



UNIVERSITY EDUCATORS
FOR SUSTAINABLE DEVELOPMENT

Mapping opportunities for developing Education for Sustainable Development (ESD) competences

REGION EAST

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1 UE4SD – University Educators for Sustainable Development

This report has been developed as part of a three year project “University Educators for Sustainable Development”. The project seeks to provide input into Education for Sustainable Development by supporting the capabilities of university educators and offering insight into quality programs for professional development in the field of Education for Sustainable Development (ESD). The aim is to gather evidence about existing programs, identify best practice examples and build upon the experiences of the partners involved so that a certain reorientation of the higher education curriculum to address sustainable development is achieved.

To this end, the UE4SD Consortium of 55 partners from 33 countries across Europe has been established to achieve progress in unison and make real impact in this area. The 3-year project will focus on support for teaching institutional colleagues to enable them to prepare students, regardless of their courses or specialisation, to understand and apply their professional and global responsibilities in sustainability. The project includes plans for university staff to develop professional competences and the academic leadership capabilities linked to Education for Sustainable Development.

UE4SD seeks to establish a leading expert group in Education for Sustainable Development competences in higher education in Europe and will create a platform to combine and share the expertise of network partners so they can inform policy and practice well beyond the life of the project. Its activities are closely associated with COPERNICUS Alliance – the European Network of Higher Education for Sustainable Development and build upon the Peoples’ Sustainability Treaty on Higher Education.

1.1 Purpose, process and development of the mapping exercise

Project partners were divided into four regional hubs to ensure efficient cooperation and the chance to highlight regional specifics and needs. Overall Network management is undertaken by the lead organisation in the project, the University of Gloucestershire (UoG, UK) which is also the co-ordinator of the Northern Europe regional hub. Partners from the Southern Europe sub-region are co-ordinated by Universidad Autónoma de Madrid (UAM, Spain), and from Western Europe by Leuphana University (LU, Germany). This report has been written on behalf of the Eastern Europe regional hub which is co-ordinated by the Charles University Environment Centre (CUEC, Czech Republic).

The mapping template has been developed by the Leuphana University and discussed with the other three leading institutions. It was introduced to the Eastern Europe regional hub at a preparatory meeting which was held in Prague on 17-18 February 2014. After this meeting, national coordinators responsible for the mapping exercise worked with their teams to collect the data for the template. Completed templates were then submitted to the regional coordinator in May 2014 and consequently used for compilation of the Eastern Europe Regional Report. Partners had an opportunity to comment on this Report before it was finalized in July 2014. The data and description of the state of art in the countries involved is applicable as of early 2014, if not stated otherwise.

All four regional reports were collated and aggregated for an overall State of Art Report on opportunities for university educators to develop their competences in ESD. This was done in August 2014 and final Report will be available to all partners and the general public at the annual UE4SD Conference in Prague, 2nd October 2014. Important strategies for further steps in progressing this area of learning will be discussed there.

The State of the Art Report contains a description of the situation in the partner countries with regard to educational policies, leadership institutions, resources available, etc. It contains a compilation of good practice examples (3 from each partner country) and analysis of their opportunities and needs. On the basis of the Report, a Leading Practice Publication on professional development in ESD for university educators will start to be developed after the Prague Conference where the best practices for the Publication will also be selected. The Leading Practice Publication is one of the UE4SD project flagship outputs on which the dissemination phases of the project will capitalize. An Online Platform of Resources and an Academy for ESD in Higher Education, which will deliver relevant knowledge and materials to those who will use them in the next stages of the UE4SD project, are closely aligned with this Publication,.

1.2 UE4SD – Region EAST

Following table provides an overview about the partners that mapped the status of ESD within Higher Education in their countries and contributed examples of professional development opportunities in ESD for university educators.

Table 1. East region countries involved in the mapping exercise (full information see Annex 2)

Country	Partner	Number of Higher Education institutions	Number of Higher Education students (thousands)
Albania	University of Tirana	59	161
Bosnia and Herzegovina	University of Bihać	120	116
Bulgaria	University of Arch., Civil Eng. & Geodesy University of Forestry	51	285
Croatia	University of Rijeka	137	188
Czech Republic	Charles Uni Prague	72	381
Hungary	Eotvos Loránd Uni	68	316
Macedonia	Ss. Cyril and Methodius University in Skopje	20	57
Poland	Adam Mickiewicz University in Poznan University of Warsaw	453	1 676
Romania	University of Bucharest	105	465
Serbia	University of Niš	226	240
Slovakia	Slovak University of Technology in Bratislava Comenian University Bratislava	36	201
Slovenia	University of Ljubljana University of Maribor	47	77
<i>Total</i>		1394	2487

1.3 Collection and validation of the data for the national reports

Desktop research was undertaken in all listed countries (policy documents in particular were reviewed in this way). In addition, interviews (with key informants or HE experts) were relatively common method of research – sometimes the national coordinators were the main source of information in this respect (having already undertaking research on the topic for a longer period). In Slovakia, research of this kind was undertaken in 2008; Slovenia has undertaken relatively comprehensive research for the purpose of the UE4SD report (forwarding parts of the template to relevant universities).

- In **Albania**, the desktop research started with identification of all stakeholders, projects or activities from websites. A Contact List was prepared of all potential stakeholders who were contacted directly (telephone and e-mails) to ask about their initiatives or projects. The main data collection methods were: internet searches for relevant information, reviews of publications, reports and evaluation reports, and interviews using the template questions (via phone). The data were validated using content methodology: the data must target sustainable development, Higher Education and professional development. Professional development should include, *inter alia*: seminars, professional courses, academic groups, conferences/publications, policy paper, etc.
- In **Bosnia and Hercegovina**, data were collected mainly through an internet search.
- In **Bulgaria**, desktop research was undertaken (a literature review – official policy documents, research papers; an internet search – university websites and online publications; and a document analysis - postgraduate courses delivered e.g. contents, schedule, training materials). Moreover, interviews were held with participants in the post-graduate course at the University of Forestry and with representatives of academic staff. Members of the Academic Initiative Group for ESD at the University of Architecture, Civil Engineering and Geodesy (UACEG) were interviewed and some were involved in the validation of data (comparison of different sources and information on curricula).
- In **Croatia**, research on laws, decisions, recommendations and other related documents for higher education was undertaken. Experts in ESD were interviewed. Data were compared with official data on higher education (Ministry of Science, Education and Sport, National Agency for Higher Education). Results were consulted with experts in EDS in Croatia.
- In **the Czech Republic (CR)**, desktop research was carried to find data on the general conditions in the CR for ESD at the HE level. CUEC's long term experience with ESD in HE was part of the process (Envigogika, the Forum of University Teachers). Data for the introductory part were compiled mostly from documents valid for the Czech government (strategies, policies) and a comprehensive internet search was done for this.

For collation of case studies, a group of university educators concerned with education for sustainable development (the Forum of University Teachers database was used) was consulted. The few responses which were received unanimously referred to the fact that there are no systemic efforts to educate university educators, especially in the field of ESD competences. Case studies have been developed based on interviews with key informants (these were, however, not able to identify competences developed within the project).

To validate the data, the national report was reviewed by colleagues from the CUEC department. The results of the case studies have been sent to all of the informants for approval.

- In **Hungary**, data were collected and validated with interviews and directly through participation. Several experts in the field of environmental education in Hungary were involved via personal communication.

- In **Macedonia**, data were collected by reviewing papers and publications, national strategies and programs, and annual reports; through internet searches for relevant information from the web pages of Higher Education Institutions, the Ministry of Education and Science, the Ministry of Environment and Physical Planning, and the Secretariat for European Affairs at Government of the R. of Macedonia (responsible for registering all international projects i.e. projects funded by foreign donors) etc. Consultations with experts and directors of relevant departments at some of the Ministries were carried out:
 - Assistant-Head of the Department for Higher Education, Ministry of Education and Science,
 - Head of the Department for Sustainable Development and Investments, Ministry of Environment and Physical Planning,
 - State Secretary at the Secretariat for European Affairs, Government of the R. of Macedonia, etc.

Validation was undertaken through the partner's own research accompanied by consultations, i.e. when necessary (as a result of data uncertainty), consultations were conducted with relevant experts for checking data validity; by analysing independent studies and monographs, data were consequently cross-checked (comparing data from different sources), etc.

In general, it was very hard to find representative examples of activities of university professors/educators in the field of ESD – it was almost impossible to find adequate initiatives and concrete activities. This is obvious, especially in Part B where the goal was partly fulfilled (despite the enormous efforts, only one example is included, and what is more, this example is not relevant to the criteria for Part B).

- In **Poland** – data for the introductory part were obtained mostly from governmental documents (strategies, policies) and information from Poland's official statistics office. The data concerning practices were collected through direct involvement in activities carried out for universities and institutional contacts.
- In **Romania**, the process of data collection included interviews using the template questions (via phone); internet searches for relevant information; review publications, reports or evaluation efforts. Data were validated by studying the artefacts and web resources resulting from the ESSD-Erasmus Intensive Programme (see case study) and through the interview with Dr. Stefanescu, one of the participants from the initial working group on ESD in 1992 (see also Stefanescu, 2013).
- In **Serbia** – data were collected and validated by undertaking desktop research on statistics, legislative and related documents on higher education. In addition, several national experts on education (including participants in the national education strategy formulation process) were interviewed in order to validate data and contribute to the synthesis. Data validation has also been done via comparison of the partner's own previous research undertaken by its team members¹.
- In **Slovakia**, a comprehensive method of data collection was applied:
 - Summarising and updating results from the previous questionnaire surveys undertaken by the team at the Faculty of Natural Sciences UK Bratislava in 2008 among all Slovak HESs (20 public, 3 state and 10 private universities). The questionnaire was focused on education

¹ Milutinović, S., V. Nikolić (2014). "Rethinking higher education for sustainable development in Serbia: an assessment of Copernicus charter principles in current higher education practices". *Journal of Cleaner Production*, Vol. 62, No 1, (pp. 107 – 113)

and research for SD, on the management and capacity building of the partnerships with the other types of schools, scientific institutions and local communities.

- Consulting experts from the Division of HEIs of the Ministry of Education, Science, Research and Sport SR.
- Conducting interviews via phone with some colleagues from HEIs
- Conducting internet searches for relevant information on the web pages of HEIs, the Ministry of Education, a professional organisation of the Ministry of Education, the Accreditation Commission, and the Independent Agency ARRA which since 2009 has designed rankings for HEI faculties in Slovakia
- Reviewing publications, strategies, programmes, projects, annual reports or evaluation exercises.

Data were validated by:

- Comparing the data from different sources
- Confronting key data published by official institutions with the experience and knowledge of the experts (published and unpublished sources)
- Validating the data in case of uncertainty via the partner's own research and consultations
- Studying independent analytical studies
- Contacting the target groups' representatives and affected subjects.

Who was involved: work was done via personal and electronic contact with experts and professionals from the Ministry of Education, Science, Research and Sports of the Slovak Republic, the Slovak Environmental Agency, NGOs Daphe, Zivica, and experts from HEIs.

- In **Slovenia**, data from the Ministry of Education, Science and Sport (The Higher Education Directorate) and from the four biggest Slovenian universities (University of Ljubljana, University of Primorska, University of Maribor, University of Nova Gorica) were collected by gathering a group of key informants. At the universities, these were mainly from the quality management system department/services. They decided who would be the most appropriate person to give answers to the specific questions that the partner selected from the template. There was one interview conducted with the questions on the template, while other universities were contacted by forwarding selected specific questions from the template (i.e. questionnaire) by e-mail. Also the data from the line ministry were collected in the same way. Additionally, the University of Ljubljana provided the e-mail contacts of all vice-deans responsible for student affairs at its faculties (altogether 26 faculties and academies), which enabled us to send a questionnaire to all of them and at the same time to validate the information gathered at the university level.

Data from other higher education institutions (one university and 42 independent higher education institutions), that are not part of any of the above mentioned universities, were collected by forwarding selected questions from the template to the general e-mail address or address of deans or other responsible persons for the quality management system. The e-mail contained not only the questionnaire but also a letter presenting the background of the project and the goal of the research with an invitation to fill out the questionnaire.

Validation: all the data gathered were checked with different informants from diverse institutions representing universities and independent higher education institutions, centres responsible for higher education didactics, government and NGOs. The questions were translated

into Slovenian in order to prevent any misunderstanding and the same sets of questions were used for all informants from universities and higher education institutions.

Data for the two case studies originate from the research projects of University of Maribor; validation included literature comparisons, questionnaires, Analytic Hierarchy Process (AHP) model for determining weights, normalization and aggregation of results.

Table 2. Data collection and validation methods

	Forwarding the template	Consultation with ESD in HE experts	Focus Groups	Interviews	Key informants	Desktop research
Albania		✓		✓	✓	✓
Bosnia and Herzegovina						✓
Bulgaria				✓		✓
Croatia				✓		✓
Czech Republic		✓		✓	✓	✓
Hungary				✓		✓
Macedonia		✓		✓	✓	✓
Poland					✓	✓
Romania		✓		✓		✓
Serbia		✓		✓		✓
Slovakia		✓		✓		✓
Slovenia	✓			✓	✓	✓

2 The status of ESD within Higher Education at the national level

This section aims at gathering a general view about the integration of ESD within Higher Education in the UE4SD partner countries, with an emphasis on the issue of professional development opportunities for university educators to develop ESD competences.

2.1 National strategies, policies or legislations, which recognise ESD in Higher Education in the partner countries

In all of the countries, no specific documents that focus specifically on ESD in Higher Education exist. ESD in Higher Education is mentioned randomly in some of the national higher education legislative documents, and also in existing environmentally and SD oriented strategies and action plans. Very often these documents follow international trends in ESD, but are rather formal and not implemented in practice. Higher Education systems in these countries are based on academic autonomy and freedoms which are seldomly regulated through any policy measures. Strategic focus is often rather on *development* (knowledge-based society) and sustainability is mentioned only vaguely; some of the education systems seem to be incompatible with ESD principles (the interdisciplinary nature of SD) and hence implementation would require systemic changes. A comprehensive system of ESD in Slovakia, for example, recently shifted to Development Education. Sustainability in HE is mentioned rather indirectly and it has required the commitment of individuals to implement ESD principles (ESD is an option only, often without systemic or financial support).

Moreover, the system of professional development in the field of pedagogical skills is non-existent or is being initiated in only some of the countries.

In **Bosnia and Hercegovina**, laws promoting ESD specifically are non-existing at any level whatsoever (cantonal, entity or national level). Some elements of SD, though, are incorporated into existing legislation regulating agriculture, forestry, water, energy, regional development, nature protection etc. Yet, these are not integrated into the education process comprehensively. As such, SD is not a clearly defined component of the education system in BiH.

Since 2002 some progress has been made in creating a public system of ecological (environmental) education in BH. The main strategy is: the Strategy for Improvement of Education in BH that inter alia encompasses higher education level, adopted by the Council of Ministers of BiH in 2008, with a plan on implementing it for the period 2008-2015.

In **Bulgaria**, SD is only generally mentioned in the published official documents on education, including higher education, within the official statement that the national policy of Bulgaria is following the principles and priorities of the EU policy. The education for sustainable development and its objectives at all educational levels were defined in a Program for Education for Sustainable Development. The programme was unluckily not officially adopted as a national regulation document and no text was published. The final draft of the National Strategy for the development of Higher Education in Bulgaria in the period 2014-2020² recently published on-line for public discussion has no explicit focus on the education for SD. It however stresses upon the importance of restructuring the HE system in the country in accordance with the principles of the *Europe 2020 Strategy*.

In **Croatia**, university educators are not obliged to attend programmes for professional development. They are obliged to publish certain number of scientific papers, attend certain number of

² Project for National Strategy for the development of Higher Education in Bulgaria in the period 2014-2020 (In Bulgarian). <http://www.mon.bg/?go=page&pageId=74&subpageId=143>, May 2014. Accessed on July 12, 2014

conferences and to hold certain amount of teaching hours. Professional development, attending seminars and other life-long learning programmes is free will of every person. It would be important to introduce importance of professional development of university educators in Croatia in general and then also to stress importance of development of ESD competences.

In the **Czech Republic**, new methods of education mentioned in the National Strategy for ESD (2008-2015), especially for teacher education where these methods should be developed and tested; they are also supposed to be an ultimate goal in all tertiary education³.

Professional development of university educators (focused on pedagogical skills, not SD competences) exists only as a strategy for 2011-2015 (§ 2.3 Lifelong learning)⁴:

- Recommendations for higher education institutions: to develop courses for academic staff focusing on effective use of information technologies in instruction (e.g. the development of study supports) and on enhancement of pedagogical competencies needed for the teaching of mature (employed) students and participants in lifelong learning courses. Instruments for implementation are mainly grant schemes

In **Hungary**, the main planning document, National Sustainable Development Strategy, contains general aims about teaching and learning of sustainability, including in the level of higher education. The Training and Outcome Requirements (Képzési és Kimeneti Követelmények) of the Ministry of National Resources contains detailed information in this field.

In **Macedonia**, there are some strategies, strategic documents and legislations that recognize the need for education in sustainable development, but not specifically in Higher Education. For instance “National Program for Development of the Education in the Republic of Macedonia 2005-2015” and “National Strategy for Sustainable Development” are relevant documents which comprise ESD targets (full list see national report).

In **Poland** is relevant *National Environmental Education Strategy. Through education to sustainable development* published by the Ministry of Environment in 2001. Part II Academic institution.

In **Romania** there is no strategy, educational policy or any official approach to education for sustainable development in higher education. On the Ministry of Education website there are no references on this issue. We can conclude that there is no awareness on policy level about sustainable development, in general, and to education for SD, in particular.

In **Serbia**, *The National Sustainable Development Strategy 2008 - 2017* (NSDS) is the only cross-sectoral policy document explicitly addressing ESD as one of its priorities, under the chapter entitling “Economy of the Republic of Serbia – Knowledge-Based Sustainability”. However, the ESD concept as defined by the Vilnius framework is not entirely congruent with the treatment of education in the national SDS, a difficulty also reflected in the institutional structure in charge of these two parallel processes. Although most key ESD priorities are present, the focus is more on contributing to sustainable economic development, through improving education system quality and efficiency, coverage, and coordination with the labour market.

Strategy of Education Development in Serbia to 2020+ (2012) is first comprehensive and “umbrella” policy document in education. The strength of this strategy is the fact that it treats education in close

³ National Strategy for ESD (2008 – 2015)

⁴ The Strategic Plan for the Scholarly, Scientific, Research, Development, Innovation, Artistic and Other Creative Activities of Higher Education Institutions for 2011-2015; <http://www.msmt.cz/areas-of-work/tertiary-education/the-strategic-plan-for-higher-education-institutions-2011?lang=2>

connection with other sectors and that the changes cover all education levels from preschool to lifelong learning, with a strong emphasize on higher education. Although ESD is not specifically mentioned as a priority, proposed solutions is fully compatible with SD principles. However, the problem of SDES implementation is, of course, open and uncertain, and depends on the political will of the future Serbian government to accept education as a one of the developmental potentials of Serbia and to turn it into concrete measures in state policy.

In **Slovakia**, following documents are relevant:

- National Strategy for SD for Slovakia (Slovak Government, 2001)
- Action Plan for SD in Slovakia for 2005-2010 (Office of the Slovak Government, 2005) – The Action Plan included requirement to implement basic principles of sustainability into the curricula across all levels of education as well as in the life- long learning. This document proposed creation of inter-sectorial advisory board of the minister of education and minister of environment, the task of which, among others, should be the innovation of the outdated concept of environmental education and teaching (from the year 1997) across all level of educational establishments
- Action Plan for ESD in Slovak Educational Institutions (Ministry of Education, Science, Research and Sport of the Slovak Republic, 2006) – implemented requirements of the UNO for education towards sustainable development. Action Plan was elaborated by the Joint Working Commission and approved by the Ministry of Education and the Ministry of the Environment in December 2006.
- National Strategy for Global Education for the Period 2012-2016 (Ministry of Education, Science, Research and Sport, 2012)– for this national strategy the term „global education“ is used as an integrating principle underlying global contexts of education. Its part represents global development education, environmental education, education for sustainable development, multicultural education, peace education, human rights education in global context.

Additional national strategic documents supporting the HE development and QAS in HES:

- National Program for Education and Schooling in Slovak Republic for the Period of the Coming 15- 20 years – „Millennium" (approved by the Government of the SR in 2000)
- The Concept of Future Development of HE in Slovakia for 21st Century (approved by the Government of the SR in 2000)
- Long-term Intent in Educational, Research, Development, Artistic and Other Creative Activities in HE Establishments for the period 2010-2014(discussed in the Government of the SR on 9.6.2010)

Legal documents regarding the HES development and QAS at the HES:

- Law act No. 131/2002 Call. On HES and About the Changes and Completion of Some Law Acts as Amended by Later Legal Documents
- Order of the Government of SR No. 104/2003 Call. About Accreditation Committee in the Wording of Later Legal Documents especially the Novelization of this Order by the Order No. 427/2013 Call. (Acquired activity since January 1st, 2014).

In **Slovenia**, there is no national strategy, which would recognize ESD in Higher Education as a special topic. However, there are some strategic documents, which indirectly indicate the importance of ESD – such as Resolution on National programme of higher education and Decree on budgetary financing of higher education institutions and other institutions. These and also

some other documents indirectly support conditions for implementing sustainability in Higher Education.

- In striving for teaching excellence, the National programme of higher education recognizes the need to support ESD. According to the document, teaching support should be offered to all employees engaged in the teaching process and teaching training should be gradually required at system level (personnel entering the teaching process after 2013 would be systematically integrated into the teaching support, providing the acquisition of integrated competences necessary for teaching including the understanding and operation for the support of sustainable development of society). The same national programme highlights also the importance of study programmes which educate for the teaching profession. Unfortunately, regarding ESD no specific implementation measures or goals are mentioned in the document.

Following table presents an overview of the key messages about national strategies, policies or legislations, which recognise ESD in Higher Education on the country level. More detailed information can be found in Annex 2.

Table 3. Recognition for ESD in HE through national policy and legislation in the East countries

	National Legislation	HE Act or Strategy	SD/Agenda 21 strategy/plan	ESD/DESD strategy/plan	Development plan for HE
Albania					
Bosnia and Herzegovina	✓				
Bulgaria	✓				
Croatia					
Czech Republic				✓	
Hungary	✓	✓			
Macedonia			✓		
Poland	✓				
Romania					
Serbia			✓		✓
Slovakia	✓	✓	✓	✓	✓
Slovenia	✓	✓			

2.2 ESD processes and approaches that are promoted within national strategies

Here the main obstacle to ESD implementation becomes visible – many of the countries have a long tradition in environmental education and ESD is not properly understood. As a result, interdisciplinary and transdisciplinary approaches are rather non-systemic and often rejected by the education systems (Bosnia and Herzegovina). ESD processes require substantial innovations and are not sufficiently underpinned in the documents. Some of the documents call for reform of the system of education in this respect (Serbia). Comprehensive changes of this kind declared in relevant documents in Slovakia, for example, have never been implemented.

In **Bosnia and Herzegovina**, Sustainable development as a concept wider than environmental protection has not been fathomed properly by education management, teachers, or students. The notion of ESD has been reduced to a few courses on environmental protection (biology, my environment, nature and society etc.). All educational programs are unsatisfactorily linked and coordinated, thus stemming *interdisciplinary and transdisciplinary approaches* that are necessary to understanding environmental issues holistically.

In **Bulgaria**, no particular processes and approaches are till the moment explicitly promoted in higher education. Directorate on Access to Education and Support for Development has included among other objectives the one ‘to create, maintain and promote information basis in the field of education for sustainable development’.

In the **Czech Republic**, ESD competences should be supported within the system of higher education (student inter-institutional mobility), career growth of university educators and as a part of innovations with funding from grant agencies. Networking is part of the National ESD Strategy realization.⁵

Although the Action Plan for the ESD Strategy (2011-12) has been adopted by the Government, there were no finances provided for the realization of this Action Plan and a new AP has not been developed.

In **Hungary**, the Training and Outcome Requirements (Képzési és Kimeneti Követelmények) contains competences for every study programmes, for example for teacher training.

In **Macedonia**, in the *Law on Environment*, the education on environment and sustainable development and their achievement are given at the beginning (Article 4). According to the Law, there is a need for raising awareness for environmental protection in the education process and the promotion of environmental protection. Unfortunately, although the Law talks about education in environmental protection and sustainable development (Article 48), yet the higher education has not been addressed and almost not mentioned.

In the *National Strategy for Sustainable Development in the R. Macedonia* only some attention is devoted to higher education. Actually, the Strategy recognizes the need to remodel policy for higher education, with particular reference to the dimensions of sustainable development. In this respect the Strategy asks for necessary coordination with other economic and social policies, in order to provide a consistent policy aimed to higher economic growth and sustainable development. Unfortunately, the Strategy does not contain precise measures or steps for its realization in practice.

The *National Program for the Development of Education 2005-2015* (adopted by the Parliament of the Republic of Macedonia in April 2006) Also, there is no particular priority to the offered activities. It strives to provide full contribution to the realization of the sustainable development and improvement of society and its affirmation as an equal and respectable member of European and world community. The Program asks for investment by the Government in education, training, science and the survey, because they are always a kind of worthwhile (i.e. so called profitable) investment and strongest subjects of national competence and competitiveness, and hence they are main factors for the sustainable development of the country. Finally, in this Program it is stated and that the education occupies a central position as undisputed key to sustainable development, quality and competitiveness. Unfortunately, there are no defined financial resources needed to implement the activities under the Program, nor the deadlines.

In **Poland**, in the Strategy document is written:

“Environmental education at academic level should present the basic knowledge of natural science, economics, technology and humanities, as well as develop environment friendly attitudes

Academic institutions should become centres offering post-graduate programmes and courses for teachers, government employees, journalists and other people responsible for – and interested in – environmental issues”

In **Serbia**, National Sustainable Development Strategy (NSDS) promotes specific objectives as follows:

- Providing more favourable general conditions for economic-financial, institutional and technical support to the process of reform of the system of education and education for sustainable development;

⁵ National Strategy for ESD (2008 – 2015)

- Promote the concept and practice of sustainable development and the system of sustainable education through formal and informal ways of learning;
- Provide adequate training on sustainable development for teachers at all levels of education;
- Work systematically to develop research in the field of sustainable development and education for sustainable development;
- In implementing the reform of education, continually promote cooperation at the national, regional and international level.

The **Slovak Republic** committed itself in the year 2005 to implement the UN Strategy for education for sustainable development into the educational process on all levels. This Strategy was implemented into the Action Plan of Education for Sustainable Development in the Slovak Republic, which the Slovak Ministry of Education, Science, Research and Sport approved in December 2006. For the HE five main pillars were proposed in this Action Plan for the periods 2007 – 2010: (1) Institutional capacities, (2) Education and training, (3) Research, (4) Institutional efficiency, and (5) Communication, coordination and cooperation. But the Action Plan has not been approved by the Government and has got the character of a recommendation.

Newly approved document National Strategy for Global Education for the Period 2012-2016 (Ministry of Education, Science, Research and Sport, 2012) focuses on global education at the level of the HEIs as well. It is understood as the topic of further development concept focused on the implementation of real study programs and projects focused on development studies and international support. This National Strategy recommends to include the goals, topics and principles of global education into the curricula for the education of further teachers and the same for other than pedagogic study fields. As the target groups for formal global education are defined students as well as academicians at the HES.

In **Slovenia**, at the time being, no special approaches or processes are used. ESD is supported only indirectly through some crucial documents about higher education.

Table 4. Summary of ESD approaches and principles in East region national strategies

	ESD approaches					ESD principles		
	Whole-of-institution	Strategic/systemic	Competence/ skills-based	Futures thinking	Critical/creative thinking	Action learning	Systemic thinking	Participation/Partnerships
Albania								
Bosnia and Herzegovina								
Bulgaria								
Croatia								
Czech Republic							✓	✓
Hungary			✓					
Macedonia								
Poland							✓	
Romania								
Serbia								✓
Slovakia							✓	
Slovenia								

2.3 Reference to ESD professional development for university educators within national strategies

These references are very random and expressed more in relation to “between the lines”. Need in innovative teaching methods is mentioned more in the context of teacher education (Czech Republic). Where the principles of ESD in professional development for university educators appear, they are related to the visions of educational reform (Macedonia) and/or not implemented (Serbia). In Slovakia, Global Education has recently taken the initiative in the ESD field.

For instance, in **Macedonia**, the *Strategy for the Development of Education in the Republic of Macedonia*, (Ministry of Education and Science, 2000), among other things, it was recognized the need for continuous professional development of the university professors/educators. The previous means, that the Strategy recognized the need for new approaches in the processes of education, inclusion of new contents, as well as taking into account the topic of environmental quality and its improvement. But, from the other side, the Strategy was lacking greater selectivity in the separation of the priorities and their better connection with social necessities, and after all it was missing a specific plan of action.

The *National Strategy for Sustainable Development in the R. of Macedonia*, in some sense touched the issue of ESD professional development for university educators. Actually, the Strategy partly elaborates the topic of *outdated curricula and methods of teaching*. Consequently, a conclusion is derived that, one of the main reasons why the graduates lack adequate knowledge and skills, is due to the use of the outdated curricula and methods of teaching at all levels of education. According to the Strategy, the methods used are not in accordance with the needs of the modern world. They in

fact neglect the importance of functional meanings (such as problem solving and critical thinking), and do not prepare students so they can function in society which is knowledge based (for many occasions, this is targeted as one of the major weaknesses of the education system in the Republic of Macedonia, especially for the system of higher education).

In **Slovakia**, *National Strategy for Global Education for the Period 2012-2016* (Ministry of Education, Science, Research and Sport, 2012) has been implemented instead ESD strategy. Its goals are as follows:

- To educate continually academicians for the reflection of principles, goals and topics of global education and for the development of knowledge, skills and attitudes of the teachers in the implementation of global education into the teaching process
- To take into account the topics of global education in the preparation of further academicians
- To take into account the topics of global education in the extra-curricular activities in the educational programs of educational establishments
- To create the precondition for the inclusion of the development topics into the curricula at the HES in the others than pedagogical study fields – as the key topic is understood international development support and humanitarian aid
- To support science and research at the HES in the field of development

Table 5. References to ESD professional development in East region national strategies

	Yes	No	Extract from national templates
Albania		✓	
Bosnia and Herzegovina		✓	No specific programs as for professional development of university educators, apart from occasionally organizing seminars and conferences.
Bulgaria		✓	
Croatia		✓	
Czech Republic		✓	The Action Plan for the ESD Strategy (2011-12) stresses methodology of problem-based education, place-based education, and concern that general social aspects be developed and used within <i>teacher</i> education. All disciplines should organize interdisciplinary courses focused on key themes of sustainable development (outlined in the Action Plan). ⁶
Hungary		✓	There are no relevant ideas or concepts especially for university educators.
Macedonia		✓	Almost no one of the previous documents (neither legislation, nor strategies) refers to ESD professional development for university educators. In fact, sustainable development is a topic that is mentioned very often in most of the documents, but it is not proposed as a strict component of the university educators' professional development.
Poland		✓	There is no specific references to professional development for university educators
Romania		✓	
Serbia	✓		At the general level, yes. NSDS as an "umbrella" strategy promotes professional development for university educators as a specific objective, but without any operationalisation. NSDS Action plan (2008) assigned concrete activities, some of them promoting ESD through professional development of teachers (not exclusively in higher education) and improvement of skills and capacities. Unfortunately, this strategy was rarely implemented through concrete policies and it is considered as "dead" today.
Slovakia	✓		National Strategy for Global Education for the Period 2012-2016 has stressed particular (ESD relevant) goals the measures.
Slovenia	✓		In the Resolution on National programme of higher education and Decree on budgetary financing of higher education institutions and other institutions.

⁶ Action Plan for the National Strategy for ESD (2011-12)

2.4 National initiatives on ESD professional development for university educators

Partnes were asked if there are any national (including regional jurisdictions such as cantons, states, provinces, etc.) initiatives (projects, programmes, etc.) on ESD professional development for university educators in their countries.

As ESD at the HE level is more the subject of an initiative and committed leadership, there are some examples of good practice in this field (also described in the case studies). On the other hand, as professional development at the higher education level is not dealt with systemically in any of the educational systems in the countries in question, these initiatives concentrate more on promotion of SD curricular changes. Some of the initiatives are focused on building awareness of the *need* for professional development in the ESD field (initial stages of the implementation of this type of change).

In **Bulgaria**, only opportunities exist under the Operational Programme “Human Resources Development” is a strategic document that acts as a framework for absorption of funds, co-financed jointly by the European Social Fund of the European Union and the national budget during the programming period 2007 – 2013. It is a constituent part of the National Strategic Reference Framework and contributes to one of its main objectives to “develop human capital potential to ensure higher employment, income and social integration”.

In **Macedonia**, one of the interesting and innovative ideas comes from the proposed institutional set-up for supporting the realization of the sustainable development. That is the idea for establishing so-called University Campus for Sustainable Development (UCSD). This campus was supposed to be responsible for enforcing the sustainable development in terms of researches and studies based on the Strategy’s objectives. UCSD was imagined as a kind of green-field project, i.e. as a new university campus outside Skopje, on the way to being a driving force for regional development and innovation, as well as “a place for new ways of thinking, innovation and residence.” The preliminary idea was that Campus should be funded, established and developed as public-private partnership (PPP). UCSD’s direct target group above all, should be motivated, proactive and innovative students from Macedonia and neighbouring countries, who are committed to the general vision for sustainable development. So far, no one foreign experience recognized establishing/formation of such Campus for Sustainable Development. Hence, it would represent maximum engagement and remarkable brand even worldwide, if it was realized in practice. Unfortunately, so far this idea has not been transformed into something real.

In **Slovakia**, since 1995 series of the National Conferences on Environmental Education and ESD have been organised:

- 1995 (Comenius University in Bratislava)
- 1998 (University of Technology in Zvolen)
- 2001 (University of P.J. Šafarik in Košice)
- 2004 (Constantine the Philosopher University in Nitra)
- 2009 (University of Matej Bell in Banská Bystrica)
- 2013 (Comenius University in Bratislava).

Each of the above listed conferences brought comprehensive, more or less objectivized view on the state of art in respective field, the participants prepared qualified conclusions and recommendations for regional school system, HES and practice. Unfortunately, only minority of those recommendations has been implemented and improved environmental education and ESD. The

progress can be identified regarding the possibilities for continual education in sustainable development for the teachers at the elementary, high and professional schools. The paradox in Slovak educational system is the lack of inherent system of university teachers' education. The system existing before 1990 was dissolved and new has not been established. In the frame of individual initiatives of particular universities there exists such education in the centres of life long education. That because the ESD for HES could not be fully integrated.

There has not been elaborated any document focused on ESD professional development for university educators. Therefore here are important national documents, projects and initiatives listed, focused on the requirement to assure education of university educators.

An analytical study *"Academic carrier of researcher and educators at the HES in SR and possibilities of its optimization"* was elaborated in 2009 in the frame of the implementation of the Modernization Program Slovakia 21, approved by the Government of the SR by the decision Nr.376 Call from June 4th, 2008. (IBS SLOVAKIA, s.r.o., December 2009, 136 pp.) This study focuses on the mapping of the possibilities of the academic carrier at the HES in Slovakia, opinions of the university educators as well as doctoral candidates regarding their working conditions and motivations as well as comparison with the carrier systems in chosen countries.

The Ministry of Education, Science, Research and Sport of the SR initiated the project *"Transformation of university education of the teachers in the context of the reform of regional educational system"* in the collaboration with HES in 2010. The goal of this project was to analyse the preconditions for the preparation of the teachers at the faculties of pedagogy and harmonization with the changes in regional educational system.

The Ministry of Education, Science, Research and Sport of the SR prepared *"Report on the State of Art of Educational System in Slovakia in 2013"* for public discussion. (The document was discussed in the Parliament as well). As it results from this Report, Slovakia is behind the ESG standards in Europe, as the development of internal QASs are not properly developed. Even the Slovak Accreditation Committee is not the member of the ENQA. This Report requires the assurance of systematic continual education of university teachers as their professional development is currently mostly reduced to the research field.

Table 6. Overview of key messages of national initiatives on ESD professional development for university educators

Country	Yes	No	Key message
Albania	✓		Yes, there are some projects and programs on ESD development for university educators. There are several institutions of HE which have been included in initiatives on ESD for university educators. Most of the initiatives have been in the field of environment, economic development, social issues and agriculture.
B & H		✓	
Bulgaria		✓	No initiatives could be identified to specifically address ESD professional development for university educators.
Croatia		✓	
Czech Republic	✓		CUEC is an initiator of the Forum of University Teachers (ad hoc database and association of university teachers concerned with EE and ESD) and in 2002 it organized a conference and published proceedings specifically concerned with methods and approaches in HE for sustainability (Innovation of HE in environmentally oriented disciplines). Experts from the Charles University Institute for Research and Development of Education participated in the conference ⁷ .
Hungary		✓	There are no existing initiatives.
Macedonia	✓		In the framework of the <i>National Strategy for Sustainable Development in the R. of Macedonia</i> , there is an important part, titled "Strategic actions for reaching Sustainable Development in the Republic of Macedonia". Here are elaborated main activities and measures needed to achieve the strategic goals of the Strategy.
Poland		✓	
Romania		✓	There are no initiatives to support ESD development for university educators.
Serbia		✓	Currently no
Slovakia	✓		Series of the National Conferences on Environmental Education and ESD have been organised. This is an initial phase of ESD implementation where state of art in respective field is being discussed with relevant stakeholders. Unfortunately, only minority of conclusions of these meetings and resulting recommendations has been implemented to improve environmental education and ESD.
Slovenia		✓	During our survey, we didn't find or recognize any national initiatives (projects, programmes, etc.) on ESD professional development for university educators in Slovenia.

⁷Dlouhá, J. (ed.) (2002) *Inovace vysokoškolské výuky v environmentálních oborech* (Innovation of HE in environmentally oriented disciplines) Praha : COŽP UK. 185 pp. ISBN 80-238-9228-2. Info about the conference including presentations see <http://www.czp.cuni.cz/Vzdel/Forumvs/Setkani030123/>

2.5 Strategic plans and guidelines of Higher Education institutions to promote ESD

A limited number of strategic plans and guidelines has been reported (Albania). Sometimes, such documents exist as they are required to e.g. within EU tendering procedures, but are not implemented in any practical way (Hungary). Some of the countries report that “there is no requirement” for such a strategy, which indicates that the top-down approach is still the main driving force to accept some systemic changes.

