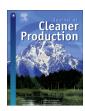
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# Learning to change universities from within: a service-learning perspective on promoting sustainable consumption in higher education



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#### ABSTRACT

Progression towards more sustainable consumption patterns is a key challenge of the 21st century. Higher education plays a crucial role in this in as much as it significantly contributes to building the capacity of future generations to deal with real-world problems of unsustainable consumption. However, conceptually substantiated approaches to educating for sustainable consumption in universities are still poorly developed. This paper contributes to bridging this gap. It merges two separate fields of scholarship (service learning and incidental learning) and analyses key aspects of a teaching approach to promoting learning for sustainable consumption in higher education. A case example of a series of project-based seminars is presented that illustrates how this conceptual approach can be applied in practice. This paper illustrates how the integration of the concept of transdisciplinarity into service learning can help to further develop the concept to support rich and meaningful learning settings for students. The paper concludes with a critical appraisal of the approach for moving forward the agenda of higher education for sustainable development in the context of consumption and with a call for further research.

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#### 1. Sustainable consumption as an educational challenge

Consumption is today considered a key driver of environmental change (Wilk, 2002). Consumer goods cause both *direct* global environmental pressures while they are being used as well as *indirect* pressures that have accumulated during their production (EEA, 2010). In Rio de Janeiro in 1992, the world leaders agreed on action to change what they identified as unsustainable patterns of consumption and production (Jordan and Voisey, 1998; Quental et al., 2011).

Today, twenty years after the Rio Conference, recent studies provide alarming snapshots of the limited progress made over the past decades. In the latest Global Environmental Outlook (GEO-5) reporting process, UNEP (2011) data indicates that the global extraction of natural resource materials has increased by over 40 per cent in total between 1992 and 2012. According to the Ecological Footprint Network, humanity's footprint increased by 27 per cent between 1990 and 2007 (WWF, 2010). Recent studies estimate that unless the prevailing excessively short-term political

and economic model is abandoned, in 2050 we will be facing a world economy four times larger than today that uses about twice as much energy (OECD, 2012; Randers, 2012).

Data also shows that human demand on the environment is unequally distributed. In 2006, only 16 per cent of the world population accounted for more than three quarters of global consumption expenditure (Assadourian, 2010). OECD countries, representing less than a fifth of the world population, account for more than half of the world electricity demand (OECD, 2011), while about 1.5 billion people completely lack electricity (UNDP, 2011).

In light of this inequitable distribution of access to resources, it was recommended prior to the Rio+20 Summit to complement the United Nations' Millennium Development Goals (MDGs) with Millennium Consumption Goals (MCGs), which focus on "managing the consumption patterns of the rich" (de Zoysa, 2011: p. 1). But what forms of consumption — understood both in terms of individual consumer actions and structural consumption-production systems — are sustainable? The arguably most widely spread definition of sustainable consumption stems from an international gathering of government officials and NGO representatives in Oslo in 1994 at which *sustainable consumption and production* was established as the "use of goods and services that respond to basic needs and bring a better quality of life, while minimising the use of

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natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardize the needs of future generations" (Norwegian Ministry of the Environment, 1994). As argued elsewhere, this definition has been criticised in the scholarly literature for a number of shortcomings: namely, for lacking a clear distinction between consumption and production, its terminological vagueness and for relating essential ideas to specific and arbitrary measures (see Fischer et al., 2012).

An alternative approach to overcome these shortcomings would be to recollect two overarching normative criteria already mentioned in the Brundtland definition: the concept of basic needs and the idea of limitations (World Commission on Environment and Development, 1987: p. 54). Sustainable consumption, in its essential meaning, is consumption that contributes to creating or sustaining external conditions that allow all human beings today and in the future to meet their objective needs (Fischer et al., 2012). As with the overall idea of sustainability, the process of specifying sustainable consumption is subject to controversial debate. In the search for transition pathways to more sustainable productionconsumption systems (Lebel and Lorek, 2008), a considerable number of approaches and measures have been proposed as possible solutions. There is ample experience with and research on 'hard' instrumental measures, such as marketisation and regulation approaches (Jerneck et al., 2011). These also include legislative, regulatory and juridical as well as financial and market instruments (Dalal-Clayton and Bass, 2007; Kaufmann-Hayoz et al., 2001). Most scholars suggest complementing these approaches with 'soft' persuasive measures that aim to change social norms and people's willingness to adopt new attitudes and behavioural patterns (Jackson and Michaelis, 2003).

