

## ABSTRACT

### SUSTAINABLE PATHS IN HIGHER EDUCATION

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Depending on the Conference Scientific Committee interest this paper could have two presentation possibilities. A broader view of different examples of good practice on sustainability around the world; or a focused and long explanation about some specific experiences that could be relevant for the Africa context.

#### Sustainability

Sustainable development does not arise alone, but must be promoted through analysis and long-term objectives (Jansen, 2008). To do so, higher education must play a dual role: it has the freedom to inform the attitudes, knowledge and develop the skills necessary to lead this process and encourage and promote research on Sustainability.

Sustainability is not an independent specialty, but must be integrated into all operations, and departments. This integration will require a rethinking of the entire educational system and its values and its rules. Above all, it is hoped that the boards of the institutions of higher education will acknowledge the necessity and urgency of Sustainability, and will be convinced of the role of higher education in promoting Sustainability and will support initiatives to integrate Sustainability in higher education.

To achieve this vision a strategy will be required that will show Higher Education Institutions the way forward in engaging with this issue so that new methodologies can be developed which have themes of sustainability at their core.

Higher Education Institutions (HEIs) around the world are attempting to respond to this emerging challenge. At the **Universities and Social Commitment Observatory** from the **Global University Network for Innovation (GUNI)** it is possible to find examples of **good practice** in some HEIs and international organizations specifically focused on **Sustainability and Higher Education**: <http://www.guni-rmies.net/info/default.php?id=77>. This paper will draw attention to some examples of good practice from GUNI's Observatory.

#### Curriculum in higher education institutions

Higher education needs to be set in the context of the day in which we live and the complex issues that are shaping the world today.

The goal of education in the arena of sustainability should be about the transformation of paradigms and the encouragement for individuals and societies to live and to be in ways that are ethical, responsible and sustainable.

One possible opportunity could be the introduction of new content in higher education programmes and the introduction of a cross-curriculum approach which is more problem-oriented and more closely connected with the challenges and concerns of the real world and the problems people face in it. Another example of the way forward would be for those responsible for human resources in HEIs taking these requirements into consideration when reviewing the requirements for the recruitment of new positions and internal promotion, and offering the opportunity to existing teachers to acquire qualifications and experience in the area of ~~sustainability~~. In this context, ~~six~~ **universities in Southern Africa** participate in a network of 13 institutions aiming to include sustainable development aspects in their curricula. The good practice "achieving sustainable development through curriculum transformation in higher education institutions of Southern Africa" support

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environmental education processes through enabling decentralized networking of environmental education practitioners within the **Southern African Development Community (SADC) region**.

Other example is carried out by **Kingston University (UK)**: the "Disciplinary Integration in Research and Teaching to promote Sustainability Models". Within the international framework that establishes the benchmarks for developing programs to promote sustainability, the **Higher Education Funding Council for England (HEFCE)** has launched a funding scheme to further curriculum greening in institutions of higher education. The purpose of government backing is to enable universities in the United Kingdom to become leaders in sustainability education by applying innovative teaching programs.

### **Research for Sustainable Development**

Research in higher education should respond to the problems of society. The new research and teaching programs are creating the need to describe and analyze the emerging world. Each company requires different sets of knowledge and research. The contribution of knowledge and social policy must take into account the uniqueness of each society and their stage of development. Moreover, existing knowledge should be considered an international or global public good. Strategies must be developed to systematically gather information on science and technology worldwide. The main strategic challenge higher education institutions face is the recognition of other sources of knowledge about contemporary art and the human and social development. The conflict underlying these different epistemological traditions of production, dissemination and use of knowledge has become one of the main reasons for the disconnection between the institutions of higher education and human development issues.

In this sense, the **Center for Sustainable Building Research (CSBR)** of the **University of Minnesota (USA)** was established as an official unit within the College of Architecture and Landscape Architecture (CALA) in 2001, although its staff has been conducting building research at CALA since 1997. The CSBR believes it is necessary to establish interdisciplinary collaboration with other units in the College of Architecture, as well as with other colleges in the university, in order to gain a wider perspective on the concept of sustainability.

### **Science that studies science**

Most of the implications of science and technology with regard to human development can be grouped under one or more of these three sections: ethical, environmental and social. The universities also have the task of developing the critical discourses and analytical structures with which human societies can continually reflect on the products of their ingenuity. Globally, a very small percentage of all the resources spent on science and technology is intended to take seriously their ethical, environmental and social dimensions. The first step is to recognize that science, technology and society are subjects of research and teaching that require urgent attention by themselves. The second step is to provide institutional resources to systematically study and teach.

Focusing on such pressing practical and policy questions in health, environment and science the **Knowledge, Technology and Society (KNOTS) team** at the **Institute of Development Studies** from the **University of Sussex** (Brighton, UK) are working on such issues as: sociological perspectives on Science, Technology and Sustainability; Science, Knowledge and the Politics of Development; Science and Policy Processes: Issues in Health, Environment and Agriculture.

### **The link with civil society**

Knowledge is increasingly inseparable from citizenship and democracy. It is necessary to democratize the expert knowledge and provide expert advice and a pluralist democratic institutions and citizens in general. While universities no longer dominate the field of knowledge production, they remain crucial to make the between knowledge and citizenship. Universities can also serve as reliable agents of society and respond to their needs, engage responsibly in the struggle for human rights and social justice. Universities in developing countries must sometimes stand firm against threats and take risky and courageous positions. It is crucial to increase the capacity to establish a compromise between practice and research in matters relating to human and social development.

Many civil society organization and universities around the world are working on this issue. This paper will highlight some examples of good practice from GUNI's Observatory such as the **Social Innovation and Entrepreneurship Program from Stanford University** (USA). This program is working with **government agencies, utilities, the Red Cross and the private sector**. It develops innovative, technology-based solutions with a potential for social benefit in a global scale. For instance, The Light Brigade, created a Sustainable cheap home lighting system with a solar panel that is being used in India, Nepal, Sri Lanka and Afghanistan. Some other experiences identified by the Universities and Social Commitment Observatory: <http://www.guni-rmies.net/info/default.php?id=77>