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Culturing Education for Sustainability: Evaluating a Tertiary Case Study

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Abstract: Although discussions of sustainability often call for a 'cultural transformation' or 'culture change', this is not matched by strategies for working at a cultural level. Cultural diversity is a source of innovation and resilience, and intercultural dialogue is a method for exchanging values and challenging, and changing unsustainable cultures. Yet, education for sustainability (EfS), a project that is supposed to assist in this transformation has generally not yet acknowledged the contribution that culture, cultural diversity or intercultural dialogue make to sustainable futures. This research reviews the literature on culture, sustainability and education for sustainability. As a case study, a tertiary course is explored through a cultural lens. The tertiary course demonstrates that sustainability is inherently cultural and it is feasible to integrate culture into EfS. However, the course does not sufficiently include non-dominant voices in the course and often presents cultural issues through an individual lens.

Keywords: Education for sustainability, culture, diversity, multicultural, intercultural, environmental education.

1. Introduction

'Culture' influences human relationships with nature, as well as relationships between humans. Thus culture underpins our capacity to meet the needs of the present, where 'needs' includes bio-physical as well as social and personal needs.

We now find ourselves in a global crisis of unsustainability, with the World Wildlife Fund's Living Planet Report 2012 finding that we already use the resources of one and a half Planet Earths. This unsustainable use of the environment stems from Western cultural assumptions that underpin industrialization and consumer culture, such as the idea that humans are separate from, and more important than, non-human nature (Ball and McCabe 2011, Hill 2011, Plumwood 1993).

In response to this crisis, environmental/sustainability education and the broader environmental/sustainability movement emerged. While we can say there have been some successes, the overall situation is disheartening. Education doesn't necessarily lead to pro-environmental behaviour (Orr cited in Jones *et al*. 2010). Education *for* sustainability (EfS) emerged in response to the recognition that desiring a more sustainable world and learning about what is unsustainable does not necessarily provide students with the requisite skills to make change (Wals 2009).

This lack of environmental progress has led some to comment that we need a deeper, cultural change to challenge many of the Western cultural assumptions that lead to environmental degradation of such scale (Ball and McCabe 2011, Ehrenfeld 2008, Hill 2011, Plumwood 1993). Yet, environmental education and EfS are both largely developed from within the same Western, industrial culture that needs to be addressed (Bowers 2001). If cultural change is necessary, EfS therefore must engage with this need. However many authors recognize that 'culture' is not well integrated into education for sustainability (Agyeman 2003, Bowers 2001, Guthman 2011, James 2003, Lake 2010, Matthews 2011).

This paper aims to contribute to 'culturing' EfS by examining a case study of EfS through a cultural lens.

The paper examines all the ways in which 'culture', broadly defined, contributes to sustainable or unsustainable outcomes and then compares this to the way culture is represented in the EfS case study. Cultural practice is also investigated, exploring the pedagogies used in the case study against multicultural and intercultural pedagogical recommendations. The case study is an introductory, undergraduate, sustainability course which is examined through a grounded approach, using mixed methods such as participant observation, interviews and document analysis.

I begin by defining two slippery terms at the core of this paper, 'sustainability' and 'culture'.

2. 'Sustainability'

For the purposes of this paper I take the most often quoted definition whereby sustainability would be a state in which every human on the planet had the capacity to meet their needs, yet did not reduce the capacity of future human generations to do the same (UNWCED 1987). I take for granted, that human wellbeing depends on the wellbeing of other non-human organisms. I also take for granted, that human needs include social and personal needs such as love, security and self-esteem along with biophysical needs such as food, shelter, water.

3. 'Culture'

Culture has many definitions; I find Jon Hawkes to be the most tangible and relevant to sustainability:

'Culture has three aspects. It encompasses:

- Our values and aspirations;
- The processes and mediums through which we develop, receive and transmit these values and aspirations;
- The tangible and intangible manifestations of these values and aspirations in the real world' (Hawkes 2001, p. 4).

Therefore culture is inclusive,

> 'the social production and transmission of identities, meanings, knowledge, beliefs, values, aspirations, memories, purposes, attitudes and understanding, […

> and] the "way of life" of a particular set of humans: customs, faiths and conventions; codes of manners, dress, cuisine, language, arts, science, technology, religion and rituals; norms and regulations of behaviour; traditions and institutions' (Hawkes 2001, p. 3).