Education, commonly categorised as a 'soft' and persuasive policy instrument, is often also credited with the potential to facilitate the formation of a sustainable society that is both democratic and deliberative (Barth and Fischer, 2012). A number of important policy papers emphasise the need for an educational response, describing education as "one of the most powerful tools for providing individuals with the appropriate skills and competencies to become sustainable consumers" (OECD, 2008: p. 25). In the past ten years, consumption has become an increasingly important theme in pedagogical discourse across different educational sectors. Particularly in the context of the United Nations World Decade on Education for Sustainable Development (2005—2014), a number of pilot projects and best practice examples have emerged that focus on the promotion of sustainable consumption through education and its institutions.

Higher education plays a crucial role in the context of sustainable development in as much as it has a significant influence on the way in which future generations will deal with the social challenges ahead. Emphasising how these challenges go beyond an education for developing future career profiles, Hopkins et al. (2005) state that universities "are called on to teach not only the skills required to advance successfully in a globalised world, but also to nourish in their students, faculty and staff a positive attitude towards environmental issues and cultural diversity" (Hopkins et al., 2005: p. 13). In order to prevent this from being misunderstood or misused in a purely instrumental or even in an indoctrinating way, approaches are called for which focus on "building capacity to think critically about [and beyond] what experts say and to test sustainable development ideas" as well as "exploring the contradictions inherent in sustainable living" (Vare and Scott, 2007: p. 194).

Apparently, the transition from the classic ivory tower focus on disciplinary development towards a culture that strengthens the link between academia and other actors in regional sustainability initiatives is not at all an easy undertaking and calls for democratising research processes, providing communicative space and tools for

democratic change and the transformation of power relationships (Adomßent, 2008; Barth et al., 2011). At a societal level this transition involves nothing less than a system-wide innovation, with many stakeholders involved, each with their own values and preferences, strategies, resources and perceptions of the future (Loorbach, 2007).

#### 2. Learning for sustainable consumption in higher education

Documents like the Talloires Declaration (ULSF, 1994) or the Copernicus Charta (COPERNICUS Alliance, 1993) indicate how early the tertiary sector responded to the challenges arising out of the global consumption crisis. While the early phase was characterised by relatively independent efforts to integrate sustainability into organisations' operations (e.g. Delakowitz and Hoffmann, 2000; Ferrer-Balas et al., 2008) and to include sustainability in curricula (e.g. Barth, 2013; Lidgren et al., 2006; Lozano, 2010), the focus of the debate has since shifted towards more concerted and integrated efforts such as 'whole-of-university' approaches (McMillin and Dyball, 2009) and community outreach (Zimmermann et al., 2011). A number of tools and instruments have been developed to monitor progress towards the implementation of sustainability principles in all facets of an organisation (e.g. AASHE, 2010; Roorda, 2001; ULSF, 2009). These tools and instruments provide solid and well-tested approaches to implementing sustainability on the organisational meso-level of the education system.

However, the question of how learning processes relating to sustainable consumption can be promoted on the micro-level among university students in educational organisations still constitutes a fairly under-researched area. Learning for sustainable consumption aims first and foremost at developing knowledge and competencies so that individuals are able to make informed decisions regarding consumption. It is thus not only the development of factual knowledge ('knowing-that') but also procedural knowledge ('knowing-how') that is at stake. Consequently, a goal of education for sustainable development is to develop *key competencies* to actively engage in consumption-related decisions as a private consumer and a public consumer citizen (Barth and Fischer, 2012; cf. Barth et al., 2007; Frisk and Larson, 2011; Rieckmann, 2012; Segalas et al., 2010; Wiek et al., 2011).

Students develop such competencies not only inside the class-room but also as part of informal learning processes in their daily life experiences on campus and elsewhere (Barth et al., 2007). In this paper we want to explore how learning for sustainable development can be understood as the interplay of two different forms of learning: learning as an active involvement in consumption-related decisions and activities and learning in a more passive manner based on experiences of existing norms, rules and practices in the immediate environment.

This conceptual paper analyses how such a dual perspective on students' consumer learning in higher education can be substantiated by drawing on the concepts of experiential and service learning. A case example of a series of project-based seminars is presented that illustrates how the conceptual approach can be applied in practice. We critically discuss the case example in light of the principles of a service-learning approach and we reflect on how the concept of transdisciplinary collaboration can enrich the idea of service learning. This paper concludes with a critical appraisal of the approach for moving forward the agenda of higher education for sustainable development in the context of consumption and a call for further research.

#### 2.1. Learning to change

The first and most obvious way of addressing learning for sustainable consumption in higher education organisations is to do so

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