Table 7. Number of HE institutions’ strategic plans and guidelines that promote ESD in the East region

	None	Few	Several	Many	All	Key messages
Albania		✓				Good examples: Few of institutions have developed strategic plans or guidelines regarding the promotion of ESD. In this regard can be mentioned Polis University and University of Agriculture of Tirana.
Bosnia and Herzegovina	✓					
Bulgaria		✓				Few – not specifically focused on ESD priorities
Croatia	✓					
Czech Republic	✓					Never at the university level; some departments have internal guidelines but are more concerned with overarching themes and approaches such as active learning.
Hungary			✓			<p>Almost every institute have their own sustainable development strategies, the general problem is the practical implementation.</p> <p>Universities may create their strategies, but it is not required by regulation. Nevertheless, there are several such plans in the country, because of the EU requirements in tendering processes. Unfortunately, these documents have very limited effect on the operation of institutions.</p> <p>Good examples: the Operational Programme “Human Resources Development” (European Social Fund of the EU & national) implements project schemes also for training and career development of the academic staff.</p>
Macedonia	✓					There are no strategic plans or guidelines at Higher education institutions, prepared for the reason of promotion ESD. In fact, universities and faculties are not obliged to have strategic plans or guidelines to promote ESD.
Poland		✓				
Romania	✓					
Serbia	✓					

Slovakia	✓					
Slovenia		✓				University of Maribor has “A sustainable and socially responsible University” initiative (see http://www.um.si/en/quality/Pages/A-sustainable-and-socially-responsible-University-.aspx). No other higher education institution or university in Slovenia reported to have a strategic plan or special guidelines in order to promote ESD. However, many of them offer their students study courses on sustainability and educate future teachers.

2.6 Initiatives of Higher Education institutions to support the professional development of university educators in ESD

A few initiatives to support the professional development of university educators in ESD exist (Albania). A comprehensive program for addressing professional competences in ESD is reported by Bulgaria at the University of Architecture, Civil Engineering and Geodesy (UACEG); some of the initiatives are being run as part of international projects (Hungary, Macedonia). In the Czech Republic, the theme was launched in 2002 at an annual conference of a professional network. Some countries list initiatives focused on SD oriented curricular changes (Bosnia and Hercegovina) as life-long learning is often not addressed (Serbia, Croatia and others). Initiatives launched by individuals are more common (Slovenia). In Slovakia, there are numerous initiatives in terms of workshops that provide an initial input for those interested in the ESD theme. Slovenia has a very advanced program for higher education pedagogy in the Centre for Pedagogical Education (Faculty of Arts, University of Ljubljana) – ESD, however, is not yet included.

Bosnia and Hercegovina

Examples of initiatives are: faculties of agriculture and forestry at the Universities of Banja Luka and Sarajevo. The universities of Banja Luka and Tuzla introduced a curriculum on environmental protection while the University of Sarajevo, Zenica and Bihać introduced a curriculum on environmental management. The Rulebook of Academic Titles adopted by the BiH State Government on 3 December 2009 lists several Bachelor’s degrees on environment: spatial planning, geology, geography, meteorology, biology and environmental engineering (mining and geology engineers). Each engineering study program includes a mandatory course on environmental protection. Study courses for lawyers, economists and management do not cover environment.

Macedonia

There are some universities/faculties that already have introduced subjects (syllabi) or even study programs (curricula) in environmental protection and sustainable development. This is referred mainly to faculties in natural sciences (chemistry and biology), faculties of agriculture, faculty of forestry, faculties of geography, faculties of spatial planning, faculties of architecture, but also faculties in social sciences, as for instance faculties of law and faculties of economics (Ss. Cyril and Methodius University in Skopje, University St Kliment Ohridski in Bitola, University Goce Delcev in Stip, etc). These faculties do have subject/syllabi in ecology or environmental protection. Some chapters of the programs are devoted to the topic of sustainable development.

It is interesting that at the Integrated Business Faculty (private independent higher education institution in Skopje), exists a study program (graduate study) on *Sustainable Development - Environmental Economy*. Majority of the subject are in economics, but it also contains several subjects in environmental protection and sustainable development. Also, at Ss. Cyril and Methodius University in Skopje (biggest and oldest university in Macedonia with a status of public institution), in 2011 was established a study program in *Engineering of Environment and Natural Resources* (as post-graduate study program). Beside the subjects in engineering, the program contains subject in environmental economics (with a chapter on sustainable development).

Slovakia; examples of the initiatives:

Scientific conference „Decade of education on sustainable development in SR“ (Modra, 2006), organized by Slovak Environmental Agency in Banska Bystrica and FPV UMB. The goals were as follows:

- to contribute to the definition of conceptual background for education on sustainable development with the stress on identification of the ties between natural, cultural and spiritual values in Slovakia.
- to wake up the interest of the professionals for closer collaboration between schools and local communities in the implementation of sustainable development strategies and
- to underline the role and potentials of HES in looking for solutions in local environment

Workshop on Action plan for education and teaching for sustainable development.... (Bratislava, 2007) – part HES, organized by the Ministry of Education and Faculty of Natural Sciences UK in Bratislava. The goal was to assess current state of art in the education and teaching for sustainable development at the HESs in Slovakia, presentation of the initiatives and projects realised by individual HES supporting the development of sustainable faculties/universities and proposal to establish a network of the representatives of particular HES responsible for the education and teaching for SD.

Workshop „Education and teaching for sustainable development at Slovak HES (Bratislava, 2008), organized by organized by the Ministry of Education and Faculty of Natural Sciences UK in Bratislava with the goal to assess current state of art in the education and teaching for sustainable development at the HESs in Slovakia, to prepare the measures for its improvement, to present the best examples of integrative curricula dealing with sustainable development, to assess institutional capacities for implementation of the UNO Strategy for education for sustainable development, to discuss the goals relevant for the development of sustainable universities/HES in Slovakia.

„Pilot Program of Environmental Education– Innovative approaches in environmental education“, implemented by the Regional Development Agency in Presov self-governmental region (ARR PSK), in the collaboration with Slovak Environmental Agency and Universities (Prešov 2006). Main activities were as follows: 5 educational trainings for the coordinators of environmental education led by the lectures from the SAG, Prešov University and Matej Bel University in Banska Bystrica making participating academicians aware about new innovative approaches in teaching on sustainability in elementary schools, high and professional schools in the self-governmental region Presov.

The participants had the possibility to take part at practical activities in environmental education and education for SD, to learn by doing and experiencing. They get the information about new methods supporting the fulfilment of their role as environmental coordinators in their schools.

Different *projects are running at the HEIs* (VEGA, Kega, APVV, APVT,ESF, bilateral and multilateral projects SR, ČR, Poland, Bulgaria, Serbia, projects in the frame of the research network of the Visegrad agreement group) focussed on education for SD, e.g.:

- Prešov University in Presov, Faculty of Management: – ESF project *“Educational training for the qualification development in the field of environmental protection and development”* (Presov, 2005-2007) International Polish-Slovak project in the collaboration with the Primorsk Pedagogic Academy in Slupsko, - Project „Education and environmental protection in selected regions of Poland and Slovakia (Presov, 2006-2009); - Project APVV *“Popularization of the outputs of environmental research for improvement of environmental awareness and interest on science”* (Presov, 2009 – 2012); - Project KEGA *“Development of study materials/tools for newly developed managerial disciplines in study program in study field Environmental management”* (Presov, 2010 – 2011).
- Faculty of Philosophy, UK Bratislava: - International educational project *“Women Taking Chances”* (Bratislava, 2008 – 2010) realised in the frame of Life long educational program of the EU, GRUNTVIG PARTNERSHIP with the goal to motivate women to take part in the life long educational activities
- Faculty of Mechanical Engineering, Zilina University: - Project KEGA „Improvement of skills and abilities of the students in technology fields via implementation of new forms of e-based learning build on Web-based applications”.
- Slovak University of Technology in Bratislava INTERREG II C international project: „Spatial Planning Instruments for Safeguarding the Sustainable Spatial Development at the local and regional level” (Bratislava, 1998-2001) focused on the know how transfer in sustainable spatial development in the professional practice and education of spatial planners, architects and urbanists.
- SPECTRA Centre of Excellence EU at the STU in Bratislava 5th FP project: *“Permanent Research in Spatial Planning in the context of European Enlargement and Information Society Advancement”* (SPECTRA-PERSEUS) (Bratislava 2003-2005) focused on capacity building in the research and education for sustainable spatial development in order to meet sustainable spatial environmental, social and economic, development.
- Slovak University of Technology, Tempus project: LENNE *“Joint European Curriculum Development Project: Master of Landscape Planning and Management”* (TU Wien/FA STU/Univ. Belgrade 2005-2007) focused on the development of curricula and capacities in sustainable landscape planning and management at the universities in Belgrade, Novy Sad, Vienna and Bratislava.
- SPECTRA Centre of Excellence EU at the STU in Bratislava TEMPUS project: *PSDEEWB Post-Secondary Diploma in Energy Efficiency for the Western Balkans*, focused on the development of curricula and capacities of HES educators in efficient energy use in sustainable settlement development in Western Balkan countries.
- Faculty of Natural Sciences UK Bratislava and Institute of Management of the STU Bratislava: - Project KEGA (2007-2009) *“Interuniversity coordination of the contents in study programs focused on landscape planning”* with the goal to support integration of the study programs’ content focused on landscape planning.
- Faculty of Natural Sciences UMB Banská Bystrica: - Project in the frame of EU Leonardo da Vinci Program LLP - Transfer of Innovations (2009-2013) with the goal to improve the competences of the professionals in professional education and training including the SD topic.

See also examples of good practices in Annex 3.

Slovenia

Two possibilities have been identified at the University of Ljubljana, which would be able to incorporate ESD:

- The Centre for Pedagogical Education (Faculty of Arts, University of Ljubljana) is responsible for the pedagogical education and additional training of teachers at all educational levels, including the education in the field of higher education pedagogy. They regularly offer courses in higher education didactics for university teachers and could in the future introduce also ESD as a part of teaching support mentioned in the National programme of higher education. We recognized the same possibility at the University of Maribor, which has a comparable centre for pedagogical education.
- The spring 2013 was marked by kick-off of the KUL project at the University of Ljubljana. The main goal of the 4-year project, co-financed by the European Social Fund and the national Ministry of Education, Science and Sport, is to improve the quality management system. One of the planned activities is the education of employees at the University of Ljubljana. Professional development programme for university teachers comprises the following modules: rhetoric, E-learning, basic university didactics, quality management system, development of competences for improving organizational system and to restore the culture of quality at the University. The list of modules does not include any initiatives to support the professional development of university educators in ESD.

Table 8. Number of higher education institutions in the East region that support the professional development of university educators in ESD

	None	Few	Several	Many	All	Key messages
Albania			✓			<p>Recent years some initiatives have been developed to support the professional development of university educators in ESD.</p> <p>Important initiatives can be mentioned related to: Sustainability in the field of social issues (UT/Center of Excellence); Sustainability in the fields of social issues and economy (UET/UAMD); Sustainability in the field of environment (POLIS), Sustainability in the field of agriculture (UBT).</p>
Bosnia and Herzegovina			✓			In higher education, several universities have introduced ecological programs.
Bulgaria		✓				At the University of Architecture, Civil Engineering and Geodesy (UACEG) two research projects (2005-07, 2009-11) addressed issues of SD-related professional competencies to be developed and provided recommendations for needed changes in the concept and everyday educational practice. An Academic Initiative for SD Education (ISDE) was established in 2011 – an informal group of university teachers aimed to identify existing interests and teaching capacities; to provide mutual support in teaching and self-educating; to initiate coordination between faculties and disciplines.
Croatia	✓					
Czech Republic		✓				As mentioned elsewhere, Forum of University Teachers initiated by the Charles University Environment Centre (CUEC) has been discussing this topic at its annual conferences. Especially the 2002 conference was devoted to innovations in HE teaching – its focus was on curricula and teaching methods and approaches. CUEC is also organizing other conferences and producing publications for expert dialogue and awareness raising in the field of ESD. In general, ESD is considered to be a theme rather for NGOs.
Hungary		✓				<p>There are some EU-funded projects in this field, but only conferences:</p> <p>International Conference on Project Pedagogy, College of Kecskemét, 2011</p> <p>Regular Conferences on Education Informatics, ELTE University</p>
Macedonia	✓					Concerning the professional development of university professors/educators in ESD, for the time being, it can be concluded that it is an issue left to the

					professor/educator him/her self. The process of improvement from the viewpoint of professional and scientific competences is not institutionalized, and the impression is that it does not follow the contemporary development. In fact most of the educators are left to satisfy the necessity of professional development in ESD by voluntarily attended seminars, workshops, scientific conferences and so on. There are as exemptions from the previous, see above.
Poland		✓			
Romania	✓				Concentrated around projects resulting from international cooperation (European Virtual Seminar In SD (ESSD) or Environmental Training Project (financed from the USAID) – see case studies
Serbia	✓				General practice in Serbia does not encourage life-long learning. Therefore, environmental training is not a common practice at Serbian Universities. Moreover, given the life-long-learning concept is still not well developed in Serbia, outreach education for sustainable development are missing and universities did not develop specific educational services for the community.
Slovakia				✓	Due to non-systemic character of professional education on HE level, and also non-systemic inclusion of ESD in HE teaching in Slovakia, bottom-up approach is being widely implemented to raise awareness and develop skills in ESD (driven by committed individuals and teams). Slovakia closely follows international trends and recently focus has been shifted to global education instead ESD.
Slovenia	✓				The professional development of university educators in ESD is in Slovenia currently being left to each individual and his approach toward (self-improvement of scientific, professional and didactic competences in order to follow the latest development in the field. Therefore, the majority of interviewees reported to organize and attend scientific meetings, conferences, invited lectures, etc. However, none of the HE institutions and universities in Slovenia reported to have an initiative (project, programme, etc.) to support the professional development of university educators specifically in ESD.

2.7 ESD as a part of quality assurance and accreditation processes of Higher Education institutions

ESD is not part of the quality assurance and accreditation processes of Higher Education institutions in any of the countries of the East region. Sometimes there are general recommendations in place (Bulgaria) or they are required to include the subjects on SD in specific programs (Slovakia). In Slovenia, the question whether a higher education institution enables lifelong education and professional development for all employees is included, but it is not very specific and does not include the criteria of ESD.

Slovakia – additional comments:

Describe briefly your national HE system with regards to

a) the career criteria (are there any requirements concerning pedagogical competences)

Current system of QAS in HESs in Slovakia is based on a system of criteria defined by the Accreditation commission which is an advisory board of Slovak Government. The law on HE defines the systems of QAS at the HESs (annual assessment elaborated by the scientific boards of the universities, anonymous questionnaire for students, etc.) The positions of associated professors and professors as well as lectures are not permanent positions and they are occupied in the selection processes. This protects not only the best choice for the position but the permanent development of the staff in their research and educational activities. Only seldom the HESs offer regular possibility for permanent education of their academicians in andragogy, pedagogics, didactics, as well as training of the doctoral candidates involved in the educational process by law.

b) quality assurance demands (some quality management assessment systems try to guarantee that HE teachers have training to be able to improve education

As a part of new criteria applied in the decision making of the Accreditation Commission since December 2013 are Criteria on QAS, including the assurance of the quality of the academicians:

Criterion KVSK-B3: Assurance of the quality of the academicians:

- HEI has developed the rules and requirements on QAS of academicians, the professional development of university educators, and assessment of qualification of new academicians.
- HEI has developed the mechanism of the implementation of the outputs from the evaluation of educators by the students
- HEI offers the possibility for personal development of own educators in their educational activities.

Table 9: Overview of key messages about ESD as a part of quality assurance and accreditation processes at Higher Education institutions

Country	Yes/ No	Key message
Albania	No	
B & H	No	
Bulgaria	No	SD is not explicitly taken into consideration during the formal accreditation process. There are only some general recommendations about including modules on environmental protection in the programmes and integrating SD considerations into the educational process.
Croatia	No	
Czech Republic	No	As accreditation is concerned almost exclusively with formal requirements such as quality of academic staff etc.
Hungary	No	Definitely not.
Macedonia	No	In general, ESD is not included as a part of the quality and accreditation process of higher education institutions. Of course, there are some study programs (as mentioned in the previous question/answer 4, and some syllabi at faculties of economics, law, natural sciences, mechanical engineering, civil engineering, etc., but actually these are exemptions of the final conclusion. (Details on quality assurance and accreditation processes see the national report.)
Poland	No	
Romania	No	There is a quality assurance and accreditation process of HE institutions made by ARACIS (Agentia Romana de Asigurare a Calitatii in Invatamantul Superior) and it requests syllabi in which professors must point out the relevance of their discipline to the academic community, to professional community and to employers' expectations. But it is not a direct reference to SD or ESD. We can assume that there is only "sustainability" of the domain in the broad context of knowledge based society.
Serbia	No	
Slovakia	No	ESD in Slovakia is not a topic included in the quality assurance and complex accreditation processes of HESs. In the accreditation of some study programs is required (e.g. in ecologically and environmentally oriented programs, spatial planning and others) to include the subjects on SD.
Slovenia	No	In Slovenia, education for sustainable development per se is not a part of the quality assurance and accreditation process. Accreditation process in Slovenia is marked strongly by the evaluation of the adequacy of each higher education institution and the quality of the study programme. The accreditation form contains also the question whether the higher education institution enables lifelong education and professional development of all employees, but the question is not very specific and does not include the criteria of ESD.

2.8 Higher Education networks, partnerships and main drivers that support the professional development of university educators in ESD in the partner countries

Several networks, often with an international scope or initiated by (international) projects, are reported. The involvement of different social actors has been described in Albania, Bulgaria, Czech Republic, Hungary, and others, which indicates the fact that ESD is often NGO driven (in Serbia, students involved in NGOs represent an important driving force). Networks with the involvement of businesses is reported only by Slovenia. ESD concerned *professional* networks are described in the Czech Republic, Poland, Slovakia. However, these networks very often could be considered more as “discussion clubs” and not real think-tanks influencing ESD policies and strategies.

Except for the Czech Republic’s Charles University Environment Centre, the Slovak University of Technology in Bratislava, and recently the University of Warsaw in Poland as well, no institution is a member of the European Network on Higher Education for Sustainable Development (COPERNICUS Alliance)

In **Albania**, the project ‘*Connecting Science-Society Collaborations for Sustainability Innovations*’ addresses the priority through establishing a science-society network for sustainable innovations and through developing and running workshops and trainings for the target groups to foster collaborations within this network. The established network consists of 4 Albanian HEI and 3 Kosovo universities, and 4 EU universities, 2 NGO-s from Albania and Kosovo and 2 Regional Centers of Expertise (RCE) on ESD.

In **Bulgaria**, ERASMUS. ERASMUS-MUNDUS and CEEPUS mobility helps to enhance SD related competencies of both teachers and students. Since late 1990s an increasing number of NGOs (with access to foreign funding programmes) have been actively searching for closer collaboration with HE institutions in developing training courses and programmes in different SD-related fields (energy efficiency, environmental protection, etc.). A good early example for this process was a training programme for municipal energy management developed by the Centre for Energy Efficiency *Eneffect* in the period 2000-2005, project title: Strategy for Energy Efficiency and Reduction of Greenhouse Emissions (UNDP grant, expert partners from Norway and the Netherlands). The first step in the project was organising a training seminar for Bulgarian university teachers who were later on involved in the training courses for municipal experts in energy management. SD was explicitly addressed by the course as the framework concept of the energy efficiency considerations.

In the **Czech Republic**, the Forum of University Teachers has raised the theme of competences in ESD at the HE level, but it did not receive sufficient support and interest. ESD at the HE level in CR is more concerned with the themes and approaches that could be perceived as “sources of power” and legitimacy for enforcing sustainable development – a consensus concerning SD has not yet been achieved in society.

In **Hungary**, there are two similar NGO initiatives in this field, both of them focus mainly on the performance of department offices. The more traditional one is an absolutely student-led department greening competition of the University Green Association (UGA) at Budapest University of Technology and Economics. Since 2009 it brought changes to certain departments at the university. A similar program launched in the ELTE University this year, which is organized by a local student group, ELTE Students for Environmental Awareness. This one is based on a professional green office programme with long tradition.

Another NGO based initiative is the Concept for Higher Education of the Waste Work Group, which focused on the implementation of the Zero Waste approach into the operation of higher education institutions.

The third non-governmental based program is connected to the Hungarian Educational Research Association (HERA), which focus basically on teacher training.

In the framework of research in **Macedonia**, there was not recorded any Higher Education network or partnership that support the professional development of university educators in ESD. The criteria for professional development and selection to the academic and scientific titles for the university professors/educators do not include the field of sustainable development. Some of the characteristics of the national HE system in Macedonia regarding professional development and promotion to the academic and scientific titles for the university professors/educators see the national report.

In **Poland**, there is an annual conference for academic educators “Environmental Protection in the programmes of universities studies on natural science”. This conference is addressed to leading academic lecturers and staff from all universities in Poland providing studies and courses on environmental protection. The purpose of the conference is exchange of experiences and examples of good practices in teaching about environment protection and sustainable development. Each year the conference is organised by different University.

In **Serbia** experts from Universities are becoming active part of global scientific SD community. Many initiatives at the local and national level have already been initiated from (or with the active involvement of) university lecturers (National sustainable development strategy was engaged more than 50 university lecturers; some other strategies and policy initiatives as well). However, only a few networks dealing with environment and sustainability have been established so far, and those networks have limited influence. There is none influential “think-tank” organization lobbying for sustainability (instead, there is very influential organization that intensely supports neo-liberal approach). Ministry of education is rather ambivalent about environmental concerns and do not foster sustainable practices. However, student population is much more involved and aware, following the overarching sustainability goals. In many cases students are promoting themselves as a “moving forward engines” on environment and sustainability (mainly through their involvement in NGOs, students association and organization and voluntary activities), although those actions are rather sporadic and only declaratively supported by Universities.

In **Slovakia**, there exist several networks, partnerships supporting also professional development of HEIs – or supporting dissemination of the themes related to SD (e.g. NGO Society for Sustainable Living in Slovakia), but no one of them is focused on direct support of professional development of universities educators.

There is a SPIRAL Network – national network of organisations dealing with environmental education and teaching, providing expertise and consultation in the field of environmental education, organising educational events, seminars, workshops, excursions, publishing information via periodical and non-periodical publications (journal Telescope – Dalekohľad), developing the projects supporting environmental education and teaching not only at elementary and secondary schools but at HESs as well.

Some university teachers from **Slovenia** are active in different national and international sustainability initiatives, but only individual higher institutions reported their involvement in such activities. For example, IBS – International Business School from Ljubljana and IEDC – Bled School of Management are members of the UN Global Compact Slovenia, together with many prominent

Slovenian businesses and NGOs. Such co-operation enables professional development of participating university educators. The same is true for university teachers who work with NGOs. Nevertheless, the general impact of all those partnerships on overall professional development of university educators in ESD in Slovenia can be assessed as low.

Table 10. Summary of higher education networks, partnerships and main drivers that support the ESD professional development of university educators in the East region

Country	Local and national networks	Local and national associations, NGOs and foundation	Regional and international centres and networks	Externally funded collaborative projects
Albania			RCE Middle Albania ⁸	'Connecting Science-Society Collaborations for Sustainability Innovations' - project funded by Tempus and led by UET.
Bosnia and Herzegovina	No	No	No	No
Bulgaria	UACEG and the Technical University Sofia - personal contacts with EESD network (Engineering Education for Sustainable Development)			Strategy for Energy Efficiency and Reduction of Greenhouse Emissions – incl. a training seminar for university teachers.
Croatia	No	No	No	No
Czech Republic	Forum of University Teachers – association of teachers interested in SD and discussing up-to-date problems of university teaching	NGO driven initiatives	ISPoS project http://www.czp.cuni.cz/ispos/ , VCSE network http://www2.leuphana.de/vcse/ and other forms of international cooperation in teaching. Member of the European Network on Higher Education for Sustainable Development (COPERNICUS Alliance)	MOSUR project, http://mosur.czp.cuni.cz/index.php/en/ focused on interdisciplinary cooperation of diverse institutions.

⁸ A non-formal partnership that consist of consist on 20 partner organizations and individuals on a network community of 470 connection in the Facebook page, which serve as an exchange and informative platform. promoting a new model of governance, by coordinating different types of organizations in an equal partnerships in order to foster region development through Education for Sustainable Development. Main focus is on: Sustainable Architecture and Green Building, Research on ESD, Inter-regional Cooperation, Eco-Tourism, Capacity strengthening, Innovation and Urban Farming, International and Balkan cooperation.

Hungary		NGO driven initiatives: green office, waste, teacher training		
Macedonia	No	No	No	No
Poland	An annual conference for academic educators "Environmental Protection in the programmes of universities studies on natural science".		University of Warsaw is a member of the European Network on Higher Education for Sustainable Development (COPERNICUS Alliance)	
Romania	No	No	No	No
Serbia	No	No	No	No
Slovakia	SPIRAL Network – national network of organisations dealing with environmental education and teaching.		Slovak University of Technology in Bratislava is a member of the European Network on Higher Education for Sustainable Development (COPERNICUS Alliance)	
Slovenia		UN Global Compact Slovenia NGO driven initiatives		

2.9 Development of Higher Education initiatives in response to the UNECE ESD competences

UNECE ESD competences have had a limited impact on HE in the region in question. The document has been mentioned in project proposal frameworks (e.g. in Albania). Bulgaria represents a good interface between international documents and national initiatives on ESD competences (University of Architecture, Civil Engineering and Geodesy, Sofia). In the Czech Republic, the *Envigogika* journal has published articles that should have initiated a wider discussion on ESD competences when the UNECE expert group started its work (and CUEC organized a conference on the topic before the UNECE initiative). Hungary reports two initiatives with limited relevance (one is not concerned specifically with competences; the other not for the HE level). In Slovenia, where comprehensive projects for the ESD reorientation of HE are running, these were not in any respect related to the UNECE documents.

In **Slovakia**, such initiative exists only for primary school teachers. A program called „Environmental footprint) is running in Slovakia. It is based on the work with internet calculator of ecological footprint of a school. The main goal is to educate pupils to understand influence of every day human activities on environment and research own possibilities to reduce their environmental footprint. It provides new teaching methods for the teachers, inspirations for project based teaching, use of ICT in learning process. It mediates the knowledge for the pupils via informal play-based activities in teaching process. This program is implemented in the frame of the project *“Improvement of environmental awareness in the field of nature and landscape protection”* (NATURA 2000 incl.) and it is co-financed from the EFRD. But this is only for kindergartens, elementary schools and secondary schools.

Table 11. Summary of higher education initiatives or projects developed in response to the UNECE ESD competences

Country	Yes	No	Extract from national templates
Albania	✓		The initiatives mentioned in the Table 6 are developed in response to UNECE ESD competences as they mentioned the document of UNECE (2011) Learning for the future: Competences in Education for Sustainable Development as an important reference.
B & H		✓	
Bulgaria	✓		The UACEG (University of Architecture, Civil Engineering and Geodesy, Sofia) is ranked 39 th out of 56 universities on the list of EESD Observatory Report on the Status of Engineering Education for SD in European Higher Education (EESD, 2008) – and is one of only five East European universities there. 2 research projects provided practical recommendations (limited implementation) to develop: (1) an integrated educational approach; and (2) to search opportunities for implementing SD in the educational process. PhD and MSc students were involved in both research projects.
Croatia		✓	
Czech Republic	✓		The Envigogika journal has published articles that should have initiated a wider discussion on ESD competences when the UNECE expert group started its work ⁹ . Special issue of Envigogika on competences being prepared in response to the UE4SD project.
Hungary	✓		2 initiatives: a) Green Energy Cooperation of Higher Education – ZENFE (Zöld Energia Felsőoktatási Együttműködés); http://zenfe.unideb.hu/index.php/projekt b) Experiential Learning and Education for Nature Awareness; http://www.anl.bayern.de/forschung/elena/index.htm
Macedonia		✓	The research did not recognize any higher education initiative or project developed in response to the UNECE ESD competences.
Poland		✓	There are no initiatives undertake to in response to the UNECE ESD competences at HE level.
Romania		✓	
Serbia		✓	
Slovakia		✓	Not for HE level.
Slovenia		✓	No Slovenian university or other higher education institution is a member of the European Network on Higher Education for Sustainable Development (COPERNICUS Alliance) and none of them signed the Rio+20 Treaty on Higher Education. UNECE ESD competences are not used as a starting point/basis for any higher education initiative or project in Slovenia. At least such initiatives were not identified during our inquires at the line ministry and at the individual higher

⁹ Dlouhá, J. (2009) Obecné vzdělávací kvality a pojem kompetence. (Educational qualities and the term competence) *Envigogika*, IV/1 [online] [cit. 2010-06-16] Available from: <http://envigogika.cuni.cz/index.php/cs/texty/20091/299> ISSN: 1802-3061 DOI: <http://dx.doi.org/10.14712/18023061.35>

Dlouhá, J. (2009) Kompetence v environmentálním vzdělání. (Competences in environmental education) *Envigogika*, IV/1 [online] [cit. 2010-06-16] Available from: <http://envigogika.cuni.cz/index.php/cs/texty/20091/300> ISSN: 1802-3061 DOI: <http://dx.doi.org/10.14712/18023061.34>

3 Professional development opportunities in ESD for university educators

Case study ranking methodology:

A list of all case studies has been developed with a brief description of each, and these case studies have been assessed within 4 categories of relevance (see also Table 14):

1. Target group relevance (university educators concerned);
2. Systemic character (random versus systemic activity);
3. Added value (specifics highlighted);
4. ESD relevance (the most important category as several types of activities could be identified here).

The case studies were assessed on a 5 point scale from non-relevant to highly relevant in all 4 categories; as a majority of the examples were not relevant, especially in the ESD category, the selection process was rather simple. In the following Tables 12 and 13 only those case studies are presented which are (usually not completely) relevant from an ESD point of view and were positively assessed in the other categories as well. All of the case studies provided are presented in Table 14 in Annex 3.

Explanation of the results (Table 12 and 13):

The first two examples in Table 12 come from Bulgaria and the Czech Republic – they represent a bottom-up initiative introduced by an international project but which continued after its conclusion. These activities are regular and almost systemic and bring together university educators from different disciplines (Bulgaria) or countries (Czech Republic). They have established wide communication channels (Bulgaria) and bring new perspectives to HE teaching/learning methodology (CR). Both have a clear legacy in the production of teaching materials and/or research articles. The following four case studies are also an initiative of HEIs, two are repeated on regular basis (Poland, Hungary) and two were undertaken only once (Serbia, Slovakia). Two are specifically focused on ESD (Serbia, Slovakia) and they initiated a national dialogue on this issue between academics and policymakers; the other two have more of a SD focus (Poland, Hungary) but raise high awareness in transdisciplinary themes and activities, which is otherwise problematic in this region. Sometimes these initiatives fail to have any practical follow-up and in general they represent only the first steps in negotiating ESD as a policy and curricular priority at the university level.

The case studies included in Table 13 represent other interesting examples of professional development opportunities in ESD but which unfortunately lack some important aspect to be considered as good practice. Slovenia introduced an excellent university management initiative which has led to numerous learning processes for university staff – unfortunately these are not specifically ESD oriented. Transdisciplinary cooperation in Albania is associated with university staff training in ESD and the production of methodological materials, but this is the only activity envisaged. Examples from Bosnia & Herzegovina and Romania are relevant but outdated; Slovakia and Croatia introduced non-ESD oriented activities for university educators which on the other hand represent an opportunity to be re-oriented towards ESD in future phases (development of non-ESD teaching competences in Croatia).

In general, the number of case studies focusing specifically on ESD was low due to the absence of professional development requirements in the pedagogical area at the higher education level; the

generally non-supportive environment, which is difficult to contextualize, then has implications for ESD programs.

Table 12. Good practice examples of professional development opportunities in ESD for university educators

Professional development opportunities in ESD for university educators <i>A list of most appropriate examples that explicitly focus on developing ESD competences of university educators</i>			
Title	Country	Explanation	Category
Initiative for SD Education (ISDE)	Bulgaria	Academic working group for university educators – to identify existing interests and teaching capacities; mutual support in teaching and self-educating; coordination between faculties and disciplines.	Workshop of university educators
ENOAT (European Network Organic Agriculture Teachers)	Czech Republic	Seminar once a year; innovation in teaching practices related to the joint projects on sustainable development practices in agriculture, food production, landscape management etc.	University teacher training initiative – ESD competence oriented
Seminar: Education and teaching for sustainable development at the HESs in Slovakia	Slovakia	One-day seminar, but the preparation, including the discussion with the professionals, organisers, responsible persons from the Ministries took place for several months. As the follows-up several meetings at the Ministry of Education focused on further elaboration of chosen topics from the seminar took place.	Seminar for university educators and policy makers
Series of open lectures: Selected topics in environmental protection – sustainable development in theory and in practice	Poland	13 seminars – one in every week of the semester running since 1997; for students, university educators and various stakeholders outside academia; environmental topics.	Seminar for students and university educators
“University and sustainable development” (October 2010)	Serbia	One day event to discuss the problems of higher education for sustainable development and to contribute wider implementation of SD ideas at Serbian Universities.	Workshop of university educators
National meetings of university educators involved in environmental protection	Hungary	Regular meeting of professionals to improve the knowledge of the educators and sensitization with cultural events and field programs	Workshop of university educators

Table 13. Further interesting examples of professional development opportunities in ESD for university educators

Professional development opportunities in ESD for university educators
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A list of most appropriate examples that explicitly focus on developing ESD competences of university educators

Title	Country	Explanation	Category
Sustainable and Socially Responsible University of Maribor	Slovenia	Staff induction aimed at creation of an innovative environment and an effective organisation contributing to balanced, sustainable and socially responsible development of the University	University management initiative
‘Connecting Science-Society Collaborations for Sustainability Innovations’ Project TEMPUS-JPHES	Albania	Structured workshops and trainings for science-society collaborations (Funded by TEMPUS). One of the aims is to develop innovative teaching materials and methodologies for higher education institutions.	Project on transdisciplinary cooperation
PSDEEWB Post Secondary Diploma in Energy Efficiency for the Western Balkans	Slovakia	Development of curricula and capacities of HES educators in efficient energy use in sustainable settlement development in Western Balkan countries, education of the educators, development of innovative teaching methods , literature, laboratories	Project on transdisciplinary cooperation
“Environmental education for sustainable development – a regional training project scheme for the Adriatic – Ionian basin (EESD)”	Bosnia & Hercegovina	Elaboration of a strategy for Environmental Education – with training modules for school teachers, university assistants and young scientists, focussed on innovative learning tools and methods for educational programmes (devoted to policy-makers and administrators)	Workshop of university educators
Environmental Training Project (1992-2000). USAID	Romania	Romanian university professors already teaching ecology are being taught about Environmental University Curricula Development (a catalogue of Romanian Universities with	Workshop of university educators held till 2000

		environmental subjects in their curricula developed)	
Teacher competences in higher education: Learning and Teaching [Nastavničke kompetencije u visokom školstvu: Učenje i poučavanje]	Croatia	Development of teaching competences for university educators – the first education for professional development of university educators in Croatia organized by HE institution.	Competence oriented training of HE educators – not (E)SD oriented

List of all case studies with brief description, and assessment in 4 categories of relevance see annex 3

3.1 Reflection on national case studies

In relation to the progress in implementation of ESD at the HE level, there are several categories of activities described above.

From an overview of all the case studies from the European region, it is obvious that in this region academic dialogue on ESD at the HE level is still only at an initial phase. The most common initiatives are workshops (or meetings and seminars) with the aim to inform and engage university educators, which are held regularly (Albania, Bulgaria, Hungary) or as a unique event (Bosnia and Hercegovina, Serbia, Slovakia). Initiatives are often policy driven, i.e. aimed at the implementation of international and national strategies (Slovakia). Some initiatives of this type were held long ago, and were related to the launch of important international strategies (Agenda 21, UNESCO ESD Decade, UNECE ESD Strategy) – as there are typically no visible results in the short term, the attention paid to ESD in these countries has often shifted to other new themes (Bosnia and Hercegovina, Czech Republic – where the most important meeting was a past event held in 2002, while more technical issues now appear to be more topical - Romania, Slovakia – where Global education has recently been stressed). In some of the cases, dialogue with policy-makers has been initiated (Bosnia and Hercegovina, Bulgaria, Slovakia); in many countries the events are open and diverse stakeholders including policy-makers can participate.

As university educators in HE systems in all of the countries have great autonomy which is not restricted by educational professional requirements, there is a need for strong driving forces to promote ESD efforts on this level of education. Leadership is required in this initial stage and many countries have introduced initiatives driven by personal commitment that are supposed to generate good practice that is followed by others (Albania, Bosnia and Hercegovina, Hungary, Poland, Slovenia). Bottom-up initiatives are needed to implement ESD even when policy documents support ESD innovations – otherwise policy recommendations are perceived as rather formal (“window-dressing”) and are often not respected by university teachers in practice (Slovakia).

Initiatives are often oriented toward implementation of *sustainable development* oriented curricular change at the university level – this is still a challenge at many universities in the East European region. Interdisciplinary programs are often initiated (in relation to the ESD transition) from the bottom-up or as a result of project implementation (often within an international network of cooperation). SD competences are the primary goal of these projects or initiatives (Albania, Slovakia) or could be considered as a by-product of learning or discussions (Czech Republic, Poland, Romania, Hungary, Slovenia, Slovakia – and then it is difficult to distinguish a SD and ESD competence focus).

SD oriented initiatives where university teachers participate represent an opportunity to intervene from outside and introduce ESD oriented information and activities.

None of the countries has a systemic program for the education of university teachers and development of their teaching competences, especially in the field of ESD. In the collection of case studies, examples are included of the initiation of an academic dialogue or first programs on competence development – where ESD competences are not yet included. Some of these initiatives are mentioned (Bulgaria, Croatia) as they represent an opportunity to include ESD competences in the existing structures for professional development of university educators. ESD reorientation is often considered to be a part of the modernization of educational systems (Albania, Croatia, Macedonia).

3.2 Reflection on ESD competences in national reports

Competences were understood mostly as SD competences, not ESD ones (e.g. achieving transformation is concerned with SD changes, not with the transition of teaching methods etc., as this is difficult to achieve when the SD focus in curricula is still a challenge)

The ESD transition related to the change of the leading paradigm (agronomy → agroecology in the Czech Republic, example 1): then the need for innovation perceived by teachers themselves.

Sometimes driven by Western partners in networks (Czech Republic, Albania and others)

Interdisciplinary and strategic thinking is still a challenge, especially in a local context – some of the activities concentrate on this need (Albania, example 1, Czech Republic, example 2)

Learning to know is often a starting point (and competences in other domains are lacking – see Serbia, example 1, Bosnia and Hercegovina – example 2); where initiative requires transdisciplinary approaches → consequently other domains start to be important (especially *learning to live together*) (Czech Republic – Example 4)

Creative future oriented thinking is being developed within strictly voluntary activities (driven by the interest of participants) – space for brainstorming and open negotiations over the potential solutions (Czech Republic, examples 3, 4).