4. Culture and sustainability

It is beyond the scope of this paper to examine all the interrelations between culture and sustainability. However, a brief literature review demonstrates that culture and sustainability and inherently linked.

'Culture' shapes human relationships with the more-than-human world and thus affects environmental resources, and consequently our capacity to meet human biophysical needs. Human cultures and ecosystems are coevolved, interdependent and mutually reinforcing (UNESCO 2007). Through diversity in knowledge, practices, values and languages, cultures play a tangible role in ecosystems, influencing biodiversity and ecosystems (Maffi 2001). Ecosystems and biodiversity in turn shape human cultures, and these 'inextricable' links are known as bio-cultural diversity (Maffi 2001).

As an example of how values and beliefs turn into actions, 'Western' culture has long been criticized by environmentalists such as Plumwood (1993 and 2002) and Shiva (1993 and 2005) and more recently Hill (2011). The cultural assumptions that stem from the European Enlightenment such as humans being substantially different and superior to non-human animals (Plumwood 1993) have led to 'nature' being understood as places where there are no people (Cronon 1995). This has led to environmental practices that could only be conceived of through this belief, such as creating conservation refugees through removing local peoples from national parks in order to 'conserve' the 'wilderness', (Survival International n.d.) and more generally to the belief that humanity can overcome the limits that nature presents (Greer 2008).

Culture also shapes relationships between humans. Power hierarchies are often established based on cultural differences and culture also influences our understanding of power.

Eco-feminists argue that in Western cultures, white human males are conceptualized as the norm, and other organisms that do not conform to this are oppressed based on their identity (Plumwood 1993). This leads to the oppression of women, people of colour, and non-humans, who are understood as less rational than white male humans (Plumwood 1993). Although it is not just Western culture that discriminates based on race, gender or species (Hill 2011), Western culture dominates much of the globe these days and power hierarchies are established based on these Western colonial practices.

A key aspect of being oppressed by colonial powers is the incapacity to 'speak' or to be listened to (Hooks 1990, Spivak 1988). Having a political voice in the decisions that affect you is crucial if you are to have your biophysical, social and personal needs met.

Environmental racism demonstrates how culturally formed power hierarchies dictate how people's needs are met. Research found that in the United States, African American communities were more likely to live near toxic waste than any other racial group, irrelevant of income (Bullard *et al*. 2007). The environmental justice movement contends that those

who contribute least to environmental degradation are those most likely to experience the consequences of environmental degradation (Environmental Justice 1996). This is being played out on the global stage in the case of climate change (Climate Vulnerability Forum 2009, DARA 2010).

Environmental Justice (1996) defines the environment as 'places where people live, work, and play', which contrasts with more Western understandings of the environment as 'wilderness' (Cronon 1995).

It's clear that culture influences conceptualizations of the environment, which leads to environmental outcomes. Further, who experiences the consequences of these outcomes—which leads to their needs being met or not—is also shaped by culture.

Cultural diversity is deservingly acknowledged as a source of intrinsic value (UNESCO 2001) that needs to be promoted and protected, from threats including climate change (INTO 2011). However, cultural diversity is also a resource for challenging and damaging the cultural assumptions that lead to oppression of both humans and non-humans. Intercultural dialogue can provide the opportunities to develop empathy for 'others' and to learn about different lifestyles, worldviews and knowledge systems (Tilbury and Mula 2011) which may be more sustainable and just, than existing strategies.

Many authors argue that these links between culture and sustainability are a matter of common sense (Ball and McCabe 2011, Duxbury and Jeannotte 2010, Hawkes 2001, Kato 2002, Nordström 2008). However many also argue that culture, cultural diversity and intercultural dialogue are rarely embedded into EfS (Agyeman 2003, Matthews 2011, Tilbury and Mula 2009).

5. Educating for cultural sustainability

Education is one of the best places to begin implementing cultural strategies for sustainability. As Agyeman (2003) states,

> 'the prefix "culturing" should be superfluous; environmental education is inherently about culture. However, until curriculum content, pedagogy and practice, and research methodologies reflect this, the prefix must stay' (Agyeman 2003, p. 86).

