terminology shifted to refer instead to education 'as critical for promoting sustainable development and improving the capacity of the people to address environment and development issues' (1992, 36.3), otherwise known as 'education for sustainable development'. A more recent global initiative, the UN Decade of Education for Sustainable Development (2005-2014), represents the latest initiative that supports initiatives to engage governments and universities with this agenda.

Both of the volumes reviewed here, *International Handbook on Research on Environmental Education* and *Sustainable Development at Universities: New Horizons* frame their contributions in the context of the closure of the UNESCO decade. The

numerous and diverse contributions they both contained manifest the growing interest in this dynamic field and its advances. Both books share further characteristics. They both incorporate perspectives of educators and scholars from around the world, demonstrating the multiplicity of ways we can understand the interrelatedness between the biophysical aspects of our changing natural world and human social life and societies. They both document the range of higher education responses and research approaches to the challenges of improving the preparedness of graduates to ensure they can face both projected and uncertain future challenges.

Whereas the former is theoretically solid, and the latter case studies rich, they complement each other. Thus, a combined review of these two publications provides a shorthand way to navigate through what some find an overwhelmingly complex field. Such an attempt is surely worthwhile, not least in view of the growing pertinence of public concern and education on the environment and issues of sustainability, before the exponential rates of environmental degradation and acceleration of climate change.

Research on Environmental Education is a 51 chapter volume which achieves its aim to highlight the central concepts, findings and methodologies of environmental education since the inception of this dynamic field during the 1970s. Broadly, this handbook contributes to 'illustrate how far environmental education research has evolved from an applied science positivistic orientation dominated by efforts to identify relationships among environmental knowledge, attitudes and behaviours to a range of more diverse' approaches (Stevenson et al, p512). It is organised into three parts, namely, Conceptualising Environmental Education as a Field of Inquiry; Research on Environmental Education Curriculum, Learning, and Assessment: Processes and Outcomes; and, Issues of Framing, Doing, and Assessing in Environmental Education Research. This makes for a coherent structure and although the editors, who are meticulous throughout, acknowledge that their handbook does not provide a comprehensive coverage, they have successfully ensured representation of all key currents and perspectives. This is clearly the product of the selection process they adopted with integrity to gather contributions, mostly from scholarly heavyweights within the field. The editors chose papers originally presented at a couple of professional conferences, and then filled the gaps by commissioning further chapters.

The majority of contributors are based at institutions in the USA, Canada and Australia, but the handbook's claim, as reflected in the 'International' adjective within its title, is further merited on account of inclusions of authors from European institutions and as importantly from Brazil, Israel, China and Botswana, amongst other countries. Several chapters further demonstrate the volume's international credentials by examining a diversity of human-environmental relationships and behaviours and knowledge systems.

Adherence to an historical overview of this dynamic field and the shifts that have shaped the field of environmental education and research facilitates an ordered examination of the various theoretical and methodological developments, including from the field of education, and to broader global events and institutional initiatives

which have shaped environmental education. Underlying most contributions is the recognition that approaching environmental problems does not only require scientific knowledge but also an understanding of how people interpret and value what they perceive and know. That environmental understanding and behaviours are mediated by culture, amongst other social contexts, is illustrated with an interview vignette with a man in Johannesburg, South Africa. He threw litter on the road, not because he didn't care about the quality of the environmental of his township, but because he wanted to do his bit to make the case for more locally employed street cleaners. Understanding environmentally-significant behaviour is far more complex and embedded in particularities of place, class and identity, and indeed wider power relations. Likewise, obtaining this understanding requires the use, not of empirical methods, but those which can obtain qualitative data such as interviews or biographical histories which can capture the perspectives of the subjective 'other'. Moreover, interdisciplinarity is the name of the environmental education game since understanding these contexts necessarily calls for interdisciplinary and holistic approaches.

By examining such cultural diversity, and indeed distinct gender perspectives, we can understand both the dangers of perceiving that there is one set of 'environmentally friendly' behaviours and the limitations of instrumental approaches to environmental education which assume privileged knowledge and perspectives. Yet, as the chapters from Latin America demonstrate, the perspectives and context of Western scientific rationalities remain predominant in universities, especially in this region.

Most recent developments hold that while knowledge of our biophysical world remains an important part of education for sustainability, so too are attitudes, understandings and values. And it is at this point - where the role of education for sustainability can be conceptualised as providing opportunities for students to think critically, participate as active citizens and make informed decision-making - that the field approximates that of teaching and learning.

For newcomers to this expanding field, *Research on Environmental Education* provides a valuable springboard from which to dive safely into the deep and highly contested waters of research and education on environment and sustainability. For veterans, it provides a serious and nuanced overview of the theoretical influences and methodological traditions through which scholarship has evolved. Its solid historical grounding of the field provides the context from which to appreciate current trends and the 'tentative directions' with which the editors (Wals, Stevenson, Brody and Dillon) conclude the volume. Future research trends, they predict, will be characterised by an 'openness and reflexivity', based on multiple philosophies, theoretical frames and research methodologies and will lead to an even greater diversity of theoretical and practical choices within environmental education and research.