Where discussion of diverse social actors is facilitated (for the sake of joint activities), competences are a natural by-product of social learning taking place under these circumstances (Albania, example 1).

The need for practical solutions in complex situations is related to the need for competences (Albania, example 2, Bosnia and Hercegovina, Hungary, Slovakia – example 1).

Where initiatives are part of national network cooperation, methodological aspects are highlighted due to the need for mutual understanding between different disciplines and approaches (Bulgaria, example 1)

Where other (not SD or ESD) university educator competences are being developed, the UN ECE categories are often applicable (Bulgaria, example 2, Croatia, example 1, Poland, example 2 and 3). This is an opportunity to link ESD to other innovative approaches in education (such as ICT).

Some of the initiatives envisage changes in behaviours and/or everyday practices (Hungary – example 1, Slovenia – example 1). In these cases, *learning to do* and *learning to be* domains are rich in competence development (competences in all domains are balanced).

Initiatives based on an environmental rather than a SD oriented approach (Poland) are lacking some of the aspects (e.g. *learning to be* domain and knowledge co-production)

Workshops to implement ESD policies often result in the development of well-balanced competences in all domains (Slovakia – example 2, 3).

In general, different stages of the ESD implementation could also be observed in competence development (initial stages are lacking some of the aspects).

4 Reflection and conclusion

The education systems in Central and Eastern Europe lagged behind Western countries in the past and so fast transformation was needed in recent decades (Kohoutek, 2009: 15-16). As a consequence, a growing numbers of students, a lack of financial resources necessary to increase system capacity, the introduction of private higher education providers, and other systemic problems occurred and HEIs (higher education institutions) in CEE countries struggled with many concurrent problems. In addition, the mission of academic institutions has changed: they were initially oriented toward teaching and were not supposed to undertake research and innovation (Balázs et al., 1995: 616); recently, research outcomes have become one of the quality indicators of HEIs in CEE as well. Demand for accountability and well-defined academic performance (outputs and efficiency) now plays an even more important role; as the indicators of academic excellence are not sustainability oriented, this was identified in many national reports as a barrier to ESD implementation. In general, disciplinarianism is a deeply rooted component of academic culture in all CEE countries, while for sustainability turn a transdisciplinary approach and wider involvement of stakeholders is crucially needed (Salcedo-Rahola, Mulder, cit. 2012). The introduction of sustainability principles and activities into the HE system also faces other barriers because universities cannot simply leave aside their traditional goals. Research into commonly adopted ESD pedagogies and their innovation is thus a high priority and higher education should play a role in this respect (cf. UNECE, 2005).

4.1 Experiences with ESD and prospects for transition at the HE level (as identified from national reports)

Strong role of leadership: in many countries, efforts targeting an ESD oriented transition are greatly dependent on committed individuals. Sometimes, the initiatives of individuals substitute for the absence of a national system for professional development of university educators.

- This is related to the vulnerability of the systemic measures to political changes and turbulences. Policy priorities are not stable in this region and it is sometimes difficult to ensure accountability for decisions and strategies in the long term. HE institutions thus are a stabilizing factor where ESD structures (if developed) persist across regimes.
- Some of the countries reported formalism together with a scepticism toward the result of long-approved decisions and policy documents that have no practical follow-up and impact. In the Czech Republic, for example, implementation documents exist but with no financial budget for real activities. Hungary reports on numerous sustainable development strategies at the institutional level, and the general problem with their practical implementation.
- On the other hand, in some of the countries, an (E)SD oriented public debate with national, regional and local authorities and specialised NGOs/ civil society organisations has been initiated (Bulgaria).
- There is a lack of support for the SD concept itself, and as a consequence ESD is often not perceived as a priority. Sometimes, “sustainability” is replaced by other general terms such as “global” (education) (e.g. in Slovakia).
- Although not explicitly reported, future-oriented thinking (from future vision to practical implementation) represents a problem in this region. Initiatives and activities are supposed to be driven rather restrictively – by regulations, norms and control mechanisms.
- In general, a system for the professional development of university educators in which ESD competences could be consequently embedded is lacking (Croatia and others). This is also

emphasised in reports from Slovakia, Slovenia, and the Czech Republic. On the other hand, an example of a good opportunity to introduce ESD competence development programmes at the higher education level can be found in Romania, where a system of mandatory socio-psycho-pedagogical training for students who will become teachers (pre-university and HE) exists.

- The crucial need for holistic, transdisciplinary and transformative education is also recognised elsewhere. For example, in Bosnia and Herzegovina it is reported that these principles are often in conflict with dominant teaching and learning attitudes and models, and the lack of compatibility between existing programs and the concept of ESD itself is a primary obstacle to a change of approach.
- To support arguments with evidence, research is badly required. In Albania, for example, a gap in research and a lack of evidence has resulted in a misunderstanding of ESD and its role in society.
- Action at the education policy level is required. Slovenia has called for a strategic document that would provide a formal framework for ESD in higher education and include as many different disciplinary fields as possible. These efforts should be aligned with international documents produced by UN (UNESCO, UNECE), EU, and related to the other national documents.

To develop a holistic and consistent sustainability-oriented HE system that includes the professional development of university educators in ESD, university “greening” should be undertaken in a relatively wide area of university life and include deeper and more qualitative transformations within the processes of education and reflection thereupon.

4.2 Specific conditions for educational transformation in the UE4SD East countries

In **Albania**, in the light of the provided information was evident: the lack of mapping the current state of art of ESD in Albania; uncertainty about the sustainability criteria among HE in the country; a gap of research that may influence strategic and policy documents; lack of evidence of the initiatives on the field of the last 20 years; not clear understanding of ESD.

The professional development of university educators related to ESD in Albania could be considered as a priority. Especially social issues in the light of SD should be tackled, such as: education (sustainable); human rights (gender issues; social and political rights; employment, etc.); public health issues; human security; culture.

In **Bosnia and Herzegovina**, the paramount goal of policymakers ought to be embedding the concept of Education for Sustainable Development (ESD) into teacher education as required by the UNECE Strategy for Education for Sustainable Development. Given that in Bosnia, and throughout Europe as well, genuine holistic, transdisciplinary and transformative teacher education for sustainable development is not as yet on a list of priorities, as in any of the countries, in order to stem opposition and obstruction to this concept, ESD needs to be incrementally promoted rather than mandatorily introduced across teacher education programs. As transdisciplinary methods, holistic learning and learner agency promoted by ESD are often in conflict with dominant teaching and learning attitudes and models, the main obstacle to this approach is lack of compatibility between existing programs and the concept of ESD itself. The adequate approach to overcome this is to create leadership and mentoring for truly transdisciplinary and transformative ESD. This could be done by establishing research networks, online databases and resources and seminars, conferences and workshops that could refer to success stories particularly.

In **Bulgaria**, estimated priority needs in the regional/national development context:

- To develop integral university policy on SD education; PhD level to be more focused on SD. Total upgrading of the educational programmes is needed in order to guarantee the continuity and consistency of the SD message throughout the educational process in line with the lifelong learning concept.
- To communicate a clear SD conceptual basis for all educational messages in the professional fields of urban planning, architecture, civil engineering, etc. and provide an explicit focus on the integrity of social, economic and environmental aspects in order to counteract technocratic perspectives.
- Developing an interactive teaching process in order to enhance the discussion on challenges addressed by on-going societal debate. Collaboration with national, regional and local authorities and specialised NGOs/ civil society organisations.
- Broader interdisciplinary competence of teaching staff is still needed; expertise in sociology and cultural studies is to complement technical expertise; broader access for young SD competent professionals to academic careers should be sought for.

In **Croatia**, it would be important to introduce importance of professional development of university educators in general and then also to stress importance of development of ESD competences.

In the **Czech Republic**:

Following barriers could be identified:

Not fully recognized need for SD and consequently ESD in policy and society

Turbulent politics & underdeveloped democracy – government policy is often changing, so that the environment for achieving progress is unstable; as a result, documents already approved are also not being implemented (ESD national strategy 2008-2015 is the case). Each change of government and each change of minister is accompanied by an almost complete ‘clean-out’ of public service staff, resulting in the constant loss of institutional knowledge and the need to continuously repeat the SD message to key political stakeholders.

In HE:

- burden of the history persists (mainly disciplinary-oriented study programs, administrative and managerial structure very traditional)
- new challenges: financing (← growing numbers of students); quality criteria (excellence stressed, not social role)
- there is no system of career growth based on development of pedagogical skills on university level

Pre-requisites for university educators ESD competence development:

1. To recognize the need for professional growth of university educators in the field of competences, including systemic requirements
2. To accredit more transdisciplinary study programs with SD focus (adjust accreditation rules) and include ESD principles in those which are disciplinary (requiring skills such as transboundary competence etc.)
3. Reflection of the teaching/learning process would greatly promote interest in competence development (opportunity to publish experiences and results).

In **Hungary**, almost every institute has its own sustainable development strategies, the general problem is the practical implementation.

In **Macedonia** (bearing in mind that the Republic of Macedonia is obliged to implement and design a separate National Strategy for Education for Sustainable Development, and in the same time the country does have a National Program for the Development of Education), it seems more appropriate to modernize the later Program according to international documents and acts (adopted at the conference in Vilnius), instead of working on a new National Strategy for Education for Sustainable Development. This is a way for saving financial resources, efforts and time. In the meantime the accepted obligation will be fulfilled, new knowledge and skills concerning sustainable development will be acquired, and finally positive values and attitudes will be adopted;

The previous should be understood as a first step toward overcoming the shortcomings of the national system for professional development in higher education. Namely, for the time being, the university professors/educators lack pedagogic education and training, and consequently didactic skills. The practice shows that university professors/educators need pedagogic education (something that teachers in primary and secondary schools do already have). This is relevant especially in the case of new and young university associates (educators and assistants).

By and large, the process of quality assurance of HEI and the process of universities ranking, should not be connected only with assessment of the quality of research, but to the quality of teaching processes, too.

In **Romania**, Education for Sustainable Development should be introduced especially in the pedagogical education and training for teachers. Since 1996 there are the Departments for Teaching Training, integrated departments in each university that provide the mandatory socio-psycho-pedagogical training for students that will become teachers (pre-university and HE). We believe that it is a good opportunity to promote the concept of sustainable development and its principles by introducing into the core competences of this teacher training programme the competences for educators in sustainable development (there is a sort of awareness about the SD, but everything stops at environmental protection, in people's mind).

There is also the possibility that ARACIS (the quality assurance and accreditation of HE institutions agency - Agentia Romana de Asigura a Calitatii in Invatamantul Superior) to be persuaded to introduce into the obligations of accreditation of teacher training programmes the competences for educators in education for sustainable development.

In **Serbia**, following barriers were identified:

- Although public (and increasingly private) Universities declaratively demonstrate the commitment to environmental and sustainable development principles, their real efforts to contribute the implementation of national environmental and sustainable development goals is considerably endangered by financial obstacles, including the hierarchical system of public universities financing.
- Ministry of education is rather ambivalent about environmental concerns and do not foster sustainable practices.
- Given the life-long-learning concept is still not well developed in Serbia, outreach education for sustainable development are missing and universities did not develop specific educational services for the community.
- Despite the awareness on sustainable development exists in higher education institution, low level of understanding is still evident. Higher education laws are reformed, but mission of higher education for sustainable development is still to be developed In Serbia.

- Majority of Universities are predominantly oriented towards teaching and learning, rather than research;
- Universities are not integrated enough, i.e. the integration role of University, important for multi- and trans-disciplinarity, is largely missing;
- Teaching and research staff is predominantly occupied and overloaded by Bologna process implementation itself, with limited resources and time to deal with community problems and development.
- Main problem in curricula is general orientation towards corrective and preventive measures and methodologies within the course contents, rather than towards values, change management and substantial sustainable development principles, that often lacking.
- Institutional support for interdisciplinary curricula and research activities in general, and sustainability – related programmes, in particular, tend to be low.

In **Slovakia**, an important negative aspect is the absence of national system for professional development of the university educators (this system including the didactic preparation dissolved in 1990). Current education of academicians is based mostly on sporadic initiatives of particular universities and their faculties (SPU in Nitra, STU in Bratislava, EU in Bratislava, UMB in Banská Bystrica, Žilina University in Žilina, UKF in Nitra and others). It is necessary to turn back to the idea of complex education of university teachers and offer a continuous pedagogic education for them, similar to the teachers at the level of elementary and secondary schools.

The professionals already for years have recommended to establish a *Centre for university pedagogy* offering the training, expertise and consultation for university educators, elaborating methodologies and other materials the problems of SD inclusive, developing research on university pedagogy, cooperating with HESs in Slovakia and abroad.

It is important to interlink the assessment of the quality of research with the quality of teaching as inherent part of HES assessment.

It is necessary to develop a system of introductory training for new university educators including educational activities, literature, practical trainings and workshop, didactic trainings. This should be interlinked with life-long education of university educators including the courses on global education and SD.

The development of basic systematic precondition for continual education and training of university educators is a precondition for safeguarding of professional development of university educators related to SD.

It is necessary to achieve the implementation of the education to SD into the study programs across the HESs as a part of the implementation of National Strategy for Global Education 2012-2016.

In **Slovenia**, the priority need in professional development of university educators related to ESD (according to research experiences) would be to introduce compulsory didactic training for higher education teaching staff, integrating among other topics also the ESD approach and competences. This new training scheme should have been prepared in a way that it could strongly contribute to already existing professional development of higher educators. In order to support this kind of systematic professional development of university educators in ESD, Slovenia needs a strategic document, providing the formal framework for ESD and including as many different fields as possible. This is by no means an excuse to postpone the implementation of general aims in the existing documents.

At the university level, it is of great importance that sustainable development is incorporated in the Vision and Mission of each university and that implementation efforts are being evaluated in regular time intervals according to the UN (UNESCO, UNECE), EU, and national documents.

5 ANNEX

- 1. Acknowledgments**
- 2. National reports about the status of ESD within Higher Education at the national level**
- 3. National examples of professional development opportunities in ESD for university educators**
- 4. List of resources**

ANNEX 1 – Acknowledgements

We like to acknowledge the efforts and support by all partners, who contributed to the national mappings:

Country	National coordinators and those who have contributed to the country report substantially
Albania	National coordinator: Edmond Dragoti, University of Tirana Marinela Sota, University of Tirana – Web researcher and Interview conductor
Bosnia and Herzegovina	Genc Trnavci, University of Bihac
Bulgaria	National coordinator: Elena Dimitrova, University of Architecture, Civil Engineering & Geodesy Dilyanka Bezlova, University of Forestry
Croatia	Kornelija Mrnjajus, University of Rijeka
Czech Republic	Jana Dlouhá, Charles University Environment Centre
Hungary	Bela Munkácsy, Eotvos Loránd University
Macedonia	Pece Nedanovski, Ss. Cyril and Methodius University in Skopje
Poland	National coordinators: Anna Kalinowska, Anna Batorczak, University of Warsaw Cez Koscielniak, Adam Mickiewicz University in Poznan
Romania	Daniela Dumitru, University of Bucharest
Serbia	Slobodan Milutinovic, University of Niš
Slovakia	National coordinator: Maros Finka, Slovak University of Technology in Bratislava Mária Kozová, Viera Novanská, Comenius University in Bratislava, Slovakia
Slovenia	National coordinator: Katja Vintar Mally, University of Ljubljana Peter Glavič, University of Maribor Faculty of Chemistry and Chemical Engineering

Additionally we would like to acknowledge the support by the experts and stakeholders in the respective partner countries who added their knowledge to the national reports and helped validating the information collected by the national project partners (in alphabetical order):

Country	Experts and stakeholders
Croatia	Dr Dunja Andic, Assistant Professor, Faculty of Teacher Education, University of Rijeka Dr Nena Roncevic, Assistant Professor, Faculty of Humanities and Social Sciences, University of Rijeka Lea Perinić, University of Rijeka Foundation Dr Elvi Pirsl, Associate Professor, Juraj Dobrila University of Pula Agency for Science and Higher Education, Croatia
Czech	Jan Moudrý, Institute of Crop Ecology, Faculty of Agriculture, University of South

Republic	<p>Bohemia in České Budějovice, Department of Organic Farming; Jan Malinovský, Faculty of Economics, VŠB – Technical University in Ostrava, Department of Regional and Environmental Economics; Nikola Fousková, Masaryk University, Department of Environmental Humanities;</p> <p>Dana Kapitulčinová, AtKisson Group; Charles University Environment Center; Andrew Barton, Jiří Dlouhý, Charles University Environment Centre</p>
Hungary	<p>Antal Miklós</p> <p>Czippán Katalin</p> <p>Horváth Attila</p> <p>Molnár Anna</p> <p>Varga Attila</p> <p>Varga Péter</p>
Macedonia	<p>Experts and professionals from the relevant Ministries:</p> <ul style="list-style-type: none"> • Ministry of Education and Science, more precisely from the Department for Higher education, • Ministry of Environment and Physical Planning, i.e. from the Department for Sustainable Development and Investments, • Secretariat for European Affairs, Government of the R. of Macedonia, and others
Poland	<p>The information was obtained from personal contacts with academic teachers from different universities and information available on website.</p>
Romania	<p>Alina Cristovici, Erasmus Coordinator and Head of International Relations, University of Bucharest;</p> <p>Alexandru Andrasanu, the European Seminar in Sustainable Development coordinator</p> <p>Rodica Stefanescu, from Technical University in Cluj-Napoca;</p> <p>Sorin Coman, University of Bucharest.</p>
Serbia	<p>Vesna Nikolic</p> <p>Radmilo Pesic</p> <p>Petar Djukic</p> <p>Darinka Radojevic</p> <p>Ljubinka Kaludjerovic</p>
Slovakia	<p>Kamila Bednarikova</p>

ANNEX 2 – National reports about the status of ESD within Higher Education at the national level

Table 14. East region countries and partners involved in the mapping exercise (full information from partners)

Country	Partner	Number of Higher Education institutions	Number of Higher Education students (thousands)
Albania	University of Tirana	59	161 (2011-2012)
Bosnia and Herzegovina	University of Bihác	Around 120 ¹⁰	116 (2012-2013)
Bulgaria	University of Arch., Civil Eng. & Geodesy University of Forestry	51 (37 public, 14 private) ¹¹	285 (2012) ¹²
Croatia	University of Rijeka	137	188 ¹³
Czech Republic	Charles Uni Prague	72 (26 public; 2 military; 44 private) ¹⁴	381 in 2012 ¹⁵
Hungary	Eotvos Loránd Uni	68	316 ¹⁶
Macedonia	Ss. Cyril and Methodius University in Skopje	20 HEI: <ul style="list-style-type: none"> • 5 public (state) • 9 private uni • 4 private HEI (faculties), • 2 religious faculties¹⁷ 	63 in 2008/2009 58 in 2009/2010 63 in 2010/2011 59 in 2011/2012

¹⁰ the number is constantly fluctuating, since each year a number of HEIs wind down their activities, or emerge in another region as an offshoot either of an existing institution or a completely new institution.

¹¹ Strategy for the development of higher education in Bulgaria in the period 2014-2020, May 2014 (Draft)
<http://www.mon.bg/?go=page&pagelid=74&subpagelid=143>, Accessed on July 12, 2014

¹² Data for 2012 from Eurostat:
<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tps00062&plugin=1>

¹³ 157,3 according to the Eurostat data for 2012:
<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tps00062&plugin=1>

¹⁴ See official web page of the Ministry of Education, Youth and Sports. Online, available from
<http://www.msmt.cz/vzdelavani/vysoke-skolstvi/prehled-vysokych-skol>.

¹⁵ See Czech statistical office, updated January 13, 2014. Online, available from
[http://www.czso.cz/csu/redakce.nsf/c5cfebca9de6e905c125723a004180a6/6dbf02a9a1330365c12576bf00534ba8/\\$FILE/1_vs_studenti_celkem_12.pdf](http://www.czso.cz/csu/redakce.nsf/c5cfebca9de6e905c125723a004180a6/6dbf02a9a1330365c12576bf00534ba8/$FILE/1_vs_studenti_celkem_12.pdf) (batchelor, master and doctoral level).

Data from Eurostat say 440,2 see
<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tps00062&plugin=1>.

¹⁶ 380,8 according to the Eurostat data for 2012:
<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tps00062&plugin=1>

			57 in 2012/2013 ¹⁸
Poland	Adam Mickiewicz University in Poznan University of Warsaw	453 HE schools. In that number there are 19 universities. 321 HE non-public.	1 677 students (among that general number 460 are from non-public higher education schools) ¹⁹
Romania	University of Bucharest	105	465 (year 2013) ²⁰
Serbia	University of Niš	15 universities (from which 8 public; 7 private) 131 independent HEI; 80 colleges;	~240
Slovakia	Slovak University of Technology in Bratislava Comenian University Bratislava	36 Higher Educational Institutions – HEI (20 HEI, 3 state HEI, 13 private HEI) + 4 foreign HEI ²¹	201 (2012) ²²
Slovenia	University of Ljubljana University of Maribor	5 universities and 42 independent higher education institutions (with active study programmes in spring 2014)	77 in 2013/2014 ²³
<i>Total</i>		1394	2 487

¹⁷ Source: 1. Ministry of Education and Science, www.mon.gov.mk, 2. *Statistical Yearbook of the Republic of Macedonia 2014*, State Statistical Office, Skopje, and 3. *News Release – Enrolled students in higher school and faculties in the Republic of Macedonia in the academic year 2012/2013*, State Statistical Office, Skopje

¹⁸ Source: 1. *Statistical Yearbook of the Republic of Macedonia 2014*, State Statistical Office, Skopje, and 2. *News Release – Enrolled students in higher school and faculties in the Republic of Macedonia in the academic year 2012/2013*, State Statistical Office, Skopje

¹⁹ **2007,2** according to the Eurostat data for 2012:
<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tps00062&plugin=1>

²⁰ **705,3** according to the Eurostat data for 2012:
<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tps00062&plugin=1>

²¹ Source: <http://www.minedu.sk/> - Accessed on April 16, 2014

²² (Source: *Annual Report on the state of Higher Education for the year 2012*, Ministry of Education, Science, research and Sport of the Slovak Republic, Bratislava, August 2013). <http://www.minedu.sk/vyrocne-spravy-o-stave-vysokeho-skolstva>)

For comparison of the growth of the number of HE students:

in 1990: 69,095 HE students

in 1998: 122,603 HE students

in 2007: 220,000 HE students.

221,2 according to the Eurostat data for 2012:
<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tps00062&plugin=1>

²³ **104,0** according to the Eurostat data for 2012:
<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tps00062&plugin=1>

According to http://www.stat.si/eng/novica_prikazi.aspx?id=6266 the number of all students enrolled in tertiary education in 2013/2014 in Slovenia is 99,622. Data are comparable to Eurostat statistics. However, there are only 77,370 students enrolled in higher education.

This section lists all national mapping reports in alphabetical country order.

Albania

General information

Lead person completing the template

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Country information

Country	Albania
Number of Higher Education institutions in the country	59 institutions (15 public and 44 private)
Number of Higher Education students in the country	160.839 (y:2011-2012)
UE4SD region	<input type="checkbox"/> Northern Europe <input type="checkbox"/> Western Europe <input type="checkbox"/> Southern Europe x <input type="checkbox"/> Eastern Europe

Part A – The status of ESD within Higher Education at the national level

This section aims at gathering a general view about the integration of ESD within Higher Education in the UE4SD partner countries, with an emphasis on the issue of professional development opportunities for university educators to develop ESD competences.

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) strategies, policies or legislations, which recognise ESD in Higher Education? *(If yes, please provide details. Max. 400 words.)*

NO

If yes, what ESD processes and approaches do these promote? (Max. 200 words.)

-

If yes, do these documents refer to ESD professional development for university educators (as like asking for skills and capabilities)? (If yes, please provide details. Max. 200 words.)

-

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) initiatives (projects, programmes, etc.) on ESD professional development for university educators? (If yes, please provide details. Max. 400 words.)

Yes, there are some projects and programs on ESD development for university educators. There are several institutions of HE which have been included in initiatives on ESD for university educators. Most of the initiatives have been in the field of environment, economic development, social issues and agriculture.

Do Higher Education institutions have strategic plans or guidelines to promote ESD? (Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)

☐ None

x ☐ Few

☐ Several

☐ Many

☐ All

Few of institutions have developed strategic plans or guidelines regarding the promotion of ESD. In this regard can be mentioned Polis University and University of Agriculture of Tirana.

Do Higher Education institutions have initiatives (projects, programmes, etc.) to support the professional development of university educators in ESD? (Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)

☐ None

☐ Few

x ☐ Several

☐ Many

☐ All

Recent years some initiatives have been developed to support the professional development of university educators in ESD. Important initiatives can be mentioned related to: Sustainability in the field of social issues (UT/Center of Excellence); Sustainability in the fields of social issues and economy (UET/UAMD); Sustainability in the field of environment (POLIS) Sustainability in the field of agriculture (UBT).

Does ESD form part of the quality assurance and accreditation processes of Higher Education institutions?²⁴ *(If yes, please provide details. Max. 400 words.)*

No

Are there any Higher Education networks, partnerships or main drivers (public, private, NGOs) that support the professional development of university educators in ESD in your country? *(If yes, please provide details. Please note that networks at the local but also global level might be relevant. Max. 400 words.)*

‘Connecting Science-Society Collaborations for Sustainability Innovations’ is a project funded by Tempus and leaded by UET. This project addresses the priority through establishing a science-society network for sustainable innovations and through developing and running workshops and trainings for the target groups to foster collaborations within this network. The network been established consists of of 4 Albanian HEI and 3 Kosovo universities, and 4 EU universities, 2 NGO-s from Albania and Kosovo and 2 Regional Centers of Expertise (RCE) on ESD.

RCE Middle Albania is a non-formal partnership that consist of consist on 20 partner organizations and individuals on a network community of 470 connection in the Facebook page, which serve as an exchange and informative platform. promoting a new model of governance, by coordinating different types of organizations in an equal partnerships in order to foster region development through Education for Sustainable Development. Main focus is on: Sustainable Architecture and Green Building, Research on ESD, Inter-regional Cooperation, Eco-Tourism, Capacity strengthening, Innovation and Urban Farming, International and Balkan cooperation.

Are there any higher education initiatives or projects developed in response to the UNECE ESD competences²⁵? *(If yes, please provide details. Max. 400 words.)*

²⁴ In countries where there is a formal accreditation process of staff, please indicate if ESD is taken into consideration in this process and *how*.

²⁵ UNECE (2011) Learning for the future: Competences in Education for Sustainable Development, ECE/CEP/AC.13/2011/6; http://www.unece.org/fileadmin/DAM/env/esd/6thMeetSC/Learning%20for%20the%20Future_%20Competences%20for%20Educators%20in%20ESD/ECE_CEP_AC13_2011_6%20COMPETENCES%20EN.pdf

The initiatives mentioned in the section above are developed in response to UNECE ESD competences as they mentioned the document of UNECE (2011) Learning for the future: Competences in Education for Sustainable Development as an important reference.

Part C – Data collection and validation

Please briefly provide information about how the data was collected and how you can validate it.

How did you collect the data? (Please refer to section 4.1 of the guidelines.)

The first identification of all stakeholders is made based on the information published in websites. It was analyzed the website publications to identify projects or activities. After the first identification the Contact List was prepared of all potential stakeholders. It was proceeded by contacting them directly in telephone and e-mails and asking the initiatives or projects published. The main data collection methods were: conduct internet searches for relevant information, review publications, reports and evaluation reports and interview conduction with the questions of the template (via phone).

How did you validate the data?

The data were validated using content method: The data must target sustainable development, High Education and professional development. Professional development should include but not only: seminars, professional courses, academic groups, conferences/publications, policy paper, etc.

Who was involved in the process and in what ways?

Marinela Sota- Web researcher and Interview conductor

Kalterina Shulla-Representative of RCE Middle Albania and staff of 'Connecting Science-Society Collaborations for Sustainability Innovations' Project

Irida Agolli-Coordinator of SBCC Master Program/UT/FSS

Alma Sulstarova-Coordinator in POLIS University

What documents have you consulted to complete this template?

Guidelines of UE4SD for Mapping opportunities for developing Education for SD competences.

UNECE (2011) Learning for the future: Competences in Education for Sustainable Development

Law on HE in Albania

Strategy documents on Research and Innovation in Albania

TEMPUS projects in Albania

Report on „Connecting Science-Society Collaborations for Sustainability Innovations“ project (not published)

Report on „Developing and Adapting Professional Programs for Energy Efficiency in the Western Balkans“ (not published)

Report of Internal Evaluation 2012,2013 of Faculty of Social Sciences/University of Tirana.

Why did you choose these initiatives and not others?

Selection Criterias for HE Institutions were:

Knowledge transfer in the context of Sustainable development

Offer courses on proffesional development

Part D – Reflection

This section is seeking your own thoughts and reflections towards professional development of university educators for ESD in your country.

In the light of the information provided, what would you consider to be priority needs in professional development of university educators related to ESD in your country?

In the light of the provided information was evident: the lack of mapping the current state of art of ESD in Albania; uncertainty about the sustainability criteria among HE in the country; a gap of research that may influence strategic and policy documents; lack of evidence of the initiatives on the field of the last 20 years; not clear understanding of ESD.

Yes, we consider as a priority the professional development of university educators related to ESD in Albania. We would like to work more focusing on social issues in the light of SD as: education (sustainable); human rights (gender issues; social and political rights; employment, etc.); public health issues; human security; culture.

Is there any further information that might be relevant and which you would like to share? Please provide links, references, documents that can already be collected for the collection of resources on the common online portal. (Documents in all languages are welcome).

Bosnia and Herzegovina

General information

Lead person completing the template

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Country information

Country	Bosnia and Herzegovina
Number of Higher Education institutions in the country	Around 120 (the number is constantly fluctuating, since each year a number of HEIs wind down their activities, or emerge in another region as an offshoot either or a completely new institution)
Number of Higher Education students in the country	In the winter semester of the academic year 2012/2013, 115,723 students enrolled (according to the both pre-Bologna programs and Bologna-compliant programs: first cycle and integrated I and II cycle), out of which 102.357 students enrolled in all study years, while 13.366 were candidates for graduation.
UE4SD region	<input type="checkbox"/> Northern Europe <input type="checkbox"/> Western Europe <input type="checkbox"/> Southern Europe <input checked="" type="checkbox"/> Eastern Europe

Part A – The status of ESD within Higher Education at the national level

This section aims at gathering a general view about the integration of ESD within Higher Education in the UE4SD partner countries, with an emphasis on the issue of professional development opportunities for university educators to develop ESD competences.

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) strategies, policies or legislations, which recognise ESD in Higher Education? *(If yes, please provide details. Max. 400 words.)*

Laws promoting ESD specifically are non-existent at any level whatsoever (cantonal, entity or national level).

Some elements of SD, though, are incorporated into existing legislation regulating agriculture, forestry, water, energy, regional development, nature protection etc. Yet, these are not integrated into the education process comprehensively. As such, SD is not a clearly defined component of the education system in BiH.

If yes, what ESD processes and approaches do these promote? *(Max. 200 words.)*

Sustainable development as a concept wider than environmental protection has not been fathomed properly by education management, teachers, or students.

The notion of ESD has been reduced to a few courses on environmental protection (biology, my environment, nature and society etc.). The missing element of ESD in BiH is a transdisciplinary approach that encompasses a changing attitude and behavior by major stakeholders (children, parents, schools, governments...) that, in order to produce results over the long term, is best achieved by being incepted as early as at the level of elementary school education.

If yes, do these documents refer to ESD professional development for university educators (as like asking for skills and capabilities)? *(If yes, please provide details. Max. 200 words.)*

There are no specific programs as to the concept of professional development for educating university educators, apart from occasionally organizing seminars and conferences. Yet there are specialized institutions, such as Pedagogical institutes, responsible for determining curricula and monitoring their implementation. They also exercise pedagogical supervision, provide technical assistance to teachers and organize programmes of training of teachers. These programs are not devoted to HEIs specifically, though.

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) initiatives (projects, programmes, etc.) on ESD professional development for university educators? *(If yes, please provide details. Max. 400 words.)*

No

Do Higher Education institutions have strategic plans or guidelines to promote ESD? (Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)

- ☐ None
- ☐ Few
- ☐ Several
- ☐ Many
- ☐ All

Do Higher Education institutions have initiatives (projects, programmes, etc.) to support the professional development of university educators in ESD? *(Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)*

- ☐ None
- ☐ Few
- ☐ Several
- ☐ Many
- ☐ All

Does ESD form part of the quality assurance and accreditation processes of Higher Education institutions?²⁶ *(If yes, please provide details. Max. 400 words.)*

No.

Are there any Higher Education networks, partnerships or main drivers (public, private, NGOs) that support the professional development of university educators in ESD in your country? *(If yes, please provide details. Please note that networks at the local but also global level might be relevant. Max. 400 words.)*

No.

Are there any higher education initiatives or projects developed in response to the UNECE ESD competences²⁷? *(If yes, please provide details. Max. 400 words.)*

Since 2002 some progress has been made in creating a public system of ecological (environmental) education in BH. Curricula and programs now include environmental elements, due to the adoption of a number of laws and strategies. The strategies are: the Strategy for Improvement of Education in BH, adopted by the Council of Ministers of BiH in 2008, with a plan on implementing it for the period 2008-2015; Developing Vocational Schools in BiH, adopted in 2007 for the period 2007-13; on Higher Education in BiH, adopted in 2007 etc.

All educational programs are unsatisfactorily linked and coordinated, thus stemming interdisciplinary and transdisciplinary approaches that are necessary to understanding environmental issues

²⁶ In countries where there is a formal accreditation process of staff, please indicate if ESD is taken into consideration in this process and *how*.

²⁷ UNECE (2011) Learning for the future: Competences in Education for Sustainable Development, ECE/CEP/AC.13/2011/6; http://www.unece.org/fileadmin/DAM/env/esd/6thMeetSC/Learning%20for%20the%20Future_%20Competences%20for%20Educators%20in%20ESD/ECE_CEP_AC13_2011_6%20COMPETENCES%20EN.pdf

holistically. Within several vocational training schools, environmental technicians are trained in forestry and wood processing and in chemistry and non-metals industries. Training modules for these occupations were developed in 2005-8. Environmental aspects are also taught in other occupational training.

In higher education, several universities have introduced ecological programs. Showcases are: faculties of agriculture and forestry at the Universities of Banja Luka and Sarajevo. The universities of Banja Luka and Tuzla introduced a curriculum on environmental protection while the University of Sarajevo, Zenica and Bihać introduced a curriculum on environmental management. The Rulebook of Academic Titles adopted by the BiH State Government on 3 December 2009 lists several Bachelor's degrees on environment: spatial planning, geology, geography, meteorology, biology and environmental engineering (mining and geology engineers). Each engineering study program includes a mandatory course on environmental protection. Study courses for lawyers, economists and management do not cover environment.

The entity environmental authorities occasionally organize a few professional training courses for their staff, officials of other public authorities and relevant personnel of enterprises. Representatives of business and NGOs every now and then also take part in these seminars.

Part C – Data collection and validation

Please briefly provide information about how the data was collected and how you can validate it.

How did you collect the data? (Please refer to section 4.1 of the guidelines.)

Through search by means of internet engines

How did you validate the data?

By assessing the information that is available online

Who was involved in the process and in what ways?

Only me

What documents have you consulted to complete this template?

Documents retrievable through internet

Why did you choose these initiatives and not others?

Other initiatives were not available

Part D – Reflection

This section is seeking your own thoughts and reflections towards professional development of university educators for ESD in your country.

In the light of the information provided, what would you consider to be priority needs in professional development of university educators related to ESD in your country?

The paramount goal of policymakers in Bosnia and Herzegovina ought to be embedding the concept of Education for Sustainable Development (ESD) into teacher education as required by the UNECE Strategy for Education for Sustainable Development. Given that in Bosnia, and throughout Europe as well, genuine holistic, transdisciplinary and transformative teacher education for sustainable development is not as yet on a list of priorities, as in any of the countries, in order to stem opposition and obstruction to this concept, ESD needs to be incrementally promoted rather than mandatorily introduced across teacher education programs. As transdisciplinary methods, holistic learning and learner agency promoted by ESD are often in conflict with dominant teaching and learning attitudes and models, the main obstacle to this approach is lack of compatibility between existing programs and the concept of ESD itself. The adequate approach to overcome this is to create leadership and mentoring for truly transdisciplinary and transformative ESD. This could be done by establishing **research networks, online databases and resources and seminars, conferences and workshops** that could refer to success stories particularly.

Is there any further information that might be relevant and which you would like to share? Please provide links, references, documents that can already be collected for the collection of resources on the common online portal. (Documents in all languages are welcome).

Bulgaria

Part A – The status of ESD within Higher Education at the national level

This section aims at gathering a general view about the integration of ESD within Higher Education in the UE4SD partner countries, with an emphasis on the issue of professional development opportunities for university educators to develop ESD competences.

General information

Bulgaria's higher education system was fully reorganized in the mid-1990s. The two most important laws that have affected Bulgarian higher education since 1989 have been the Higher Education Act (1995) and the Amendment to the Higher Education Act (1999), but ESD is not reflected in any of them. A new system of academic degrees was introduced and an agency for quality assessment and accreditation of postsecondary school activities was created. The 1999 amendment abolished free education and introduced tuition fees at all public universities, increased competition in admissions and started the process of bringing standards in line with the Bologna Declaration.

Education in Bulgaria is overseen by the Ministry of Education and Science and its directorates "Higher Education Policy". Higher Education Institutions in Bulgaria are autonomous. They are responsible for program design and quality assurance of the education provided. The National Agency for Evaluation and Accreditation has been established through the Higher Education Act as a statutory body for evaluation, accreditation and external monitoring of the quality in higher education institutions and scientific organizations aimed at the enhancement of their teaching and research.

Some documents, where relation between ESD and higher education could be found are listed below:

- Bulgarian Ministry of Education and Science, Bulgarian Ministry of Environment and Water and partners (2007): Program for Education for Sustainable Development.
- Bulgarian Ministry of Education, Youth and Science (2009): Program for development of the education, science and youth politics in Republic of Bulgaria 2009- 2013.
- Government of Bulgaria (2007): Project of Strategy for Sustainable development of Republic of Bulgaria.
- (Bulgarian) Higher Education Act (1995): State Gazette – Darzhaven Vestnik, no. 112/ 27.12.1995, last amendment State Gazette 99/16.12.2011 (in Bulgarian).