Matthews agrees that 'everyday cultural pedagogies are an extremely efficient means of educating for unsustainability' (2011, p. 260). That is, there is no 'neutral' culture and without employing cultural strategies, EfS may inadvertently be promoting cultural messages contrary to its espoused aims of: achieving economic and social justice; empowering people to resolve collective global issues (Wals 2009); respect for cultural diversity; and respect for the dignity and human rights of all people throughout the world (UNESCO cited in Jones *et al*. 2010).

There is a distinction between education about and education for sustainability (Cotton and Winter 2010). Alternative pedagogies are promoted as the means to not just talk about sustainability but to promote opportunities to learn the behaviours and skills needed for individuals to practice sustainability. This insight is equally appreciated by multicultural

education. Thus 'education for cultural sustainability' would need to employ learner centred/constructivist pedagogies (Cotton and Winter 2010, Nie and Lau 2010, Pelech and Piper 2010, Tilbury 2011) as opposed to the traditional didactic pedagogy (eg. lectures). Further to this, multicultural and intercultural education recommends a range of interrelated and mutually reinforcing teaching approaches. These include: inclusive teaching, acknowledging student diversity as a resource for learning, encouraging students to acknowledge privilege and appreciate difference, and facilitating intercultural dialogue (Prieto 2009, Tilbury and Mula 2011, Wright *et al*. 2006, UNESCO 2006).

6. Research questions

This research examines:

- How is culture and culture's role in shaping sustainable outcomes represented in a first year undergraduate sustainability course (education about cultural sustainability)?
- What intercultural and multicultural pedagogies are employed in the course (educating for sustainability)?

7. The course

A stand-alone introductory course ('the course') was selected as a case study. The course is taught to approximately 300 students studying applied social science programs such as planning, social work, psychology, legal and dispute studies and environment studies. The course learning resources consist of a weekly one hour lecture, a weekly one and a half hour tutorial, and weekly readings. The semester is twelve weeks.

8. Method

The research can be summarized as an interpretivist case study, which takes a grounded approach and uses the methods of participant observation, discourse and content analysis, and interviews.

The concept of 'culture' epitomizes key contentions of interpretivism: that knowledge is subjective and that people construct knowledge based on their own experiences (Browne 2006). Thus, this research is strongly founded in the interpretivist philosophy.

For the purposes of this research, a hypothesis may have biased the findings, and thus a grounded approach was taken. Grounded theory takes an inductive approach, generating theories from the data, that is, the theories are 'grounded' in the results (Charmaz 2006).

The course was comprised of a variety of teaching methods and resources, therefore to ensure that the research most accurately reflected the course in its entirety a variety of research methods were needed to collect and analyze the data from all these sources. Both data triangulation (comparing data from different sources when the same methods are used) and methodological triangulation (comparing data from different methods) were used to ensure the validity of my analysis, a common feature of case studies (Guion *et al*. 2002, Yin 2012).

As a sessional tutor teaching in the course, I was an observing participant which meant gaining easy access and easily developing rapport with teaching staff. This reduced the likelihood of the staff behaving differently when I observed them.

I reviewed the lectures, readings, assessment descriptions and criteria, course learning objectives, and observed one tutorial taught by each tutor (of which there were six). I also interviewed the tutors after observing their tutorial. The interviews with tutors were used to confirm if my observations from the one tutorial observed per tutor were representative of that tutorial throughout the semester as time was a limitation.

My role as a tutor may also be a limitation as I may interpret the material differently to others, and the results may therefore be biased. My personal identity as someone born in Australian and of Anglo-Saxon descent may also limit my capacity to identify inclusive teaching, however insights gained from the process may be beneficial to other teachers facing the same challenges.

9. Results

The course was developed using the Triple Bottom Line (environment, economy and society) model of sustainability. With a new course coordinator in 2012, the course began to use the social ecology model (environment, society and personal dimensions). 'Culture' was not directly mentioned in any of the course learning objectives, although aspects of culture were, such as reflecting on values, beliefs and behaviours.

