Evaluating the engagement of universities in capacity building for sustainable development in local communities

Chris Shiel [a], Walter Leal Filho [b,*], Arminda do Paço [c], Luciana Brandli [d]

[a] Faculty of Science and Technology, Bournemouth University, Dorset BH12 5BB, UK
[b] Research and Transfer Centre "Applications of Life Sciences" Hamburg/Hamburg University of Applied Sciences, Lohbruegger Kirchstraße 65, 21033 Hamburg, Germany
[c] University of Beira Interior, Departament of Business and Economics, Estrada do Sineiro s/n, 6200-209 Covilhã, Portugal
[d] Passo Fundo University Mestrado em Engenharia Civil e Ambiental, Brazil

ARTICLE INFO

ABSTRACT

Universities have the potential to play a leading role in enabling communities to develop more sustainable ways of living and working however, sustainable communities may only emerge with facilitation, community learning and continual efforts to build their capacities. Elements of programme planning and evaluation on the one hand, and capacity building on the other, are needed. The latter entails approaches and processes that may contribute to community empowerment; universities may either lead such approaches, or be key partners in an endeavour to empower communities to address the challenges posed by the need for sustainable development. Although capacity building and the promotion of sustainable development locally, are on the agenda for universities who take seriously regional engagement, very little is published that illustrates or describes the various forms of activities that take place. Further, there is a paucity of studies that have evaluated the work performed by universities in building capacity for sustainable development at the local level. This paper is an attempt to address this need, and entails an empirical study based on a sample of universities in the United Kingdom, Germany, Portugal and Brazil. The paper examines the extent to which capacity building for sustainable development is being undertaken, suggests the forms that this might take and evaluates some of the benefits for local communities. The paper concludes by reinforcing that universities have a critical role to play in community development; that role has to prioritise the sustainability agenda.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

The quest for fostering capacity building for sustainable development at universities is not new, although as this paper will argue systematic evaluation of initiatives and programme planning may be either lacking, or ad hoc. As early as 1999 for instance, the Association of University Leaders for a Sustainable Future (ULSF) indicated a variety of areas in which universities could be involved in sustainable development (e.g. management, planning, development, research, operations, purchasing, transportation, design, new construction, renovation, community service and outreach education, or capacity building) (ULSF, 1999 in van Weenen, 2000). Today, capacity building activities are focused on two main areas: activities towards building capacity among students and staff towards a more sustainable university and campus (with training

on matters such as energy efficiency, the reduction of waste and CO_2 emissions) and externally-oriented activities aimed at building capacity within a local community, to promote sustainable development amongst a wider group of stakeholders. The latter is the matter of interest and focus of this paper.

One of the main documents encouraging university-community cooperation is the "University Charter for Sustainable Development" produced by COPERNICUS. The document points out "... universities' duty to propagate environmental literacy and to promote the practice of environmental ethics in society, in accordance with the principles set out in the Magna Charta of European Universities ... and along the lines of the UNCED recommendations for environment and development education ...". The Charter asks universities "... to commit themselves to an on-going process of informing, educating and mobilising all the relevant parts of society concerning the consequences of ecological degradation ..." (CRE-Copernicus, 1994).

The original Copernicus document was signed by about 300 European higher education institutions (HEIs), confirming

their commitment to the implementation of sustainability concepts within their own universities (University of Rostock, 2014).

Today, most of the activities in the university-community nexus fall within two main areas: educational collaborative models for environmental and sustainability education, and the implementation of projects to identify and promote sustainable and economic development in a community. These two issues may be explored in turn.

In terms of *collaborative models for environmental and sustainability education*, the community provides the context of the learning environment and may play a central role in the learning process. Through community engagement, students can experience first-hand the inter-connections between environmental issues and develop their understanding of how individuals and communities interact. Furthermore, community sites provide ideal locations for class projects, applied and service learning, and internships (Schmitz, Stinson, & James, 2010), whereas academic institutions, as members of the community, are core to educating citizens, professionals, innovators, and problem-solvers.