A National Strategy for the Development of the Higher Education in Bulgaria is under preparation.

Some universities have developed strategic plans but they are general and not specifically focused on ESD. ESD and relating competences are just mentioned among the priorities.

Education for sustainable development and its objectives were defined in the Program for Education for Sustainable Development (2007), developed by the Bulgarian Ministry of Education and Science, Bulgarian Ministry of Environment and Water and NGO partners. It was stated that: "Education for Sustainable Development (ESD) – education for personal and social development, which includes ecological, social (social-political and social-cultural) and economic dimensions of

development. It incorporates the environmental, ecological, health, civic, etc. education in a common one”.

Specific objectives of the ESD program were to encourage the application of sustainable development principles in formal and informal education, incl. teacher training; to support the development and distribution of modern educational materials for ESD; to support partnerships on national, regional and local scale between representatives of state institutions, local authorities, businesses, schools and communities for developing the ESD.

The Operational Programme “Human Resources Development” is a strategic document that acts as a framework for absorption of funds, co-financed jointly by the European Social Fund of the European Union and the national budget during the programming period 2007 – 2013. It is a constituent part of the National Strategic Reference Framework and contributes to one of its main objectives to “develop human capital potential to ensure higher employment, income and social integration”.

Priority Axis 3 “Improving the quality of education and training in correspondence with the labour market needs for building a knowledge-based economy” of the Programme is managed by the “Structural Funds and International Educational Programmes” Directorate of the Ministry of Education and Science. The strategic goal of the Operational Programme is to improve the quality of life of people in Bulgaria through enhancement of the human capital, achievement of high employment levels, improvement of the productivity, access to high-quality education and lifelong learning and strengthening the social inclusion.

Projects developed under the Operational Programme “Human Resources Development” are being implemented related to introduction of electronic education, development of a modern system for training and career development of the academic staff. Examples: University of Forestry-Sofia, Sofia University St. Kliment Ohridski, SW University-Blagoevgrad, University of Architecture, Civil Engineering and Geodesy, University of Mining and Geology.

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) strategies, policies or legislations, which recognise ESD in Higher Education? *(If yes, please provide details. Max. 400 words.)*

SD is only generally mentioned in the published official documents on education, including higher education, within the official statement that the national policy of Bulgaria is following the principles and priorities of the EU policy.

The National Strategy for Lifelong learning (LLL) for the period 2014 – 2020 defines the national state policy strategic framework aimed at achieving the European goal for intelligent, sustainable and cohesive growth.

If yes, what ESD processes and approaches do these promote? *(Max. 200 words.)*

Although the Vision Statement of Bulgarian Ministry of Education, Youth and Science mentions no explicit SD dimensions, the specialized Directorate on Access to Education and Support for Development has included among other objectives the one ‘to create, maintain and promote information basis in the field of education for sustainable development’.

No particular processes and approaches are till the moment explicitly promoted in higher education.

If yes, do these documents refer to ESD professional development for university educators (as like asking for skills and capabilities)? *(If yes, please provide details. Max. 200 words.)*

No

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) initiatives (projects, programmes, etc.) on ESD professional development for university educators? *(If yes, please provide details. Max. 400 words.)*

No initiatives could be identified to specifically address ESD professional development for university educators.

Do Higher Education institutions have strategic plans or guidelines to promote ESD? *(Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)*

- ☐ None
- ☒ Few
- ☐ Several
- ☐ Many
- ☐ All

Do Higher Education institutions have initiatives (projects, programmes, etc.) to support the professional development of university educators in ESD? *(Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)*

- ☐ None
- ☒ Few
- ☐ Several
- ☐ Many
- ☐ All

Does ESD form part of the quality assurance and accreditation processes of Higher Education institutions?²⁸ *(If yes, please provide details. Max. 400 words.)*

²⁸ In countries where there is a formal accreditation process of staff, please indicate if ESD is taken into consideration in this process and *how*.

No, as far as information is available and accessible, ESD is not taken into consideration during the formal accreditation process. There are only general recommendations about including modules on environmental protection in the programmes and integrating SD considerations into the educational process.

Are there any Higher Education networks, partnerships or main drivers (public, private, NGOs) that support the professional development of university educators in ESD in your country? *(If yes, please provide details. Please note that networks at the local but also global level might be relevant. Max. 400 words.)*

Yes, university teachers from UACEG and the Technical University of Sofia have been active in establishing personal contacts with EESD (Engineering Education for Sustainable Development) network. Bulgarian university teachers have participated in several activities of the network (EESD annual conferences in 2006 and 2008), in the 5th GUNi (Global University Network for innovation) conference, 2010. Yet, participation fees are a substantial barrier for broader participation of people from the SEE region if no external funding is available.

The UACEG (University of Architecture, Civil Engineering and Geodesy, Sofia) is ranked 39th out of 56 universities on the list of EESD Observatory Report on the Status of Engineering Education for Sustainable Development in European Higher Education (EESD, 2008) - and is one of only five East European universities there.

Important chances for enhancing SD competencies are provided through different European programs for international educational mobility. UACEG has considerably benefitted in enhancing SD related competencies of both teachers and students by ERASMUS. ERASMUS-MUNDUS and CEEPUS mobility.

Since late 1990s an increasing number of NGOs (with access to foreign funding programmes) have been actively searching for closer collaboration with HE institutions in developing training courses and programmes in different SD-related fields (energy efficiency, environmental protection, etc.). A good early example for this process was a training programme for municipal energy management developed by the Centre for Energy Efficiency *Eneffect* in the period 2000-2005, project title: Strategy for Energy Efficiency and Reduction of Greenhouse Emissions (UNDP grant, expert partners from Norway and the Netherlands). The first step in the project was organising a training seminar for Bulgarian university teachers who were later on involved in the training courses for municipal experts in energy management. SD was explicitly addressed by the course as the framework concept of the energy efficiency considerations.

Are there any higher education initiatives or projects developed in response to the UNECE ESD competences²⁹? *(If yes, please provide details. Max. 400 words.)*

Although systemized information about the educational system in 1990s is generally missing, it could be assumed that the first specialized SD modules within the HE system of the country were included in 1997 in a pilot MSc programme in Urban Planning and Housing Policy (jointly developed by three

²⁹ UNECE (2011) Learning for the future: Competences in Education for Sustainable Development, ECE/CEP/AC.13/2011/6; http://www.unece.org/fileadmin/DAM/env/esd/6thMeetSC/Learning%20for%20the%20Future_%20Competences%20for%20Educators%20in%20ESD/ECE_CEP_AC13_2011_6%20COMPETENCES%20EN.pdf

Bulgarian universities and a British one, based at UACEG and delivered in English) (TEMPUS JEP-07312-94). Motivated by this teaching experience, an optional SD module was established at the Faculty of Architecture, UACEG, in 2001.

The website search on currently delivered SD modules in Bulgarian universities provides scarce and fragmented data on programmes and curricula - and even less on the real educational contents. Modules in Ecology and Environmental Protection are taught in professional areas traditionally sensitive to environmental issues (the Resource Management and Protection of Nature Department, University of Forestry in Sofia, delivers modules in Eco-management, Ecological policy and Sustainable tourism). In general, new MSc programmes more easily open up to the SD topic - usually in optional versions. It is indicative about the relevance of the SD topic to spatial planning that a compulsory module (Sustainable development and Integrated Management of Territorial Systems) is included into a new BSc and MSc programme in Planning and Management of Territorial Systems at Sofia University, the oldest and largest university in the country. Personal communication within the academic field in Bulgaria provides indications about individual efforts to develop the SD content and integrate the topic in already running teaching modules in universities of Engineering and Economics.

Two research projects partially funded by the University research budget at UACEG have addressed issues of SD-related professional competencies to be developed through university education:

(1) Integrated educational approach to urban development issues (contract No BN103/2009, 2009-2011): (a) identified teaching modules delivered at the University; (b) degree of awareness among first year students (c) a set of actions proposed for promoting the education for SD - building a virtual platform to provide the database needed for developing case studies to mutually support and synchronize the teaching/ learning process in all the faculties.

(2) The SD principles in architecture and civil engineering – opportunities for implementation in the educational process (Contract No. BN 63/2005, 2005-2007). PhD and MSc students were involved in both, so that research was able to directly inform and influence the educational process.

Both projects provided practical recommendations for needed changes in the concept and everyday educational practice, yet only fragmentary implementation followed.

Part C – Data collection and validation

Please briefly provide information about how the data was collected and how you can validate it.

How did you collect the data? (Please refer to section 4.1 of the guidelines.)

Literature overview – official policy documents, research papers;

Internet search – university websites and online publications;

Document analysis - postgraduate courses delivered (contents, schedule, training materials);

Interviews - with participants in the post-graduate course and members of the Initiative Group;

How did you validate the data?

It could be classified as action research - we were personally involved in the process as part of the academic staff of the university. The considerable interest to the two editions of the first developed

postgraduate module was indicative for the fact that it has addressed an existing need among practicing professionals in the construction field. The growing number of the ISDE members was also indicative of the needs among the academic staff.

Who was involved in the process and in what ways?

Members of the Academic Initiative Group contributed with materials for the courses; PhD and MSc students were involved in the internet search and in undertaking interviews.

The interviews were made also with representatives of the academic staff at the University of Forestry.

What documents have you consulted to complete this template?

European and national strategic and political documents, academic publications, project reports:

EC/COM, 2010. EUROPE 2020. A Strategy for Smart, Sustainable and Inclusive Growth. Brussels, 3.3.2010.

COM(2012) 433. Construction 2020. Strategy for the sustainable competitiveness of the construction sector and its enterprises.

COM(2011) 571. The Roadmap to a Resource Efficient Europe.

CEC, 2008. Regions 2020. An Assessment of Future Challenges for EU Regions.
http://ec.europa.eu/regional_policy/sources/docoffic/working/regions2020/pdf/regions2020_en.pdf

Leipzig Charter on Sustainable European Cities, 2007. Informal Ministerial Meeting on Urban Development and Territorial Cohesion. www.eufunds.bg/document/355.

Bologna Declaration, 1999. Joint Declaration of the European Ministers of Education, the European Higher Education Area. Available at:
http://www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/mdc/bologna_declaration1.pdf

Davoudi, S., 2010. Planning and interdisciplinarity. In: Geppert, A., Cotella, G. (Eds.), Quality Issues in a Changing European Higher Education Area. Planning Education. No.2, July.

Kastenhofer, et al., 2010. The contribution of university curricula to engineering education for sustainable development. Gaia 19 (1), 44e51. Online: http://lnx-hrl-075v.web.pwo.ou.nl/bitstream/1820/2341/1/44_51_Kastenhofer_3-GAIA.pdf

KSB (Bulgarian Construction Chamber), National Agency for Vocational Education

and Training, Eneffect, 2013. BUILD UP Skills Project. Supported by. Intelligent Energy Europe. www.buildupskillbg.com.

Other see list of references.

Why did you choose these initiatives and not others?

There are not many initiatives in the country for the moment to choose among. The initiative is a good example of how the process of self-organization of university teachers in the effort to promote a higher education more sensitive to sustainable development issues. The long consequence of small steps undertaken by several teachers at the University was effectively urged by the NGO sector (an organization of young professionals working outside the university and organised in an NGIO around

the idea for promoting environment-friendly building methods and materials). The initiative of the NGO was very pragmatically focused on a particular topic but they realised that they would need the support of the academic community to provide a broader framework for the activity. The academic teachers' group felt then encouraged to develop and propose a much broader platform for interdisciplinary postgraduate education in the field of urban planning and civil engineering to be undertaken by the University. The process was encouraged proactive attitude to teaching for SD. It was a step towards awareness building among the academic staff about further opportunities for jointly developing new teaching modules and teaching materials. It also stimulated the self-organization of the members of UACEG academic staff who are committed to the SD concept.

The other initiative is a good example from the University of Forestry-Sofia, Bulgaria.

Part D – Reflection

This section is seeking your own thoughts and reflections towards professional development of university educators for ESD in your country.

In the light of the information provided, what would you consider to be priority needs in professional development of university educators related to ESD in your country?

Estimated priority needs in the regional/national development context:

To develop integral university policy on SD education; PhD level to more focused on SD. Total upgrading of the educational programmes is needed in order to guarantee the continuity and consistency of the SD message throughout the educational process in line with the lifelong learning concept.

To communicate a clear SD conceptual basis for all educational messages in the professional fields of urban planning, architecture, civil engineering, etc. and provide an explicit focus on the integrity of social, economic and environmental aspects in order to counteract technocratic perspectives.

Developing an interactive teaching process in order to enhance the discussion on challenges addressed by on-going societal debate. Collaboration with national, regional and local authorities and specialised NGOs/ civil society organisations.

Broader interdisciplinary competence of teaching staff is still needed; expertise in sociology and cultural studies is to complement technical expertise; broader access for young SD competent professionals to academic careers should be sought for.

Is there any further information that might be relevant and which you would like to share? Please provide links, references, documents that can already be collected for the collection of resources on the common online portal. (Documents in all languages are welcome).

[Some publications addressing experience at UACEG in the field of education for SD:](#)

Dimitrova, E., 2014. The 'Sustainable Development' Concept in Urban Planning Education: Lessons Learned on a Bulgarian Path. In Journal of Cleaner Production, <http://dx.doi.org/10.1016/j.jclepro.2013.06.021>

Dimitrova, E., 2012. International Professional Networks in the Field of Urbanism: Opportunities for Educational and Research Collaboration. Papers, vol. 1, International Jubilee Conference UACEG2012, 15-17 November 2012, pp. 331-336 (*In Bulgarian*).

Dimitrova, E., Burov, A., Nikolov, H., Trifonov, D., Yolova, M., Trifonova, D., 2011. Integrated Educational Approach on Sustainable Urban Development. Contract No. 103/2009. Research, consultancy and design centre. UACEG. Unpublished Research report (in Bulgarian).

Dimitrova, E., A. Burov, H. Nikolov, 2010. GIS in Urban Planning Education: Support for Integrated Approaches to Sustainable Urban Development. Proceedings, Third International conference on Cartography and GIS, Nessebar, Bulgaria, 15-20 June 2010, International Cartographic Association and UACG, Sofia.

Dimitrova, E., 2009. Urban Planning Education for Sustainable Development: Building Partnerships to Last. In Proceedings, Ecocity World Summit 2009, Istanbul.

Dimitrova, E., 2008. Urban planning education for sustainable development: linking professional capacity to personal value systems and motivation for action. In: EESD 2008 Conference, Graz, Austria.

Recent activities undertaken by members of the Initiative Group - independently or in partnership with academic institutions and the NGO sector, comprise:

Project proposal submitted under HORIZON 2020 Programme, Call: H2020-EE-2014-3-MarketUptake Topic: EE-04-2014 Type of action: CSA. Project Title: Vocational Capacity Building and Up-skilling of Building managers, Craftsmen and Architects in the Usage of Innovative and Smart Technologies as for Achieving Energy Efficiency Objectives. Proposal acronym: GREENY. Proposal number: SEP-210177949

Research Project, Research and Consultancy centre at UACEG. Contract No: БН 128/11. Project title: General methodology for the estimation of concrete as a building material in the sustainable development context.

NGO project, Green School Village Foundation, project title: Contribution to the development low carbon construction in Bulgaria through the development and positioning of innovative products and natural building materials systems and training in sustainable construction at UACEG. Starting date: 02.12.2011.

Croatia

General information

Lead person completing the template

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Country information

Country	Croatia
Number of Higher Education institutions in the country	137
Number of Higher Education students in the country	188.285
UE4SD region	<input type="checkbox"/> Northern Europe <input type="checkbox"/> Western Europe <input type="checkbox"/> Southern Europe <input checked="" type="checkbox"/> Eastern Europe

Part A – The status of ESD within Higher Education at the national level

This section aims at gathering a general view about the integration of ESD within Higher Education in the UE4SD partner countries, with an emphasis on the issue of professional development opportunities for university educators to develop ESD competences.

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) strategies, policies or legislations, which recognise ESD in Higher Education? *(If yes, please provide details. Max. 400 words.)*

No

If yes, what ESD processes and approaches do these promote? (*Max. 200 words.*)

If yes, do these documents refer to ESD professional development for university educators (as like asking for skills and capabilities)? (*If yes, please provide details. Max. 200 words.*)

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) initiatives (projects, programmes, etc.) on ESD professional development for university educators? (*If yes, please provide details. Max. 400 words.*)

No

Do Higher Education institutions have strategic plans or guidelines to promote ESD? (Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)

- ☒ None
- ☐ Few
- ☐ Several
- ☐ Many
- ☐ All

Do Higher Education institutions have initiatives (projects, programmes, etc.) to support the professional development of university educators in ESD? (*Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.*)

- ☒ None
- ☐ Few
- ☐ Several
- ☐ Many
- ☐ All

Does ESD form part of the quality assurance and accreditation processes of Higher Education institutions?³⁰ (*If yes, please provide details. Max. 400 words.*)

³⁰ In countries where there is a formal accreditation process of staff, please indicate if ESD is taken into consideration in this process and *how*.

No

Are there any Higher Education networks, partnerships or main drivers (public, private, NGOs) that support the professional development of university educators in ESD in your country? *(If yes, please provide details. Please note that networks at the local but also global level might be relevant. Max. 400 words.)*

No

Are there any higher education initiatives or projects developed in response to the UNECE ESD competences³¹? *(If yes, please provide details. Max. 400 words.)*

No

Part C – Data collection and validation

Please briefly provide information about how the data was collected and how you can validate it.

How did you collect the data? (Please refer to section 4.1 of the guidelines.)

Research of laws, decisions, recommendations and other related documents for higher education.

Interviews with experts in ESD in Croatia.

How did you validate the data?

I compared them with official data on higher education (Ministry of Science, Education and Sport, National Agency for Higher Education). I consulted experts in EDS in Croatia.

Who was involved in the process and in what ways?

Colleagues from HE institutions in Croatia that are experts in ESD

What documents have you consulted to complete this template?

Law on science and higher education

Strategies of universities in Croatia

³¹UNECE (2011) Learning for the future: Competences in Education for Sustainable Development, ECE/CEP/AC.13/2011/6; http://www.unece.org/fileadmin/DAM/env/esd/6thMeetSC/Learning%20for%20the%20Future_%20Competences%20for%20Educators%20in%20ESD/ECE_CEP_AC13_2011_6%20COMPETENCES%20EN.pdf

Why did you choose these initiatives and not others?

This is only officially, recognized programme for development of teaching competences for university educators.

University educators in Croatia are not obliged to attend programmes for professional development. They are obliged to publish certain number of scientific papers, attend certain number of conferences and to hold certain amount of teaching hours. Professional development, attending seminars and other life-long learning programmes is free will of every person.

We have classes on ESD for students, some NGOs organised programs in ESD for students. In Croatia also we have some programs for primary and secondary school teachers in ESD but none for university educators.

Also, there are few researches conducted with aim to research university educators know how in ESD.

Part D – Reflection

This section is seeking your own thoughts and reflections towards professional development of university educators for ESD in your country.

In the light of the information provided, what would you consider to be priority needs in professional development of university educators related to ESD in your country?

It would be important to introduce importance of professional development of university educators in Croatia in general and then also to stress importance of development of ESD competences.

Is there any further information that might be relevant and which you would like to share? Please provide links, references, documents that can already be collected for the collection of resources on the common online portal. (Documents in all languages are welcome).

No

Thank you for your efforts and time to map the status of ESD in Higher Education in your country!

The UE4SD Steering Group team

Czech Republic

General information

Lead person completing the template

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Country information

Country	Czech Republic
Number of Higher Education institutions in the country	72 (26 public; 2 military; 44 private) ³²
Number of Higher Education students in the country	381 300 in 2012 ³³ 440 200 in 2012 ³⁴
UE4SD region	<input type="checkbox"/> Northern Europe <input type="checkbox"/> Western Europe <input type="checkbox"/> Southern Europe <input checked="" type="checkbox"/> Eastern Europe

The status of ESD within Higher Education at the national level

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) strategies, policies or legislations, which recognise ESD in Higher Education? *(If yes, please provide details. Max. 400 words.)*

³² See official web page of the Ministry of Education, Youth and Sports. Online, available from <http://www.msmt.cz/vzdelavani/vysoke-skolstvi/prehled-vysokych-skol>

³³ See Czech statistical office, updated January 13, 2014. Online, available from [http://www.czso.cz/csu/redakce.nsf/c5cfbc9de6e905c125723a004180a6/6dbf02a9a1330365c12576bf00534ba8/\\$FILE/1_vs_studenti_celkem_12.pdf](http://www.czso.cz/csu/redakce.nsf/c5cfbc9de6e905c125723a004180a6/6dbf02a9a1330365c12576bf00534ba8/$FILE/1_vs_studenti_celkem_12.pdf) (batchelor, master and doctoral level)

³⁴ Eurostat [tps00062] - Students - Tertiary education (1 000) Online, available from <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tps00062&plugin=1>

New methods of education mentioned in the National Strategy for ESD (2008-2015), especially for teacher education where these methods should be developed and tested; they are also supposed to be an ultimate goal in all tertiary education³⁵.

Professional development of university educators exists only as a strategy for 2011-2015 (focused on pedagogical skills, not SD competences) (§ 2.3 Lifelong learning)³⁶:

Recommendations for higher education institutions:

to develop courses for academic staff focusing on effective use of information technologies in instruction (e.g. the development of study supports) and on enhancement of pedagogical competencies needed for the teaching of mature (employed) students and participants in lifelong learning courses;

Instruments:

ECOP: support area 2.2, support area 4.2 – individual national projects: Q-RAM, Quality Evaluation, PTPO.

If yes, what ESD processes and approaches do these promote? (*Max. 200 words.*)

ESD competences should be supported within the system of higher education (student inter-institutional mobility), career growth of university educators and as a part of innovations with funding from grant agencies. Networking is part of the Strategy realization.³⁷

If yes, do these documents refer to ESD professional development for university educators (as like asking for skills and capabilities)? (*If yes, please provide details. Max. 200 words.*)

See above; the Action Plan for the ESD Strategy (2011-12) stresses methodology of problem-based education, place-based education, and concern that general social aspects be developed and used within teacher education. All disciplines should organize interdisciplinary courses focused on key themes of sustainable development (outlined in the Plan).³⁸

There were no finances provided by the Government for the realization of this Action Plan and a new AP has not been developed.

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) initiatives (projects, programmes, etc.) on ESD professional development for university educators? (*If yes, please provide details. Max. 400 words.*)

CUEC is an initiator of the Forum of University Teachers (ad hoc database and association of university teachers concerned with EE and ESD) and in 2002 it organized a conference and published proceedings specifically concerned with methods and approaches in HE for sustainability (Innovation

³⁵ National Strategy for ESD (2008 – 2015)

³⁶ The Strategic Plan for the Scholarly, Scientific, Research, Development, Innovation, Artistic and Other Creative Activities of Higher Education Institutions for 2011-2015; <http://www.msmt.cz/areas-of-work/tertiary-education/the-strategic-plan-for-higher-education-institutions-2011?lang=2>

³⁷ National Strategy for ESD (2008 – 2015)

³⁸ Action Plan for the National Strategy for ESD (2011-12)

of HE in environmentally oriented disciplines). Experts from the Charles University Institute for Research and Development of Education participated in the conference³⁹.

Do Higher Education institutions have strategic plans or guidelines to promote ESD? (Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)

- ☒ None
- ☐ Few
- ☐ Several
- ☐ Many
- ☐ All

Never at the university level; some departments have internal guidelines but are more concerned with overarching themes and approaches such as active learning.

Do Higher Education institutions have initiatives (projects, programmes, etc.) to support the professional development of university educators in ESD? (Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)

- ☐ None
- ☒ Few
- ☐ Several
- ☐ Many
- ☐ All

Does ESD form part of the quality assurance and accreditation processes of Higher Education institutions?⁴⁰ (If yes, please provide details. Max. 400 words.)

No, as accreditation is concerned almost exclusively with formal requirements such as quality of academic staff etc.

Are there any Higher Education networks, partnerships or main drivers (public, private, NGOs) that support the professional development of university educators in ESD in your country? (If yes, please provide details. Please note that networks at the local but also global level might be relevant. Max. 400 words.)

³⁹ Dlouhá, J. (ed.) (2002) *Inovace vysokoškolské výuky v environmentálních oborech* (Innovation of HE in environmentally oriented disciplines) Praha : COŽP UK. 185 pp. ISBN 80-238-9228-2. Info about the conference including presentations see <http://www.czp.cuni.cz/Vzdel/Forumvs/Setkani030123/>

⁴⁰ In countries where there is a formal accreditation process of staff, please indicate if ESD is taken into consideration in this process and *how*.

In the **Czech Republic**, the Forum of University Teachers – association of teachers interested in SD and discussing up-to-date problems of university teaching - has raised the theme of competences in ESD at the HE level, but it did not receive sufficient support and interest. ESD at the HE level in CR is more concerned with the themes and approaches that could be perceived as “sources of power” and legitimacy for enforcing sustainable development – a consensus concerning SD has not yet been achieved in society.

Example of the externally funded project of cooperation is the MOSUR project, <http://mosur.czp.cuni.cz/index.php/en/> focused on interdisciplinary cooperation of diverse institutions.

Other examples are ISPoS project <http://www.czp.cuni.cz/ispos/>, VCSE network <http://www2.leuphana.de/vcse/> and other form of international cooperation in teaching.

Are there any higher education initiatives or projects developed in response to the UNECE ESD competences⁴¹? (*If yes, please provide details. Max. 400 words.*)

The *Envigogika* journal has published articles that should have initiated a wider discussion on ESD competences when the UNECE expert group started its work⁴². Special issue of *Envigogika* on competences being prepared in response to the UE4SD project.

Part C – Data collection and validation

Please briefly provide information about how the data was collected and how you can validate it.

How did you collect the data? (Please refer to section 4.1 of the guidelines.)

In the **Czech Republic**, desktop research has been carried to find data on general conditions of the CR for ESD at the HE level. CUEC’s long term experience with ESD in HE was part of the process (*Envigogika*, Forum of the University Teachers). Data for the introductory part were compiled mostly from documents valid for the Czech government (strategies, policies) and a comprehensive internet search as done for this.

For collation of case studies, the group of university educators concerned with education for sustainable development (Forum of the University Teachers database used) was consulted. The few responses which were received unanimously referred to the fact that there are no systemic efforts to educate university educators, especially in the field of ESD competences. Case studies have been

⁴¹ UNECE (2011) Learning for the future: Competences in Education for Sustainable Development, ECE/CEP/AC.13/2011/6; http://www.unece.org/fileadmin/DAM/env/esd/6thMeetSC/Learning%20for%20the%20Future_%20Competences%20for%20Educators%20in%20ESD/ECE_CEP_AC13_2011_6%20COMPETENCES%20EN.pdf

⁴² Dlouhá, J. (2009) Obecné vzdělávací kvality a pojem kompetence. (Educational qualities and the term competence) *Envigogika*, IV/1 [online] [cit. 2010-06-16] Available from: <<http://envigogika.cuni.cz/index.php/cs/texty/20091/299>> ISSN: 1802-3061 DOI: <http://dx.doi.org/10.14712/18023061.35>

Dlouhá, J. (2009) Kompetence v environmentálním vzdělání. (Competences in environmental education) *Envigogika*, IV/1 [online] [cit. 2010-06-16] Available from: <<http://envigogika.cuni.cz/index.php/cs/texty/20091/300>> ISSN: 1802-3061 DOI: <http://dx.doi.org/10.14712/18023061.34>

developed based on interviews with key informants (these were however not able to identify competences developed within the project).

One colleague from the University of South Bohemia referred to their long term international cooperation and project, part of which has always included an exchange of experiences with innovative teaching methods and practical training to use them – this was included as one of the national case studies.

Another informant from the Masaryk University Brno consulted local university teachers and NGO representatives and contributed with another case study.

To compile the third case study, an interview was undertaken with representatives of the regional Ostrava University who realized university educators' training project.

The fourth case study is the result of preliminary pilot-testing of the Template which was translated into methodological principles presented to the respondents. For the testing of the template, one recent activity organized by our Centre was chosen. The activity itself is described here: <http://mosur.czp.cuni.cz/index.php/en/events/workshops/160-prague-workshop-the-world-after-2015-education-for-sustainability> or here <http://pyramid2030.net/>

How did you validate the data?

Case studies have been developed based on interviews (informants were not able to identify competences developed within the project). The results of the case studies have been sent to all of the informants for approval. To validate the general set of data, national report was reviewed by colleagues from the CUEC department.

The general part of the report has been checked by colleagues from CUEC.

Who was involved in the process and in what ways?

Person consulted to complete the Example 1

Name	prof. Ing. Jan Moudrý, CSc.
Institution	Institute of Crop Ecology, Faculty of Agriculture, University of South Bohemia in České Budějovice, Department of Organic Farming
University responsibility	Head of the Department of Organic Farming
E-mail address	moudry@zf.jcu.cz
Phone number	+420 724 262 530

Responded to the Forum of the University Teachers and provided information about the case 1.

Person consulted to complete the Example 2

Name	Ing. Jan Malinovský, Ph.D.
Institution	Faculty of Economics, VŠB – Technical University in Ostrava, Department of Regional and Environmental Economics
University responsibility	Head of the department
E-mail address	Malinovsky Jan <jan.malinovsky@vsb.cz>

Phone number Tel.: +420 597 322 232

Involved in a joint project with teacher training activity and provided information during consultation.

Person consulted to complete the Example 3

Name Nikola Fousková
Institution Masaryk University, Department of Environmental Humanities
University responsibility Project manager
E-mail address Nikola Fousková <Nikola.Fouskova@czp.cuni.cz>
Phone number

These informants have provided information upon request.

Person consulted to complete the Example 4

Name Dana Kapitulčinová
Institution Charles University Environment Center, Department of ESD
University responsibility Researcher/Coordinator
E-mail address Dana.Kapitulcinova@czp.cuni.cz
Phone number

Information gathered for preliminary pilot testing of the Template.

What documents have you consulted to complete this template?

National strategies, see the list of references.

Resources provided by informants.

Why did you choose these initiatives and not others?

There are more initiatives in the field of ESD especially initiated by NGOs but none of them focused on university educators and/or competences for ESD. The given examples were those that we found closest to the given topic and were able to gather sufficient amount of information.

Part D – Reflection

This section is seeking your own thoughts and reflections towards professional development of university educators for ESD in your country.

In the light of the information provided, what would you consider to be priority needs in professional development of university educators related to ESD in your country?

Barriers:

Not fully recognized need for SD and consequently ESD in Czech policy and society

Turbulent politics & underdeveloped democracy – government policy is often changing, so that the environment for achieving progress is unstable; as a result, documents already approved are also not being implemented (ESD national strategy 2008-2015 is the case). Each change of government and each change of minister is accompanied by an almost complete 'clean-out' of public service staff, resulting in the constant loss of institutional knowledge and the need to continuously repeat the SD message to key political stakeholders.

In HE:

burden of the history persists (mainly disciplinary-oriented study programs, administrative and managerial structure very traditional)

new challenges: financing (← growing numbers of students); quality criteria (excellence stressed, not social role)

there is no system of career growth based on development of pedagogical skills on university level

Pre-requisites for university educators ESD competence development:

To recognize the need for professional growth of university educators in the field of competences, including systemic requirements

To accredit more transdisciplinary study programs with SD focus (adjust accreditation rules) and include ESD principles in those which are disciplinary (requiring skills such as transboundary competence etc.)

Reflection of the teaching/learning process would greatly promote interest in competence development (opportunity to publish experiences and results).

Is there any further information that might be relevant and which you would like to share? Please provide links, references, documents that can already be collected for the collection of resources on the common online portal. (Documents in all languages are welcome).

Dlouhá, J. (ed.) (2002) *Inovace vysokoškolské výuky v environmentálních oborech* (Innovation of HE in environmentally oriented disciplines) Praha : COŽP UK. 185 pp. ISBN 80-238-9228-2. Info about the conference including presentations see <http://www.czp.cuni.cz/Vzdel/Forumvs/Setkani030123/>

Dlouhá, J. (2009) Obecné vzdělávací kvality a pojem kompetence. (Educational qualities and the term competence) *Envigogika*, IV/1 [online] [cit. 2010-06-16] Available from: <<http://envigogika.cuni.cz/index.php/cs/texty/20091/299>> ISSN: 1802-3061
DOI: <http://dx.doi.org/10.14712/18023061.35>

Dlouhá, J. (2009) Kompetence v environmentálním vzdělání. (Competences in environmental education) *Envigogika*, IV/1 [online] [cit. 2010-06-16] Available from: <<http://envigogika.cuni.cz/index.php/cs/texty/20091/300>> ISSN: 1802-3061
DOI: <http://dx.doi.org/10.14712/18023061.34>

National Strategy for ESD (2008 – 2015)

Action Plan for the National Strategy for ESD (2011-12)

The Strategic Plan for the Scholarly, Scientific, Research, Development, Innovation, Artistic and Other Creative Activities of Higher Education Institutions for 2011-2015; <http://www.msmt.cz/areas-of-work/tertiary-education/the-strategic-plan-for-higher-education-institutions-2011?lang=2>

Hungary

General information

Lead person completing the template

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Phone number	+36303230638

Country information

Country	Hungary
Number of Higher Education institutions in the country	68
Number of Higher Education students in the country	316385
UE4SD region	<input type="checkbox"/> Northern Europe <input type="checkbox"/> Western Europe <input type="checkbox"/> Southern Europe <input checked="" type="checkbox"/> Eastern Europe

Part A – The status of ESD within Higher Education at the national level

This section aims at gathering a general view about the integration of ESD within Higher Education in the UE4SD partner countries, with an emphasis on the issue of professional development opportunities for university educators to develop ESD competences.

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) strategies, policies or legislations, which recognise ESD in Higher Education? *(If yes, please provide details. Max. 400 words.)*

Yes.

The main planning document is the **National Sustainable Development Strategy**, which contains general aims about teaching and learning of sustainability, including in the level of higher education. In the document the higher education appears as a difficult, underfinanced area with decreasing teaching quality.

The **Training and Outcome Requirements** (Képzési és Kimeneti Követelmények) of the Ministry of National Resources contains detailed information in this field. Especially the requirements of the different teacher trainings are well detailed. The *environmental and nature protection* as well as the *sustainability* appears during the training of biology, chemistry, physics, geography, science and environmental science teachers.

If yes, what ESD processes and approaches do these promote? (*Max. 200 words.*)

The **Training and Outcome Requirements** (Képzési és Kimeneti Követelmények) contains competences for every study programmes, for example for teacher training. This document deals with the training and outcome requirements of

a) chemistry teachers:

- case studies, contextual demonstration of chemistry (chemistry and society, sustainable development, chemistry and environment);
- the borderline of chemistry – environmental pollution;
- environmentally conscious life style;

b) science teachers:

- multidisciplinary approach and integrated knowledge of environmental and nature protection;

c) teacher of geography:

- it is important to reach the value-based thinking and the responsibility for sustainable development;
- it is important to know and use the pedagogy of sustainability and its interactive methods;

d) teacher of environmental science

- comprehensive knowledge on environmental problems and sustainability.

If yes, do these documents refer to ESD professional development for university educators (as like asking for skills and capabilities)? (*If yes, please provide details. Max. 200 words.*)

There are no relevant ideas or concepts especially for university educators.

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) initiatives (projects, programmes, etc.) on ESD professional development for university educators? (*If yes, please provide details. Max. 400 words.*)

There are no existing initiatives.

Do Higher Education institutions have strategic plans or guidelines to promote ESD? (Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)

☐ None

☐ Few

☒ Several

☐ Many

☐ All

Universities may create their strategies, but it is not required by regulation. Nevertheless, there are several such plans in the country, because of the EU requirements in tendering processes. Unfortunately, these documents have very limited effect on the operation of institutions.

Do Higher Education institutions have initiatives (projects, programmes, etc.) to support the professional development of university educators in ESD? (Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)

☐ None

☒ Few

☐ Several

☐ Many

☐ All

There are some EU-funded projects in this field, but only conferences:

International Conference on Project Pedagogy, College of Kecskemét, 2011

Regular Conferences on Education Informatics, ELTE University

Does ESD form part of the quality assurance and accreditation processes of Higher Education institutions?⁴³ (If yes, please provide details. Max. 400 words.)

Definitely not.

Are there any Higher Education networks, partnerships or main drivers (public, private, NGOs) that support the professional development of university educators in ESD in your country? (If yes, please provide details. Please note that networks at the local but also global level might be relevant. Max. 400 words.)

⁴³ In countries where there is a formal accreditation process of staff, please indicate if ESD is taken into consideration in this process and *how*.

There are two similar NGO initiatives in this field, both of them focus mainly on the performance of department offices. The more traditional one is an absolutely student-led department greening competition of the University Green Association (UGA) at Budapest University of Technology and Economics. Since 2009 it brought changes to certain departments at the university. A similar program launched in the ELTE University this year, which is organized by a local student group, ELTE Students for Environmental Awareness. This one is based on a professional green office programme with long tradition.

Another NGO based initiative is the Concept for Higher Education of the Waste Work Group, which focused on the implementation of the Zero Waste approach into the operation of higher education institutions.

The third non-governmental based program is connected to the Hungarian Educational Research Association (HERA), which focus basically on teacher training.

There was a research project of the Institute of Educational Research and Development (Oktatáskutató és Fejlesztő Intézet) on “Quality development on Higher Education”. It had several a focuses, one of them was the environmental aspects, as energy consciousness and environmental consciousness.

Are there any higher education initiatives or projects developed in response to the UNECE (UN Economic Commission for Europe) ESD competences⁴⁴? *(If yes, please provide details. Max. 400 words.)*

There are some initiatives:

a) Green Energy Cooperation of Higher Education – ZENFE (Zöld Energia Felsőoktatási Együttműködés); <http://zenfe.unideb.hu/index.php/projekt>

b) Experiential Learning and Education for Nature Awareness; <http://www.anl.bayern.de/forschung/elena/index.htm>

Part C – Data collection and validation

Please briefly provide information about how the data was collected and how you can validate it.

How did you collect the data? (Please refer to section 4.1 of the guidelines.)

- a) through interviews with experts on higher education
- b) directly – through participation
- c) through internet research

How did you validate the data?

