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Academic staff engagement in education for sustainable development

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ABSTRACT

The research presented in this paper emerged from the need to identify the factors influencing academic staff members when engaging in Education for Sustainable Development in real practice. The aims of this study were to explore: (i) the factors influencing academic staff engagement in Education for Sustainable Development; and (ii) the views and vision of academic staff in relation to Education for Sustainable Development at the University of Southampton. This research was conceived as an exploratory action research study and consisted of two differentiated research stages. In Stage I fourteen academic staff members from different disciplines were interviewed as a reconnaissance phase of a typical action research cycle. In Stage II a facilitator role for curriculum development was adopted by one of the authors as part of her doctoral studies. An interdisciplinary group of five academic staff members from different subject areas was created with the aim to support the group's critical reflection and action. This research was undertaken between October 2011 and May 2013. This study suggests that although academics might have a personal interest and motivation to engage in Education for Sustainable Development, factors such as the lack of time and financial resources, lack of deep understanding of sustainability, current curriculum structures and ways of delivery, academic pressures, external factors, lack of organisational support and existing organisational conditions block their engagement in Education for Sustainable Development. Organisational support and leadership, quality assurance processes, professional development and creating reward structures are necessary strategies towards academic staff engagement in this agenda. This study provides evidence on different views and visions of academics in relation to Education for Sustainable Development and a number of contradictions between its principles and the role of Higher Education.

1. Introduction

Universities have signed international and national declarations and have publicly committed to work towards achieving sustainable practices in their estates and operations, research, outreach and curriculum (Lozano et al., 2013; Wright, 2002). However the field of sustainability in higher education (HE) is a rather recent and emerging research area (Wright, 2010). Most of the research to date has focused on environmental management and greening of university estates and operations, case studies and examples of good practice of universities, and on introducing sustainability content in specific courses (Cotton et al., 2009; Fien, 2002). The environmental management and greening of campus operations and estates have seen much more progress than curriculum development (Jones et al., 2010). Thus despite the emerging literature, the signature of international declarations and the creation and development of university strategies and policies, little implementation and holistic transformation of universities towards embedding sustainability has been achieved so far (Lozano, 2006; Thomas, 2004). Sustainability metrics and rankings of universities in the area of sustainability, such as the UI Greenmetric University World Ranking could represent a lever for the holistic implementation of sustainability. University world rankings put in place benchmarking systems that influence decision-making processes, however existing rankings focus on research, education or the environmental dimension of sustainability (Lukman et al., 2010).

Sustainability in Higher Education (HE) has been widely advocated to be more than an add-on to existing university practices (Sterling, 2004) as it involves a cultural and structural shift to existing dominant structures and practices (Tilbury, 2012). Change towards sustainability requires whole-university approaches that

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connect curriculum, campus, research and community strategies and action (Müller-Christa et al., 2014; Wright, 2002). The development of a sustainable vision of the university, clear mission and policies, targets and objectives, the creation and implementation of educational strategies and initiatives, research on sustainability, outreach and partnerships with stakeholders are necessary to achieve more sustainable universities (Velazquez et al., 2006).

A considerable amount of the literature in the field has focused on pedagogical approaches to Education for Sustainable Development (ESD) (Cotton et al., 2009). ESD is concerned with the 'what' and the 'how', therefore it is about innovative pedagogical practices (Ryan and Cotton, 2013). The integration of ESD in HE implies shifts in current pedagogical strategies moving from: transmissive learning to discovery learning; teacher-centred approaches to student-centred approaches; and theoretical learning to practice-oriented learning that links theory and practice amongst others (Sterling, 2004). ESD is based on critical reflection, is action-orientated and has futures thinking, critical thinking, participatory approaches, work in partnerships and systemic thinking as its core (Huckle and Sterling, 1996; Tilbury and Wortman, 2004). Existing teaching and learning approaches on ESD are based on: educators as role models, experiential learning and holistic thinking (Dawe et al., 2005, pp. 4–5). Tilbury (2007) highlighted learning based change approaches such as participative inquiry, action learning and action research. Besides transformative sustainability learning has been widely discussed in the literature as a suitable pedagogy in ESD (Moore, 2005; Sipos et al., 2008; Wals, 2010). It is about the cognitive, psychomotor and affective domains of learning (Sipos et al., 2008). It seeks to engage students in challenging existing worldviews, beliefs, feelings, values and assumptions based on past experiences (Mezirow, 2009; Wals, 2010). Likewise providing real world learning opportunities through the use of student-centred approaches such as problem based learning (PBL) and experiential and active and participatory learning, referring to self-reflection, self-directed inquiry, learning-by-doing, engagement with real life problems and issues, and learning collaboratively within communities are required (Thomas, 2009; Moore, 2005). Therefore the use of these type of pedagogies and teaching, and learning approaches and strategies can foster the competencies necessary to deal with sustainability such as critical and creative thinking, problem-solving skills, action competence, collaboration, futures thinking, therefore creating empowered and global and responsible citizens and professionals who can become active change agents (Barth et al., 2007; Wals, 2010).

