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HIGHER EDUCATION AND SUSTAINABLE DEVELOPMENT

Abstract:

This paper sets out to clarify and contribute to the nature and purpose of higher education. It is often argued that Universities exist to provide future society with the skills based it will require. In another view, Universities exist not only to service the economy but to contribute to the intellectual and moral improvement of the human condition.... This paper explores the relationship between Higher Education and sustainable development, examines the fundamental question - that of what higher education is. The proper purpose of Higher Education is outlined, and set out the role of higher education institutions in promoting sustainable development.

Keywords:

Higher Education, Sustainable Development and University

INTRODUCTION

It is a historical fact that education plays a necessary and decisive role in the economic, social and political development of a country and impacts each area to a significant degree. There has been growing international interest in the role of higher education in fostering a sustainable future. The relationship between education and sustainable development was first recognized on an international level at the 1972 Stockholm Conference on the Human Environment. Principle 19 of the Stockholm Declaration calls for environmental education from grade school to adulthood to "broaden the basis for enlightened opinions and responsible conduct by individuals, enterprises and communities in protecting and improving the environment in its full human dimension."(UNESC2002:12) Universities can model sustainable practices as they engage in research and teaching. They cannot afford to be disinterested, detached observers, but must bring their resources to bear on the search for sustainable development solutions; and that this can indeed be achieved by integrating learning and research with the principles and practices of conservation and sustainability.

SUSTAINABLE DEVELOPMENT

Many debates have centred on the notion of sustainable development and how the concept is most properly interpreted. Sustainable development is 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (WCED 1987: 43). In this sense, as Lafferty and Meadowcroft point out, the sustainable development agenda can 'be understood as a common challenge faced by all nations. And yet it is also a challenge which would imply very different policies and priorities according to the developmental stage already attained' (2000: 11–12).

Sustainability involves conserving the world's resources for future generations. It also means adopting practices that contribute to a balanced and fair society, which complements and supports its environment, as well as working to achieve economic stability and success. We are ever more becoming aware of the need to think about the future consequences of our actions and not just live in the present. Our decisions and actions today impact our ability to have the same degree of choice in the future, thus, sustainability is an important concern for private individuals, business, and government. A great deal of attention has already been targeted at the environment to ensure that organizations consider human ecology when planning for future development. However, the impact of globalization, modernization and arguably capitalism on people and communities is increasingly drawing attention as an essential consideration in the growth plans of socially responsible policies for corporations and the state. Individual attitudes towards human development, freedom of choice, and the competing objectives of conservation and growth can determine the well-being and long term viability of communities

The Brundtland Commission defined sustainable development as a pattern of resource use that "meets the needs of the present without compromising the ability of future generations to meet their own needs." In order to preserve the natural world, economic, social and environmental factors must be jointly considered and harmonised. Formal and informal learning, through raising awareness and influencing behaviour, has

a pivotal function if sustainable development is to be achieved. This role is especially pronounced in the realm of higher education because at this level students are being prepared to enter the labour market and emerge with skills to support green economies and as messengers of ideas.

Progressively, universities and other higher education institutions have been incorporating sustainable development values and practices into their core activities of teaching and research, institutional management and operational systems. However, the debate thus far has focused primarily on the rationale and reasoning for why sustainable development needs broad adoption.

The term „sustainable development" became prominent after the Rio Earth Summit in 1992 which prioritised global environmental discussions and improved upon the initial framework introduced at the United Nations Conference on the Human Environment, Stockholm in 1972. The resulting Rio Declaration on Environment and Development, however, advocated the role of education in preventing ecological degradation (Cleveland & Kubiszewski, 2007:15). There are many definitions of the term „sustainable development", but the most widely accepted is the one used in the publication „Our Common Future", sometimes referred to as the Brundtland definition:

"Development which meets the needs of the current generation without compromising the ability of future generations to meet their needs" (UN, 1989:09).

This definition has the advantage of describing a future that all countries could engage with, but the disadvantage of vagueness and contestability. Furthermore, as the definition is not instructive, a universal model of sustainability and sustainable development application has not yet been developed. In order to implement sustainable development, it became necessary to develop the ideas further in terms of defining what sustainable means and the relevance of development and distinguishing it from environmental education. For this paper, sustainability is understood as the end state and sustainable development is understood as the process of getting there.

An additional challenge was how to unpack the elements of a new type of development. Environmentalists and researchers recognised, though, that development patterns were harming the environment and that social problems were emerging. In an attempt to address these imbalances, a variety of models and frameworks were created to identify priority areas in sustainable development and ways to achieve progress by identifying economic, social and environmental goals. These three elements compose the three pillars of sustainable development, also identified at the Rio Earth Summit, as a means to clarify the definition of sustainable development and its application. Each one of the three pillars carries similar importance in creating and maintaining stability and balance. People, the planet and profits are all inextricably linked and interdependent, and must therefore be synchronised accordingly.