⁴⁴ UNECE (2011) Learning for the future: Competences in Education for Sustainable Development, ECE/CEP/AC.13/2011/6; http://www.unece.org/fileadmin/DAM/env/esd/6thMeetSC/Learning%20for%20the%20Future_%20Competences%20for%20Educators%20in%20ESD/ECE_CEP_AC13_2011_6%20COMPETENCES%20EN.pdf

- a) with interrelated personal interviews
- b) directly through participation

Who was involved in the process and in what ways?

several experts in the field of environmental education in Hungary – with personal communication.
Namely:

Anna Molnár (researcher, College of Kecskemét) – co-writer

Katalin Czippán (consultant and expert in the field of sustainable education, Vác) – source of information in general

Attila Varga (researcher, Hungarian Institute of Educational Research and Development) – source of information in general

Péter Varga (researcher, University of Szeged) - source of information in filling the datasheet

Attila Horváth (Green Circle, Technical University, Budapest) - source of information in filling the datasheet

Miklós Antal (Green Circle, Technical University, Budapest) – as the writer of an important article about the Greener Department initiative

What documents have you consulted to complete this template?

legal and planning documents, as

Training and Outcome Requirements

National Sustainable Development Strategy

Why did you choose these initiatives and not others?

these are the main relevant sources, there are not too many initiatives in Hungary

Part D – Reflection

This section is seeking your own thoughts and reflections towards professional development of university educators for ESD in your country.

In the light of the information provided, what would you consider to be priority needs in professional development of university educators related to ESD in your country?

Almost every institute have their own sustainable development strategies, the general problem is the lack of practical implementation.

Is there any further information that might be relevant and which you would like to share? Please provide links, references, documents that can already be collected for the collection of resources on the common online portal. (Documents in all languages are welcome).

No, thanks.

Thank you for your efforts and time to map the status of ESD in Higher Education in your country!

The UE4SD Steering Group team

Macedonia

General information

Lead person completing the template

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Country information

Country	Republic of Macedonia
Number of Higher Education institutions in the country	<p>20 HEI:</p> <ol style="list-style-type: none"> 1. 5 public (state) universities, 2. 9 private universities, 3. 4 private HEI (faculties), 4. 2 religious faculties. <p>(Source: 1. Ministry of Education and Science, www.mon.gov.mk, 2. <i>Statistical Yearbook of the Republic of Macedonia 2014</i>, State Statistical Office, Skopje, and 3. <i>News Release – Enrolled students in higher school and faculties in the Republic of Macedonia in the academic year 2012/2013</i>, State Statistical Office, Skopje.)</p>
Number of Higher Education students in the country	<p>63437 for the academic 2008/2009 year 57894 for the academic 2009/2010 year 63250 for the academic 2010/2011 year 58747 for the academic 2011/2012 year 56906 for the academic 2012/2013 year</p> <p>(Source: 1. <i>Statistical Yearbook of the Republic of Macedonia 2014</i>, State Statistical Office, Skopje, and 2. <i>News Release – Enrolled students in higher school and faculties in the Republic of Macedonia in the academic year 2012/2013</i>, State Statistical Office, Skopje.)</p>
UE4SD region	<input type="checkbox"/> Northern Europe <input type="checkbox"/> Western Europe <input type="checkbox"/> Southern Europe <input checked="" type="checkbox"/> Eastern Europe

Part A – The status of ESD within Higher Education at the national level

This section aims at gathering a general view about the integration of ESD within Higher Education in the UE4SD partner countries, with an emphasis on the issue of professional development opportunities for university educators to develop ESD competences.

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) strategies, policies or legislations, which recognise ESD in Higher Education? *(If yes, please provide details. Max. 400 words.)*

There are some strategies, strategic documents and legislations that recognize the need for education in sustainable development, but not specifically in Higher Education. For instance:

A) Legislation:

Government of the Republic of Macedonia (2010): “Decree on the National Framework for higher education qualifications”, November, 2010, Skopje,

“Law on the Bureau for the Development of the Education”, Official Gazette of the Republic of Macedonia, No. 14, 2014, Skopje,

“Law on the outstanding civic universities for lifelong learning”, Official Gazette of the Republic of Macedonia, No. 41, February 2014, Skopje,

“Law on recognition of professional qualifications”, Official Gazette of the Republic of Macedonia, No. 171, December, 2010, Skopje,

“Law on pedagogic service”, Official Gazette of the Republic of Macedonia, No. 18, February 2011, Skopje,

“Law on National Qualifications Framework”, Official Gazette of the Republic of Macedonia, No. 137, 2013, Skopje,

“Law on Higher Education”, Official Gazette of the Republic of Macedonia, No. 41, February 2014, Skopje,

“Law on Vocational Education and Training”, Official Gazette of the Republic of Macedonia, No. 41, February 2014, Skopje,

“Law on Environment”, Official Gazette of the Republic of Macedonia, No. 53, July 2005, Skopje,

Ministry of Education and Science (2014): “Rulebook on verifying the compatibility of the National Framework of Qualifications to the European Qualifications Framework for Higher Education”, www.mon.gov.mk, April, Skopje, (in Macedonian),

Ministry of Education and Science (2014): “Rulebook on the form, content and manner of keeping the register of qualifications for Higher Education”, www.mon.gov.mk, April, Skopje, etc.

B) National strategies and strategic documents:

Ministry of Education and Science (2000): “Strategy for the Development of Education in the Republic of Macedonia”, Skopje,

Ministry of Education and Science (2006): “National Program for Development of the Education in the Republic of Macedonia 2005-2015”, Skopje,

Ministry of Environment and Physical Planning (2009): “National Strategy for Sustainable Development”, Skopje.

If yes, what ESD processes and approaches do these promote?(*Max. 200 words.*)

From the point of view of national legislative basis for the education on environment and sustainable development it is worthy to analyze the provisions contained in the **Law on Environment** (the case of the Law on Higher Education will be taken in consideration later on, i.e. in the next parts of this report). Namely, some of the main objectives of the Law regarding the education on environment and sustainable development and their achievement are given at the beginning (Article 4). According to the Law, there is a need for raising awareness for environmental protection in the education process and the promotion of environmental protection. Unfortunately, although the Law talks about education in environmental protection and sustainable development (Article 48), yet the higher education has not been addressed and almost not mentioned.

The Law on Environment also points out the topic of education in the sense that there is a special chapter titled “Other research and education activities in the field of the environment”. In this chapter special attention (Article 47) is devoted to the necessity for two Ministries in Macedonian Government, i.e. the Ministry of Education and Science and the Ministry of Environment and Physical Planning, to provide support to researches of the environment and projects for the protection of the environment based on the annual program,. These activities should be financed by the central budget through an annual Program called Program for investing in the environment (Article 172). However, the next parts/articles of the Law are more important from the point of view of ESD because there is pointed out that the education for environment and sustainable development in primary and secondary schools should be a subject of regulation by the Government. Namely, the Minister of Education and Science should approve curricula for primary and secondary schools, in which as an optional or compulsory subject (syllabi) it is envisaged to have the protection of the environment. In the same time, the Minister of Environment and Physical Planning out to give the necessary support to the educational and scientific institutions, to professional organizations and NGOs, established due to the promotion of the protection of the environment and sustainable development and enforcement of relevant educational activities.

In the **National Strategy for Sustainable Development in the R. Macedonia** only some attention is devoted to higher education. Actually, the Strategy recognizes the need to remodel policy for higher education, with particular reference to the dimensions of sustainable development. In this respect the Strategy asks for necessary coordination with other economic and social policies, in order to provide a consistent policy aimed to higher economic growth and sustainable development. Unfortunately, the Strategy does not contain precise measures or steps for its realization in practice.

The previous is reflected in the fact that in the National Council for Sustainable Development is not provided a place for the Minister of Education and Science (National Council for Sustainable Development is an advisory body to the Government, that was established by the Strategy. Its main function is proposing to the Government adequate policy measures for sustainable development and monitoring of the Strategy's implementation). For example, the National Council for Sustainable Development is comprised of 13 members, of which seven ministers (Vice President of the Government, responsible for economic issues; Vice President of the Government, responsible for European integration; Minister of Environment and Physical Planning; Minister for Local Self-Government; Minister of Economy; Minister of Labour and Social Policy, and Minister of Agriculture, Forestry and Water Economy), then three experts in the field of sustainable development (the first one with the more narrow specialization in the field of economy, the second in social development and the third one in the field of environmental protection), one representative of the Macedonian Academy of Arts and Sciences, one representative of the Economic Chamber of Macedonia (the business community) and one representative from the Assembly of the Republic Macedonia.

The ***National Program for the Development of Education 2005-2015*** (adopted by the Parliament of the Republic of Macedonia in April 2006) includes nine separate programs, and contains precisely defined: vision, mission, values, principles, and challenges for the education's development, with a time horizon of 10 years. Necessary activities are defined as well, but unless the holder of the activity, there is no defined financial resources needed to implement the activity, nor a deadline. Also, there is no particular priority to the offered activities. By comparison with the sustainable development, yet at the very beginning of the National program stands that the national program itself is dedicated to the advancement of the knowledge and strengthen the culture of residence of the citizens in the Republic of Macedonia. It strives to provide full contribution to the realization of the sustainable development and improvement of society and its affirmation as an equal and respectable member of European and world community. The Program asks for investment by the Government in education, training, science and the survey, because they are always a kind of worthwhile (i.e. so called profitable) investment and strongest subjects of national competence and competitiveness, and hence they are main factors for the sustainable development of the country. Finally, in this Program it is stated and that the education occupies a central position as undisputed key to sustainable development, quality and competitiveness.

If yes, do these documents refer to ESD professional development for university educators (as like asking for skills and capabilities)? *(If yes, please provide details. Max. 200 words.)*

Almost no one of the previous documents (neither legislation, nor strategies) refers to ESD professional development for university educators. In fact, sustainable development is a topic that is mentioned very often in most of the documents, but it is not proposed as a strict component of the university educators' professional development.

For instance, in the ***Strategy for the Development of Education in the Republic of Macedonia***, (Ministry of Education and Science, 2000), among other things, it was recognized the need for continuous professional development of the university professors/educators. The previous means, that the Strategy recognized the need for new approaches in the processes of education, inclusion of

new contents, as well as taking into account the topic of environmental quality and its improvement. But, from the other side, the Strategy was lacking greater selectivity in the separation of the priorities and their better connection with social necessities, and after all it was missing a specific plan of action.

Previously mentioned ***National Strategy for Sustainable Development in the R. of Macedonia***, in some sense touched the issue of ESD professional development for university educators. Actually, the Strategy partly elaborates the topic of *outdated curricula and methods of teaching*. Consequently, a conclusion is derived that, one of the main reasons why the graduates lack adequate knowledge and skills, is due to the use of the outdated curricula and methods of teaching at all levels of education. According to the Strategy, the methods used are not in accordance with the needs of the modern world. They in fact neglect the importance of functional meanings (such as problem solving and critical thinking), and do not prepare students so they can function in society which is knowledge based (for many occasions, this is targeted as one of the major weaknesses of the education system in the Republic of Macedonia, especially for the system of higher education).

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) initiatives (projects, programmes, etc.) on ESD professional development for university educators? *(If yes, please provide details. Max. 400 words.)*

In the framework of the ***National Strategy for Sustainable Development in the R. of Macedonia***, there is an important part, titled “Strategic actions for reaching Sustainable Development in the Republic of Macedonia”. Here are elaborated main activities and measures needed to achieve the strategic goals of the Strategy.

One of the interesting and innovative ideas comes from the proposed institutional set-up for supporting the realization of the sustainable development. That is the idea for establishing so-called University Campus for Sustainable Development (UCSD). This campus was supposed to be responsible for enforcing the sustainable development in terms of researches and studies based on the Strategy’s objectives. UCSD was imagined as a kind of green-field project, i.e. as a new university campus outside Skopje, on the way to being a driving force for regional development and innovation, as well as “a place for new ways of thinking, innovation and residence.” The preliminary idea was that Campus should be funded, established and developed as public-private partnership (PPP). UCSD’s direct target group above all, should be motivated, proactive and innovative students from Macedonia and neighboring countries, who are committed to the general vision for sustainable development. So far, no one foreign experience recognized establishing/formation of such Campus for Sustainable Development. Hence, it would represent maximum engagement and remarkable brand even worldwide, if it was realized in practice. Unfortunately, so far this idea has not been transformed into something real.

Do Higher Education institutions have strategic plans or guidelines to promote ESD? (Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)

- ☒ None
- ☐ Few
- ☐ Several
- ☐ Many
- ☐ All

The research did not recognize any strategic plan or guidelines at Higher education institutions, prepared for the reason of promotion ESD. In fact, universities and faculties are not obliged to have strategic plans or guidelines to promote ESD.

Do Higher Education institutions have initiatives (projects, programmes, etc.) to support the professional development of university educators in ESD? (Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)

- ☒ None
- ☐ Few
- ☐ Several
- ☐ Many
- ☐ All

Concerning the professional development of university professors/educators in ESD in Macedonia, for the time being, it can be concluded that it is an issue left to the professor/educator him/her self. The process of improvement from the viewpoint of professional and scientific competences is not institutionalized, and the impression is that it does not follow the contemporary development. In fact most of the educators are left to satisfy the necessity of professional development in ESD by voluntarily attending seminars, workshops, scientific conferences and so on.

If we see as exemptions from the previous, there are some universities/faculties that already have introduced subjects (syllabi) or even study programs (curricula) in environmental protection and sustainable development. This is referred mainly to faculties in natural sciences (chemistry and biology), faculties of agriculture, faculty of forestry, faculties of geography, faculties of spatial planning, faculties of architecture, but also faculties in social sciences, as for instance faculties of law and faculties of economics (Ss. Cyril and Methodius University, University St Kliment Ohridski in Bitola, University Goce Delcev in Stip, etc). These faculties do have subject/syllabi in ecology or environmental protection. Some chapters of the programs are devoted to the topic of sustainable development.

It is interesting that at the Integrated Business Faculty (private independent higher education institution in Skopje), exists a study program (graduate study) on *Sustainable Development - Environmental Economy*. Majority of the subject are in economics, but it also contains several subjects in environmental protection and sustainable development. Also, at Ss. Cyril and Methodius University in Skopje (biggest and oldest university in Macedonia with a status of public institution), in 2011 was established a study program in *Engineering of Environment and Natural Resources* (as post-graduate study program). Beside the subjects in engineering, the program contains subject in environmental economics (with a chapter on sustainable development).

Does ESD form part of the quality assurance and accreditation processes of Higher Education institutions?⁴⁵ (If yes, please provide details. Max. 400 words.)

The research did not record a situation where in general, ESD is included as a part of the quality and accreditation process of higher education institutions. Of course, there are some study programs (as mentioned in the previous question/answer 4, and some syllabi at faculties of economics, law, natural sciences, mechanical engineering, civil engineering, etc., but actually they are exemptions of the final conclusion.

Main characteristic of the national HE system in Macedonia regarding:

Quality assurance and accreditation processes:

Board for Accreditation and Evaluation in Higher Education is a regular body with advisory role for the Government. It is in charge of providing and assessing the quality of higher education institutions. The system of providing and assessment the quality of high education covers:

Approving and recognition of higher education institutions and study programs, the performance of the higher education activities in accordance with the Law on Higher Education, which is conducted through accreditation;

Assessment of the quality of conducting the higher education activity, financing, academic and other activities and its priorities, which is performed through the system of evaluation and

Other activities and mechanisms through which develops and maintains the quality of higher education established by Law and the acts of the bodies which has assessed the quality of higher education institutions.

The evaluation is done through evaluation methods as external evaluation, self-evaluation, as well as the system of quality assessment of academic staff. In carrying out external evaluation in order to

⁴⁵ In countries where there is a formal accreditation process of staff, please indicate if ESD is taken into consideration in this process and *how*.

ensure uniform quality of higher education in the single European space for higher education, there are applied procedures, standards and guides (guidelines) accepted by the European Association for Evaluation in Higher Education (ENQA) and other institutions, organizations and associations that establish and apply European standards and guidelines for performance evaluation of external evaluation, as well as the services of recognized international organizations and associations that perform quality assurance of higher education. External evaluation is done by commissions on specific areas and areas composed of at least three professors from internationally recognized universities in positions equivalent to positions of associate professor and full professor and at least three years experience in conducting external evaluation. One of the committee members is a chairman. External evaluation is carried out under the criteria set forth in Guidelines for the provision and quality assessment of higher education institutions and academic staff in the country, which is proposed by the Minister responsible for higher education. The results of the evaluation of the quality of higher education are contained in reports available to the public.

Self-evaluation of a university or an organizational unit of university (faculty) is carried out by a self-evaluation commission for the unit, under conditions specified by statute of the university. Members of the commission are elected by secret ballot by the Senate, or the educational and scientific council from among the professors/teachers for four years and representatives from the students during the two years.

Self-evaluation is performed at intervals of no more than three years. The procedure for self-evaluation takes into account the evaluation (assessment) by students, as well. The assessment of the students is getting at the end of each academic year and it is considered in advance in the process of promotion of the professor/teacher in teaching and scientific title. The evaluation is obtained through a survey of students conducted by the higher education institution, as determined by the statute of the university or independent institution of higher education.

Self-evaluation results are published on the website of the university, of each unit (faculty and research institute) and the Ministry of Education and Science. The Ministry, for the purpose of self-evaluation of higher education institutions, introduced an electronic system for self-evaluation. Each university or independent institution of higher education shall submit the results to the Ministry. After that the Ministry in charge of higher education prepares integral report on the results of self-evaluation for universities and independent institutions of higher education.

Developing and maintaining the quality of higher education institutions

In order to develop and maintain the quality of higher education, for a period of every two years a mandatory ranking of all universities and institutions of higher education within the universities (faculties), is carried out and recorded in the Register of higher education institutions. The legal entity that implements the ranking must meet the following criteria:

To have established a relevant system of quality management,

To have consistently employed at least 15 people in the academic and scientific titles covering all areas of science, with a minimum of five years experience in the process of providing consultants

services to higher education institutions or state institutions and led research projects related to various aspects of higher education,

Available to own at least five foreign associates in teaching and research positions,

Have carried ranking of universities and/or institutions of higher education within the universities in at least three countries of the European Union,

Have developed a flexible methodology in the ranking,

The results of his work have publicly announced.

Universities (and faculties as members of the universities) have a legal obligation of the entity who conducts the ranking to provide all data required for the ranking. The funds required for the implementation of the ranking of universities are provided from the Budget of the Republic of Macedonia. The results of the ranking and the criteria on which the ranking is derived are available to the public within eight days after the preparation of the report on the results of the ranking with the ranking, by posting on the website of the Ministry of Education and Science.

Are there any Higher Education networks, partnerships or main drivers (public, private, NGOs) that support the professional development of university educators in ESD in your country? *(If yes, please provide details. Please note that networks at the local but also global level might be relevant. Max. 400 words.)*

In the framework of research, there was not recorded any Higher Education network or partnership that support the professional development of university educators in ESD. The criteria for professional development and selection to the academic and scientific titles for the university professors/educators do not include the field of sustainable development.

Actually, some of the characteristics of the national HE system in Macedonia regarding professional development and promotion to the academic and scientific titles for the university professors/educators are the following:

Professors in teaching and research positions are elected according to the rules defined by Law on Higher education, and more precisely by the University Statute or the Statute of the independent-college.

In the sense of the previous, as assistant professor may be appointed a person who fulfils in a cumulative way these preconditions: a) to have defended a PhD thesis in scientific field which selects, b) a person who has published at least four research papers in the relevant field in international journals and international scientific publications or two scientific papers in the scientific journal with impact factor in the last five years, c) to have achievements in the application of results from scientific research; d) ability to perform certain types of higher education; and e) positive grade/evaluation of the self-evaluation.

Associate Professor may be appointed a person who has: a) defended PhD thesis in scientific field which selects, b) published at least five research papers in the relevant field in international journals and international scientific publications, or three scientific papers in the scientific journal impact factor in the last five years; c) participation in research projects or significant advances in the application of the results from scientific researches; d) contribute to the training of teachers and younger colleagues; e) to have demonstrated the ability for performing various types of higher education activity; and f) positive grade/evaluation of self-evaluation.

Full professor may be appointed a person who has: a) PhD in the scientific field they choose, b) at least six published scientific papers in the relevant field in international scientific journals and international scientific publications, or four research papers in scientific journal with impact factor in the last five years; c) who participated in or directing the research project; d) to have contributed to the training of teachers and younger colleagues; e) who have demonstrated the ability to perform all types of higher education, and f) to have positive grade/evaluation of self-evaluation. For reelection of full professor may be appointed a person who has: a) PhD in the scientific field they choose, b) at least six published scientific papers in the relevant field in international scientific journals and international scientific publications or four research papers in scientific journal with impact factor in the last seven years, c) who participated in or directing the research project, d) which has contributed to the training of teachers and younger colleagues; e) who have demonstrated the ability to perform all types of higher education and f) positive grade/evaluation of self-evaluation.

Persons selected to the academic and educational position (i.e. professors/educators) shall pursue pedagogical commitments. Under the pedagogical responsibilities of teaching staff, means realization of teaching activities (giving lectures), maintaining consultation with students, maintenance exams, doing mentoring of students and the like. Pedagogical obligations under the collaboration staff involve maintenance exercises with students, holding consultations with students and the like.

Are there any higher education initiatives or projects developed in response to the UNECE ESD competences⁴⁶? *(If yes, please provide details. Max. 400 words.)*

The research did not recognize any higher education initiative or project developed in response to the UNECE ESD competences.

Part C – Data collection and validation

⁴⁶UNECE (2011) Learning for the future: Competences in Education for Sustainable Development, ECE/CEP/AC.13/2011/6; http://www.unece.org/fileadmin/DAM/env/esd/6thMeetSC/Learning%20for%20the%20Future_%20Competences%20for%20Educators%20in%20ESD/ECE_CEP_AC13_2011_6%20COMPETENCES%20EN.pdf

Please briefly provide information about how the data was collected and how you can validate it.

How did you collect the data?(Please refer to section 4.1 of the guidelines.)

Reviewing papers and publications, national strategies and programs, annual reports;

Internet searches for relevant information from web pages of Higher Education Institutions, Ministry of Education and Science, Ministry of Environment and Physical Planning, Secretariat for European Affairs at Government of the R. of Macedonia (responsible for registering of all international projects i.e. projects funded by foreign donors) etc.;

Consultations with experts and directors of relevant departments at some of the Ministries:

Assistant-Head of the Department for Higher education, Ministry of Education and Science,
Head of the Department for Sustainable Development and Investments, Ministry of Environment and Physical Planning,

State Secretary at the Secretariat for European Affairs, Government of the R. of Macedonia, etc.

How did you validate the data?

Own research accompanied with consultations i.e. when necessary (as a result of data uncertainty), consultations were conducted with relevant experts for checking data validity;

Analyzing independent studies and monographs,

Cross-checking (comparing data from different sources), etc.

Who was involved in the process and in what ways?

Several consultations were conducted with experts and professionals from the relevant Ministries:

Ministry of Education and Science, more precisely from the Department for Higher education,

Ministry of Environment and Physical Planning, i.e. from the Department for Sustainable Development and Investments,

Secretariat for European Affairs, Government of the R. of Macedonia, etc.

What documents have you consulted to complete this template?

For the purpose of mapping, a lot of documents and papers have been consulted. More important titles are the following:

Government of the Republic of Macedonia (2010): "Decree on the National Framework for higher education qualifications", November, 2010, Skopje, unpublished (in Macedonian),

Government of the Republic of Macedonia (2014): "Law on the Bureau for the Development of the Education", Official Gazette of the Republic of Macedonia, No. 14, 2014, Skopje, (in Macedonian),

Government of the Republic of Macedonia (2014): "Law on the outstanding civic universities for lifelong learning", Official Gazette of the Republic of Macedonia, No. 41, February 2014, Skopje, (in Macedonian),

Matlievska Margarita (2011): *Sustainable Development – New Global Paradigm*. private publication, Skopje (in Macedonian),

Ministry of Education and Science (2006): "National Program for Development of the Education in the Republic of Macedonia 2005-2015", Skopje, unpublished, (in Macedonian),

Ministry of Education and Science (2010): "Law on recognition of professional qualifications", Official Gazette of the Republic of Macedonia, No. 171, December, 2010, Skopje, (in Macedonian),

Ministry of Education and Science (2011): "Law on pedagogic service", Official Gazette of the Republic of Macedonia, No. 18, February 2011, Skopje, (in Macedonian),

Ministry of Education and Science (2013): "Law on National Qualifications Framework", Official Gazette of the Republic of Macedonia, No. 137, 2013, Skopje, (in Macedonian),

Ministry of Education and Science (2014): "Law on scientific research", Official Gazette of the Republic of Macedonia, No. 14, 2014, Skopje, (in Macedonian),

Ministry of Education and Science (2014): "Law on Higher Education", Official Gazette of the Republic of Macedonia, No. 41, February 2014, Skopje, (in Macedonian),

Ministry of Education and Science (2014): "Law on Vocational Education and Training", Official Gazette of the Republic of Macedonia, No. 41, February 2014, Skopje, (in Macedonian),

Ministry of Education and Science (2014): "Rulebook on verifying the compatibility of the National Framework of Qualifications to the European Qualifications Framework for Higher Education", www.mon.gov.mk, April, Skopje, (in Macedonian),

Ministry of Education and Science (2014): "Rulebook on the form, content and manner of keeping the register of qualifications for Higher Education", www.mon.gov.mk, April, Skopje, (in Macedonian),

Ministry of Environment and Physical Planning (2005): "Law on Environment", Official Gazette of the Republic of Macedonia, No. 53, July 2005, Skopje, (in Macedonian),

Ministry of Environment and Physical Planning (2009): "National Strategy for Sustainable Development", Skopje, unpublished, (in Macedonian).

Nedanovski Pece (2011): "Implementation of the Sustainable Development as a Significant Precondition for Approaching European Union – The Case of the Republic of Macedonia", *Proceedings – International Scientific conference "Economic theory and practice in modern conditions"*, Brčko, Bosnia and Herzegovina, 10 November, p. 52-57.

Trpevski Strahinja (ed.). Sustainable development – Key challenges for Republic of Macedonia, *Journal of Sustainable Development*, Skopje, 2008, June, pp. 64.

United Nations, Economic Commission for Europe - Committee on Environmental Policy (2005): "UNECE Strategy for Education for Sustainable Development", Vilnius, March.

UNECE (2011) Learning for the future: Competences in Education for Sustainable Development, ECE/CEP/AC.13/2011/6

UNESCO World Conference on Education for Sustainable Development (2009): "Bonn Declaration", March-April, Bonn.

Why did you choose these initiatives and not others?

One of the main conclusion that could be derived from the research is that Macedonia currently lacks real and concrete activities in regard to ESD at higher education institutions. Having in mind this, it is understandable the situation where the opportunities for developing ESD competences are very modest. So, it was really hard to find representative examples of activities of university professors/educators in the field of ESD. The author of the Report did his best to fulfill the goal, but it was almost impossible to find adequate initiatives and concrete activities. In fact, it is obvious especially from Part B, where the goal was partly fulfilled (despite the enormous effort, only one example is included, and what is moreover, this example is not relevant to the criteria for the Part B).

Part D – Reflection

This section is seeking your own thoughts and reflections towards professional development of university educators for ESD in your country.

In the light of the information provided, what would you consider to be priority needs in professional development of university educators related to ESD in your country?

Bearing in mind that the Republic of Macedonia is obliged to implement and design a separate National Strategy for Education for Sustainable Development, and in the same time the country does have a National Program for the Development of Education, it seems more appropriate to modernize the later Program according to international documents and acts (adopted at the conference in Vilnius), instead of working on a new National Strategy for Education for Sustainable Development. This is a way for saving financial resources, efforts and time. In the meantime the accepted obligation will be fulfilled, new knowledge and skills concerning sustainable development will be acquired, and finally positive values and attitudes will be adopted;

The previous should be understood as a first step toward overcoming the shortcomings of the national system for professional development in higher education. Namely, for the time being, the university professors/educators lack pedagogic education and training, and consequently didactic skills. The practice shows that university professors/educators need pedagogic education (something

that teachers in primary and secondary schools do already have). This is relevant especially in the case of new and young university associates (educators and assistants).

By and large, the process of quality assurance of HEI and the process of universities ranking, should not be connected only with assessment of the quality of research, but to the quality of teaching processes, too.

Is there any further information that might be relevant and which you would like to share? Please provide links, references, documents that can already be collected for the collection of resources on the common online portal. (Documents in all languages are welcome).

In my opinion, the above mentioned and listed references (documents and papers) could provide almost complete information and picture of the current situation in ESD at higher education institutions in Macedonia.

Thank you for your efforts and time to map the status of ESD in Higher Education in your country!

The UE4SD Steering Group team

Poland

General information

Lead person completing the template

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Country information

Country Poland
Number of Higher Education institutions in the country 453 higher education schools. In that number there are 19 universities.
321 higher education schools (from general number are non-public).
Number of Higher Education students in the country 1 676,927 students (among that general number 459 450 are from nonpublic higher education schools)
UE4SD region
☐ Northern Europe
☐ Western Europe
☐ Southern Europe
☒ Eastern Europe

Part A – The status of ESD within Higher Education at the national level

This section aims at gathering a general view about the integration of ESD within Higher Education in the UE4SD partner countries, with an emphasis on the issue of professional development opportunities for university educators to develop ESD competences.

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) strategies, policies or legislations, which recognise ESD in Higher Education? *(If yes, please provide details. Max. 400 words.)*

National Environmental Education Strategy. Through education to sustainable development published by the Ministry of Environment in 2001. Part II Academic institution

If yes, what ESD processes and approaches do these promote? (Max. 200 words.)

In the Strategy document is written:

“Environmental education at academic level should present the basic knowledge of natural science, economics, technology and humanities, as well as develop environment friendly attitudes

Academic institutions should become centres offering post-graduate programmes and courses for teachers, government employees, journalists and other people responsible for – and interested in environmental issues”

If yes, do these documents refer to ESD professional development for university educators (as like asking for skills and capabilities)? (If yes, please provide details. Max. 200 words.)

There is no specific references to professional development for university educators.

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) initiatives (projects, programmes, etc.) on ESD professional development for university educators? (If yes, please provide details. Max. 400 words.)

No

Do Higher Education institutions have strategic plans or guidelines to promote ESD? (Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)

- ☐ None
- ☒ Few
- ☐ Several
- ☐ Many
- ☐ All

Do Higher Education institutions have initiatives (projects, programmes, etc.) to support the professional development of university educators in ESD? (Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)

- ☐ None
- ☒ Few
- ☐ Several
- ☐ Many
- ☐ All

Does ESD form part of the quality assurance and accreditation processes of Higher Education institutions?⁴⁷ *(If yes, please provide details. Max. 400 words.)*

No

Are there any Higher Education networks, partnerships or main drivers (public, private, NGOs) that support the professional development of university educators in ESD in your country? *(If yes, please provide details. Please note that networks at the local but also global level might be relevant. Max. 400 words.)*

Yes. There is an annual conference for academic educators “Environmental Protection in the programmes of universities studies on natural science”. This conference is addressed to leading academic lecturers and staff from all universities in Poland providing studies and courses on environmental protection. The purpose of the conference is exchange of experiences and examples of good practices in teaching about environment protection and sustainable development. Each year the conference is organised by different University.

Are there any higher education initiatives or projects developed in response to the UNECE ESD competences⁴⁸? *(If yes, please provide details. Max. 400 words.)*

No

⁴⁷ In countries where there is a formal accreditation process of staff, please indicate if ESD is taken into consideration in this process and *how*.

⁴⁸ UNECE (2011) Learning for the future: Competences in Education for Sustainable Development, ECE/CEP/AC.13/2011/6; http://www.unece.org/fileadmin/DAM/env/esd/6thMeetSC/Learning%20for%20the%20Future_%20Competences%20for%20Educators%20in%20ESD/ECE_CEP_AC13_2011_6%20COMPETENCES%20EN.pdf

Romania

General information

Lead person completing the template

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Country information

Country	Romania
Number of Higher Education institutions in the country	105
Number of Higher Education students in the country	464.592 (year 2013) ⁴⁹
UE4SD region	<input type="checkbox"/> Northern Europe <input type="checkbox"/> Western Europe <input type="checkbox"/> Southern Europe <input checked="" type="checkbox"/> Eastern Europe

Part A – The status of ESD within Higher Education at the national level

This section aims at gathering a general view about the integration of ESD within Higher Education in the UE4SD partner countries, with an emphasis on the issue of professional development opportunities for university educators to develop ESD competences.

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) strategies, policies or legislations, which recognise ESD in Higher Education? *(If yes, please provide details. Max. 400 words.)*

⁴⁹ Costoiu, Mihnea (Minister of Higher Education), Interview, <http://www.hotnews.ro/stiri-esential-15701687-mihnea-costoiu-ministrul-delegat-pentru-invatamant-superior-numarul-studentilor-universitatile-publice-crescut-aproximativ-10-fata-anul-trecut.htm>. Accessed on the 1st of May, 2014.

There is no strategy, educational policy or any official approach to education for sustainable development in higher education. On the Ministry of Education website there are no references on this issue. We can appreciate that there is no awareness on policy level to sustainable development, in general, and to education for SD, in particular.

If yes, what ESD processes and approaches do these promote? *(Max. 200 words.)*

If yes, do these documents refer to ESD professional development for university educators (as like asking for skills and capabilities)? *(If yes, please provide details. Max. 200 words.)*

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) initiatives (projects, programmes, etc.) on ESD professional development for university educators? *(If yes, please provide details. Max. 400 words.)*

No.

Do Higher Education institutions have strategic plans or guidelines to promote ESD? (Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)

- ☒ None
- ☐ Few
- ☐ Several
- ☐ Many
- ☐ All

Do Higher Education institutions have initiatives (projects, programmes, etc.) to support the professional development of university educators in ESD? *(Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)*

- ☒ None
- ☐ Few
- ☐ Several
- ☐ Many
- ☐ All

Does ESD form part of the quality assurance and accreditation processes of Higher Education institutions?⁵⁰ *(If yes, please provide details. Max. 400 words.)*

There is a quality assurance and accreditation process of HE institutions made by ARACIS (Agentia Romana de Asigurare a Calitatii in Invatamantul Superior) and it requests syllabi in which professors must point out the relevance of their discipline to the academic community, to professional community and to employers' expectations. But it is not a direct reference to SD or ESD. We can assume that there is only "sustainability" of the domain in the broad context of knowledge based society.

Are there any Higher Education networks, partnerships or main drivers (public, private, NGOs) that support the professional development of university educators in ESD in your country? *(If yes, please provide details. Please note that networks at the local but also global level might be relevant. Max. 400 words.)*

No

Are there any higher education initiatives or projects developed in response to the UNECE ESD competences⁵¹? *(If yes, please provide details. Max. 400 words.)*

Part C – Data collection and validation

Please briefly provide information about how the data was collected and how you can validate it.

How did you collect the data? (Please refer to section 4.1 of the guidelines.)

In the process of data collection we used the following methods:

conduct interviews with the questions on the template (via phone);

conduct internet searches for relevant information;

reviewing publications, reports or evaluation efforts.

How did you validate the data?

We validated the data by studying the artefacts and web resources resulted from the initiative presented here (ESSD-Erasmus Intensive Programme) and for the Academia suggestion (see below, part D, point 2) we read the book dr. Stefanescu has published⁵²).

⁵⁰ In countries where there is a formal accreditation process of staff, please indicate if ESD is taken into consideration in this process and *how*.

⁵¹ UNECE (2011) Learning for the future: Competences in Education for Sustainable Development, ECE/CEP/AC.13/2011/6; http://www.unece.org/fileadmin/DAM/env/esd/6thMeetSC/Learning%20for%20the%20Future_%20Competences%20for%20Educators%20in%20ESD/ECE_CEP_AC13_2011_6%20COMPETENCES%20EN.pdf

The validation for the second example data was pretty difficult. The only input and source of information was the interview with Dr. Stefanescu, one of the participants from the initial group in 1992.

Who was involved in the process and in what ways?

Daniela Dumitru identified the potential sources of information, meaning Dr. Alexandru Andrasanu (the European Seminar in Sustainable Development coordinator), the Head of International Relations Department and Erasmus Coordinator, University of Bucharest, Mrs. Alina Cristovici and dr. Rodica Stefanescu, from Technical University in Cluj-Napoca. Then Daniela Dumitru and Sorin Coman conducted phone interviews and internet search to complete the mapping template. Daniela Dumitru filled in the template with the collected data.

What documents have you consulted to complete this template?

Websites, case study reports, executive summaries, power-point presentations all related to Erasmus Intensive Programme / European Seminar in Sustainable Development.

Book and article from dr. Rodica Stefanescu's work.

Why did you choose these initiatives and not others?

It was easy, there are no initiatives in Romania that have university teaching staff in the target group, except the one we've presented here.

Part D – Reflection

This section is seeking your own thoughts and reflections towards professional development of university educators for ESD in your country.

In the light of the information provided, what would you consider to be priority needs in professional development of university educators related to ESD in your country?

Education for sustainable development should be introduced in the pedagogical education and training for teachers. In Romania functions since 1996 the Departments for Teaching Training, integrated departments in each university that provide the **mandatory socio-psycho-pedagogical training for students that will become teachers (pre-university and HE)**. We believe that it is a good opportunity to promote the concept of sustainable development and its principles by **introducing** into the core competences of this teacher training programme the competences for educators in sustainable development (there is a sort of awareness about the SD, but everything stops at environmental protection, in people's mind).

⁵² Stefanescu, R. (2013) *Alumni and the Sustainable University*, The 7th book of the Research Series THE SUSTAINABLE ENTERPRISE, Editors: Prof. Dan Căndeă, Ph.D. & Senior Researcher - Deputy Rodica M. Căndeă, Ph.D./ U.T.PRESS, Cluj-Napoca, Romania, December 15, 2013 See: <https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbmFpbnxvcmdhbmI6YXRpYXN1c3RlbnFiaWxhfGd4OjFhYzEyYTJhYTQwNDM2NzA>).

Is there any further information that might be relevant and which you would like to share? Please provide links, references, documents that can already be collected for the collection of resources on the common online portal. (Documents in all languages are welcome)

Thank you for your efforts and time to map the status of ESD in Higher Education in your country!
The UE4SD Steering Group team

Serbia

General information

Lead person completing the template

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Country information

Country	Republic of Serbia
Number of Higher Education institutions in the country	15 (from which 8 public Universities; 7 private Universities) 131 academies; 80 colleges;
Number of Higher Education students in the country	~240.000
UE4SD region	<input type="checkbox"/> Northern Europe <input type="checkbox"/> Western Europe <input type="checkbox"/> Southern Europe <input checked="" type="checkbox"/> Eastern Europe

Part A – The status of ESD within Higher Education at the national level

This section aims at gathering a general view about the integration of ESD within Higher Education in the UE4SD partner countries, with an emphasis on the issue of professional development opportunities for university educators to develop ESD competences.

