Chapter 32
Transforming University Curricula towards Sustainability:
A Euro–Mediterranean Initiative

Vassilios Makrakis
University of Crete, Greece

ABSTRACT

The UNESCO Chair ICT in Education for Sustainable Development in cooperation with the RCE Crete (Regional Centre of Expertise) on Education for Sustainable Development responding to the UN Decade of Education for Sustainable Development (DESD 2005-2014) took the initiative to establish a North-South Network for embedding sustainability in higher education institutions. A Consortium with 12 universities (six from Europe and six from Middle East) led by the UNESCO Chair and the RCE Crete at the University of Crete prepared a proposal submitted to the Tempus- European Commission programme for funding. The RUCAS (Reorient University Curricula to address Sustainability) project, studied in this chapter, has initiated various activities in the partner countries' institutions, which seem to exert significant curricular changes. The changes include the revision of courses, building the appropriate infrastructure, the development of an online community of practice and the RUCAS Toolkit that are being used as drivers for reorienting university curricula to address sustainability. As a result, a growing number of academics in the partner institutions are concerned with the current sustainability crisis and claim for a transformative shift in what they teach and how teaching is practiced.

ORGANIZATION BACKGROUND

The RUCAS project is initiated by the RUCAS Consortium of 12 Universities and three NGOs financially supported by the European Commission for a three-year period (2010-13) and it is

coordinated by the University of Crete, Greece. More specifically, the project aims to:

1. Support the development of Education for Sustainable Development (ESD) in the Higher Education sector in Egypt, Jordan and Lebanon.
2. Build capacity amongst university staff to embed ESD in curricula and pedagogy.

3. Review and revise undergraduate curricula to address ESD in line with Bologna and Lisbon processes.

4. Assist the coordination and dissemination of ESD policy, research, curriculum reform and practice relating to ESD in the partner institutions that are expected to function as role models in the region.

It adopts a multi/inter-disciplinary and systemic approach contextualized in the three partner countries, namely Egypt, Jordan and Lebanon. The approach entails the following key outcomes:

- Establish continuous dialogue with university faculties regarding directions and means of education for sustainability.
- Develop ESD competences for university students contextualized to the European Union and Arab region.
- Evaluate ESD student competences in the participating Higher Education Institutions (HEIs).
- Establish and apply a Virtual Learning & Management System for running a community of practice in reorienting university curricula to address sustainability.
- Develop an ICT-based training Toolkit on ESD curriculum reform and innovation in Higher Education, reflecting the ESD student competences framework.
- Establish Virtual Training Centers in each partner university to support the process of reorienting university curricula to address sustainability.
- Build capacity amongst university staff to review, revise, infuse and embed ESD in undergraduate university curricula; and institutionalize and disseminate ESD curriculum reform.

- Apply and evaluate the revised university curricula with respect to the ESD student competences.
- Bridge the gap between HEIs and society through the placement of at least 100 students from each of the six partner institutions (600 in total) in the Arab partners in local stakeholders dealing with ESD local/regional issues.
- Promote reorienting HE towards ESD as a viable avenue for "whole institution" curriculum reform, research and teaching across all HEIs in the Arab region and the other member institutions.

Transforming university curricula towards sustainability is defined as a process that integrates ecological integrity, social and economic justice and human wellbeing into course content and instructional methodologies. This definition places faculty at the center in curriculum transformation. It has been argued that learning processes which can enable transformative changes largely depend on academic staff and their capabilities and willingness to support such processes (Hegarty, 2008; Ceulemans & De Prins, 2010; Barth & Rieckmann, 2012). Embedding sustainability in the university curricula is therefore seen as a process and praxis in transforming faculty perspectives and increasing their active global competence and sustainable citizenship. Sustainability does not simply require an 'add-on' to existing structures and curricula, but implies a change of fundamental epistemology in our culture and hence also in our educational thinking and practice. Seen in this light, sustainability is not just another issue to be added to an overcrowded curriculum, but a gateway to a different view of curriculum, of pedagogy, of organisational change, of policy and particularly of ethos (Sterling, 2004, p.50).

Related Content

Climate-Smart Approach for Sustainable Agriculture
Nicolae Suvorovand Alina Mdlina Stancu (2021). *International Journal of Sustainable Economies Management (pp. 46-57).*
www.irma-international.org/article/climate-smart-approach-for-sustainable-agriculture/280144

DICI Engine With Diesel and CNSL Biodiesel Fuel as a Biodegrade Substitute: Alternative and Renewable Fuel
B. Murali Krishna (2022). *International Journal of Social Ecology and Sustainable Development (pp. 1-11).*
www.irma-international.org/article/dici-engine-with-diesel-and-cnsl-biodiesel-fuel-as-a-biodegrade-substitute/287120

Cultural Policy, Administration, and Info-Communication Landscape: The Cultural Management Model, Info-Communication Cultural Management (ICCM)
George K. Gantzias (2014). *International Journal of Social Ecology and Sustainable Development (pp. 30-42).*
www.irma-international.org/article/cultural-policy-administration-and-info-communication-landscape/120530

Experimenting with Project Stakeholder Analysis: A Case Study
Claudia Weninger, Martina Huemann, Jairo Cardoso de Oliveira, Luis Fernando Mendonça Barros Filhoand Erwin Weitlaner (2013). *Sustainability Integration for Effective Project Management (pp. 380-393).*
www.irma-international.org/chapter/experimenting-project-stakeholder-analysis/76832

User Charges and Solid Wastes Generation in Lagos, Nigeria
Ayadi Folorunso Sunday (2011). *International Journal of Green Computing (pp. 83-105).*
www.irma-international.org/article/user-charges-solid-wastes-generation/61377