Throughout the lectures and the course readings, there were five distinct yet interrelated representations of culture:

- *Culture as knowledge*: culture forms our understanding of the world, and facts; objective truth are non-existent because they are always influenced or mediated by culture. The way that we understand our world, that is, how culture is formed, is by the telling of stories.
- *Western culture as an impediment to sustainability*: the course critiqued the Enlightenment's cultural legacy in the West of understanding nature as something to be controlled by humans, and also its links to colonization, particularly in Australia. For example, from week two lecture slides: 'One of the 'fathers' of Enlightenment thinking was Francis Bacon and he once suggested that '*men of science'* should dig deeper and deeper into the secrets of nature so that '*nature takes orders from man and works under his authority*' (italics original).
- *Culture as connection to place*: the course emphasized (re)localization and place making, particularly in relation to overcoming disconnectedness from nature and disconnectedness from community. For example, from week six lecture slides: '[There is a] relatively low level of place awareness in Australia due to the history of settler society (compare[d] with indigenous Australian cosmologies)'. It was emphasized that a strong sense of place would lead to caring about the world more.
- *Culture as something to be produced, not just consumed*: the course encouraged the importance of being producers, not just consumers, of culture.

For example, from week seven lecture slides: 'Self-actualization—the realization of our deepest potential—can never be achieved through consumption alone; we all need to be producers of some kind.'

- *Culture as creativity, diversity and innovation*: the course emphasized that cultural diversity is crucial for sustainability. For example, from week four slides: 'A diversity of ideas and practices as a source for adaptation or innovation; eg. the importance of social and cultural diversity in the creation of 'vibrant' and cosmopolitan human communities' (is necessary for resilience). However, this slide also acknowledged the role of dialogue, that we need to '[balance] innovation by drawing from some ancient wisdom and diverse cultural traditions ('old ways'); ie. it is not all new.'

However, 'alternative' (non-Western) voices and perspectives were not well integrated into the lectures or reading pack. Only ten of the forty authors represented in the reading pack were female. The majority of authors were of Anglo-Saxon descent from Western countries, with some Scandinavian authors represented as well. Only two authors represented people of non-white, non-Western ethnicity.

I found most of the tutors to be practicing some inclusive teaching practices, such as speaking face to face with students (ie. sitting at their table rather than standing to speak to them); arranging students in a circle, without the tutor at the head; putting all instructions in both verbal and written form; emailing students lesson plans before class and notes afterwards; all tutors spoke fairly clearly and did not use much slang. However, most tutors had not heard of inclusive teaching which should be of concern to universities.

Tutors all agreed that culture was integral to sustainability and had a broad understanding of the relationship between the two concepts. Tutors agreed that diversity is a learning resource although some acknowledged that this can be challenging to implement. However observations of tutorials indicated that diversity was appreciated and practiced by tutors.

Some activities that clearly incorporated cultural aspects were run, although often the opportunities for reflecting on the role that culture plays, and the opportunities that it presents, may not have been maximized. Activities such as 'diversity walk' aimed to get students to appreciate the different ways in which identity markers influence our behaviours and experiences of the world. Similarly 'privilege circle' aimed to get students to reflect on the way their own privilege has influenced their life opportunities. 'Take a step for equity' demonstrates the global income distribution and questions its fairness. Despite running activities such as these, tutors did not believe that they had run 'cultural' activities and as such discussion after the activities was unlikely to centre on cultural themes and culture's relation to inequality, privilege and diversity.

One assignment asked students to evaluate their own ecological footprint and reflect on which of their own values underpinned their result. One class used the results from the ecological footprint calculations to explore what the dominant values of unsustainable societies are, and what some alternative values might be. However during this activity the word culture was not mentioned and the depth of discussion and cultural learning opportunities was thus lacking. Further, this was the only example of values being presented through a social lens; generally in the course, values were presented through an individual lens. For example, the readings that explored values were in the week on 'personal

sustainability' and the ecological footprint assignment epitomized this individualization of values.

10. Discussion

Jon Hawkes claimed in 2001 that in discussions of sustainability, 'culture keeps getting guernseys in the pep talks, but when the game starts it always seems to end up on the bench' (p. 25). Much of the literature suggests that culture is not holistically integrated into EfS (Agyeman 2003, Matthews 2011, Tilbury and Mula 2009) despite the recognition that sustainability requires a cultural change. This case study, despite many positive and innovative achievements, would still benefit from providing more diverse voices and further recognizing the role that culture plays in shaping values and behaviours.

