

Education of Sustainable Development Competence in Higher Education Institution

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Abstract: The present paper aims at exploring the role of higher education institution (HEI) on education of sustainable development competence (SDC). Considering the connection of Education for Sustainable Development (ESD), it is important to reflect on the mission of HEIs in promoting sustainable development (SD) ideas. In the present paper an attempt has been made to draw the parallels between HEIs and SDC as well as to answer the questions how the concept of SD is reflected in HEI. It is believed that building the capacity of students on SDC to communicate SD ideas and discuss about a sustaining world view is of great importance. For this reason the literature review and its analysis of various researchers working on SD and SDC have been done. To support theoretical findings, research has been done on students' attitude to SDC at Vytautas Magnus University and comparative analysis of 2015 – 2016 years has been done. The paper aims to give HEI staff and students an impulse to understand the significance of SD practices, as well as to make choices, taking actions in educating SDC at universities not only in Lithuania, but also abroad.

Keywords: higher education, sustainable development competence, sustainable development.

Introduction

There is a great deal of research into education for sustainable development (ESD), encompassing the concepts of sustainable development (SD), models of incorporation of ESD into the different levels of human life. However, little research has been done into the field of education of sustainable development competence (SDC). Promoting ESD and educating SDC in Higher Education Institutions (HEIs), we have to meet a number of challenges in connecting SDC in terms of SD. Therefore, encouraged by re-thinking of existing approaches to SD, the study is aimed to investigate the present-day reality of education of SDC at Vytautas Magnus University (VMU) and suggest insights of bringing SDC into practices. To support the idea of SD, scientific literature and UN, EU documents analyses on the concept of SD as well as on the promotion of SDC has been done. Based on the analysis of the various expert contributions (Goodland, 2002, 25; Galkutė, 2004, 267; Kliučininkas, Čiegis, 2008, 130; Crawford-Brown, 2011, 47; Wiek, Withycombe, 2011, 20; Leal-Filho, 2015, 9) four dimensions – economical, environmental, social and institutional of the concept of SD have been determined as well as three broad categories of SDC related to complex demands of modern life have been modified. Acting autonomously; communicating interactively; joining into dialogues to function in socially heterogeneous society - these three categories are located at a very general level of abstraction and are thought to be applicable to a wide variety of contexts which are considered relevant for an effective interaction and cooperation globally and locally. Furthermore, it could be argued that ESD enables individuals to view the economy, ecology, social and institutional issues from holistic perspective. For this reason it could be stated that HEIs can help students broaden the concept of SD and offer the ways to educate SDC through the engagement in learning activities related to SD issues. Drawing on author P. Dasgupta (2007) nature and ecology approaches, which have influenced many areas of life, gave rise to eco-friendly, green, ethical and more sustainable communication. The application of the SD related principles with the respect for the environment, nature, and on the habitats in which cultural reproduction takes place, have major implications for the content of the communication and interaction. According to strategies of UNESCO (2015) rethinking the ways of education towards a global common good - formal, informal and non – formal setting is equally important. Moreover, rapid changes in life require to communicate in a sustainable way for a more successful realization of one's goals at personal, local and global levels. Therefore, the ESD principles, formulated by the authors from Lithuania (Galkutė 2004, 269; Kliučininkas, Čiegis, 2008, 124) and major strategic international and national documents (Education for All..., 2015; Nacionalinė Darna..., 2003; Vytauto Didžiojo..., 2012) can serve as a starting point for the analysis of SDC.

The aim of the paper is to give an impulse to HEI staff and students to understand the significance of SD practices, as well as to make choices, taking actions in educating SDC at universities not only in Lithuania, but also in abroad.