Emergent research in the field has also explored the learning outcomes and competences that educational programmes need to seek to develop in students for them to become change agents towards sustainability (Lambrechts et al., 2013; Svanström et al., 2008; Weik et al., 2011). However, despite the emergence of this body of literature little evidence exists on the development, outcomes and impact that courses introducing students to these competences have (Weik et al., 2011). Academic staff engagement and understanding of sustainability is critical to implement courses that develop sustainability competencies and to progress embedding sustainability in HE (Holmberg and Samuelsson, 2006; Lozano, 2006). Research in this area has focused on exploring academic staff understandings, beliefs, values, attitudes and visions towards ESD (Cotton et al., 2009; Jones et al., 2008). In an interview research focussing on academic staff' views on ESD Jones et al. (2008) identified limiting factors such as staff interest, lack of awareness, time and capability. Other inhibitors in curriculum development and innovation towards sustainability are: academics tend to see sustainability as imposed and not connected to their discipline; academics' lack of knowledge and competencies to integrate sustainability issues in their subjects; the ethos of the institutions; disciplinary silos; lack of incentives or individual priority; limited institutional commitment and support; crowded curriculum; limited commitment from external bodies and stakeholders (Ferrer-Balas et al., 2008; HEFCE, 2008; Jones et al., 2010; Leal Filho, 2009).

Factors conditioning academics' attitudes towards sustainability have been also linked to misconceptions about the term, knowledge, background, previous experiences and personal values and beliefs (Leal Filho, 2009, 2011). A recently published paper (Christie et al., 2013) has reported the findings from a research on Australian academics views and practice of ESD pedagogy. It is suggested that ESD is not practiced and academics do not see the link between ESD and pedagogical innovation. However the importance of using certain type of pedagogies for ESD has been articulated, those responsible for using them do not necessarily see the link (Cotton et al., 2009). In this sense it could be argued that the existing pedagogical literature on ESD does not encounter, and tends to discount, the experiences and everyday life of academics, which are not necessarily in line with ESD educational ideals (Cotton et al., 2009). Little research exists to date that has studied in-depth staff understandings, attitudes and challenges faced when trying to embed the principles of ESD in real practice.

The research presented in this paper aimed to mirror and connect the everyday experiences and challenges that academics face in real-practice when trying to embed ESD within their teaching, and to bridge the gap between theory and practice identified in the field of ESD in HE (Moore, 2005; Thomas, 2004). This study, conceived as an exploratory action research, attempted to contribute to this gap identified in the literature, with the research aims being to explore: (i) the factors influencing academic staff engagement in ESD; and (ii) the views and visions of academic staff in relation to ESD at the University of Southampton. The findings of this study can in turn inform other universities' journeys on engaging its academics in ESD and on embedding ESD in the curriculum.

2. Methods

The research project was undertaken at the University of Southampton. This University is located in the South East region of the United Kingdom (UK). It is one of the top-research universities in the UK and is a member of the Russell Group of Universities. It has over 22,000 students and around 5000 staff members. The profile of sustainability at the University increased over recent years in strategies and actions such as the approval of a second Carbon Management Plan in 2011, the Environment and Sustainability Strategy in 2012 and the creation of the Environment and Sustainability Advisory Group in 2012. Moreover the University of Southampton was part of the EcoCampus, a UK Environmental Management System (EMS) scheme for the HE sector, and achieved its silver award in December 2012 whilst the institution support to a group of practitioners who engaged in the Higher Education Academy (HEA) Green Academy programme 'Curricula for Tomorrow'. The HEA Green Academy programme was an innovative initiative to help institutions achieve sustainability in the curriculum goals. Environmental management of the estates and operations has seen more progress than the curriculum. In terms of curriculum, the elective interdisciplinary modules dealing with global challenges offered since the academic year 2011/2012 and the option of Sustainability Minors offered to students since 2013/2014, are the main achievements of the university in terms of embedding ESD within the curriculum.

A qualitative research approach was chosen as the aim was to acquire a deep understanding of the University of Southampton context, and its academic staffs' experiences, understandings and

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