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) strategies, policies or legislations, which recognise ESD in Higher Education? *(If yes, please provide details. Max. 400 words.)*

The National Sustainable Development Strategy 2008 - 2017 (NSDS) is the only cross-sectoral policy document explicitly addressing ESD as one of its priorities, under the chapter entitling “Economy of the Republic of Serbia – Knowledge-Based Sustainability”. However, the ESD concept as defined by the Vilnius framework is not entirely congruent with the treatment of education in the national SDS, a difficulty also reflected in the institutional structure in charge of these two parallel processes. Although most key ESD priorities are present, the focus is more on contributing to sustainable economic development, through improving education system quality and efficiency, coverage, and coordination with the labor market.

Strategy of Education Development in Serbia to 2020+ (2012) is first comprehensive and “umbrella” policy document in education. The strength of this strategy is the fact that it treats education in close connection with other sectors and that the changes cover all education levels from preschool to lifelong learning, with a strong emphasize on higher education. Although ESD is not specifically mentioned as a priority, proposed solutions is fully compatible with SD principles. However, the problem of SDES implementation is, of course, open and uncertain, and depends on the political will of the future Serbian government to accept education as a one of the developmental potentials of Serbia and to turn it into concrete measures in state policy.

If yes, what ESD processes and approaches do these promote? (*Max. 200 words.*)

NSDS promotes specific objectives as follows:

Providing more favourable general conditions for economic-financial, institutional and technical support to the process of reform of the system of education and education for sustainable development;

Promote the concept and practice of sustainable development and the system of sustainable education through formal and informal ways of learning;

Provide adequate training on sustainable development for teachers at all levels of education;

Work systematically to develop research in the field of sustainable development and education for sustainable development;

In implementing the reform of education, continually promote cooperation at the national, regional and international level.

If yes, do these documents refer to ESD professional development for university educators (as like asking for skills and capabilities)? (*If yes, please provide details. Max. 200 words.*)

At the general level, yes. NSDS as an “umbrella” strategy promotes professional development for university educators as a specific objective, but without any operationalisation. NSDS Action plan (2008) assigned concrete activities, some of them promoting ESD through professional development of teachers (not exclusively in higher education) and improvement of skills and capacities. Unfortunately, this strategy was rarely implemented through concrete policies and it is considered as “dead” today.

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) initiatives (projects, programmes, etc.) on ESD professional development for university educators? (*If yes, please provide details. Max. 400 words.*)

Currently no.

Do Higher Education institutions have strategic plans or guidelines to promote ESD? (Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)

☒ None

☐ Few

☐ Several

☐ Many

☐ All

Do Higher Education institutions have initiatives (projects, programmes, etc.) to support the professional development of university educators in ESD? *(Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)*

☒ None

☐ Few

☐ Several

☐ Many

☐ All

Does ESD form part of the quality assurance and accreditation processes of Higher Education institutions?⁵³ *(If yes, please provide details. Max. 400 words.)*

No.

Are there any Higher Education networks, partnerships or main drivers (public, private, NGOs) that support the professional development of university educators in ESD in your country? *(If yes, please provide details. Please note that networks at the local but also global level might be relevant. Max. 400 words.)*

No.

Are there any higher education initiatives or projects developed in response to the UNECE ESD competences⁵⁴? *(If yes, please provide details. Max. 400 words.)*

⁵³ In countries where there is a formal accreditation process of staff, please indicate if ESD is taken into consideration in this process and *how*.

⁵⁴ UNECE (2011) Learning for the future: Competences in Education for Sustainable Development, ECE/CEP/AC.13/2011/6; http://www.unece.org/fileadmin/DAM/env/esd/6thMeetSC/Learning%20for%20the%20Future_%20Competences%20for%20Educators%20in%20ESD/ECE_CEPA13_2011_6%20COMPETENCES%20EN.pdf

Slovakia

General information

Lead person completing the template

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Country information

Country	Slovakia
Number of Higher Education institutions in the country	36 Higher Educational Institutions – HEI (20 HEI, 3 state HEI, 13 private HEI) + 4 foreign HEI Source: http://www.minedu.sk/ - Accessed on April 16, 2014
Number of Higher Education students in the country	200,743 HE students (2012) (Source: Annual Report on the state of Higher Education for the year 2012, Ministry of Education, Science, research and Sport of the Slovak Republic, Bratislava, August 2013). http://www.minedu.sk/vyrocne-spravy-o-stave-vysokeho-skolstva) For comparison of the growth of the number of HE students: in 1990: 69,095 HE students in 1998: 122,603 HE students in 2007: 220,000 HE students
UE4SD region	<input type="checkbox"/> Northern Europe <input type="checkbox"/> Western Europe <input type="checkbox"/> Southern Europe <input checked="" type="checkbox"/> Eastern Europe

Part A – The status of ESD within Higher Education at the national level

This section aims at gathering a general view about the integration of ESD within Higher Education in the UE4SD partner countries, with an emphasis on the issue of professional development opportunities for university educators to develop ESD competences.

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) strategies, policies or legislations, which recognise ESD in Higher Education? *(If yes, please provide details. Max. 400 words.)*

National Strategy for SD for Slovakia (Slovak Government, 2001)

Action Plan for SD in Slovakia for 2005-2010 (Office of the Slovak Government, 2005) – The Action Plan included requirement to implement basic principles of sustainability into the curricula across all levels of education as well as in the life- long learning. This document proposed creation of inter-sectorial advisory board of the minister of education and minister of environment, the task of which, among others, should be the innovation of the outdated concept of environmental education and teaching (from the year 1997) across all level of educational establishments

Action Plan for ESD in Slovak Educational Institutions (Ministry of Education, Science, Research and Sport of the Slovak Republic, 2006) – implemented requirements of the UNO for education towards sustainable development. Action Plan was elaborated by the Joint Working Commission and approved by the Ministry of Education and the Ministry of the Environment in December 2006.

National Strategy for Global Education for the Period 2012-2016 (Ministry of Education, Science, Research and Sport, 2012)– for this national strategy the term „global education“ is used as an integrating principle underlying global contexts of education. Its part represents global development education, environmental education, education for sustainable development, multicultural education, peace education, human rights education in global context.

Additional national strategic documents supporting the HE development and QAS in HES:

National Program for Education and Schooling in Slovak Republic for the Period of the Coming 15- 20 years– „Millennium“ **(approved by the Government of the SR in 2000)**

The Concept of Future Development of HE in Slovakia for 21st Century (approved by the Government of the SR in 2000)

Long-term Intent in Educational, Research, Development, Artistic and Other Creative Activities in HE Establishments for the period 2010-2014 (discussed in the Government of the SR on 9.6.2010)

Legal documents regarding the HES development and QAS at the HES:

Law act No. 131/2002 Call. On HES and About the Changes and Completion of Some Law Acts as Amended by Later Legal Documents

Order of the Government of SR No. 104/2003 Call. About Accreditation Committee in the Wording of Later Legal Documents especially the Novelization of this Order by the Order No. 427/2013 Call. (Acquired activity since January 1st, 2014).

If yes, what ESD processes and approaches do these promote? *(Max. 200 words.)*

The Slovak Republic committed itself in the year 2005 to implement the UN Strategy for education for sustainable development into the educational process on all levels. This Strategy was

implemented into the Action Plan of Education for Sustainable Development in the Slovak Republic, which the Slovak Ministry of Education, Science, Research and Sport approved in December 2006. For the HES five main pillars were proposed in this Action Plan for the periods 2007 – 2010: (1) Institutional capacities, (2) Education and training, (3) Research, (4) Institutional efficiency, and (5) Communication, coordination and cooperation. But the Action Plan has not been approved by the Government and has got the character of a recommendation.

Newly approved document National Strategy for Global Education for the Period 2012-2016 (Ministry of Education, Science, Research and Sport, 2012) focuses on global education at the level of the HES as well. It is understood as the topic of further development concept focused on the implementation of real study programs and projects focused on development studies and international support. This National Strategy recommends to include the goals, topics and principles of global education into the curricula for the education of future teachers and the same for other than pedagogical study fields. As the target groups for formal global education are defined students as well as academicians at the HES. |

If yes, do these documents refer to ESD professional development for university educators (as like asking for skills and capabilities)? *(If yes, please provide details. Max. 200 words.)*

National Strategy for Global Education for the Period 2012-2016 (Ministry of Education, Science, Research and Sport, 2012) has got among particular goals the measures as follows:

To include the goals, principles and topics of global education into the state educational programs

To educate continually academicians for the reflection of principles, goals and topics of global education and for the development of knowledge, skills and attitudes of the teachers in the implementation of global education into the teaching process

To take into account the topics of global education in the preparation of future academicians

To take into account the topics of global education in the extra-curricular activities in the educational programs of educational establishments

To create the precondition for the inclusion of the development topics into the curricula at the HES in the others than pedagogical study fields – as the key topic is understood international development support and humanitarian aid

To support science and research at the HES in the field of development

To assure informal education of the youth in global topics

To assure the access of the public, public administrators, politicians and media to the information regarding global topics

|

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) initiatives (projects, programmes, etc.) on ESD professional development for university educators? *(If yes, please provide details. Max. 400 words.)*

Since 1995 series of the National Conferences on Environmental Education and ESD have been organised in Slovakia:

1995 (Comenius University in Bratislava)

1998 (University of Technology in Zvolen)

2001(University of P.J. Šafarik in Košice)

2004 (Constantine the Philosopher University in Nitra)

2009 (University of Matej Bell in Banská Bystrica)

2013 (Comenius University in Bratislava.

Each of the above listed conferences brought comprehensive, more or less objectivized view on the state of art in respective field, the participants prepared qualified conclusions and recommendations for regional school system, HES and practice. Unfortunately, only minority of those recommendation has been implemented and improved environmental education an ESD. The progress can be identified regarding the possibilities for continual education in sustainable development for the teachers at the elementary, high and professional schools. The paradox in Slovak educational system is the lack of inherent system of university teachers' education. The system existing before 1990 was dissolved and new has not been established. In the frame of individual initiatives of particular universities there exists such education in the centers of life long education. That is because the ESD for HES could not be fully integrated.

There has not been elaborated any document focused on ESD professional development for university educators. Therefore here are important national documents, projects and initiatives listed, focused on the requirement to assure education of university educators.

An analytical study **“Academic carrier of researcher and educators at the HES in SR and possibilities of its optimization”** was elaborated in 2009 in the frame of the implementation of the Modernization Program Slovakia 21, approved by the Government of the SR by the decision Nr.376 Call from June 4th, 2008. (IBS SLOVAKIA, s.r.o., December 2009, 136 pp.) This study focuses on the mapping of the possibilities of the academic carrier at the HES in Slovakia, opinions of the university educators as well as doctoral candidates regarding their working conditions and motivations as well as comparison with the carrier systems in chosen countries.

The Ministry of Education, Science, Research and Sport of the SR initiated the project „Transformation of university education of the teachers in the context of the reform of regional educational system,“ in the collaboration with HES in 2010. The goal of this project was to analyze the preconditions for the preparation of the teachers at the faculties of pedagogy and harmonization with the changes in regional educational system.

The **Ministry of Education, Science, Research and Sport of the SR prepared „Report on the State of Art of Educational System in Slovakia in 2013“** for public discussion. (The document was discussed in the Parliament as well). As it results from this Report, Slovakia is behind the ESG standards in Europe, as the development of internal QASs are not properly developed. Even the Slovak Accreditation Committee is not the member of the ENQA. This Report requires the assurance of systematic continual education of university teachers as their professional development is currently mostly reduced to the research field. |

Do Higher Education institutions have strategic plans or guidelines to promote ESD? (Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)

☒ None – our research has not identified any HES with such plan or guidelines.

☐ Few

☐ Several

☐ Many

☐ All

Do Higher Education institutions have initiatives (projects, programmes, etc.) to support the professional development of university educators in ESD? *(Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)*

☐ None

☐ Few

☐ Several

☒ Many

☐ All

Initiatives:

Scientific conference „Decade of education on sustainable development in SR“ (Modra, 2006), organized by Slovak Environmental Agency in Banská Bystrica and FPV UMB. The goals were as follows:

to contribute to the definition of conceptual background for education on sustainable development with the stress on identification of the ties between natural, cultural and spiritual values in Slovakia.

to wake up the interest of the professionals for closer collaboration between schools and local communities in the implementation of sustainable development strategies and

to underline the role and potentials of HES in looking for solutions in local environment

Workshop on Action plan for education and teaching for sustainable development.... (Bratislava, 2007) – part HES, **organized by the Ministry of Education and Faculty of Natural Sciences UK in Bratislava. The goal was to assess current state of art in the education and teaching for sustainable development at the HESs in Slovakia, presentation of the initiatives and projects realised by individual HES supporting the development of sustainable faculties/universities and proposal to establish a network of the representatives of particular HES responsible for the education and teaching for SD.**

Workshop „Education and teaching for sustainable development at Slovak HES (Bratislava, 2008), **organized by the Ministry of Education and Faculty of Natural Sciences UK in Bratislava with the goal to assess current state of art in the education and teaching for sustainable development at the HESs in Slovakia, to prepare the measures for its improvement, to present the best examples of integrative curricula dealing with sustainable development, to assess institutional capacities for implementation of the UNO Strategy for education for sustainable development, to discuss the goals relevant for the development of sustainable universities/HES in Slovakia.**

„Pilot Program of Environmental Education– Innovative approaches in environmental education“, implemented by the Regional Development Agency in Presov self-governmental region (ARR PSK), in the collaboration with Slovak Environmental Agency and Universities (Prešov 2006). Main activities were as follows: 5 educational trainings for the coordinators of environmental education led by the lectures from the SAG, Prešov University and Matej Bel University in Banská Bystrica making participating academicians aware about new innovative approaches in teaching on sustainability in elementary schools, high and professional schools in the self-governmental region Presov.

The participants had the possibility to take part at practical activities in environmental education and education for SD, to learn by doing and experiencing. They get the information about new methods supporting the fulfilment of their role as environmental coordinators in their schools.

Different projects are running at the HESs (VEGA, Kega, APVV, APVT, ESF, bilateral and multilateral projects SR, ČR, Poland, Bulgaria, Serbia, projects in the frame of the research network of the Visegrad agreement group) focussed on education for SD, e.g.:

Prešov University in Presov, Faculty of Management: – ESF project „Educational training for the qualification development in the field of environmental protection and development “ (Presov, 2005-2007) International Polish-Slovak project in the collaboration with the Primorsk Pedagogic Academy in Slupsko, - Project „Education and environmental protection in selected regions of Poland and Slovakia (Presov, 2006-2009); - Project APVV „Popularization of the outputs of environmental research for improvement of environmental awareness and interest on science (Presov, 2009 – 2012); - Project KEGA „Development of study materials/tools for newly developed managerial disciplines in study program in study field Environmental management“ (Presov, 2010 – 2011).

Faculty of Philosophy, UK Bratislava: - International educational project “Women Taking Chances” (Bratislava, 2008 – 2010) realised in the frame of Life long educational program of the EU, GRUNTVIG PARTNERSHIP with the goal to motivate women to take part in the life long educational activities

Faculty of Mechanical Engineering, Zilina University: - Project KEGA „Improvement of skills and abilities of the students in technology fields via implementation of new forms of e-based learning build on Web-based applications”.

Slovak University of Technology in Bratislava INTERREG II C international project: „Spatial Planning Instruments for Safeguarding the Sustainable Spatial Development at the local and regional level” (Bratislava, 1998-2001) focused on the know how transfer in sustainable spatial development in the professional practice and education of spatial planners, architects and urbanists.

SPECTRA Centre of Excellence EU at the STU in Bratislava 5th FP project: “Permanent Research in Spatial Planning in the context of European Enlargement and Information Society Advancement” (SPECTRA-PERSEUS) (Bratislava 2003-2005) focused on capacity building in the research and education for sustainable spatial development in order to meet sustainable spatial environmental, social and economic, development.

Slovak University of Technology, Tempus project: LENNE “Joint European Curriculum Development Project: Master of Landscape Planning and Management” (TU Wien/FA STU/Univ. Belgrade 2005-2007) focused on the development of curricula and capacities in sustainable landscape planning and management at the universities in Belgrade, Novi Sad, Vienna and Bratislava.

SPECTRA Centre of Excellence EU at the STU in Bratislava TEMPUS project: PSDEEWB Post- Secondary Diploma in Energy Efficiency for the Western Balkans, focused on the development of curricula and

capacities of HES educators in efficient energy use in sustainable settlement development in Western Balkan countries.

Faculty of Natural Sciences UK Bratislava and Institute of Management of the STU Bratislava: - Project KEGA (2007-2009) „Interuniversity coordination of the contents in study programs focused on landscape planning“ with the goal to support integration of the study programs' content focused on landscape planning.

Faculty of Natural Sciences UMB Banska Bystrica: - Project in the frame of EU Leonardo da Vinci Program LLP - Transfer of Innovations (2009-2013) with the goal to improve the competences of the professionals in professional education and training including the SD topic. |

Does ESD form part of the quality assurance and accreditation processes of Higher Education institutions?⁵⁵*(If yes, please provide details. Max. 400 words.)*

|ESD in Slovakia is not a topic included in the quality assurance and complex accreditation processes of HESs. In the accreditation of some study programs is required (e.g. in ecologically and environmentally oriented programs, spatial planning and others) to include the subjects on SD.

Additional Comments:

Describe briefly your national HE system with regards to

a) the career criteria (are there any requirements concerning pedagogical competences)

Current system of QAS in HESs in Slovakia is based on a system of criteria defined by the Accreditation commission which is an advisory board of Slovak Government. The law on HE defines the systems of QAS at the HESs (annual assessment elaborated by the scientific boards of the universities, anonymous questionnaire for students, etc.) The positions of associated professors and professors as well as lectures are not permanent positions and they are occupied in the selection processes. This protects not only the best choice for the position but the permanent development of the staff in their research and educational activities. Only seldom the HESs offer regular possibility for permanent education of their academicians in andragogy, pedagogics, didactics, as well as training of the doctoral candidates involved in the educational process by law.

b) quality assurance demands (some quality management assessment systems try to guarantee that HE teachers have training to be able to improve education

As a part of new criteria applied in the decision making of the Accreditation Commission since December 2013 are Criteria on QAS, including the assurance of the quality of the academicians:

Criterion KVSK-B3: Assurance of the quality of the academicians:

HES has developed the rules and requirements on QAS of academicians, the professional development of university educators, and assessment of qualification of new academicians.

HES has developed the mechanism of the implementation of the outputs from the evaluation of educators by the students

HES offers the possibility for personal development of own educators in their educational activities |

⁵⁵ In countries where there is a formal accreditation process of staff, please indicate if ESD is taken into consideration in this process and *how*.

Are there any Higher Education networks, partnerships or main drivers (public, private, NGOs) that support the professional development of university educators in ESD in your country? *(If yes, please provide details. Please note that networks at the local but also global level might be relevant. Max. 400 words.)*

There exist several networks, partnerships in Slovakia supporting also professional development of HESs – or supporting dissemination of the themes related to SD (e.g. NGO Society for Sustainable Living in Slovakia), but no one of them is focused on direct support of professional development of universities educators.

There is a SPIRAL Network – national network of organisations dealing with environmental education and teaching, providing expertise and consultation in the field of environmental education, organising educational events, seminars, workshops, excursions, publishing information via periodical and non-periodical publications (journal Telescope – Dalekohľad), developing the projects supporting environmental education and teaching not only at elementary and secondary schools but at HESs as well.

Are there any higher education initiatives or projects developed in response to the UNECE ESD competences⁵⁶? *(If yes, please provide details. Max. 400 words.)*

A program called „Environmental footprint) is running in Slovakia. It is based on the work with internet calculator of ecological footprint of a school. The main goal is to educate pupils to understand influence of every day human activities on environment and research own possibilities to reduce their environmental footprint. It provides new teaching methods for the teachers, inspirations for project based teaching, use of ICT in learning process. It mediates the knowledge for the pupils via informal play-based activities in teaching process. This program is implemented in the frame of the project “Improvement of environmental awareness in the field of nature and landscape protection” (NATURA 2000 incl.) and it is co-financed from the EFRD. But this is only for kindergardens, elementary schools and secondary schools.

Part C – Data collection and validation

Please briefly provide information about how the data was collected and how you can validate it.

How did you collect the data? (Please refer to section 4.1 of the guidelines.)

Summarising and updating results from the previous questionnaire surveys realised by the team of Faculty of Natural Sciences UK Bratislava in 2008 among all Slovak HESs (20 public, 3 state and 10 private universities). The questionnaire was focused on the education and research for SD, on the management and capacity building of the partnerships with the other types of schools, scientific institutions and local communities.

Consulting with experts from the Division of HEIs of the Ministry of Education, Science, Research and Sport SR

Conducting interviews via phone with some colleagues from HEIs

⁵⁶UNECE (2011) Learning for the future: Competences in Education for Sustainable Development, ECE/CEP/AC.13/2011/6; http://www.unece.org/fileadmin/DAM/env/esd/6thMeetSC/Learning%20for%20the%20Future_%20Competences%20for%20Educators%20in%20ESD/ECE_CEP_AC13_2011_6%20COMPETENCES%20EN.pdf

Conducting internet searches for relevant information in web pages of HEIs, Ministry of Education, professional organisation of the Ministry of Education, Accreditation Commission, Independent Agency ARRA which elaborated since 2009 ranking for faculties of HEIs in Slovakia

Reviewing the publications, strategies, programmes, projects, annual reports or evaluations effort |

How did you validate the data?

|Comparing the data form different sources

Confronting key data published by official institutions with the experience and knowledge of the experts (published and not published sources)

Validating the data in case of uncertainty via own research and consultations

Studying independent analytical studies

Concating the target groups ' representatives and affected subjects |

Who was involved in the process and in what ways?

|Via personal and electronic contact the experts and professionals form the Ministry of education, science, research and sports of the Slovak Republic, Slovak Environmental Agency, NGOs Daphe, Zivica, experts form the HESs – see also point 1 |

What documents have you consulted to complete this template?

|**National Strategy for SD for Slovakia** (Slovak Government, 2001)

Action Plan for SD in Slovakia for 2005-2010 (Office of the Slovak Government, 2005)

Action Plan for ESD in Slovak Educational Institutions (Ministry of Education, Science, Research and Sport of the Slovak Republic, 2006)

National Strategy for Global Education for the Period 2012-2016 (Ministry of Education, Science, Research and Sport, 2012) - Národná stratégia pre globálne vzdelávanie na obdobie rokov 2012-2016 (Ministry of Education, Science, Research and Sport, 2012)

National Program for Education and Schooling in Slovak Republic for the Period of the Coming 15- 20 years – „Millennium" (**approved by the Government of the SR in 2000**)

The Concept of Future Development of HE in Slovakia for 21st Century (approved by the Government of the SR in 2000)

Long-term Intent in Educational, Research, Development, Artistic and Other Creative Activities in HE Establishments for the period 2010-2014(discussed in the Government of the SR on 9.6.2010)

Law act No. 131/2002 Call. On HES and About the Changes and Completion of Some Law Acts as Amended by Later Legal Documents - ZÁKON č. 131/2002 Z.z. o vysokých školách a o zmene a doplnení niektorých zákonov v znení neskorších predpisov

Order of the Government of SR No. 104/2003 Call. About Accreditation Committee in the Wording of Later Legal Documents especially the Novelization of this Order by the Order No. 427/2013 Call. (Acquired activity since January 1st, 2014) - Nariadenie vlády Slovenskej republiky č. 427/2013 Z. z. ktorým sa mení a dopĺňa nariadenie vlády Slovenskej republiky č. 104/2003 Z. z. o akreditačnej komisii v znení neskorších predpisov (nadobudlo účinnosť 1.1.2014)

Academic carrier of researcher and educators at the HES in SR and possibilities of its optimization"(IBS SLOVAKIA, s.r.o., December 2009, 136 pp.)

Report on the State of Art of Educational System in Slovakia in 2013“ (MSVVS SR, 2013) - Správa o stave školstva na Slovensku na verejnú diskusiu (materiál bol predložený aj na rokovanie Národnej rady Slovenskej republiky) Bratislava, marec 2013

Project: Transformatin of the HE of the teachers in the context of the reform of regional educational system - Transformácia vysokoškolského vzdelávania učiteľov v kontexte reformy regionálneho školstva - Ministerstvo školstva, vedy, výskumu a športu SR (2010) <http://www.minedu.sk/projekt-transformacia-vysokoskolskeho-vzdelavania-ucitelov-v-kontexte-reformy-regionalneho-skolstva/>

Long – term perspective of educational, research, development, artistic and other creative activities at HESs for the period 2010-2014 - Dlhodobý zámer vo vzdelávacej, výskumnej, vývojovej, umeleckej a ďalšej tvorivej činnosti pre oblasť vysokých škôl do roku 2014(prerokovaný vládou SR 9.6.2010) Zdroj: <http://www.minedu.sk/dlhodoby-zamer-ministerstva-a-jeho-aktualizacie/>

Assessment criteria of QAS in HES (Accreditation commission, 2013)- Kritériá hodnotenia vnútorného systému zabezpečovania kvality vysokoškolského vzdelávania (Akreditačná komisia, december, 2013) <http://www.minedu.sk/kriteria-pouzivane-pri-vyjadrovaní-sa-akreditacnej-komisie/>

Why did you choose these initiatives and not others?

Chosen activities are representative examples of active work of university educators in the field of education on SD with the goal to strengthen the cooperation, experience and information exchange and communication among the academicians. Projects and initiative of the HE educators results from the need to increase environmental awareness and to inspire the teachers for the development and implementation of efficient methods in environmental education towards SD across whole range of teaching and educational activities.

Part D – Reflection

This section is seeking your own thoughts and reflections towards professional development of university educators for ESD in your country.

In the light of the information provided, what would you consider to be priority needs in professional development of university educators related to ESD in your country?

As an important negative aspect we consider the absence of national system for professional development of the university educators dissolved in 1990 in Slovakia including the didactic preparation. Current education of academicians is based mostly on sporadic initiatives of particular universities and their faculties (SPU in Nitra, STU in Bratislava, EU in Bratislava, UMB in Banská Bystrica, Žilina University in Žilina, UKF in Nitra and others). It is necessary to turn back to the idea of complex education of university teachers and offer a continual pedagogic education for them, similar to the teachers at the level of elementary and secondary schools

The professionals already for years have recommended to establish a centre for university pedagogic offering the training, expertise and consultation for university educators, elaborating methodologies and other materials the problems of SD inclusive, developing research on university pedagogic, cooperating with HESs in Slovakia and abroad.

It is important to interlink the assessment of the quality of research with the quality of teaching as inherent part of HES assessment.

It is necessary to develop a system of introductory training for new university educators including educational activities, literature, practical trainings and workshop, didactic trainings. This should be interlinked with life-long education of university educators including the courses on global education and SD.

The development of basic systematic precondition for continual education and training of university educators is a precondition for safeguarding of professional development of university educators related to SD.

It is necessary to achieve the implementation of the education to SD into the study programs across the HESs as a part of the implementation of National Strategy for Global Education 2012-2016.

|

Is there any further information that might be relevant and which you would like to share? Please provide links, references, documents that can already be collected for the collection of resources on the common online portal. (Documents in all languages are welcome).

|The above listed documents and web-based links provide complex picture about the situation in relevant topics in Slovak Republic |

Thank you for your efforts and time to map the status of ESD in Higher Education in your country!

The UE4SD Steering Group team

Slovenia

General information

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Country information

Country	Slovenia
Number of Higher Education institutions in the country	5 universities and 42 independent higher education institutions (with active study programmes in spring 2014)
Number of Higher Education students in the country	Approximately 77.370 students in the study year 2013/2014
UE4SD region	<input type="checkbox"/> Northern Europe <input type="checkbox"/> Western Europe <input type="checkbox"/> Southern Europe <input checked="" type="checkbox"/> Eastern Europe

Part A – The status of ESD within Higher Education at the national level

This section aims at gathering a general view about the integration of ESD within Higher Education in the UE4SD partner countries, with an emphasis on the issue of professional development opportunities for university educators to develop ESD competences.

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) strategies, policies or legislations, which recognise ESD in Higher Education? *(If yes, please provide details. Max. 400 words.)*

In Slovenia, there is no national strategy, which would recognize ESD in Higher Education as a special topic. However, there are some strategic documents, which indirectly indicate the importance of ESD – such as Resolution on National programme of higher education and Decree on budgetary financing of higher education institutions and other institutions. These and also some other documents indirectly support conditions for implementing sustainability in Higher Education.

In striving for teaching excellence, the National programme of higher education recognizes the need to support ESD: "... *higher education institutions will offer teaching support to their higher education teaching staff and their better didactic training for the development of an integrated pedagogic competence including their activity for the support of the sustainable development of society.*" According to the document, teaching support should be offered to all employees engaged in the teaching process and teaching training should be gradually required at system level (personnel entering the teaching process after 2013 would be systematically integrated into the teaching support, providing the acquisition of integrated competences necessary for teaching including the understanding and operation for the support of sustainable development of society). The same national programme highlights also the importance of study programmes which educate for the teaching profession and must therefore "*ensure an integrated development of competences and knowledge for the performance of the pedagogic profession including active support of the teachers to the sustainable development of society.*" Unfortunately, regarding ESD no specific implementation measures or goals are mentioned in the document.

If yes, what ESD processes and approaches do these promote? (Max. 200 words.)

As written above, at the time being, no special approaches or processes are used. ESD is supported only indirectly through some crucial documents about higher education.

If yes, do these documents refer to ESD professional development for university educators (as like asking for skills and capabilities)? (If yes, please provide details. Max. 200 words.)

See general explanation at Question 1.

Are there any national (including regional jurisdictions such as cantons, states, provinces, etc.) initiatives (projects, programmes, etc.) on ESD professional development for university educators? (If yes, please provide details. Max. 400 words.)

During our survey, we didn't find or recognize any national initiatives (projects, programmes, etc.) on ESD professional development for university educators in Slovenia.

Do Higher Education institutions have strategic plans or guidelines to promote ESD? (Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)

☐ None

☒ Few

☐ Several

☐ Many

☐ All

University of Maribor has "A sustainable and socially responsible University" initiative (see <http://www.um.si/en/quality/Pages/A-sustainable-and-socially-responsible-University-.aspx> as well as Example 1 of this report). No other higher education institution or university in Slovenia reported to have a strategic plan or special guidelines in order to promote ESD. However, many of them offer their students study courses on sustainability and educate future teachers.

Do Higher Education institutions have initiatives (projects, programmes, etc.) to support the professional development of university educators in ESD? *(Please tick the box regarding your estimation of the situation in your country and provide an overview, not specific details. Max. 400 words.)*

☒ None

☐ Few

☐ Several

☐ Many

☐ All

None of the higher education institutions and universities in Slovenia reported to have an initiative (project, programme, etc.) to support the professional development of university educators specifically in ESD. However, we have identified two possibilities at the University of Ljubljana, which would be able to incorporate ESD:

The Centre for Pedagogical Education (Faculty of Arts, University of Ljubljana) is responsible for the pedagogical education and additional training of teachers at all educational levels, including the education in the field of higher education pedagogy. They regularly offer courses in higher education didactics for university teachers and could in the future introduce also ESD as a part of teaching support mentioned in the The National programme of higher education. We recognized the same possibility at the University of Maribor, which has a comparable centre for pedagogical education.

The Spring 2013 was marked by kick-off of the KUL project at the University of Ljubljana. The main goal of the 4-year project, co-financed by the European Social Fund and the national Ministry of Education, Science and Sport, is to improve the quality management system. One of the planned activities is the education of employees at the University of Ljubljana. Professional development programme for university teachers comprises the following modules: rhetoric, E-learning, basic university didactics, quality management system, development of competences for improving organizational system and to restore the culture of quality at the University. The list of modules does not include any initiatives to support the professional development of university educators in ESD.

The professional development of university educators in ESD is in Slovenia currently being left to each individual and his approach toward (self-)improvement of scientific, professional and didactic competences in order to follow the latest development in the field. Therefore, the majority of interviewees reported to organize and attend scientific meetings, conferences, invited lectures, etc.

Does ESD form part of the quality assurance and accreditation processes of Higher Education institutions?⁵⁷ *(If yes, please provide details. Max. 400 words.)*

In Slovenia, education for sustainable development per se is not a part of the quality assurance and accreditation process. Accreditation process in Slovenia is marked strongly by the evaluation of the adequacy of each higher education institution and the quality of the study programme. The accreditation form contains also the question whether the higher education institution enables lifelong education and professional development of all employees, but the question is not very specific and does not include the criteria of ESD.

Are there any Higher Education networks, partnerships or main drivers (public, private, NGOs) that support the professional development of university educators in ESD in your country? *(If yes, please provide details. Please note that networks at the local but also global level might be relevant. Max. 400 words.)*

Some university teachers from Slovenia are active in different national and international sustainability initiatives, but only individual higher institutions reported their involvement in such activities. For example, IBS – International Business School from Ljubljana and IEDC – Bled School of Management are members of the UN Global Compact Slovenia, together with many prominent Slovenian businesses and NGOs. Such co-operation enables professional development of participating university educators. The same is true for university teachers who work with NGOs. Nevertheless, the general impact of all those partnerships on overall professional development of university educators in ESD in Slovenia can be assessed as low.

Are there any higher education initiatives or projects developed in response to the UNECE ESD competences⁵⁸? *(If yes, please provide details. Max. 400 words.)*

No Slovenian university or other higher education institution is a member of the European Network on Higher Education for Sustainable Development (COPERNICUS Alliance) and none of them signed the Rio+20 Treaty on Higher Education. UNECE ESD competences are not used as a starting point/basis for any higher education initiative or project in Slovenia. At least such initiatives were not identified during our inquiries at the line ministry and at the individual higher institutions.

⁵⁷ In countries where there is a formal accreditation process of staff, please indicate if ESD is taken into consideration in this process and *how*.

⁵⁸ UNECE (2011) Learning for the future: Competences in Education for Sustainable Development, ECE/CEP/AC.13/2011/6; http://www.unece.org/fileadmin/DAM/env/esd/6thMeetSC/Learning%20for%20the%20Future_%20Competences%20for%20Educators%20in%20ESD/ECE_CEP_AC13_2011_6%20COMPETENCES%20EN.pdf

Part C – Data collection and validation

Please briefly provide information about how the data was collected and how you can validate it.

How did you collect the data? (Please refer to section 4.1 of the guidelines.)

Data from the Ministry of Education, Science and Sport (The Higher Education Directorate) and from four biggest Slovenian universities (University of Ljubljana, University of Primorska, University of Maribor, University of Nova Gorica) were collected by gathering a group of key informants. At the universities, they were mainly from the quality management system department/services. They have decided who might have been the most appropriate person to give answers to the specific questions that we have selected from the template. There was one interview conducted with the questions on the template, while other universities were contacted by forwarding selected specific questions from the template (i.e. questionnaire) by e-mail. Also the data from the line ministry were collected in the same way. Additionally, University of Ljubljana provided e-mail contacts of all vice-deans responsible for student affairs at its faculties (altogether 26 faculties and academies), which enabled us to send questionnaire to all of them and at the same time to validate the information gathered at the university level.

Data from other higher education institutions (one university and 42 independent higher education institutions), that are not part of any of the above mentioned universities, were collected by forwarding selected questions from the template to the general e-mail address or address of deans or other responsible persons for the quality management system. The e-mail contained not only the questionnaire but also a letter presenting the background of the project and the goal of the research with the kind invitation to fill out the questionnaire.

Data for the two examples presented in Part B originate from the research projects of University of Maribor.

How did you validate the data?

All the data gathered were checked with different informants from diverse institutions representing universities and independent higher education institutions, centres responsible for higher education didactics, government and NGOs. The questions were translated to Slovenian language in order to prevent any misunderstanding and the same sets of questions were used for all informants from universities and higher education institutions.

In the case of both examples chosen in Part B, the data validation included literature comparisons, questionnaires, Analytic Hierarchy Process (AHP) model for determining weights, normalization and aggregation of results.

Who was involved in the process and in what ways?

All the data were gathered and validated by both Slovenian project partners: Department of Geography at Faculty of Arts, University of Ljubljana (P48) and Faculty of Chemistry and Chemical Engineering, University of Maribor (P47). The data for the two examples presented in Part B as well as all information about ESD from the University of Maribor were provided by colleagues from Maribor (P47). Other data for this report were gathered by colleagues from Ljubljana (P48), contacting other universities in Slovenia as well as 42 independent higher education institutions (see explanation at Question 1), some NGOs and the Centre for Pedagogical Education at Faculty of Arts in Ljubljana.

What documents have you consulted to complete this template?

We have consulted the following documents and sources:

Resolution on National programme of higher education,
Decree on budgetary financing of higher education institutions and other institutions,
Research and Development Act,
Higher Education Act,
COPERNICUS Alliance web page,
Rio+20 Treaty on Higher Education,
scientific papers and publications,
web pages of all Slovenian universities and independent higher education institutions,
colleagues, representatives of NGOs, etc.

Why did you choose these initiatives and not others?

Both chosen initiatives on ESD, presented in Part B, are the only ones at the University of Maribor and at the same time at Slovenian universities that have been identified during the mapping and also acknowledged by the international higher education community (for example, 16 experts from 5 different countries).

Part D – Reflection

This section is seeking your own thoughts and reflections towards professional development of university educators for ESD in your country.

In the light of the information provided, what would you consider to be priority needs in professional development of university educators related to ESD in your country?

According to research experiences from Slovenia, the priority need in professional development of university educators related to ESD would be to introduce compulsory didactic training for higher education teaching staff, integrating among other topics also the ESD approach and competences. This new training scheme should have been prepared in a way that it could strongly contribute to already existing professional development of higher educators. In order to support this kind of systematic professional development of university educators in ESD, Slovenia needs a strategic document, providing the formal framework for ESD and including as many different fields as possible. This is by no means an excuse to postpone the implementation of general aims in the existing documents.

At the university level, it is of great importance that sustainable development is incorporated in the Vision and Mission of each university and that implementation efforts are being evaluated in regular time intervals according to the UN (UNESCO, UNECE), EU, and national documents.

Is there any further information that might be relevant and which you would like to share? Please provide links, references, documents that can already be collected for the collection of resources on the common online portal. (Documents in all languages are welcome).

We have checked especially the following links, documents and sources:

Slovenian "Legal information system" web page: <http://www.pisrs.si/Pis.web/> --> Of special interest on this web page are:

Resolution on National programme of higher education: <http://www.pisrs.si/Pis.web/pregledPredpisa?id=RESO71>

Decree on budgetary financing of higher education institutions and other institutions: <http://www.pisrs.si/Pis.web/pregledPredpisa?id=URED5405>

Research and Development Act: <http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO3387>

Higher Education Act: <http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO172>

The Centre for Pedagogical Education (Faculty of Arts, University of Ljubljana): <http://www.ff.uni-lj.si/en/1/Activities/The-Centre-for-Pedagogical-Education.aspx>

COPERNICUS Alliance: <http://www.copernicus-alliance.org/>

Rio+20 Treaty on Higher Education: <http://hetreatyrio20.com/>

R. Lukman et al., University ranking using research, educational and environmental indicators, J. Cleaner Prod. 18 (2010) 619–628.