Methodology

The ideas of SD in Lithuania are grounded on National Strategy for Sustainable Development of the Republic of Lithuania (Nacionalinė Darna..., 2003); on the UNESCO Programme Education for All 2000 - 2015 Achievements and Challenges (Education for All..., 2015), which is being implemented together with the State education strategy 2013 – 2022 (2012). The documents ensure that SD ideas are integrated into subject curriculum at all levels of education which fosters learners abilities and enhances motivation to learn and act responsively. HEIs in Lithuania base their SD strategies and programmes following (State education strategy 2013 – 2022, 2012) programmes ensuring education of SDC which only makes sense if the societal component is taken into account by addressing both large scale structures such the micro level (i.e. relationships between students and staff), macro level (relationships between HEIs) and meso level (relationships between faculties, institutes, centres) as well as relationships between stakeholders and individuals. Thus while the internal structure of SDC (attitudes, knowledge, talents, abilities, skills, intentions) are important parameters, so too are the structures of the institutional, social, economic and political environmental – particularly as they have their part to play in actually constructing the demands which both define SDC and require it to be demonstrated by individuals. However, it has been recognized that there is no single use of the concept of competence, core competence, and SDC, and, therefore, there's no broadly accepted definition or unifying competence theory yet. Meanings vary widely, depending largely on the perspective and ideological viewpoints involved, and on the underlying objectives associated with the use of the term, both in scientific discussion and in the policy realm. Thus a pragmatic conceptual approach seems appropriate in line with many authors (Sterling, 2004, 63; Bulajeva, Lepaitė, 2011, 57) who proposed to adopt the following definitional criteria. SDC is a complex three fold entity comprising of knowledge, abilities, skills, moral values and potential of individual qualities (talents, abilities, character features) enabling an individual to carry out a complex activity or task (which is referred as competency) while reacting to different challenges related to SD. The concept of competence is used to refer to the necessary or desirable prerequisites required to fulfil the demands of a particular professional position, of a social role, or a personal project. Using this definition, the structure of SDC derives from the structure of the demands encountered in the context of work and in everyday life, the focus is on what the individual achieves in results, in an action, or in a way of behaviour. The scale may or may not be combined with relative thresholds that establish whether or not an individual possesses a sufficient level of competence for a particular purpose. It is the demand, task, or activity which defines the internal structure of a competence, including the interrelated attitudes, values, knowledge and skills that together make effective action (learning) possible. Therefore, competences cannot be reduced to their cognitive components, but need to be complemented by the conceptualization of competences as internal structures to the individual. This conceptualization reflects optimistic and humanistic approach to the extent that it integrates attitudes and moral values, drives (internal motivation), demands (external motivation) and discourse as prerequisites of a competent performance.

Based on these assumptions, universities have a profound role to play in fostering students' SDC that enable them to contribute to a more sustainable world. Following Bologna Declaration (1999) efforts were made to define a sustainable university. Since 1999 several declarations to form the conception of sustainable university have been formulated and signed (Our Common Future..., 1987; Agenda 21: Earth Summit. The United Nations Programme of Action from Rio, 1992; Bologna Declaration, 1999; Earth Summit 2012, 2012; The European Higher Education Area in 2015; 2015) in which sustainable development programme and sustainable higher education institution are closely related to each other. What is more, Vytautas Magnus University (VMU) strategy 2015 emphasizes the significance of SDC. VMU strategy demonstrates the evidence that SD ideas are promoted and SDC is fostered. Moreover, internal and external learner's motivation plays a significant role in the development of competences, too. Therefore, it is a big challenge for HEIs to equip students with this opportunity. One of the modes for this endeavour is that students should be familiarized with SDC, its subcompetences and learning strategies for ensurance of the competences progress. The structure of SDC, which is presented in figure 1, has been designed based on the strategic documents, literature analysis - humanism, holism, constructivism and educational research theories. Drawing on authors from Lithuania and from abroad (Goodland, 2002, 25; Cortese, 2003, 21; Galkutė, 2004, 267; Kliučininkas, Čiegis, 2008, 130; Crawford-Brown, 2011, 47; Wiek, Withycombe, 2011, 203; Bastardas-Boada, 2014, 163; Leal-Filho,

2015, 9) it could be claimed that the structure of SDC, which is demonstrated in Figure 1, comprises of 6 components:

- personal (internal and external),
- methodological – instrumental (professional),
- social (education and leadership),
- transformative (demonstrating ability to positive change),
- communicative (demonstrating linguistic intelligences) and
- cross – cultural (demonstrating ability to interact in social networks) subcompetences.

