Higher Education for Sustainable Development

Education empowers people for their role in society and therefore is of vital importance to promote the sustainable development of our global community. The Millennium Development Goals, adopted by the UN General Assembly in 2000, and the WEHAB Initiative proposed by the UN Secretary General Kofi Annan during the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg both underscore the role of education in improving peoples’ lives. While it is broadly understood that literacy and education for all plays a crucial role in preparing people for their future in a highly connected, interlinked and globalized world; higher education in particular occupies an important position in shaping the way in which future generations learn to cope with the complexities of sustainable development. In nine of the forty chapters, Agenda 21 noted the key role universities have to play to achieve sustainability.

Universities form a link between knowledge generation and transfer of knowledge to society in two ways. First, they prepare the future decision-makers of 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.

Universities as actors in society

Globalisation has spurred technological, economic, social and cultural change as well as the greater mobility of capital, technology, information and labour. This phenomenon has created a growing demand for society’s capacity to acquire, process, disseminate and apply knowledge. Universities, as important centres of research and learning, play an important role in this context. In addition to fundamental research, universities also have to undertake innovative, action-oriented research. They should be particularly attuned to the provision of appropriate knowledge and skills relevant for sustainable development to the local community as local knowledge centres. In addition to their traditional teaching functions, universities must consider their role in retraining school teachers as well as other local professionals to contribute to learning for sustainable development. Universities are important actors in the community, as employers, purchasers and service users; they are also businesses where prudent use of resources saves money and safeguards reputations. Thus, universities can be perceived as models for society in the pursuit of sustainable development. Universities are expected to contribute to innovation, to contribute to reflection on values and ethics, and to contribute to the transformation to a more sustainable society. The provision of knowledge as a "public good" is one of the tasks of higher education, and unhindered access to knowledge is a prerequisite for sustainable development. Of particular importance are qualitative factors imparted by the education system, such as orientation towards innovation and learning, creativity and the willingness to take risks.

In considering the roles and functions of the university in promoting sustainable development, following issues should be particularly addressed:

- increasing the relevance of teaching and research for the societal processes leading to more sustainable and discouraging unsustainable patterns of life,
- improving the quality and efficiency of teaching and research,
- bridging the gap between science and education, and traditional knowledge and education,
- strengthening interactions with actors outside the university, in particular with local communities and businesses,
- introducing decentralized and flexible management concepts.

Higher Education and knowledge transfer to society

Societal problems are almost always complex problems that ask for multidisciplinary approaches. The challenge for higher education institutes is to create rich learning environments that prepare learners for their roles in society. This implies that learning environments should:

- offer access to scientific knowledge of good quality.

1 WEHAB: Water and sanitation, Energy, Health, Agriculture and Biodiversity and ecosystem management.
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- enable students to obtain the competences needed to work together in multi-disciplinary and multi-cultural teams in participatory processes, and
- bring the global dimension into individual learning environments.

Through the processes of education, outreach and service to community and region, universities and other higher education institutes constitute bridges between knowledge generation and application of this knowledge in society. This bridging function is of great importance for innovation, development and creation of welfare. The learning environments created in higher education should enable learners to understand their physical and social environment; to develop a positive attitude towards cultural, environmental diversity, and life-support ecological processes; and to use their knowledge and attitude in a way that is responsible with respect to the well-being of their own society, other societies and of the planet as a whole.

Higher education should not only critically reflect on learning environments and learning processes for students studying for their first degree in higher education, they should also reflect on their role in creating an infrastructure that supports and enhances life long learning processes.

Higher education has a specific place within the educational system because it constitutes the learning environment for all educational professionals including those for primary and secondary education. Therefore it is important that the learning environments for educational professionals provide a source of inspiration for the development of innovative learning processes as well. For that purpose, the opportunities offered by new media and information and communication technology (ICT) certainly deserve attention.

International commitments

Universities and higher education institutes can contribute to sustainable development in several ways. First, by giving sustainable development a place in all university curricula and educational and research programs. By generation and dissemination of knowledge, the university's core competences, they provide literacy on sustainable development to all professionals. Their graduates should be responsible citizens capable of responding to the challenges of sustainable development. Universities can also play a role in reorienting educational programmes at primary, secondary and vocational education. Teacher re-training might be an important role that universities can play. Second, by playing an important role as local knowledge centres for sustainable development in order to help society meet the challenge of sustainable development at the local level. Third, by making sustainable development a leading principle in their own logistics and managerial processes.

These three dimensions form the core of several declarations adopted by university networks in the passed decade: the University Charter for Sustainable Development (Copernicus Campus)\(^2\), the Talloires Declaration (Association of University Leaders for a Sustainable Future, ULSF)\(^3\), the Kyoto Declaration (International Association of Universities, IAU)\(^4\), the Halifax Declaration\(^5\), adopted during Conference on University Action for Sustainable Development in Canada, the Rio Declaration, and the Thessaloniki Declaration\(^6\); adopted by the International Conference on Environment and Society-Education and Public Awareness for Sustainability in Greece, and the Lüneburg Declaration on Higher Education for Sustainable Development\(^7\).

Three associations of universities, COPERNICUS-CAMPUS, ULSF and IAU, have formed together with UNESCO the Global Higher Education for Sustainability Partnership (GHESP), which was launched as a Type-2 Partnership at the WSSD in Johannesburg. This alliance was based on the “Lüneburg-Declaration on Higher Education for Sustainable Development” of 2001 that addressed the WSSD and had a wide acceptance and support from governments, inter-governmental and non-governmental organizations.