In such circumstances universities may further the co-creation of community change by contributing with research, technical skills, human resources, and emerging knowledge. The various Faculties at a given university could offer theoretical, research, and technical knowledge, that would usefully support community members in designing and implementing projects (Schmitz et al., 2010). Universities committed to community engagement might establish reciprocal partnerships that could improve the creativity and responsiveness of both (Boyer, 1996 in Schmitz et al., 2010).

As far as the *implementation of projects* to identify and promote sustainable and economic development is concerned, a whole-community approach is needed, which requires the participation of a variety of organisations and/or the establishment of alliances at the local level. The key constituencies and strategic themes of the partnership may be reflected in a community engagement strategy. In order to succeed, they need to engage the following stakeholders:

- local people, who reside near a University or College, with a particular focus on the area within a 10–20-mile radius;
- local government and regional bodies;
- locally based voluntary and charitable organisations;
- local and regional business.

Strategic elements that would catalyse the promotion and enhancement of capacity building for sustainable development at a community level include enabling university facilities to be used by a variety of stakeholders such as the public and local schools, and providing university support for local activities and partnerships, which might represent a move away from the 'Ivory Tower' cliché, to a situation where the university's contribution is appreciated by a broader range of stakeholders.

Exemplifying how this works in practice, the University of Rostock (Germany), which is a signatory of the COPERNICUS-Charta (University of Rostock, 2014), established some time ago a working team titled "Agenda 21" to develop community based capacity building strategies on sustainable development in the following fields:

- Coordination of existing Agenda 21-activities at the University of Rostock and interlinking with related activities in Rostock city and region.
- Support for sustainable development in the region via knowledge and technology transfer and.
- Support of and contribution to additional partnerships with urban and regional institutions.

Activities that were implemented include:

- The organisation and implementation of exhibitions on the topics Sustainability and Agenda 21 with regional partners
- Organisation and implementation of conferences or symposia – conference series "The University of Rostock as active partner of municipalities and regions for a sustainable development" and
- Contribution to urban and regional working teams towards the Local Agenda 21.

However, the above illustration appears to be an exception rather than the norm, analysis of available information and published reports shows that despite the fact that a range of activities aimed at increasing the potential of universities to engage with capacity building for sustainable development in communities exists, their frequency is still rather limited. There is a "relative lack of research focused on the processes by which higher education institutions establish and sustain community partnership" (Hart, Northmore, Gerhardt, & Rodriguez, 2009, p. 45). The subsequent parts of this paper will seek to explore this trend, outline the situation and propose what needs to happen as a consequence.

2. Capacity building and universities: the need for research

The global issues and challenges facing humanity (population growth, climate change, technological developments, and economic globalization, for example) are extensively referred to in the literature. The impacts of current production and consumption patterns, resource scarcity, growing inequality, and changes in political and environmental dynamics (United Nations, 2012) underscore the need to build capacity for more sustainable development (SD) and to foster the creation of sustainable communities and a sustainable society.

If the goal is to achieve sustainable development, then capacity building is seen as one of the main ways of working towards that achievement (UNEP, 2002). This is explicit in the various declarations on sustainability for higher education, where the importance of learning, communication, and also capacity building for sustainable development (Lozano, Lukman, Lozano, Huisingh, & Lambrechts, 2011; Moore, 2005; Tilbury, 2012) is repeatedly confirmed and writ large. Building capacity for sustainable development in education is also one of the key areas within the international implementation scheme for the United Nations Decade of Education for Sustainable Development (O'Rafferty, Curtis, & O'Connor, 2014). Universities have an important role in contributing to sustainable development through educating their students and preparing them to address the challenges; they also need to build capacity within their own structures and systems so that they operate more sustainably and, finally, they have a role to play externally by contributing (through education and research) to building capacity with stakeholders across their communities.

According to the WRI (2008) building capacity in local communities is becoming more critical in a global world, where resources are becoming scarce and methods and technologies are changing. Merino, Carmenado, and de los (2012) emphasise that building capacity through the community contributes not only to social development, but also to economic growth. These arguments support the need for research that explores how higher education institutions (HEIs) are working within their communities in terms of building capacities for sustainability, but also to show advances and ways forward.

However, capacity building is not an easy concept (Brown, LaFond, & Macintyre, 2001) and is thus, challenging to research. Spoth, Greenberg, Bierman, and Redmond (2004) define capacity-building