However, SDC subcompetences can undergo different modifications and can vary depending on contexts. For example, communicative foreign language, cross – cultural communication, transformative and personal subcompetences can be comprised of different components which depend on many factors such as social status, education background, profession and work experience.

Figure 1. The structure of SDC based on theories

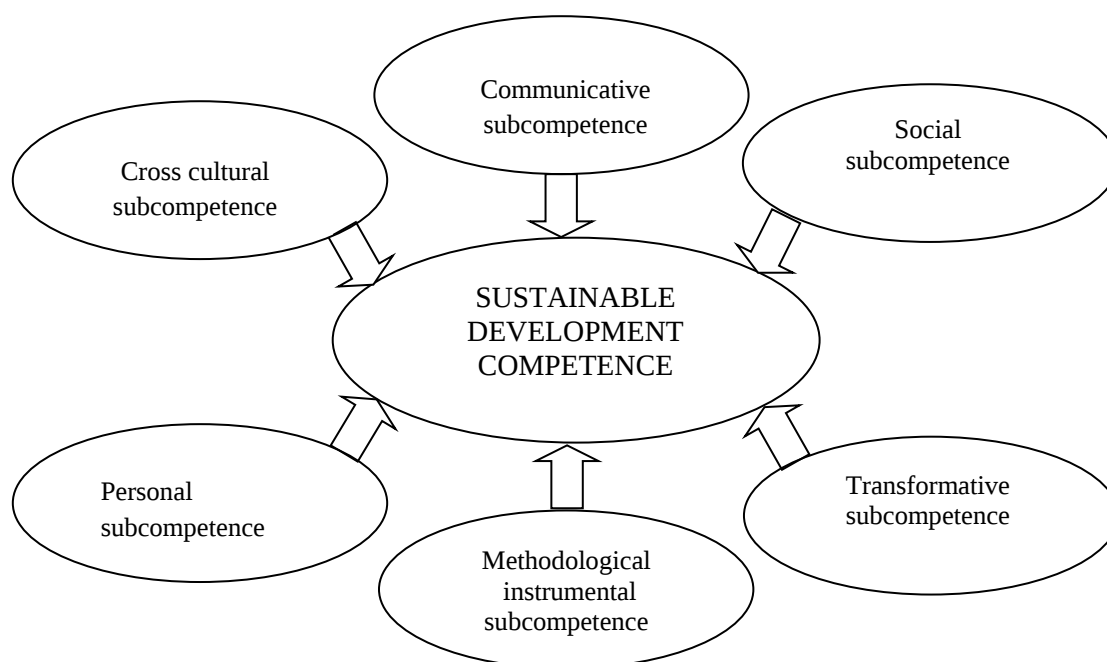


Figure 1. The structure of SDC based on theories.

The structure of SDC in figure 1 displays two important subcompetences: *communication in foreign language and cross- cultural communication* subcompetences. For this reason, it is crucial to analyze the relations of foreign (English) language learning with education of SDC at HEIs. English (A1 – C1 level) is the subject of bachelor study programme of general A group education at VMU. For the time being there is the relation between students' learning aims and the objectives of university. The English study programmes describe what learning activities students are to complete in order finish their course successfully. At VMU during the semester in all levels (A1 – C1) of English, which are designed according to Common European Framework of References for Languages (2001), a mixed form of studies and active methods: group presentations, team work, round table discussions, forums in MOODLE virtual environment (synchronic/asynchronic consultations, interactive activities) as well as individual learning of vocabulary, grammar enriched with the content of SD ideas have a positive impact on education of SDC. Moreover, while applying competence focused learning, students improve not only phonetic, grammatical and lexical communicative foreign language competence, but they also have the possibility to promote SDC. The analyses of English (A1 – C1 level) content of study programmes at Institute of Foreign Languages at VMU proves that there are topics (economical, environmental, social and institutional) which have close relations with the SD ideas and are interfaced.