During the Johannesburg Summit, eleven foremost educational and scientific organisations -signed the Ubuntu Declaration. The Declaration strives to ensure that educators and learners from primary through higher education are aware of the imperatives of sustainable development. Its aims are to strengthen collaboration with the scientific community, and to successfully integrate the values and principles of sustainable development into their work and way of life.

Higher education and the UN Decade Education for Sustainable Development

Knowledge is a key factor for sustainable development. Yet without the appropriate context and applications, knowledge cannot successfully catalyze sustainable development. Therefore education should be considered as an enabling infrastructure for all sectors of the economy, for democracy and for good governance.

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\(^1\) see www.Copernicus-campus.org
\(^2\) see www. ulsf.org
\(^3\) see www.unesco.org/iau/sd/
\(^4\) see www.unesco.org/iau/sd/halifax.html
\(^5\) see www.unesco.org/images/0011/001177/117772em.pdf
\(^6\) see www.unesco.org/images/0011/001177/117772em.pdf
\(^7\) The Lüneburg Declaration was prepared as a result of the International Copernicus Conference ‘Higher Education for Sustainability – Towards the World Summit on Sustainable Development (Rio+10)’, held at the University of Lüneburg, Germany, on 8-10 October 2001
The challenge for higher education in the context of DESD is to innovate traditional learning environments and learning processes in such a way that they not only support the learning process of children and young adults in formal education, but life long learning, training and informal learning as well. Higher education institutes are challenged to co-operate together in networks that constitute a supportive infrastructure for life long learners. Co-operation between universities is not enough, however. In order to fulfill their outreach/service function at regional, national and international levels as well, universities and higher educational institutes will have to be active nodes in international/national/regional networks with other partners such as primary and secondary schools, vocational education, science centres, small and medium sized companies, chambers of commerce, NGOs, national and regional governments, etc.

The challenges for higher education in the context of the Decade are thus enormous, but the opportunities as well. New media and ICT offer many possibilities to enhance human activities in the field of education by providing flexible access to educational resources, assisting in information management and facilitating active discussions. Emphasis should not only be on competition at a global scale, but also, and even much more, on co-operation and sharing of knowledge at a global scale.

One example of the co-operation, as well as innovative uses of ICT, is the Global Higher Education for Sustainability Partnership (GHESP) Resource Project that could be described as a portal to qualified good practices along the lines of higher education’s contribution to sustainable development (curricula, logistics and managerial practices and outreach/service to society) and the formation of a global network of Regional Centres of Excellence (RCEs) for Learning for Sustainable Development. Such regional centres should organise their activities locally and aim a) at enhancing collaboration between different levels of formal education, i.e. between primary, secondary and higher education and b) at facilitating relations between formal education and local actors relevant for ESD, such as research centres, local businesses, museums, local governments, etc.

**UNESCO’s role: Higher Education and Education for Sustainable Development**

UNESCO has built partnerships with governments, civil society groups, and other UN and international agencies to meet important education and literacy targets. GHESP is such a partnership focussing on the specific role of higher education in the context of the Decade of Education for Sustainable Development.

UNESCO has a dual role in relation to Education for Sustainable Development (ESD): first as a substantive implementer of ESD-accelerating reforms and co-ordinating activities of multiple stakeholders to implement ESD at international, regional and country levels. Second, UNESCO also acts as the lead agency in the promotion of DESD (2005-2014). The Decade offers an opportunity for UNESCO and its partners to advance progress made in human resource development, education and training to promote a more sustainable development of our global society.

The International Work Programme on Education, Public Awareness and Training by the Commission on Sustainable Development was carried out by UNESCO - for chapter 36 of Agenda 21. This work programme has emphasized that institutions of higher education need to promote an interdisciplinary perspective conducive to addressing sustainable development issues in both teaching and research. This topic was taken up at a special session held during the UNESCO World Conference on Higher Education (Paris, 1998), in collaboration with the United Nations University (UNU, the International Association of Universities (IAU) and CRE-COPERNICUS. The declaration and action plan of the conference stressed the importance of sustainable development. This issue was also underlined at the follow-up conference WCHE+5 (Paris, 2003). A discussion kit on the World Conference on Higher Education “Working together to Transform Higher Education” was prepared in 2001 by the Canadian Commission for UNESCO to serve in particular sustainable human development. Some 30 UNESCO Chairs for Sustainable Development have been established in universities around the world. UNESCO will use existing university networks, such as GUNI, for promoting ESD and ensuring effective actions within DESD.

UNESCO is a partner in the GHESP, whose major goals are to develop a global online Resource Project and, in collaboration with United Nations University (UNU), promote regional centres of excellence (RCE). In this capacity, UNESCO will promote integration of the ESD into university activities and integration of ESD at the local level in multiple localities. UNESCO is also a member of the Ubuntu Alliance8, which is a strategic alliance between the world’s leading education and, science, & technology organizations that are working toward achieving the goals of sustainable development.

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8 The signatories of the Ubuntu Declaration: United Nations University; United Nations Educational, Scientific and Cultural Organization; African Academy of Science; International Council for Science; International Association of Universities; Copernicus-Campus, Global Higher Education for Sustainability Partnership; Science Council of Asia; Third World Academy of Sciences; University Leaders for a Sustainable Future; and World Federation of Engineering Organizations