University of Maribor: <http://www.um.si/en/quality/Pages/A-sustainable-and-socially-responsible-University-.aspx>

<http://repositorio.uc.cl/xmlui/bitstream/handle/123456789/1783/608595.pdf?sequence=1>

<http://www.esdtoolkit.org/discussion/default.htm>

http://www.esdtoolkit.org/esd_toolkit_v2.pdf

<http://www.heacademy.ac.uk/education-for-sustainable-development>

http://archive.ias.unu.edu/sub_page.aspx?catID=108&ddlID=54

ANNEX 3 – National examples of professional development opportunities in ESD for university educators

To select the most relevant good practice examples which could be subsequently shared within the partnership, an overview of the all case studies has been developed. Assessment was based on 4 categories of relevance which are outlined in the following way:

1. Target groups relevance (university educators concerned);
2. Systemic character (random versus systemic activity);
3. Added value (specifics highlighted);
4. ESD relevance (most important category – several types of activities were identified in this category).

A brief description of each case is based on the information provided by the national coordinators. The method of assessment in these 4 categories is described in more detail in Section 3 “Professional development opportunities in ESD for university educators”. For the list of all case studies with a brief description in each category, see Table 14.

Table 14: Analysis of further interesting examples of professional development opportunities in ESD for university educators

Professional development opportunities in ESD for university educators						
<i>A list of interesting examples that address ESD, but do explicitly focus on developing ESD competences of the target group of university educators</i>						
Title	Country	Description	Target groups	Systemic character	Added value	ESD relevance
'Connecting Science-Society Collaborations for Sustainability Innovations' Project TEMPUS-JPHES	Albania	Structured workshops and trainings for science-society collaborations (Funded by TEMPUS). One of the aims is to develop innovative teaching materials and methodologies for higher education institutions.	HEIs (esp. lecturers, researchers and students), research institutions and regional stakeholders like enterprises, NGOs and regional development agencies. Policy makers will benefit indirectly	Initiation - will establish a network (2013 – 2016)	International network of HEI, enterprises, NGOs and development agencies.	SD competence focus
Developing and Adapting Professional Programs for Energy Efficiency in the Western Balkans Reference 543782-TEMPUS-1-2013-1-AL-TEMPUS-JPCR	Albania	Two year post-secondary study and Professional Master Program – delivery of programs according to European standards with a strong emphasis on applied skills and market needs. The initiative is a response to the demand (from government, industry and potential students)	Post-secondary and professional Masters levels (120 students)	Initiation - design of quality professional programs in five universities in the region	Modernization of the educational systems of Albania, Kosovo and Montenegro.	SD competence focus

		for more applied skills.				
Master Program of Communication for Behaviour and Social Change	Albania	2 years Master of Science Program. The initiative has multidisciplinary and interdisciplinary character.	Teachers, journalists, public relations employees, public health employees, sociologists, etc.	Master program of study (2 years of study)		SD focus – interdisciplinary aspect
“Les clusters comme outils permettant la mise en œuvre d’un développement durable”	Bosnia & Hercegovina	Promoting clusters as a tool to achieve sustainable development. Transdisciplinary nature allows for an integrated approach, taking into account environmental issues, culture, society and the economy.	Educators interested in ESD (but anyone can)	Initiative – one day seminar (2014)	Active learning	SD focus – interdisciplinary aspect
“Environmental education for sustainable development – a regional training project scheme for the Adriatic – Ionian basin (EESD)”	Bosnia & Hercegovina	Elaboration of a strategy for Environmental Education – with training modules for school teachers, university assistants and young scientists, focussed on innovative learning tools and methods for educational programmes (devoted to policy-makers and administrators)	Educators interested in ESD (but anyone can)	2004–2006	Capacity-building in environmental management at the regional level.	Initiation of the dialogue on ESD with policy-makers

"Creating an action plan for sustainable development of the local community"	Bosnia and Hercegovina	Seminar – methodology for sustainable local planning, with the presentation of successful practice.	Teachers and civil servants	3 days seminar in 2010	Providing a platform for effective strategic dialogue	SD focus – strategic
Initiative for SD Education (ISDE)	Bulgaria	Academic working group for university educators – to identify existing interests and teaching capacities; mutual support in teaching and self-educating; coordination between faculties and disciplines.	Teachers from different faculties of the UACEG	2011-now	Bottom-up self-organization of academic staff; building interdisciplinary capacity for SD	Initiation of the academic dialogue on ESD
System for Qualification and Career Development of University academic staff– Project BG051PO001-3.1.09-0019, Operational Program "Human Resources Development"	Bulgaria	Development of a modern and effective system for training and career development of the academic staff – to raise the academic staff skills and competences in ICT, foreign languages and pedagogy and provide instruments to evaluate education process	University educators from the University of Forestry	18 Months 2013-2014	Competences in ICT, foreign languages and pedagogy and provide instruments to evaluate education process	Initiation of the academic dialogue on competences
Teacher competences in higher education: Learning and Teaching	Croatia	Development of teaching competences for university educators	University of Rijeka educators (30) – post-doc level	2013-now (6 months post-doc program)	Development of teaching competences for	Initiation of the academic dialogue on

[Nastavničke kompetencije u visokom školstvu: Učenje i poučavanje]		– the first education for professional development of university educators in Croatia organized by HE institution.			university educators (not ESD)	competences
4th School of Sustainable Development	Croatia	Scientific-professional programme; informal education – to educate students about importance of sustainable development	Students of University of Rijeka	2013 – two days	Awareness raising	SD focus
ENOAT (European Network Organic Agriculture Teachers)	Czech Republic	Seminar once a year; innovation in teaching practices related to the joint projects on sustainable development practices in agriculture, food production, landscape management etc.,	University teachers - cca 30 participants (cca 1-3 participants per country, cca 8-10 countries or more)	One day seminar once a year (seminar)	Initiative based on an identified need to transform curricula and teaching approaches	ESD competences focus
Development of the strategic document “Aiming the EU structural aid to further modernization of NUTS II Moravia-Silesia...”	Czech Republic	Development of the skills necessary for strategic planning in the area of regional development and multidisciplinary communication together with the production of	University teachers, Ph.D. students	One semester collaborative coaching program	Related to the problematic region; integrates economic, social and environmental dimension in the regional	SD focus, ESD competences by-product

		the strategic document in real context of the underdeveloped region			development framework.	
Open Space Seminars	Czech Republic	Discussions among different stakeholders on a sustainability related theme requiring active involvement and co-production of knowledge	Interested actors incl. university teachers	One week, every year since 2007, end of January	Emergent nature of discussions and conclusions	SD focus, SD related competences needed
Pyramid workshop (Pyramid2030 initiative)	Czech Republic	One-day workshop where systems thinking is used to investigate and learn more deeply about an SD issue (local or global level)	Interested actors incl. university teachers	Organized January 2014	Clear focus on envisioning future	SD focus, SD related competences by-product
Greenest Department Competition	Hungary	Competition to support the development of pro-environmental behaviors; focus: to reach a greener operation of departments and to support pro-environmental changes with ideas, information, connections and concrete practical solutions	University departments - several hundred of people	every year since 2009	awareness raising, teamwork, bottom-up approach	SD focus
National meetings of university educators involved in environmental	Hungary	Regular meeting of professionals in environmental	Environmental educators and students	2 or 3 days once a year	Regular meeting of professionals and exchange	Initiation of the academic dialogue on ESD

protection		protection to improve the knowledge of the educators and sensitization with cultural events and field programs			their knowledge	
International Summer School: Make a Difference-Become a 'Green' EU Leader	Macedonia	Summer school – leadership skills and competences, act and promote 'green' activism.	21 domestic and 1 foreign students.	10 days in 2010	Field activities i.e. so-called 'green days'.	Not relevant
Series of open lectures: <i>Selected topics in environmental protection – sustainable development in theory and in practice</i>	Poland	13 seminars – one in every week of the semester running since 1997.	Students, university educators and various receivers outside academia (100)	Summer semester every year	Opportunity to gather broad spectrum of specialists with whom the participants can discuss and learn	SD focus, ESD as by-product
Obligatory Lectures in "Environmental Law" and "International Environmental Protection Policy", conducted by the Polish Universities for Law, Political Science and International Relations Students	Poland	Lectures to familiarise students with the law regulation on the environmental protection in the context of international, European Union and country law systems – for students (practical aspect important).	110000 students of Law, Political Science and International Relations	One semester 30 hours every academic year	Broad scope	SD focus
The European Master's	Poland	Lecture, seminar, work	100 students	Every year one	Interdisciplinary	SD as by-

Programme in Human Rights and Democratisation		on the Master Degree thesis		academic year	nature; range of high level academics, ...	product
European Seminar In Sustainable Development (ESSD) (2010-2013)	Romania	EVS seminar	42 teaching staff members, 42 students, 15 specialists	11 days, 88 hours; since 2010 until 2013	International network	SD focus
Environmental Training Project (1992-2000). USAID	Romania	Romanian university professors already teaching ecology are being taught about Environmental University Curricula Development (a catalogue of Romanian Universities with environmental subjects in their curricula developed)	42 participants, Romanian university professors already teaching ecology	7 days; from 1992 until 2000.	Interdisciplinary approach with a lot of practice.	SD curricula reorientation focus
“University and sustainable development” (October 2010)	Serbia	One day event to discuss the problems of higher education for sustainable development and to contribute wider implementation of SD ideas at Serbian Universities.	University teachers and students (open event)	21. 04. 2011.	Bottom-up approach, publication “University and Sustainable Development”	Initiation of the academic dialogue on ESD
PSDEEWB Post Secondary	Slovakia	Development of	Development of	3 years project in	Outputs from the	SD focus, ESD as

Diploma in Energy Efficiency for the Western Balkans		curricula and capacities of HES educators in efficient energy use in sustainable settlement development in Western Balkan countries, education of the educators, development of innovative teaching methods , literature, laboratories	capacities of more than 100 university educators directly involved	2013-2016	initiative implemented – introduction of 7 new study programs with the focus on SD	by-product
Workshop to Action Plan implementation (Action Plan for education and teaching for sustainable development across all levels of education and life-long education , part: HESs	Slovakia	Seminar to present the initiatives and projects realised by individual HES supporting the development of sustainable faculties/universities and proposal to establish a network of the representatives of particular HES responsible for the education and teaching for SD.	Not limited participation, 36 participants attended	November 11th, 2007	Policy driven (implementation of the Action Plan for education and teaching for sustainable development)	Initiation of the academic dialogue on ESD
Seminar: Education and teaching for sustainable development at the HESs in Slovakia	Slovakia	One-day seminar, but the preparation, including the discussion with the professionals, organisers, responsible	More than 50 participants representing 6 Slovak universities and 2 Czech universities and other	November 20th, 2008	Policy driven (awareness of the goals of the Action Plan with the focus on the	Initiation of the academic dialogue on ESD

		persons from the Ministries took part several months. As the follows-up several meetings at the Ministry of Education focused on further elaboration of chosen topics from the seminar took place	stakeholders		tasks for HEIs)	
Sustainable and Socially Responsible University of Maribor	Slovenia	Staff induction aimed at creation of an innovative environment and an effective organisation contributing to balanced, sustainable and socially responsible development of the University	Staff of all departments	2006–2014	Practical leadership	SD focus, SD competences as a by-product
Ranking of Sustainable Universities	Slovenia	Research and awareness raising – ranking of universities regarding the three bottom lines: social, economic, and environmental	About 60 universities	2005–2013, every second year	Research driven, awareness as result	SD focus, SD competences as a by-product

Albania

Albania – Example 1

Title of the professional development initiative	‘Connecting Science-Society Collaborations for Sustainability Innovations’ Project Reference 543742-TEMPUS-1-2013-1-AT-TEMPUS-JPHES
Who is the facilitator or leading institution?	European University of Tirana
Who participates?	University of Graz,AT; University of Natural Resources and Life Sciences Vienna, AT; Leuphana University Lüneburg, DE; University of Limerick, IE; European University of Tirana, AL; Polis University, AL; Institute for Development Policy, XK; Agricultural University of Tirana, AL ; Center for International Comparative Studies, AL; Universum College, XK; Public University "Haxhi Zeka" , XK; Riinvest College, XK; Aleksander Moisiu University of Durres, AL
How many people can participate?	-
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input type="checkbox"/> Others (<i>please specify</i>): workshops and trainings
When does the initiative take place? (Please only list initiatives since 2005.)	2013
How long does it take?	36 months
What is the purpose and objective?	<p>The project aims to establish a regional science (involving higher education and research)-society (involving practice) network for sustainability innovations in Albania and Kosovo.</p> <p>The specific objectives are: i) to identify regional stakeholders in the field of higher education, research and practice for sustainable development; ii) to establish a science-</p>

	society network for sustainability innovations; iii) to develop innovative teaching materials and methodologies for higher education institutions; iv) to develop and run structured workshops and trainings for science-society collaborations.
What is the ambition (idea behind the initiative)?	The wider idea is to strengthen the connection and collaboration of higher education institutions, research and practice as well as to promote mutual learning and innovative sustainability issues and methods through structured workshops to support capacity building as well as systemic and holistic thinking.
What is the professional development initiative about (focus, thematic entry point)?	The direct target groups will be higher education institutions (esp. lecturers, researchers and students), research institutions and regional stakeholders like enterprises, NGOs and regional development agencies. Furthermore policy makers will benefit indirectly.
What is the pedagogical approach?	Structured workshops on SD. (UNECE document on CESD based)
What has attracted the participants to take part in the initiative?	To achieve these objectives, the consortium members were selected due to their methodological competencies, capacities and know-how.
What is valuable and interesting about this initiative? Why is it worth doing it?	The initiative relates the SD with innovation and science. Also the network consists of HEI, enterprises, NGOs and development agencies.
How is the initiative being funded?	Funded by TEMPUS
How is the initiative being evaluated? If possible, please share some of the results.	Not yet
Link to website/ references	http://consus.allafine.com/project.php Project lead: Prof. Dr. Friedrich Zimmermann friedrich.zimmermann (at) uni-graz.at

Competences for educators in education for sustainable development

	HOLISTIC APPROACH	ENVISIONING CHANGE	ACHIEVING TRANSFORMATION
	<i>Integrative thinking and practice</i>	<i>Past, present and future</i>	<i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> • The role of stakeholders in science and civil society regarding SD. • The importance of science-society network for sustainability innovations. By identifying experienced stakeholders and those which are new to innovation, the project will try to understand each ones' roles in sustainability and also to increase their impact, to share information and to enhance sustainability • The big potential for sustainability research, education and innovation if there is networking. 	<ul style="list-style-type: none"> • The analysis of current sustainability collaborations and expertise means identifying regional stakeholders in the field of higher education, research and practice for sustainable development. • The importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change • The importance of scientific evidence in supporting sustainable development 	<ul style="list-style-type: none"> • The direct target groups are higher education institutions (esp. lecturers, researchers and students), research institutions and regional stakeholders like enterprises, NGOs and regional development agencies. • Policy makers benefit indirectly.
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> • To understand the importance of collaboration of science institutions and civil society organizations and/or other types of organizations. 	<ul style="list-style-type: none"> • To understand the real situation, to identify specific problems and to elaborate possible solutions for them. It will be produced a joint Report from Partners with regard to the analysis of regional science-society collaboration. 	<ul style="list-style-type: none"> • Through seminars and workshops the project will facilitate participatory and learner-centred education that develops critical thinking and active citizenship • To assess learning outcomes in terms of changes and achievements in relation to sustainable development in a regional context.
Learning to live together <i>The initiative offers an</i>	<ul style="list-style-type: none"> • Increase the knowledge about others expertise and experience. • Integrate the knowledge, skills and other's solutions in integrated approaches. 	<ul style="list-style-type: none"> • critically assess processes of change in society and envision sustainable futures • facilitate the evaluation of potential consequences of different decisions and actions • 	<ul style="list-style-type: none"> • help participants clarify their own and others views through dialogue, and recognize that alternative frameworks exist

*opportunity
for the
educator to
work with
others in ways
that....*

Learning to be

- Know the importance of professional development in SD.
- Know his/her ones limits

*The initiative
offers an
opportunity
for the
educator to be
someone
who....*

- is motivated to make a positive contribution to other people and their social and natural environment, locally , regionally and globally.
-

- is a facilitator and participant in the learning process
- inspires creativity and innovation
- engages with learners in ways that build positive relationships

Albania - EXAMPLE 2

Title of the professional development initiative	Developing and Adapting Professional Programs for Energy Efficiency in the Western Balkans Reference 543782-TEMPUS-1-2013-1-AL-TEMPUS-JPCR
Who is the facilitator or leading institution?	Polis University, AL
Who participates?	University Aleksandër Moisiu of Durrës, AL; University of Prishtina, XK; University for Business and Technology, XK; University of Montenegro, ME; Slovak University of Technology in Bratislava, SK; Co-PLAN, Institute for Habitat Development, AL; University of Minho, PT; Van Hall Larenstein University of Applied Sciences, NL; Anhalt University of Applied Sciences, DE; Albanian Constructors Association, AL.
How many people can participate?	120 post-secondary students
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input type="checkbox"/> Others (<i>please specify</i>): Two year post-secondary study and Professional Master Programme
When does the initiative take place? (Please only list initiatives since 2005.)	2013
How long does it take?	36 months
What is the purpose and objective?	The wider objective of this project is to develop education in the field of energy efficiency at post-secondary and professional Masters levels. Specific objectives include: the design of quality professional programs in five universities in the region; the delivery of programs according to European standards with a strong emphasis on applied skills and market needs; the establishment of networks with industries, educational sector and society at wide; Provide policy recommendation mainstreaming professional programs within each partner country.
What is the ambition (idea behind the initiative)?	The project contributes to the modernization of the educational systems of Albania, Kosovo and Montenegro.

What is the professional development initiative about (focus, thematic entry point)?	The project will bring together expertise and experience for curriculum development and for practical application of energy efficiency. The study programs contain several thematic subjects including foundations, technical knowledge, applied skills, European regulations in the field of energy efficiency, an internship and a final project.
What is the pedagogical approach?	Two-year post-secondary diploma programs are a learning experience that informs Ministries of Education and the educational sector at large, enabling them to replicate this type of professional education in many other fields, as also envisioned in education strategies. The professional Masters programs will equip students that already possess ample theoretical knowledge from the field with much needed applied and technical skills enhancing employment opportunities.
What has attracted the participants to take part in the initiative?	The initiative is a response to the demand (from government, industry and potential students) for more applied skills, both in the two-year post-secondary diploma level and in the professional Masters level.
What is valuable and interesting about this initiative? Why is it worth doing it?	The project initiated professional education programs in the field of Energy Efficiency that varied according to national contexts and educational institution.
How is the initiative being funded?	By TEMPUS
How is the initiative being evaluated? If possible, please share some of the results.	Not yet
Link to website/ references	http://www.universitetipolis.edu.al

Competences for educators in education for sustainable development

Please note that a facilitator or participant of the professional development initiative might need to support the answering of this grid.

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> the importance of delivery of programs according to European standards with a strong emphasis on applied skills and market needs; importance of the establishment of networks with industries, educational sector and society at wide; the importance of providing policy recommendation mainstreaming professional programs local and regional context. 	<ul style="list-style-type: none"> that sustainable development is an evolving concept the urgent need for change from unsustainable practices towards environmental sustainability the importance of scientific evidence in supporting sustainable development 	<ul style="list-style-type: none"> there is a need to transform the education systems that support learning there is a need to transform the way we educate/learn how engagement in real-world issues enhances learning outcomes and helps learners to make a difference in practice
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> create opportunities for sharing ideas and experiences from different places and cultures without prejudice. connect the participants to their local and regional spheres of influence. 	<ul style="list-style-type: none"> communicate a sense of urgency for local and regional change and inspire hope facilitate the evaluation of potential consequences of different decisions and actions focusing on policy decisions. use the natural, social and built environment, including their own institution, as a context and source of learning 	<ul style="list-style-type: none"> facilitate participatory and learner-centred education that develops critical thinking
Learning to live together <i>The initiative offers an</i>	<ul style="list-style-type: none"> actively engage different groups across theoretical knowledge and different experiences. 	<ul style="list-style-type: none"> encourage negotiation of alternative futures in regional context 	<ul style="list-style-type: none"> challenge unsustainable practices across educational systems, including at the institutional and market level. help students clarify their own and others views through master program and recognize that alternative frameworks exist

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
<i>opportunity for the educator to work with others in ways that....</i>			even in countries with less knowledge and initiatives on sd.
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	•	•	•

Albania - EXAMPLE 3

Title of the professional development initiative	Master Program of Communication for Behaviour and Social Change
Who is the facilitator or leading institution?	University of Tirana/Faculty of Social Sciences/ Centre of Excellence
Who participates?	Teachers, journalists, public relations employees, public health employees, sociologists, etc.
How many people can participate?	30 pers/each year
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input checked="" type="checkbox"/> Others (<i>please specify</i>): 2 years Master of Science Program
When does the initiative take place? (Please only list initiatives since 2005.)	2011
How long does it take?	2 years of study
What is the purpose and objective?	The aim is to provide students with knowledge and skills on Theories and practices of Communication for Behaviour and Social Change.
What is the ambition (idea behind the initiative)?	Communication for Behaviour and Social Change is a research process, interactive and planned that aims to promote change of social conditions and individual behaviour. Behaviour change is defined as a consultation process based on research and addressing issues related with behaviour and attitudes change. Communication for Behaviour and Social Change provides knowledge and practices to define needs of institutions, NGOs working in different developmental fields and also CBSS assist in generating valuable data for program's improvements.
What is the professional development initiative about (focus, thematic entry point)?	The initiative has multidisciplinary and interdisciplinary character with focus to Communication for Behaviour and Social Change.
What is the pedagogical	The teaching and learning activities are combined with theoretic

approach?	and practise in field hours, including: lectures, seminars, group discussions, case studies, simulations, presentations, research projects, etc.
What has attracted the participants to take part in the initiative?	The participants coming from different fields of experience were attracted by its multidisciplinary and interdisciplinary program.
What is valuable and interesting about this initiative? Why is it worth doing it?	The initiative is valuable and interesting as holds different professionals in joint adult learning activities. It's really interesting the work done for their course assignments that reflects the theoretical knowledge added to their practice.
How is the initiative being funded?	Funded by public money (University of Tirana is a public university) and by students' fees.
How is the initiative being evaluated? If possible, please share some of the results.	Not evaluated.
Link to website/ references	www.universityoftirana.edu.al Coordinator: Dr.Irida Agolli, E-mail: iagolli@yahoo.com

Competences for educators in education for sustainable development

Please note that a facilitator or participant of the professional development initiative might need to support the answering of this grid.

	<i>HOLISTIC APPROACH</i> <i>Integrative thinking and practice</i>	<i>ENVISIONING CHANGE</i> <i>Past, present and future</i>	<i>ACHIEVING TRANSFORMATION</i> <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> the basics of theory and practice on CBSC ways in which individuals, social and economic systems function and how they may be interrelated their personal world view and cultural assumptions and seek to understand those of others their own thinking and action in relation to sustainable development in social, health and economic issues. 	<ul style="list-style-type: none"> the root causes of personal and social problems the urgent need for change from unsustainable practices towards advancing quality of life, equity, solidarity, welfare and environmental sustainability. the importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change the importance of scientific evidence in supporting sustainable development 	<ul style="list-style-type: none"> why there is a need to transform the education systems that support adult learning regarding CBSC. why it is important to prepare students to meet new challenges on behaviours and social problems how engagement in real-world issues enhances learning outcomes and helps learners to make a difference in practice. This approach is helped by the presence of invited professors from Denmark and Sweden and through in-field practice.
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> create opportunities for sharing ideas and experiences from different disciplines without prejudice and preconceptions. work with different perspectives on dilemmas, issues, tensions and conflicts on CBSC. connect the learner to their local and global spheres of influence 	<ul style="list-style-type: none"> critically assess processes of sustainable change in behaviours and society facilitate the evaluation of potential consequences of different decisions and actions on CBSC. 	<ul style="list-style-type: none"> facilitate participatory and learner-centred education that develops critical thinking and active citizenship assess learning outcomes in terms of changes and achievements in relation to communication for behaviour and social change.
Learning to live together	<ul style="list-style-type: none"> actively engage different peoples across disciplines 	<ul style="list-style-type: none"> facilitate the emergence of new worldviews that address sustainable behaviour and social change. 	<ul style="list-style-type: none"> challenge unsustainable practices across educational systems, including at the institutional level

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
<i>The initiative offers an opportunity for the educator to work with others in ways that....</i>			
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	<ul style="list-style-type: none"> • is inclusive of different disciplines and perspectives, including local knowledge and worldviews. 	<ul style="list-style-type: none"> • is motivated to make a positive contribution to other people and their individual and social environment, locally and globally • 	<ul style="list-style-type: none"> • is willing to challenge unsustainable attitudes and decisions underlying behaviour and social change • is an adult learner, so it's participant and learner in the process. • is a critically reflective practitioner • inspires creativity and innovation • engages with individuals, groups, communities and public in ways that build positive relationships

Bosnia and Hercegovina

Bosnia and Hercegovina - EXAMPLE 1

Title of the professional development initiative	“Les clusters comme outils permettant la mise en œuvre d’un développement durable”
Who is the facilitator or leading institution?	Roland Gilles, Ambassadeur de France en Bosnie-Herzégovine (BiH)
Who participates?	Educators interested in ESD (but anyone can)
How many people can participate?	40-30
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input checked="" type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing
When does the initiative take place? <i>(Please only list initiatives since 2005.)</i>	April 3 rd , 2014
How long does it take?	One day
What is the purpose and objective?	<p>Purpose: promoting clusters as a tool to achieve sustainable development. Transdisciplinary nature of clusters play an important role in promoting competitiveness, innovation and job creation but also the quality of life and respect for the global public good.</p> <p>Clusters allow for an integrated approach, taking into account environmental issues, culture, society and the economy and create the conditions for the "development that meets the needs of the present without jeopardizing the needs of future generations" (Brundtland Commission, 1987).</p>
What is the ambition (idea behind the initiative)?	Promote SD thinking as well as transdisciplinary approach and action on a practical, local level
What is the professional development initiative about (focus, thematic entry point)?	Using systems thinking and change management basis to generate awareness and ideas on SD – interactive activity
What is the pedagogical approach?	Learning by discussing and doing
What has attracted the participants to take part in the initiative?	ESD topic, interactive and practical focus
What is valuable and interesting about this	Discussion approach, suitable for diverse participants, fun

initiative? Why is it worth doing it?

How is the initiative being funded?

By French Embassy in Sarajevo

How is the initiative being evaluated? If possible, please share some of the results.

Summary report after end of initiative

Link to website/ references

http://unsa.ba/s/index.php?option=com_content&task=view&id=1868

Competences for educators in education for sustainable development

	<i>HOLISTIC APPROACH</i> <i>Integrative thinking and practice</i>	<i>ENVISIONING CHANGE</i> <i>Past, present and future</i>	<i>ACHIEVING TRANSFORMATION</i> <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> the basics of systems thinking: exploring an SD issue and its causes and effects ways in which natural, social and economic systems function and how they may be interrelated their personal world view and cultural assumptions and seek to understand those of others the connection between sustainable futures and the way we think, live and work their own thinking and action in relation to sustainable development 	<ul style="list-style-type: none"> the root causes of unsustainable development the importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change 	
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> create opportunities for sharing ideas and experiences from different disciplines/places/cultures/generations without prejudice and preconceptions: participants asked to contribute equally with their thoughts, experiences and ideas work with different perspectives on dilemmas, issues, tensions and conflicts agreement has to be reached among the participants connect the learner to their local and global spheres of influence 		<ul style="list-style-type: none"> facilitate participatory and learner-centred education that develops critical thinking and active citizenship
Learning to live together <i>The initiative offers an opportunity for the educator to work with others in ways that....</i>	<ul style="list-style-type: none"> actively engage different groups across generations, cultures, places and disciplines: diversity of participants is particularly encouraged, activity is suitable for any age/culture/discipline 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	<ul style="list-style-type: none"> is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and worldviews 	<ul style="list-style-type: none"> is motivated to make a positive contribution to other people and their social and natural environment, locally and globally 	<ul style="list-style-type: none"> is a facilitator and participant in the learning process inspires creativity and innovation engages with learners in ways that build positive relationships

Bosnia and Hercegovina - EXAMPLE 2

Title of the professional development initiative	"Environmental education for sustainable development – a regional training project scheme for the Adriatic – Ionian Basin (EESD)"
Who is the facilitator or leading institution?	UNESCO ROSTE
Who participates?	Educators interested in ESD (but anyone can)
How many people can participate?	20-40
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input checked="" type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input type="checkbox"/> Others (<i>please specify</i>):
When does the initiative take place? (<i>Please only list initiatives since 2005.</i>)	30 November 2004 – 29 November 2006
How long does it take?	Two years
What is the purpose and objective?	Strengthening capacity-building in environmental management at the regional level.
What is the ambition (idea behind the initiative)?	Creating and implementing a renewed Environmental Education programme, designed to set off a capacity-building process for environmental management to be developed within a regional approach.
What is the professional development initiative about (focus, thematic entry point)?	<p>Elaboration of a strategy for Environmental Education in the concerned region, which should be based on:</p> <ul style="list-style-type: none"> ▪ a review of the already existing facilities in Central Eastern Europe aimed at performing educational and training activities in the target countries; ▪ a review of the present state of the environment in the region with particular attention to biodiversity conservation and environmental, as well as local, sustainable development policies; ▪ the analysis of educational needs expressed by the above-mentioned target groups; ▪ testing of EE schemes, through the alternation of learning modules with in-the-field training activities.

What is the pedagogical approach?	<ul style="list-style-type: none"> ▪ training modules for school teachers, university assistants and young scientists, focussed on innovative learning tools and methods for educational programmes; • face to face and distance learning teaching modules • intensive in-field activities.
What has attracted the participants to take part in the initiative?	training of qualified experts with high-level, integrated, and multidisciplinary environmental know-how, by means of specific and intensive teaching modules
What is valuable and interesting about this initiative? Why is it worth doing it?	educational programmes expressly devoted to policy-makers and administrators, aimed at improving their basic knowledge of environmental issues
How is the initiative being funded?	Donor: Italian Ministry of Foreign Affairs, Law 84/2001
How is the initiative being evaluated? If possible, please share some of the results.	By the donor
Link to website/ references	portal.unesco.org/fr/files/29079/11273963181eesd.doc/eesd.doc

Competences for educators in education for sustainable development

	HOLISTIC APPROACH Integrative thinking and practice	ENVISIONING CHANGE Past, present and future	ACHIEVING TRANSFORMATION People, pedagogy and education systems
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> the basics of systems thinking: exploring an SD issue and its causes and effects ways in which natural, social and economic systems function and how they may be interrelated their personal world view and cultural assumptions and seek to understand those of others: discussions of own thoughts and experiences relating to the SD issue and own ideas for change the connection between sustainable futures and the way we think, live and work their own thinking and action in relation to sustainable development: discussion of own thoughts and ideas for action 	<ul style="list-style-type: none"> the root causes of unsustainable development: in Level 2 discussions, participants explore the issue in detail and come up with the main causes the importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change 	<ul style="list-style-type: none">
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> create opportunities for sharing ideas and experiences from different disciplines/places/cultures/generations without prejudice and preconceptions: participants asked to contribute equally with their thoughts, experiences and ideas work with different perspectives on dilemmas, issues, tensions and conflicts: based on the discussions a 'capstone' agreement has to be reached among the participants connect the learner to their local and global spheres of influence: an idea for a specific local action with a global relevance is an expected outcome of the activity 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> facilitate participatory and learner-centred education that develops critical thinking and active citizenship
Learning to live together <i>The initiative offers an</i>	<ul style="list-style-type: none"> actively engage different groups across generations, cultures, places and disciplines: diversity of participants is particularly encouraged, activity is suitable for any age/culture/discipline 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">

<i>opportunity for the educator to work with others in ways that....</i>			
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	<ul style="list-style-type: none"> • is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and worldviews: as above 	<ul style="list-style-type: none"> • is motivated to make a positive contribution to other people and their social and natural environment, locally and globally • 	<ul style="list-style-type: none"> • is a facilitator and participant in the learning process • inspires creativity and innovation • engages with learners in ways that build positive relationships

Bosnia and Hercegovina - EXAMPLE 3

Title of the professional development initiative	"Creating an action plan for sustainable development of the local community"
Who is the facilitator or leading institution?	The Regional Environmental Centre for Central and Eastern Europe (REC)
Who participates?	Teachers and civil servants
How many people can participate?	30-40
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input checked="" type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input type="checkbox"/> Others (<i>please specify</i>):
When does the initiative take place? (<i>Please only list initiatives since 2005.</i>)	June 27 through 30 2010
How long does it take?	3 days
What is the purpose and objective?	To gather information on the state of the ESD in the region
What is the ambition (idea behind the initiative)?	providing a platform for effective strategic dialogue on the issue of sustainable development in the Western Balkans
What is the professional development initiative about (focus, thematic entry point)?	Introducing a methodology for sustainable local planning, with the presentation of successful practice
What is the pedagogical approach?	Interactive lecturing and debate
What has attracted the participants to take part in the initiative?	Acquiring knowledge and experience
What is valuable and interesting about this initiative? Why is it worth doing it?	Spreading the idea and concept on sustainability
How is the initiative being funded?	By the Government of Finland
How is the initiative being evaluated? If possible, please share some of the results.	Not available
Link to website/ references	http://www.rec.org.ba/esd2.htm

Competences for educators in education for sustainable development

	HOLISTIC APPROACH Integrative thinking and practice	ENVISIONING CHANGE Past, present and future	ACHIEVING TRANSFORMATION People, pedagogy and education systems
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> the basics of systems thinking: exploring an SD issue and its causes and effects ways in which natural, social and economic systems function and how they may be interrelated their personal world view and cultural assumptions and seek to understand those of others: discussions of own thoughts and experiences relating to the SD issue and own ideas for change the connection between sustainable futures and the way we think, live and work their own thinking and action in relation to sustainable development: discussion of own thoughts and ideas for action 	<ul style="list-style-type: none"> the root causes of unsustainable development: in Level 2 discussions, participants explore the issue in detail and come up with the main causes the importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change 	<ul style="list-style-type: none">
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> create opportunities for sharing ideas and experiences from different disciplines/places/cultures/generations without prejudice and preconceptions: participants asked to contribute equally with their thoughts, experiences and ideas work with different perspectives on dilemmas, issues, tensions and conflicts: based on the discussions a 'capstone' agreement has to be reached among the participants connect the learner to their local and global spheres of influence: an idea for a specific local action with a global relevance is an expected outcome of the activity 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> facilitate participatory and learner-centred education that develops critical thinking and active citizenship
Learning to live together	<ul style="list-style-type: none"> actively engage different groups across generations, cultures, places and disciplines: diversity of participants is particularly 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">

<i>The initiative offers an opportunity for the educator to work with others in ways that....</i>	encouraged, activity is suitable for any age/culture/discipline		
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	<ul style="list-style-type: none"> • is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and worldviews: as above 	<ul style="list-style-type: none"> • is motivated to make a positive contribution to other people and their social and natural environment, locally and globally 	<ul style="list-style-type: none"> • is a facilitator and participant in the learning process • inspires creativity and innovation • engages with learners in ways that build positive relationships

Bulgaria

Bulgaria - EXAMPLE 1	
Title of the professional development initiative	Initiative for SD Education (ISDE)
Who is the facilitator or leading institution?	University of Architecture, Civil Engineering and Geodesy - informal teachers initiative
Who participates?	Teachers from different faculties of the UACEG
How many people can participate?	It is open to all the interested and motivated teachers of the University. Three members of the academic staff initiated the process in 2011, the group has grown to 15 teachers and PhD students
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input checked="" type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input type="checkbox"/> Others (<i>please specify</i>):
When does the initiative take place? (<i>Please only list initiatives since 2005.</i>)	Initiated in November 2011
How long does it take?	Ongoing
What is the purpose and objective?	To identify existing interests and teaching capacities; mutual support in teaching and self-educating; coordination between faculties and disciplines.
What is the ambition (idea behind the initiative)?	To build a value-based professional community of teachers at the university, to enhance interdisciplinary professional knowledge needed for the implementation of the SD in practice, to counteract limited technocratic approaches to the sustainable development concept.
What is the professional	Aimed at building the framework for the effective interaction of

development initiative about (focus, thematic entry point)?	academic teachers in building teaching capacity to meet the challenges of the SD concept in the professional field.
What is the pedagogical approach?	Information exchange, professional debate, organisation of joint interdisciplinary teaching events; development of a postgraduate programme for practicing professionals at UACEG based on the LLL (lifelong learning) concept.
What has attracted the participants to take part in the initiative?	The understanding about the urgency of building interdisciplinary capacity for SD, which is still strongly missing in the country; the need for mutual support in introducing new approaches and developing/ translating SD-related terminology in the particular professional field.
What is valuable and interesting about this initiative? Why is it worth doing it?	Bottom-up self-organization of academic staff; provides for an increasing self-confidence among the teaching staff
How is the initiative being funded?	Separate activities have been partially funded by: (a) an NGO project, GEF Small Grants Program, UNDP; and (b) a small-scale University research project on integrated approaches to SD education.
How is the initiative being evaluated? If possible, please share some of the results.	The initiative is still in its initial phase, yet with growing popularity among teachers – members are currently involved from 4 out of 5 faculties of the University.; a draft interdisciplinary training programme has been developed and two editions of the first module already delivered jointly with a professional NGO (more than 40 people attended)
Link to website/ references	www.asem-bg.org – about the postgraduate course on building with natural materials Dimitrova, E., 2014. The ‘sustainable development’ concept in urban planning education: lessons learned on a Bulgarian path. In <i>Journal of Cleaner Production</i> 62 (2014) 120-127; http://dx.doi.org/10.1016/j.jclepro.2013.06.021