Although including culture in course materials and activities, this was not consistent with course learning objectives which did not cover 'culture'. This is consistent with Tilbury and Mula (2009) who argue that it is integral that culture, cultural diversity and intercultural dialogue are embedded into EfS but found that this is rare. This failure to embed culture into the course leads to inconsistencies in the way culture is included and not making culture's role in sustainability explicit.

Features of culture were often presented through an individual lens in the lectures, tutorials and reading pack, which Matthews (2011) contends is common in EfS. This is consistent with Gough who argues that focusing on the individual level can lead to a failure to address social, cultural and political factors (cited in Matthews 2011). Similarly, eco-feminist critiques argue that recognizing interdependency between ourselves and the rest of the world, ie. making our worldview less self-centred, is integral to achieving sustainability (Plumwood 1993, Lake 2010).

Postcolonial critiques argue that in order to overcome colonialism, the marginalized need to be given the opportunity to speak and be listened to (Hooks 1990, Spivak 1988). Although the course presented a strong critique of colonialism it simultaneously used colonial practices to do so. Only 25 per cent of the reading pack's authors were female, and only two of the forty authors had non-Western backgrounds.

Agyeman (2003) and Guthman (2011) argue that environmental education and EfS often espouse culturally specific models of environmental and social activism and responsibility which exclude many people. Although SSE did not promote any particular activities as the 'right' ones, the course failed to discuss in depth the variety of ways in which people from 'other' backgrounds are working to promote alternative futures. The work of Wangari Maathai and the Green Belt Movement (eg. Maathai 2010), the Chipko movement (eg. Ramachandra 2000) and more locally, Australian Indigenous land rights movements (Reconciliation Network 2011) are all obvious examples that highlight the interconnections between culture, environment and social justice, and that demonstrate that sustainability is not just for white, privileged people. Although some mention of groups similar to these was made in lectures, they were not explored in significant depth. Also, these stories were re-presented by the lecturer, which is substantially different to those people speaking for themselves (Alcoff 1991). Cultural diversity cannot lead to dialogue or resilience if non-dominant voices are excluded from the conversation or if different cultures are not presented as equal. These external voices must be given opportunities to present their own ideas, both

as a means to an end (cultural exchange for sustainability) and as an end in itself (challenging power structures so that the present generations can meet their needs).

A potential barrier to this is the requirement for universities to teach students how to find and understand 'academic' and 'reputable' sources of information, which is a significant part of the course's purpose and objectives (Hegarty *et al*. 2011, RMIT 2012). Highly radical visions and voices are less likely to be presented in this format because academic journals and publications, like universities themselves, are institutions of the dominant culture where the historical legacy of privileging white male voices over others has not yet been overcome (Mirza 2009). This is reflected in the course's reading pack. However, this is not a sufficient excuse as plenty of 'academic' sustainability literature from non-Westerners exists, such as the work of Vandana Shiva (eg. 1993 and 2005) and Arundhati Roy (eg. 2002). Further, recognizing the value of others' ideas, although they might not be presented in familiar forms (ie. intercultural communication), is a skill that students need to develop if we are to treat people equally and thus meet the needs of the present.

Yet despite the shortcomings, the course was fairly innovative in its inclusion of culture. Throughout the course materials, culture was represented holistically; contrasting with the findings of Tilbury and Mula (2009), that EfS generally understands culture mainly as cultural heritage. Tilbury and Mula (2009) also found that EfS generally values diversity mainly in terms of indigenous knowledge. In this course the importance of all cultural diversity for resilience was covered in the course theory, although this wasn't reflected in practice through the selection of readings offered in the reading pack. The course clearly conceptualized culture as dynamic, again contradicting the EfS policies reviewed by Tilbury and Mula (2009). Another key finding of Tilbury and Mula (2009) was that few EfS policies see the relevance of culture to pedagogy. In this course this was somewhat true—staff felt that culture was relevant, but did not feel they had been given the brief to include culture in class activities. However, many activities did draw on student diversity and encourage intercultural dialogue, although the discussions that partnered the activities rarely, if ever, mentioned the role that culture played in the activities. According to Matthews (2011), Tilbury and Mula (2009) and Sherren (2006), this inclusion of culture is unusual for EfS which often focuses on technological solutions or represents culture in narrow ways.

