

## Chapter 56

# Are University Lecturers Literate in Sustainability?

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### ABSTRACT

*An extensive body of knowledge exists about students and education for sustainable development; though very little can be found for educators. This chapter will review existing literature and relate how it is relevant for educators to be sustainability literate in order to promote the skill among students. A purely qualitative approach was used for this study. Eleven lecturers were interviewed in order to ascertain their level of sustainability knowledge. The interview transcripts were analysed using phenomenography. Findings indicate that built environment academics were particularly literate in sustainability matters. Recommendations as to how other institutions can assess the sustainable literacy level of educators are made.*

### INTRODUCTION

Sustainable development education has been the focus of much research (Pappas, 2012; Murray, 2011; Wright, 2010; Sibbel, 2009; Murray and Cotgrave, 2007; Cotgrave and Alkhaddar, 2006; Reid and Petocz, 2006; Thomas, 2004); largely due to the United Nations decade of education for sustainable development as well as the worldwide attention sustainability has been given.

The most cited definition of sustainable development comes from the United Nations World Commission on Environment and Development (WCED, 1987) Brundtland Report which states that “sustainable development seeks to make sure that developments meet the needs of the present without limiting future generations from meeting their needs”. However other ways of defining it exist. The ‘triple bottom line’ considers sustainability in environmental, economic and social terms (Hueting and Reijnders, 2004; Murray, 2011). Whereas Faber, Jorna and van Engelen (2005, p. 5) suggested that “sustainability refers to an equilibrium between an artefact and its supporting environment, where they interact with each other

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without mutual detrimental effects". Although there are numerous definitions for sustainability, (WCED, 1987; Leal Filho, 2000; Hueting and Reijnders, 2004; Faber et al., 2005; Atkinson, 2008; Shepherd et al., 2009; Murray 2011) the basic premise of all of them appear to be how sustaining the well-being of living systems can be achieved over time (Moore, 2005; Atkinson, 2008). It would therefore be safe to say that there will likely never be a universal definition for sustainability as it means different things to different people (Mann, Dall'Alba, and Radcliffe, 2007). The authors argued that a reason for that is that people's understanding is influenced by their own background, work experience, previous training and their views on political and economic aspects.

The UK government has passed legislation such as the Duty of Care which places the responsibility of appropriately disposing of waste to those that are in contact with materials, including producers and importers (Dainty and Brooke, 2004). It has also published reports such as the Office of Government Commerce which provided details as to how the construction industry can achieve sustainable procurement (OGC, 2007; Cotgrave and Kokkarinen, 2010b). Research conducted by Cotgrave and Alkhaddar (2006) found that final year students did not possess in-depth knowledge regarding environmental or sustainable issues when holding presentations on the subject. The following year Murray and Cotgrave (2007) wrote that the Sustainable Development Education Panel (SDEP) proposed that all professional bodies should incorporate sustainability in their course accreditation criteria. As observations like this have still been made even with government and professional body involvement, it emphasizes the need to educate people on sustainable development, particularly in higher education, as this is most often the last chance people have to gain full theoretical knowledge before being able to practically apply that knowledge in a job.

The influence that sustainable development education has on students has been researched as they will have the potential to endorse sustainable practices in the industry once they obtain their degree. In spite of this, the community, industry and university groups have a limited knowledge of how educators at university level understand and incorporate the concept of sustainability in their teaching (Reid and Petocz, 2006).

Studies promoting sustainable development education in students have proposed educational theories such as collaborative and transformational learning (Moore, 2005). A central tenet for collaborative learning is that students from many disciplines work together to build their knowledge and understanding on a subject matter. The assumption for this type of learning is that every discipline has something to contribute towards this production of knowledge (Moore, 2005). Transformational learning is when learning changes problematic frames of reference into ones which are more reflective, inclusive and emotionally able to change (Moore, 2005; Dirkx, Mezirow and Cranton, 2006). This means that an opinion changes once enough knowledge is gained which challenges the previous point of view that was held by an individual.

If academics are found to have a deep knowledge on sustainable issues, knowledge on collaborative and transformational learning might enable them to think of different educational tasks by which to encourage transformational learning to occur amongst their students. Not only that, but academics themselves could benefit by applying certain principles from these theories into exchanging ideas with other members of staff regarding their knowledge on sustainability as this may vary from subject to subject. As sustainable development means different things to different people, incorporating collaborative and transformational learning theories to form a new understanding of what sustainability means, particularly in the built environment, which reflects the knowledge of each academic in every discipline is needed.

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