Results and discussion

In order to find out students' opinions about SD and SDC a questionnaire survey was performed in 2015 and 2016. 120 first year students from various faculties, who were studying English in B2 level at VMU in 2015 (60 students) and 2016 (60 students) took part in the research and expressed their opinions about SDC.

The findings of the quantitative research demonstrate the VMU students' attitudes to SDC and English B2 language learning processes at VMU, Lithuania. The analysis of the results makes valuable reading. It has revealed that almost a half of English B2 level students (45 %) assume that it is significant to develop SDC. Moreover, they believe that they should get more knowledge (25 %) in English on SD. This finding might be explained by the fact that generally all first year students who are placed into English B2 level at VMU have already acquired very good language skills at secondary schools and can easily take part in discussions on environmental, economic, social and political issues in English. Their language proficiency is quite high to make presentations and do writing assignments on sustainable development issues. Moreover, the question about getting a better education on SD has been highly evaluated and took the third place in popularity among B2 level students of English. This fact may be interpreted that the respondents' communicative and cross-cultural subcompetences have considerably increased and that they would need to acquire new SDC while studying English and other foreign languages at A1 – C1 levels at HEIs.

Table 1

Results of 2015 and 2016 year students opinions about SDC (%)

Topics	2015	2016
Economy	13	15
Ecology	31	27
Social issues	28	20
Institutions	2	3
Equity	8	13
Cross – cultural communication in English	10	15
Multilingual communication	8	13
Communicative competence	30	42

The research findings show that the VMU students would like to get more knowledge about ecology and environment protection (27 %) in 2016 (Table 1) as well as to develop their communicative skills while discussing about social issues (20 %) and multilingual competence (13 %) through studying English and other foreign languages. This figure has increased by 5 % since 2015 and it might be interpreted for students need and potential to discuss various SDC topics with their colleagues and counterparts in other foreign languages, not only English. Their wish to study other languages to enhance their multilingual competence (13 %), cross - cultural communication (15 %), might help build up their understanding of other cultures and people's behaviour. However, very little importance is attached to institutions (3 %), supposedly due to their lack of knowledge about institutional involvement in the promotion of SD ideas in interdisciplinary contexts at universities. The comparison of research results in table 1 of the years 2015 and 2016 can draw our attention to the following tendency: there is no big difference in the percentage of students' attitude to the significance of the issues on economy, ecology and institutions in the years 2015 and 2016. According to the students' opinion, institutions (3 %) do not play a significant role in education of SDC. Whereas, in relation to communicative and cross – cultural communication competences in English, the importance of these competences have increased, most likely due to the processes of globalization as well as changes in employability at local and international levels. This demonstrates students' concerns about their profession and opportunities in the changing labour market.

Conclusions

The students from VMU recognize the importance of social, environmental, ecological, cross – cultural and communicative aspects, which are integral subcompetences of SDC. Moreover, languages, in particular English, serve as a means for building up SD awareness on a broad scale at HEIs. English study B2 level programme is based on the UN, EU, National and Institutional (VMU) Sustainable

Development strategies and comprises interdisciplinary aspects. For this reason, the English language B2 level curriculum gives students opportunities to discuss about sustainable development issues including topics on ecology, economy and social policy. However, a lack of attention is paid to institutional involvement in educating SDC at HE. Therefore, it could be stated that integration of SD content into English (A1 – C1 level) curriculum should be revised in relation to the integration of institutional topics. The results of the research ground the significance of foreign (English) language learning for education of SDC as students, who are learning English at VMU, are enabled to educate cross – cultural and communicative English language subcompetences which are integral elements of SDC. English language learning at VMU, Lithuania, is the privileged experience aimed not only for the linguistic purposes, but also for the acquisition of SDC.

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