The philosophical underpinning

The varieties of approaches to sustainable development are an indication of differing beliefs about the natural world held in different societies, cultures and historical settings and at the individual level. The values that are attributed to nature range across a broad spectrum, from an 'anthropocentric' to an 'ecocentric' position. At the extreme end of the anthropocentric view, the wealth of nature is seen only in relation to what it can provide for the service of humankind (O'Riordan 1981:32). In contrast, ecocentrics hold the view that nature has intrinsic value. It is aimed at creating a partnership, based on

reciprocity, between human beings and nature. These two different perspectives have important implications for the design and implementation of policies. The ecocentric approach focuses on the community level and espouses small-scale, locally based technology. The objective is to maintain social and communal well-being and not merely the harmonious use of natural resources (Baker *et al.* 1997:40). In contrast, the anthropocentric approach can be distinguished by its optimism over the successful manipulation of nature and her resources in the interests and to the benefit of humankind. With its emphasis on human needs, promoting sustainable development is, in this formulation, a way in which to ensure that development (a human activity) is sustainable over time. While this may involve the protection of the natural resource base, the rationale for this protection is essentially a human-centric one: it is protected because it is necessary for our well-being. Nevertheless, ranging attitudes towards nature along a continuum from anthropocentric to ecocentric is useful. At one extreme, nature is seen only in relation to its use to human beings. Moving along the continuum, sustainable development becomes a challenge to devise a more environmentally friendly approach to planning and resource management. Moving further along.

As noted earlier, the concept of sustainable development was originally introduced at the first Earth Summit in 1972 in Stockholm. During this meeting of government representatives and non-governmental organisations, education was identified as fundamental to the successful achievement of sustainable development, and a point that has been reiterated by numerous governments and practitioners in the intervening years. Since then, progress has been variable and generally unsatisfactory. However, a badly needed injection of urgency was administered in 2005, when the UN adopted a Decade of Education for Sustainable Development (DESD) (UNESCO, 2005:29). The goal of the DESD is to: “integrate the principles, values, and practices of sustainable development into all aspects of education and learning.” The idea being that, such an input will “encourage changes in behaviour that will create a more sustainable future in terms of environmental integrity, economic viability, and a just society for present and future generations.” Recognising that human behaviour can be altered to limit harmful effects on the environment, sustainable development philosophy has evolved to include more than just recycling and constructing buildings with solar panels, but encompasses how individuals and communities behave and interact with the Earth.

The DESD covers all levels of formal and informal education, but for this paper formal higher education is chosen as the level of interest because of its influence on graduates who go on to become leaders in their communities, organisations and countries. For this reason, it is considered fundamental to the strategy for achieving sustainability. Sustainable development is not an ecological problem, nor a social problem nor an economic problem. It is an integrated feature of all three. Effective investments in sustainable development retain and encourage the adaptive capabilities of people, of business (enterprises), and of nature. (Holling 1995: 65)

HIGHER EDUCATION AND SUSTAINABLE DEVELOPMENT

Higher education has a catalyst role vis-à-vis education for sustainable development and the building of a Learning Society. It has a special responsibility to conduct the scholarship and scientific research necessary to generate the new knowledge needed and train the leaders and teachers of tomorrow, as well as communicate this knowledge

to decision makers and the public-at-large. The ultimate goal of education for sustainable development is to impart the knowledge, values, attitudes and skills needed to empower people to bring about the changes required to achieve sustainability. Quality education for sustainable development needs to be based on state of the art knowledge and to continually review and update curricula and teaching materials accordingly. It needs to serve teachers, other professionals and all citizens as life long learners to respond to society's challenges and opportunities, so that people everywhere can live in freedom from want and fear, and to make their unique contribution to a sustainable future.

UNESCO (2004:16) identifies two unique opportunities for Higher education institutions to engage in sustainable development. First, "Universities form a link between knowledge generation and transfer of knowledge to society for their entry into the labour market. Such preparation includes education of teachers, who play the most important role in providing education at both primary and secondary levels. Second, they actively contribute to the societal development through outreach and service to society." (Cortese2003:43) seconds this notion, stating "Higher education institutions bear a profound, moral responsibility to increase the awareness, knowledge, skills, and values needed to create a just and sustainable future. Higher education often plays a critical but often overlooked role in making this vision a reality. It prepares most of the professionals who develop, lead, manage, teach, work in, and influence society‟s institutions." Thus, Higher education institution have a critical and tangible role in developing the principles, qualities and awareness not only needed to perpetuate the sustainable development philosophy, but to improve upon its delivery.