Given that culture was not included in the learning objectives or the model of sustainability that the course was based on, the frequency and variety of ways in which culture was included in the course suggest that the links between culture and sustainability are indeed self-evident, as many authors state (Ball and McCabe 2011, Duxbury and Jeannotte 2010, Hawkes 2001). That is, culture, cultural diversity and intercultural dialogue inadvertently formed part of the content and pedagogy of the course without the staff having planned to address these links and/or without recognition that the links had been covered.

Yet the failings demonstrate that the links between culture and sustainability are not sufficiently obvious or easy to integrate so as to supersede deep-seated Western assumptions and practices such as individualism and the privileging of white male voices. Staff's enthusiasm for culture and the conspicuous links between culture and sustainability did not inevitably lead to culture being examined to the extent it deserves, with some tutors commenting that they hadn't done cultural activities as culture was not included in the learning objectives. Thus planning and reflecting on practice through a cultural lens is necessary. This confirms what Hawkes argued in 2001, that if we want a cultural

transformation we have to plan for it—we need a cultural framework and we must take cultural action.

Conclusion

There are many links and relationships between culture, sustainability, and education for sustainability. Sustainability is a slippery goal, one that requires innovation, education and dialogue in order for humanity to collectively imagine and articulate alternative, just futures. Culture plays a fundamental role in shaping our values, beliefs and behaviours, and thus influences not only what is suggested as a response to unsustainability but also whose suggestions are listened to and taken seriously. Culture therefore leads to tangible outcomes that may be sustainable or unsustainable, just or unjust.

Reviewing the content of a first year undergraduate finds that many of the aspects of culture—beliefs, values, behaviours—are included in the course as relevant to sustainability, however these aspects are not always understood as cultural, and culture is not promoted as a core feature of sustainability. While presenting a strong critique of Western culture, cultural alternatives were not explored in depth, and few alternative voices had genuine opportunities to be heard. Examples that clearly demonstrate the role culture plays in shaping sustainable or unsustainable outcomes such as environmental racism and bio-cultural diversity were not covered.

The course tutorial activities included many pedagogical practices that intercultural and multicultural education promote, though not all. Tutors used a range of inclusive teaching practices and were committed to student diversity as a resource for learning. A variety of activities focused on challenging privilege and appreciating diversity, and facilitated intercultural dialogue. However, ‘culture’ was rarely, if ever, mentioned as playing a role in the activity and thus opportunities for appreciating the significance of culture in sustainable outcomes was limited.

This case study demonstrates that it is not only desirable, but possible to include culture in EfS. From this research it is clear that the course had not been planned with cultural learning objectives, yet culture’s role in sustainability still featured in many of the course activities and content, reinforcing the claims that the links between culture and sustainability are self-evident.

However, this case study also demonstrates that good cultural practice requires planning, reflecting and evaluating on EfS practice with the use of cultural guidelines or a cultural framework. All the staff teaching in the course appreciated the links between culture and sustainability; however this appreciation did not always translate into good cultural practice in the classroom. Many of the cultural activities and content in the course were presented through an individual lens, which is common in EfS and environmental education (Matthews 2011). The privilege given to white male voices relative to the voices of women and people of colour in the reading pack was alarming, but again consistent with much EfS (Agyeman 2003, James 2003, Matthews 2011). Culture is often at the root of unsustainable outcomes, and intercultural dialogue through cultural diversity and creativity can challenge and change damaging cultural practices and results in innovative visions for the future. However intercultural dialogue requires cultural equality to ensure the cultural exchange goes both ways, rather than reproducing colonial power hierarchies. Including alternative voices in the

conversation and making explicit the role of culture in forming beliefs, values and worldviews is integral if we are to genuinely decolonize the present and the future. Planning, reflecting and evaluating on EfS practice through a cultural lens is necessary in order to truly practice cultural equality, a prerequisite for intercultural dialogue for sustainability.

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