For its part, *Sustainable Development at Universities* comprises a collection of 77 papers presented at one conference, the annually organised World Symposium of Sustainable Development. This one took place in Rio de Janeiro, Brazil, in June 2012. Papers are organised broadly into four sections, including Implementing Sustainable Development in the Curriculum, Implementing Sustainable Development in University

Activities, and Implementing Sustainable Development in Research and in Outreach Programmes. The final section, Latin America, while appearing as a thematic anomaly, speaks to the groundswell of academic and institutional developments taking place in this geographical region. It is weighted in particular by contributions from Chile and Brazil. Since 1992, when Brazil hosted the aforementioned high profile UNCED which was the first event that brought nations together to focus on these issues, Brazilians have been greatly visible in international networks focussing on education for sustainable development. The strengthening administrative and research capacity of their universities have been accompanied, as these contributions describe, by increased efforts to 'green' their campuses by increasing the environmental content in their science, economic, business and technical courses, and reducing the environmental impact of their management and operations.

This is an eclectic collection. It includes a sprinkling of chapters authored by seasoned specialists, and others of somewhat mixed quality. There is no introduction, which could have been used effectively to contextualise or provide minimal coherence for readers to the motley assortment of contributions that this conference generated. Nonetheless, although the *raison d'être* of this volume is unashamedly to create a publication outlet for the authors, anyone already involved in the field would appreciate the rich case material and the insights they shine on a variety of institutional settings and country contexts. This reviewer was particularly fascinated by Chapter 26 where Vellani and Nanjee examine HEIs in the Muslim world, based on the case of the Aga Khan University, where institutional practices are informed by concepts of environmental stewardship as interpreted from the Qur'an. Religion, we learn from another part of the globe, is another factor which motivates universities to engage with the sustainability agenda. Other contributions, from just within western traditions, also illustrate how more local variants of value and cultures mean that institutionalisation differs at each university or campus and even between different academic units.

The focus of all chapters on institution-specific experiences – where most contributions are theory 'lite' – provides both practical ideas and an opportunity for the reader to identify common themes. This reviewer noted in particular that an underlying concern of many contributions was the tracking of how and the extent to which institutions adopt sustainability. These seem to conclude, broadly, how universities link sustainable technological, 'green' practices and campus operations with learning opportunities via an incremental change which is preferred to radical change. Yet, as Chapters 6 (Winter et al), 32 (Acevedo *et al*.) and 33 (Tappeser and Meyer) illustrate, students are increasingly asserting themselves as important change agents. In this regard, it is hopeful to consider that future shifts within universities to becoming 'sustainable learning organisations' (Nora *et al*. Chapter 68) may be paced more urgently by student demand than at the snail-speed of the planning and approval processes of university and quality standards management and administration

One can but hope this happens sooner than later since education for sustainability practices have been shortcoming across the globe. Meanwhile, international collaborations such as the Intergovernmental Panel on Climate Change (IPCC) which has produced its latest (2014) report, 'Impacts, Adaptation, and Vulnerability',

demonstrate that the effects of climate change are already taking place on all continents and across the oceans. Our graduates remain largely ill-prepared for future risks although numerous opportunities for effective action remain.

Language Centre Online (and beyond)

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Introduction

E-learning, online materials development and computer assisted learning seem to have been in the spotlight for a few years. The use of technology in language teaching has even been proposed to become the norm, e.g. when it is 'used in language education without our being consciously aware of its role as a technology, as an effective element in language learning process' (Bax, 2011), and indeed it feels like it is gradually getting there.

The current project was developed based on the idea of normalisation of technology use for language learning, as well as in an attempt to provide more flexible, easily accessible online English language support for the student population at the University of Bedfordshire (UoB). In addition to these, the project provided an opportunity for volunteering trainee teachers to develop online materials, and increase their understanding of the use of technology in language teaching.

This paper will, first of all, set the background for the project, and explain the choice of the medium of delivery. Then it moves on to outline the project and its aims, after which the research methods and outcomes will be presented and analysed. Rather than a conclusion, the article ends by looking into the future of the current project.

Project background

Among the many student support services available at UoB, there are two main points of language and academic support: Professional Academic Development (PAD), which focuses, as its title suggests, on academic skills, via one-to-one drop in sessions, seminars and workshops; and Communication Skills, which offers weekly timetabled sessions for students, and helps students adapt to the British university culture, and excel their communication skills within their field of studies. However, as practice shows, the students who are in need of support very rarely identify themselves or seek help, let alone taking an active part in their studies. In many cases the reason behind this might be the fear of 'threatening their face' – as making mistakes can damage their 'self-image that every member wants to claim for themselves' (Brown and Levinson, 1987 cited in Mao, 1993). In addition to this, due to lack of time (some students have part-time jobs, or have to travel to the university) or their course design (e.g. part-time courses) students might not be able to come in person for a session or workshop. Having this in mind, the project seemed to be the perfect fit to fill the gap, as online support is impersonal and inherently flexible – allowing to study when, where and as long as, one feels like.