The Lüneburg Declaration (2001:11) called on higher education institutions, NGOs and other stakeholders to:

a Ensure the continual review a. and updating of learning materials to reflect the latest scientific understanding of sustainability;

b. Ensure that the re-orientation of teacher education towards sustainable development continues to be given priority as a key component of higher education;

c. Provide continuing education to teachers, decision-makers and the public at large on sustainable development;

d. Encourage all educational institutions to include in their activities a strong component of reflection on values and norms with respect to sustainable development;

e. Raise awareness and increase understanding of the importance and relevance of technology assessments and risk assessment;

f. Promote the creative development and implementation of comprehensive sustainability projects in higher education, and all other levels and forms of education;

g. Increase attention to the international dimension and provide more opportunities for intercultural exchange in the learning environment;

h. Increase a focus on capacity development and intensified networking among institutions of education; and

i. Promote stronger integration of training and research and closer interaction with stakeholders in the development process.

University graduates perform important roles in society. One of these is as citizens. University teaching informs future citizenship behaviour by design or by default. University research may or may not be linked to teaching, and has impacts on the wider context of social and economic policy, legal process, technological change and so on – within which lives are lived, citizenship practised and further learning achieved. Both

teaching and research are (increasingly) international in nature and therefore bear upon issues of global citizenship, policy, structure and lifelong learning. Global citizenship crucially involves the awareness and balancing of competing perspectives.

Universities value knowledge and for that reason they demand clarity about what is known and how. Universities also value the pursuit of knowledge and must, therefore, insist on its present and on-going incompleteness – in the face of those who,for whatever reason,wish to extrapolate to final,general truths. Sustainable development touches on all aspects of our intellectual lives and will require us to husband what we know, eschew glib certainties and confront the future with an open, learning orientation. To this extent there is an identity of interest between higher education and sustainable development.

Obviously, since the 1972 Stockholm Declaration, the political importance of the role of higher education in sustainable development has become firmly recognized. Also, the scholarly study of higher education and sustainable development has become well established, with its own dedicated journal, the *International Journal of Sustainability in Higher Education*, and the number of academic papers on higher education and sustainable development has grown exponentially. However, what is of more recent origin are the notions that higher education institutions should more actively engage with the communities in which they are located (and do so on a basis of equality) and that sustainability itself extends beyond the disciplines of agriculture, engineering and related fields and is a by-product of social interaction. In one sense, it is a mistake to consider participatory development and sustainable development as separate concepts, for there can be little (if any) truly sustainable development without the active participation of those involved. The future rests on participatory sustainable development in which higher education institutions have a key role to play. According to some, the pursuit of sustainable development in the absence of the participatory element may in fact be counterproductive or even detrimental.[Wals and Jickling 2002: 222).

CHALLENGES AND OPPORTUNITIES FOR IMPLEMENTING SUSTAINABLE DEVELOPMENT

The most frequently cited challenges can be summarised as:

A] Lack of strategic leadership in Higher education institutions and government

B] Low demand from most internal and external stakeholders, including students and employers

C] Academic and professional silos which inhibit cooperative efforts across disciplines and institutions

D] Poor communication within the higher education institution regarding the meaning and concept of sustainable development and how it applies

Whereas the list of challenges seems to focus on what might be considered traditional challenges to organisational change (such as funding, time and capacity).

The opportunities include:

A] Inter-disciplinary nature of research in sustainable development

B] Demand from internal and external stakeholders, including students and employers

C] Collaborations/partnerships to work together

D] Networks to learn from each other

E] A proactive unit or an individual within the HEI driving sustainable development with a clear plan

In comparing the challenges and opportunities, the overlaps between them become apparent. Employer and student demand is seen as a potential opportunity to influence innovative teaching styles, course offerings and degree requirements, but is obviously not providing the drive needed for sustainable development as its absence is also cited as a challenge. As different stakeholders understand sustainable development in different ways and seek different outcomes, the most significant challenge is resolving the competing objectives and divergent functions of the Higher Education Institutions.

Conclusion

Universities are open systems. They are discrete entities, capable of planning their actions and coordinating their internal component parts. At the same time they have fluid and permeable boundaries across which they interact with a wide range of external agencies and Groups. Most of these interactions can be classified as teaching, research and administration.

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Initiating and maintaining sustainability in the classroom, on the campus and in the community remains a major challenge on a global scale. In order to protect and preserve natural resources, sustain a vibrant economy and cultivate a high quality of life, higher education institutions must respond rapidly and create momentum for the movement. Higher education institutions can achieve all this and contribute to „green growth" in a number of ways from their role as an educator – contributing to skills needed to develop green economies, their role as a place for research and innovation – contributing to knowledge creation and underpinning business research and development to produce the green technologies and services for a green economy, but also in their role as a consumer of resources.

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