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> the complex interactions of mankind and nature the interconnection of different life systems the integrative power of the cultural context the interaction of global-local interactions 	<ul style="list-style-type: none"> sharing knowledge with others the importance of critically estimating the accumulated human experience 	<ul style="list-style-type: none"> The importance of education as a transfer of cultural codes and values The broader social and cultural dimensions of technical knowledge and of the engineering profession
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> Creatively adapt theoretical knowledge to a particular context Interpret SD principles in the particular professional areas and teaching modules 	<ul style="list-style-type: none"> Conceptualize the long-term effects of the action undertaken; Estimate various professional contributions to the educational process Develop criteria and methods for evaluating the importance of environmental and sociocultural dimensions of development 	<ul style="list-style-type: none"> Identify and follow clear educational aims related to SD in all the professional fields covered by the University
Learning to live together <i>The initiative offers an opportunity for the educator to work with others in ways that....</i>	<ul style="list-style-type: none"> Rely upon varied professional competence Equally respect local and professional knowledge 	<ul style="list-style-type: none"> Empower all the participants in an open dialogue Coordinate joint action and collaboration 	<ul style="list-style-type: none"> Mobilize positive energy and creates synergies Enable closer professional interaction Respect personal values and points of view in an ongoing professional debate

	<i>HOLISTIC APPROACH</i> <i>Integrative thinking and practice</i>	<i>ENVISIONING CHANGE</i> <i>Past, present and future</i>	<i>ACHIEVING TRANSFORMATION</i> <i>People, pedagogy and education systems</i>
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	<ul style="list-style-type: none"> • Acknowledges the variety of viewpoints and approaches; 	<ul style="list-style-type: none"> • Develops and implements a clear overall vision of needed action, risks and possible outcomes 	<ul style="list-style-type: none"> • Provokes and encourages critical and creative thinking

Bulgaria - EXAMPLE 2	
Title of the professional development initiative	System for Qualification and Career Development of University academic staff– Project BG051PO001-3.1.09-0019, Operational Programme "Human Resources Development"
Who is the facilitator or leading institution?	University of Forestry, Sofia, Bulgaria
Who participates?	University educators from the University of Forestry
How many people can participate?	Ca. 250
What type of professional development is it?	<input type="checkbox"/> Short course <input checked="" type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input type="checkbox"/> Others (<i>please specify</i>):
When does the initiative take place? (<i>Please only list initiatives since 2005.</i>)	23.04.2013-22.10.2014
How long does it take?	18 Months
What is the purpose and objective?	Creation, approbation and development of a modern and effective system for training and career development of the academic staff at the University of Forestry - Sofia
What is the ambition (idea behind the initiative)?	Evaluating and improving the ICT competences of academic staff Maintaining the level of competence of educators through a web platform Publishing Textbooks and Manuals Increasing the foreign language competence of educators Improving communication skills and pedagogical approach of educators Training educators to use modern methods of teaching through ICT Training related to the methodologies of academic teaching, research and project management Implementing best practices from leading universities in Bulgaria and abroad in content development, plans and programs linked to the system of accumulation and transfer of credits Creating a tool of questionnaires, regulations and databases to increase the quality of education and training oriented to the labor market.
What is the professional development initiative about (focus, thematic entry point)?	ICT, foreign language, communication skills and pedagogical approach of academic staff and development of evaluation system of the education and training at the University of Forestry
What is the pedagogical	Trainings, courses

approach?	
What has attracted the participants to take part in the initiative?	The possibility for training and career development
What is valuable and interesting about this initiative? Why is it worth doing it?	Raise the academic staff skills and competences in ICT, foreign languages and pedagogy and provide instruments to evaluate education process
How is the initiative being funded?	Operational Programme "Human Resources Development"
How is the initiative being evaluated? If possible, please share some of the results.	It is still running. Questionnaires
Link to website/ references	http://www.ltu.bg/a.php/nav/university/university/1011/?lang_id=1

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> the basics of systems thinking the interdependent nature of relationships within the present generation and between generations, as well as those between rich and poor and between humans and nature their personal world view and cultural assumptions and seek to understand those of others 	<ul style="list-style-type: none"> the importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change the importance of scientific evidence in supporting sustainable development 	<ul style="list-style-type: none"> why there is a need to transform the education systems that support learning why there is a need to transform the way we educate/learn why it is important to prepare learners to meet new challenges
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> create opportunities for sharing ideas and experiences from different disciplines/places/cultures/generations without prejudice and preconceptions connect the learner to their local and global spheres of influence 	<ul style="list-style-type: none"> communicate a sense of urgency for change and inspire hope facilitate the evaluation of potential consequences of different decisions and actions 	<ul style="list-style-type: none"> facilitate participatory and learner-centred education that develops critical thinking and active citizenship
Learning to live together <i>The initiative offers an opportunity for the educator to work with others in ways</i>		<ul style="list-style-type: none"> facilitate the emergence of new worldviews that address sustainable development encourage negotiation of alternative futures 	<ul style="list-style-type: none"> help learners clarify their own and others worldviews through dialogue, and recognize that alternative frameworks exist

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
<i>that....</i>			
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>		<ul style="list-style-type: none"> • is willing to take considered action even in situations of uncertainty 	<ul style="list-style-type: none"> • is a facilitator and participant in the learning process • is a critically reflective practitioner • engages with learners in ways that build positive relationships

Croatia

Croatia - EXAMPLE 1

Title of the professional development initiative	Teacher competences in higher education: Learning and Teaching [Nastavničke kompetencije u visokom školstvu: Učenje i poučavanje]
Who is the facilitator or leading institution?	Faculty of Humanities and Social Sciences in Rijeka
Who participates?	University of Rijeka educators
How many people can participate?	30
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input type="checkbox"/> Others (<i>please specify</i>): postdoc level; further education for development of teacher competences in higher education
When does the initiative take place? (Please only list initiatives since 2005.)	It started in 2013
How long does it take?	6 months
What is the purpose and objective?	Purpose is education of university educators for work in higher education teaching
What is the ambition (idea behind the initiative)?	<p>To teach in higher education in Croatia it is not required to possess teaching competences i.e. to finish any education for teaching in higher education. It is enough that person holds PhD or to be enrolled in doctoral study if we talk about research assistants on project that are also holding some seminars and practicums.</p> <p>Praxis has shown that university educators are missing teaching competences and younger generations of university educators are aware of it and are willing to attend courses for development of such competences.</p>
What is the professional development initiative about (focus, thematic entry point)?	Development of teaching competences for university educators
What is the pedagogical approach?	Lectures, field work, individual tasks, presentations
What has attracted the participants to take part in	Participants are younger university educators, mostly at the beginning of their career. They are aware that they are missing teaching

the initiative?	competences and their attendance in education is their own choice.
What is valuable and interesting about this initiative? Why is it worth doing it?	It is first education for professional development of university educators in Croatia organized by HE institution. Only two NGO's in Croatia organize periodical programmes for development of teaching competences for university educators in Croatia (teaching methods, planning of classes...)
How is the initiative being funded?	University of Rijeka funds this program
How is the initiative being evaluated? If possible, please share some of the results.	Program passed official evaluation at the University before it was accepted. After every lecture participants evaluate program. Their feedback is very positive. They said that they learned many new things but they also stressed new topics they are still missing.
Link to website/ references	http://www.ffri.uniri.hr/files/dokumentidzjeka/CON/Nastavnicke%20u%20visokom%20skolstvu%20ucenje%20i%20poucavanje.pdf

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> • Templates of cognitive functioning of students • Student motivation for learning and study • Recognition and understanding of needs of students with special needs; how to adjust teaching to their features • Planning of changes in everyday praxis • Planning and programming of teaching • Development of study program for own class; formulation of learning outcomes • Connection with European and Croatian Qualification Framework 	•	•
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> • Planning of changes in everyday praxis • Planning and programming of teaching • Development of study program for own class; formulation of learning outcomes • 	•	•
Learning to live together <i>The initiative offers an opportunity for the educator to work with others in ways that....</i>	<ul style="list-style-type: none"> • Recognition and understanding of needs of students with special needs; how to adjust teaching to their features • 	•	•

Croatia - EXAMPLE 2

Title of the professional development initiative	4th School of Sustainable Development
Who is the facilitator or leading institution?	University of Rijeka Foundation
Who participates?	Students of University of Rijeka
How many people can participate?	50
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input type="checkbox"/> Others (<i>please specify</i>): scientific-professional programme; informal education
When does the initiative take place? (<i>Please only list initiatives since 2005.</i>)	October 19-20 2013
How long does it take?	Two days
What is the purpose and objective?	To arise participants consciousness on necessity of changes in community
What is the ambition (idea behind the initiative)?	That students acquire new knowledge, discuss, get insight in examples of good practices and review actual social-political and economic situation in context of sustainable development on local and global level
What is the professional development initiative about (focus, thematic entry point)?	To educate students about importance of sustainable development
What is the pedagogical approach?	lectures
What has attracted the participants to take part in the initiative?	Programme is free of charge, good experiences of past participants
What is valuable and interesting about this initiative? Why is it worth doing it?	Some previous researches showed that almost half of students don't know what sustainable development is and some of them are future teachers. It is important to educate young people on sustainable development.
How is the initiative being funded?	Different sponsors
How is the initiative being evaluated? If possible, please share some of the results.	Participants filled evaluations at the end of education. They were very satisfied with lecturers, organisation, information they got and they showed huge interest for future learning on sustainable development

Link to website/ references <http://www.rijeka.hr/ProjektSkolaOdrzivog>

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> the basics of systems thinking ways in which natural, social and economic systems function and how they may be interrelated the interdependent nature of relationships within the present generation and between generations, as well as those between rich and poor and between humans and nature their personal world view and cultural assumptions and seek to understand those of others the connection between sustainable futures and the way we think, live and work their own thinking and action in relation to sustainable development 	<ul style="list-style-type: none"> the root causes of unsustainable development the urgent need for change from unsustainable practices towards advancing quality of life, equity, solidarity, and environmental sustainability the importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change 	<ul style="list-style-type: none"> why it is important to prepare learners to meet new challenges
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> create opportunities for sharing ideas and experiences from different disciplines/places/cultures/generations without prejudice and preconceptions work with different perspectives on dilemmas, issues, tensions and conflicts connect the learner to their local and global spheres of influence 	<ul style="list-style-type: none"> critically assess processes of change in society and envision sustainable futures use the natural, social and built environment, including their own institution, as a context and source of learning 	<ul style="list-style-type: none"> facilitate participatory and learner-centred education that develops critical thinking and active citizenship assess learning outcomes in terms of changes and achievements in relation to sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to live together <i>The initiative offers an opportunity for the educator to work with others in ways that....</i>	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • facilitate the emergence of new worldviews that address sustainable development • encourage negotiation of alternative futures 	<ul style="list-style-type: none"> • help learners clarify their own and others worldviews through dialogue, and recognize that alternative frameworks exist
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • is motivated to make a positive contribution to other people and their social and natural environment, locally and globally • is willing to take considered action even in situations of uncertainty 	<ul style="list-style-type: none"> • is a critically reflective practitioner

Czech Republic

Czech Republic – Example 1

Person consulted to complete the Example 1

Name	prof. Ing. Jan Moudrý, CSc.
Institution	Institute of Crop Ecology, Faculty of Agriculture, University of South Bohemia in České Budějovice, Department of Organic Farming
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EXAMPLE 1

Title of the professional development initiative	ENOAT (European Network Organic Agriculture Teachers)
Who is the facilitator or leading institution?	Prof. Peter von Fragstein und Niemsdorff from the University Kassel and Ewa Rembiałkowska from the Warsaw Agricultural University.
Who participates?	Members of the network ⁵⁹ – international university staff
How many people can participate?	Cca 30 participants (cca 1-3 participants per country, cca 8-10 countries or more)
What type of professional development is it?	<input type="checkbox"/> Short course <input checked="" type="checkbox"/> Teaching support initiative <input checked="" type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program

⁵⁹ Following institutions are involved in the Network:

- [Norwegian University of Life Sciences \(UMB\)](#)
- [Swedish University of Agricultural Sciences \(SLU\)](#)
- [University of Kassel](#)
- [The Royal Veterinary and Agricultural University of Denmark \(KVL\)](#)
- [University of Wales](#)
- [Wageningen University](#)
- [University of Maribor](#)
- [University of Tuscia](#)
- [University of Torino](#)
- [FESIA - ISARA](#)
- [University of Helsinki](#)
- [Warsaw](#)
- [BOKU, Vienna](#)
- [Corvinus, Budapest](#)
- [Azores](#)

	<input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input type="checkbox"/> Others (<i>please specify</i>):
When does the initiative take place? (<i>Please only list initiatives since 2005.</i>)	Once a year (seminar); there is also a summer school for students or other activity for members of the network once per year (summer courses on specific topics relevant to organic agriculture)
How long does it take?	1 day
What is the purpose and objective?	Seminar or workshop on teaching methodology
What is the ambition (idea behind the initiative)?	Curriculum development for organic agriculture was the initial point of an Erasmus group of 7 universities from 1995 till 1998. Recently they became involved in numerous joint projects ⁶⁰ and try to improve the inter university exchange of experiences and to encourage the dissemination and implementation of organic agriculture practices together with the competences to teach them (staff members and students involved).
What is the professional development initiative about (focus, thematic entry point)?	Sustainable development practices in agriculture, food production, landscape management etc., and related innovation in teaching practices
Who participates	University staff; it is also for consultants Formerly for CEE countries, recently mutual exchange – new countries are flexibly involved
What is the pedagogical approach?	Interactive methods of teaching, team & group work, world café etc. The learning process is facilitated by mediators.
What has attracted the participants to take part in the initiative?	Involvement in the network of cooperation and related projects that have been undertaken by the members of this network, personal relationships (long cooperation – since 1995, and even before)
What is valuable and interesting about this initiative? Why is it worth doing it?	The initiative is based on an identified need to transform curricula and teaching approaches (not an obligation or top-down enforced need to do so). Results are shared within the institutions involved. Members of the network offer joint courses ⁶¹ . Need for the curricular change is associated with overall transition towards agroecology within the discipline.
How is the initiative being funded?	From the projects undertaken by the network – it is part of annual project meetings.
How is the initiative being evaluated? If possible, please share some of the results.	Feedback on learning outcomes provided (see Papers about ENOAT , didactic articles from the literature)
Link to website/ references	http://www.umb.no/enoat/article/european-network-of-organic-agriculture-university-teachers-enoat http://www.bio-info.cz/zpravy/enoat-podporuje-vzdelavani-studentu-v-ekologickem http://core.kmi.open.ac.uk/display/10927804

⁶⁰ Such as ERASMUS, SOCRATES, 6th Framework Program (e-learning), Leonardo da Vinci – LOVet: <http://www.lovnet-project.net/> - training of consultants (between university staff)

⁶¹ See <http://www.umb.no/enoat/article/network-members>

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> Holistic principle is embedded in the broad theoretical & practical foundations of organic farming (Fabio Caporali → agroecology) Primary: relationships, interdependencies → objective phenomena secondary (by specialists is this approach misunderstood) In this field: material world meets philosophy and religion 	<ul style="list-style-type: none"> Principle of education: methods of agricultural production are innovated and/or modified to comply with SD requirements Aim – environmentally friendly agriculture, replacement of technocratic approaches Multifunctional and socially relevant agriculture Projects of innovative agricultural system & methods of assessment Projects for analysis of consultancy in different countries – comparative studies 	<ul style="list-style-type: none"> Change in agricultural practices → need for university transition Integration of teaching and research⁶² Transdisciplinary strategy for education that involves experiential learning needed Go beyond skills and knowledge → higher order issues (application in complex situations) Philosophy implicit (sometimes explicit) part of the teaching & transition
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> Planning innovation (cooperatives) → discussions, “clash” of approaches Learning for practice: agronomy, food production 	<ul style="list-style-type: none"> Students in close contact with nature – hands-on, experiential learning New methods to raise quality of product and process Tools and methods to deal with whole systems, uncertainty, change⁶³ 	<ul style="list-style-type: none"> Combination of academic and practical experience The idea of ‘transformation’, defined as a ‘systemic change that addresses a certain ecological problem in an agricultural system, is incorporated into an action learning component of agroecology courses⁶⁴

⁶² Lieblein et al.

⁶³ Lieblein et al.

⁶⁴ Jordan et al. (2005) in Franics (2013) Jordan, N.R., D.A. Andow, and K.L. Mercer. 2005. New Concepts in Agroecology: A Service-Learning Course. Journal of Natural Resources and Life Science Education. 34:83–89.

<p>Learning to live together</p> <p><i>The initiative offers an opportunity for the educator to work with others in ways that....</i></p>	<ul style="list-style-type: none"> • New generation of experts involved in ENOAT → intergenerational learning (West – more knowledgeable within the themes and more experiences in active teaching methods, problem solution etc.; share with East) 	<ul style="list-style-type: none"> • Exchange of innovative practice (mutual learning) • Disabled in biodynamic farms – therapy through agricultural praxis 	<ul style="list-style-type: none"> • Participatory and social learning – ways to achieve transdisciplinary dimension⁶⁵ • Live together here means not only human interaction, but also interaction with non-human world – the discipline as a whole “learns” to be in harmony
<p>Learning to be</p> <p><i>The initiative offers an opportunity for the educator to be someone who....</i></p>	<ul style="list-style-type: none"> • Learning from anthroposophy, biodynamic agriculture and other groups 	<ul style="list-style-type: none"> • Motivation and interest is a needed pre-requisite to (and also an outcome of) change of perspective (principle of agroecology) 	<ul style="list-style-type: none"> • Developing creative approaches is a result of challenging pertinent unsustainable paradigms in agriculture (principle of agroecology)

⁶⁵ Francis (2013)

Czech Republic – Example 2

Person consulted to complete the Example 2

Name	Ing. Jan Malinovský, Ph.D.
Institution	Faculty of Economics, VŠB – Technical University in Ostrava, Department of Regional and Environmental Economics
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EXAMPLE 2

Title of the professional development initiative	Development of the strategic document “Aiming the EU structural aid to further modernization of NUTS II Moravia-Silesia...” ⁶⁶ under supervision of the consultancy company GAC comp. ltd.
Who is the facilitator or leading institution?	GAC comp. ltd. Faculty of Economics, VŠB – Technical University in Ostrava, Department of Regional and Environmental Economics
Who participates?	University teachers, Ph.D. students; students
How many people can participate?	21
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input checked="" type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input type="checkbox"/> Others (<i>please specify</i>):
When does the initiative take place? (Please only list initiatives since 2005.)	Since September 2011 till June 2012
How long does it take?	2 semesters / 9 half-day workshops and self-directed work in between
What is the purpose and objective?	Work in multidisciplinary teams under supervision of the consultant company → to develop strategic document of regional sustainable development

⁶⁶ Aiming the EU structural aid to further modernization of NUTS II Moravia-Silesia in the upcoming period of 2014 - 2020

What is the ambition (idea behind the initiative)?	To develop skills necessary for strategic planning in the area of regional development and multidisciplinary communication; to produce such a document in real context of the underdeveloped region and present it to relevant policy makers
What is the professional development initiative about (focus, thematic entry point)?	Regional development – practising analytical skills and strategic work (priority setting)
What is the pedagogical approach?	Team cooperation in multidisciplinary environment; role playing; interaction of the HE and commercial sphere (consultancy)
What has attracted the participants to take part in the initiative?	It was a project of the whole HE department; interactive and multidimensional; having practical outcome aimed at improving of the real situation
What is valuable and interesting about this initiative? Why is it worth doing it?	Closely related to the problematic region and its specifics; integrates economic, social and environmental dimension in the regional development framework. This exercise including its “product” (the Strategy paper) of has been elaborated as a case study and further used in education (including focus on skills such as teamwork and strategic skills)
How is the initiative being funded?	Project MOSUR, http://mosur.czp.cuni.cz/
How is the initiative being evaluated? If possible, please share some of the results.	<p>2 institutions are evaluating the outcome of the project – policy document:</p> <ul style="list-style-type: none"> Office of the regional committee for the regional cohesiveness NUTS2 Slezsko (Úřad Regionální rady regionu soudržnosti Moravskoslezsko) Regional development agency Ostrava (Agentura pro regionální rozvoj) <p>The document has also undergone “public hearings”</p> <ul style="list-style-type: none"> June 20th, 2012. Organised at the premises of the Faculty with ministers (education, industry & business), invited members of the Parliament, Senate, regional representatives – regional authorities; local businesses. Also Rector of the University and NGO representatives were attending. Presented publicly also within the Environmental Commission of the Czech Academy of Sciences. Presented also at the Club of Regionalists for lay public & actors from praxis
Link to website/ references	

Competences for educators in education for sustainable development

	<i>HOLISTIC APPROACH</i> <i>Integrative thinking and practice</i>	<i>ENVISIONING CHANGE</i> <i>Past, present and future</i>	<i>ACHIEVING TRANSFORMATION</i> <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> • ... and work with statistical data from regional data sources – which involves analytical skills in the environment where multiple perspectives are included 	<ul style="list-style-type: none"> • ...understand complex reality → identify strategy areas to concentrate on most pressing problems of the region 	<ul style="list-style-type: none"> • ...educators gradually introduce transdisciplinary themes and approaches related to sustainable development in teaching practice • ...educators reorientate process of education towards more active and participatory involvement of students
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> • ...integrate multiple perspectives within the teamwork and discussions leading to the development of joint product • ...cooperatively offer structured information and analytical insight in the problem which is understandable across disciplines 	<ul style="list-style-type: none"> • ... work in identified strategy areas with diverse information resources and data • ... find priorities of action in strategic areas • ...suggest solutions to practical problems in strategic areas 	<ul style="list-style-type: none"> • ...facilitate education process focused on future (SD in regional context) • ...innovate learning process using experience from the teamwork and other pedagogical approaches
Learning to live together <i>The initiative offers an opportunity for the educator to work with</i>	<ul style="list-style-type: none"> • ... they play roles in working teams & abandon professional roles and positions ← this is associated with active involvement in development of policy paper 	<ul style="list-style-type: none"> • ...negotiate with representatives of other disciplines and worldviews • ...make compromise to achieve joint result 	<ul style="list-style-type: none"> • ...involve different actors in discussions about the product after it has been developed → to achieve practical impact • ...use experience from the teamwork in their further teaching

<i>others in ways that....</i>			
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	<ul style="list-style-type: none"> • ...actively look for opportunities to confront their own point of view with other diverse worldviews to receive balanced picture of reality • ...consider SD an important part of the future perspective on the regional level 	<ul style="list-style-type: none"> • ...are able to find evidence to support realization of the sustainable development goals on the regional level and act on the basis of this evidence 	<ul style="list-style-type: none"> • ...consider social impact as one of the core principles in HE teaching • ...are able to reorient own teaching process towards these goals

Czech Republic – Example 3

Person consulted to complete the Example 3

Name	Nikola Fousková
Institution	Masaryk University, Department of Environmental Humanities
University responsibility	Project manager
E-mail address	Nikola Fousková <Nikola.Fouskova@czp.cuni.cz>
Phone number	

EXAMPLE 3

Title of the professional development initiative	Open Space Seminars
Who is the facilitator or leading institution?	The Economy and Society Trust, www.thinktank.cz
Who participates?	Academic employees, local authorities, NGO members, entrepreneurs, state authorities, university students
How many people can participate?	20-30
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input checked="" type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input type="checkbox"/> Others (<i>please specify</i>): workshop
When does the initiative take place? (<i>Please only list initiatives since 2005.</i>)	Every year since 2007, end of January
How long does it take?	Wednesday-Sunday, 5 days (3 full days)
What is the purpose and objective?	Participants from different fields and with diverse backgrounds (theory and praxis, with different views concerning the theme) meet and discuss the theme, inspire each other and develop argumentation in dialogue. Each of the participants presents his/her projects, themes, questions for discussion, or he/she could participate only passively. Leaders of the discussion as well as the whole program emerge as a result of the initiative of individual participants.
What is the ambition (idea behind the initiative)?	To provoke discussions concerning the theme among different stakeholders that have something to say in this regard. The themes are in principle transboundary: they concern local, ethical and

	democratic economic alternatives. Discussions have critical dimension, with “emerging” conclusions and outcomes. Participants usually start new cooperation, later develop joint projects, and gradually form a “community of interest”.
What is the professional development initiative about (focus, thematic entry point)?	The Economy and Society Trust aims to support experts and interested citizens working on economic and social models, concepts and practical solutions promoting democracy, social justice, sustainability and corporate responsibility. The main mission of the Trust is to propose and implement alternatives to current mainstream policy approaches.
What is the pedagogical approach?	Open space technique http://en.wikipedia.org/wiki/Open_Space_Technology
What has attracted the participants to take part in the initiative?	Theme and learning concept (innovative approach) Personal invitation
What is valuable and interesting about this initiative? Why is it worth doing it?	Very friendly relationships of the participants that are built through the activity Absence of “lecturer” (only facilitator), equal position of all Active involvement of every participant Sharing knowledge and experiences within the thematic scope
How is the initiative being funded?	Different donors in past + participant fees, recently MOSUR project
How is the initiative being evaluated? If possible, please share some of the results.	Closing circle with participants, paper feedback form From feedback: Seminar is very friendly and inspiring meeting, “intellectual holidays” ☺ Discussions in working sessions have to be well facilitated
Link to website/ references	www.thinktank.cz http://www.thinktank.cz/dok/sborniky-ze-seminare-otevreny-prostor/

Competences for educators in education for sustainable development⁶⁷

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> • The seminar is being split into different themes and each of these themes is being facilitated by the most knowledgeable volunteer • Participants communicate about some topic from their viewpoints • They have to understand each other and formulate his/her own standpoints; they analyse the problem from these points of view • The theme is at the end perceived holistically by those involved in the discussion 	<ul style="list-style-type: none"> • Participants understand the root causes of unsustainable development • They have to identify what is missing in the area of their interest and discuss strategic challenges • They have to envision how to improve this current situation • They understand the problem setting, are able to critically reflect, vision and creatively think to effect change 	<ul style="list-style-type: none"> • Participants have to find some strategic and also practical steps to achieve the envisioned change • They build on their experience within the learning activity → this is a basis for transformation • Their engagement in discussion concerning the real-world issues enhances learning outcomes and helps them to make a difference in practice
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> • get oriented in a complex problem • share ideas and experiences from his own discipline/place/culture/generation without prejudice and preconceptions • work with different perspectives on dilemmas, issues, tensions and conflicts • connect the learner to their local and global spheres of influence • find his/her personal way around (standpoint, action) 	<ul style="list-style-type: none"> • Participants critically assess processes of change in society and envision sustainable future • They are able to set the problem and plan some concrete action 	<ul style="list-style-type: none"> • Participants plan real world activities • They should be able to facilitate participatory and learner-centred learning process that develops critical thinking and active citizenship

⁶⁷ Rather SD competences, not ESD in this example – participants are involved in an innovative learning activity and „are competent“ to use it in their teaching

<p><i>Learning to live together</i></p> <p><i>The initiative offers an opportunity for the educator to work with others in ways that....</i></p>	<ul style="list-style-type: none"> • Communicates with each other • Understands each other and mutually clarify each other's standpoints • Critically and with respect looks at the arguments of others • Productively discusses the theme in the group 	<ul style="list-style-type: none"> • Participants work and communicate together to formulate the principles of the problem • They let to "emerge" the vision of change in dialogue • Also the potential plans and solutions are result of negotiation & mutual exchange of information, experiences, views... 	<ul style="list-style-type: none"> • Learners are expected to clarify their own and others worldviews through dialogue, and recognize that alternative frameworks exist • They negotiate with each other to agree upon possible strategies of SD transformation
<p><i>Learning to be</i></p> <p><i>The initiative offers an opportunity for the educator to be someone who....</i></p>	<ul style="list-style-type: none"> • Clarifies his/her personal values in the context of complex issue discussed in a group of diverse participants • Adheres to his/her values even if they are critically discussed 	<ul style="list-style-type: none"> • Participants find theoretical & practical expression to his/her values in the context of discussed issue • They are able to work with values critically and find positive solution 	<ul style="list-style-type: none"> • Participants are willing to challenge assumptions underlying unsustainable practice • They become facilitators and participants in the learning process; critically reflective practitioners • They inspire creativity and innovation; engage with learners in ways that build positive relationships • They decide on his/her involvement in the process of transformation after the activity is finished

Czech Republic – Example 4

This was an example where the **pilot testing** of the data collection method was realized.

EXAMPLE 4

Title of the professional development initiative	Pyramid workshop (Pyramid2030 initiative)
Who is the facilitator or leading institution?	Dana Kapitulčinová – CZ national contact (AtKisson Group; Charles University Environment Center)
Who participates?	Educators interested in ESD (but anyone can)
How many people can participate?	4-30
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input checked="" type="checkbox"/> Others (<i>please specify</i>): One-day workshop
When does the initiative take place? (<i>Please only list initiatives since 2005.</i>)	22. 1. 2014
How long does it take?	Half a day to one day
What is the purpose and objective?	Purpose: Use systems thinking to investigate and learn more deeply about an SD issue (local or global level), interdisciplinary teamwork Objective: Come up with a consensus on further action
What is the ambition (idea behind the initiative)?	Promote SD thinking and action on a practical, local level
What is the professional development initiative about (focus, thematic entry point)?	Using systems thinking and change management basis to generate awareness and ideas on SD – interactive activity
What is the pedagogical approach?	Problem based learning Learning by discussing and doing Team work Future visioning & strategic planning
What has attracted the participants to take part in the initiative?	Credibility of organizers (UN information centre) Theme and learning concept (innovative approach) - ESD topic, interactive and practical focus Comms and promotion through the ESD network
What is valuable and interesting about this initiative? Why is it worth	Part of international network that works with the same methodology Clear focus on envisioning future Discussion approach, suitable for diverse participants, fun

doing it?	Very friendly relationships of the participants that are built through the activity Active involvement of every participant
How is the initiative being funded?	MOSUR project: workshop costs (CUEC and iCentrum in Prague) Volunteer initiative Pyramid2030 (AtKisson Group, ISIS Academy, Compass Education)
How is the initiative being evaluated? If possible, please share some of the results.	Summary report after end of initiative
Link to website/ references	http://mosur.czp.cuni.cz/index.php/en/events/workshops/160-prague-workshop-the-world-after-2015-education-for-sustainability http://pyramid2030.net/

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>	KEYWORD
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> • Participants communicate about some topic from their viewpoints • They have to understand each other and formulate more or less joint conclusions • The theme of the workshop is at the end perceived holistically 	<ul style="list-style-type: none"> • Participants have to identify what is missing in the area of the workshop's interest – gaps, policy and strategic challenges, practical issues,... • They also have to envision how to improve this current situation 	<ul style="list-style-type: none"> • Participants have to find some strategic and also very practical steps to achieve the envisioned change • They have to say (or write), in particular, what they could do themselves • Finally they have to commit themselves that they will really accomplish some of the discussed steps 	UNDERSTANDING
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> • Gets oriented in a complex situation • Find his/her personal way around (standpoint, action) 	<ul style="list-style-type: none"> • Envisages nearest and long term future • Commits himself/herself for this vision • Plans some concrete action 	<ul style="list-style-type: none"> • Plans some action that he/she is going to realize • Expresses his/her will to realize the action in a proper way 	ACTION
Learning to live together <i>The initiative offers an opportunity for the educator to work with others in ways that....</i>	<ul style="list-style-type: none"> • Communicates with each other • Understands each other and mutually clarify each other's standpoints • Critically and with respect looks at the arguments of others • Productively discusses the theme in the group 	<ul style="list-style-type: none"> • Works and communicates together to formulate vision • Expresses and presents the vision on behalf of the group (not necessarily his/her vision) 	<ul style="list-style-type: none"> • Finds his/her own approach within discussed theme and translate it into the action • Negotiates with each other to agree upon joint (or rather select some of the offered) strategies of transformation • Respects selection of the group 	INTERPERSONAL SKILLS

<p><i>Learning to be</i></p> <p><i>The initiative offers an opportunity for the educator to be someone who....</i></p>	<ul style="list-style-type: none"> • Clarifies his/her personal values in the context of complex issue discussed in a group of diverse participants • Adheres to his/her values even if they are critically discussed 	<ul style="list-style-type: none"> • Finds practical expression to his/her values in the context of discussed issue • Is able to trace the values in the past situations as well as express them in the future context 	<ul style="list-style-type: none"> • Decides on his/her involvement in the process of transformation • Commits himself/herself to the practical steps in this regard 	<p>PERSONAL VALUES & EXPRESSION</p>
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Hungary

Hungary - EXAMPLE 1

Title of the professional development initiative	Greenest Department Competition
Who is the facilitator or leading institution?	University Green Association (UGA)
Who participates?	university departments
How many people can participate?	several hundred of people
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input checked="" type="checkbox"/> Others (<i>please specify</i>): competition
When does the initiative take place? (<i>Please only list initiatives since 2005.</i>)	every year since 2009
How long does it take?	about 10 weeks/ semester
What is the purpose and objective?	Purpose: awareness raising of university educators Objective: a teamwork in order to reach a greener operation of departments
What is the ambition (idea behind the initiative)?	Promote environmental thinking in university level
What is the professional development initiative about (focus, thematic entry point)?	reaching higher resource efficiency and to show a better example for the students
What is the pedagogical approach?	Learning by doing
What has attracted the participants to take part in the initiative?	the practical character and the bottom-up approach
What is valuable and interesting about this initiative? Why is it worth doing it?	tangible results in the field of resource consumption; initiated by students
How is the initiative being funded?	this initiative does not need any financial aid
How is the initiative being	discussions after the end of every part of the project

**evaluated? If possible, please
share some of the results.**

Link to website/ references

Antal M. 2013: The “Greenest Department Competition”: an exemplary student-led project. In: Sustainability Accounting, Management and Policy Journal Vol. 4 No. 3, pp. 366-383.
<http://ezk.bme.hu/egyetem/ZoldTanszek/versenyrol> (in Hungarian)

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> • It creates connection between sustainable futures and the way we work – and indirectly the way we think and live; • it increases the knowledge of employees regarding environmental issues and procedures: knowledge of issues, knowledge of procedures, social incentives; • it reveal the pillars of resource management due to the lifecycle approach; • the main goal of the Greenest Department Competition is to motivate and help departments to make their practices more sustainable 	<ul style="list-style-type: none"> • The project aims to support pro-environmental changes with ideas, information, connections and concrete practical solutions 	<ul style="list-style-type: none"> • changing the environmental attitude and behaviour of regular employees of higher education institutions • improving the ecological performance of individual departments
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> • connect the learner to their local and global spheres of influence: an idea for a specific local action with a global relevance is an expected outcome of the activity 	<ul style="list-style-type: none"> • After the ending of the contest, the participants will have more information about how to do correctly such a separate waste collection; • After the ending of the contest, the participants will have more information and experience about the usage of recycled goods, as papers. • The participants will have an experience that reuse of paper will not an inconvenient procedure, moreover it is easy and fashionable 	<ul style="list-style-type: none"> • pro-environmental behaviours in a university context • facilitate participatory and learner-centred education that develops critical thinking and active citizenship: participants learned from the common knowledge of the group (sharing knowledge), expected outcome is further action on a local level

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to live together <i>The initiative offers an opportunity for the educator to work with others in ways that....</i>	<ul style="list-style-type: none"> creates social incentives to change behaviour due to direct engagement between environmental activists and faculty or staff members, and assesses performance during the audits. actively engage different groups across generations and disciplines 	<ul style="list-style-type: none"> the contest of the departments may have a team-building result 	<ul style="list-style-type: none"> the behaviour and attitude to the common work may change.
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	<ul style="list-style-type: none"> it can support the development of pro-environmental behaviours through various channels 	<ul style="list-style-type: none"> is motivated to make a positive contribution to other people and their social and natural environment, locally and globally: ideas for a positive change are the outcome of the activity 	<ul style="list-style-type: none"> pro-environmental behaviours in an university context inspires creativity and innovation engages with learners in ways that build positive relationships: highly interactive activity engages participants to discuss and build relationships with others

Hungary - EXAMPLE 2

Title of the professional development initiative	National meetings of university educators involved in environmental protection
Who is the facilitator or leading institution?	Society for Dissemination of Scientific Knowledge in Bács-Kiskun County (TIT)
Who participates?	environmental educators and students
How many people can participate?	50
What type of professional development is it?	<input type="checkbox"/> Short course <input checked="" type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input type="checkbox"/> Others (<i>please specify</i>):
When does the initiative take place? (<i>Please only list initiatives since 2005.</i>)	once a year
How long does it take?	2 or 3 days
What is the purpose and objective?	regular meeting of professionals and exchanging their knowledge
What is the ambition (idea behind the initiative)?	to improve the knowledge of the educators and sensitization with cultural events and field programs
What is the professional development initiative about (focus, thematic entry point)?	the focus is changing year to year
What is the pedagogical approach?	to provide diverse impulses
What has attracted the participants to take part in the initiative?	interesting presentation of famous experts and diverse cultural and field programmes
What is valuable and interesting about this initiative? Why is it worth doing it?	it allows to create personal connections and deepen knowledge
How is the initiative being funded?	by the participants
How is the initiative being evaluated? If possible, please share some of the results.	evaluation sheet
Link to website/ references	http://www.titbkkm.hu/kepzesek/kornyezet.html

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> the connection between sustainable futures and the way we work – and indirectly the way we think and live; special environmental issues and procedures; 	<ul style="list-style-type: none"> The project aims to support pro-environmental changes with ideas, information, connections 	<ul style="list-style-type: none"> changing the environmental attitude and behaviour with cultural sensitization and field programs;
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> connect the learner to their local and global spheres of influence; 	<ul style="list-style-type: none"> understand the hidden relations of the complex environmental system 	<ul style="list-style-type: none"> pro-environmental behaviours in an university context facilitate learner-centred education that develops critical thinking: participants learned from the common knowledge of the group (sharing knowledge);
Learning to live together <i>The initiative offers an opportunity for the educator to work with others in ways that....</i>	<ul style="list-style-type: none"> actively engage different groups across generations and disciplines; 	<ul style="list-style-type: none"> have a team-building result 	<ul style="list-style-type: none"> the behaviour, the attitude and the curriculum may change.

	<i>HOLISTIC APPROACH</i> <i>Integrative thinking and practice</i>	<i>ENVISIONING CHANGE</i> <i>Past, present and future</i>	<i>ACHIEVING TRANSFORMATION</i> <i>People, pedagogy and education systems</i>
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	<ul style="list-style-type: none"> • can support the development of pro-environmental behaviours through various channels 	<ul style="list-style-type: none"> • is motivated to make a positive contribution to other people and their social and natural environment, locally and globally: ideas for a positive change are the outcome of the activity 	<ul style="list-style-type: none"> • can support the pro-environmental behaviours in an university context; • inspires creativity and innovation; • engages with learners in ways that build positive relationships: highly interactive activity engages participants to discuss and build relationships with others

Macedonia

Macedonia - EXAMPLE 1	
Title of the professional development initiative	International Summer School: MAKE A DIFFERENCE-BECOME A 'GREEN' EU LEADER
Who is the facilitator or leading institution?	Faculty of Economics, Ss. Cyril and Methodius University in Skopje.
Who participates?	Domestic students at graduate studies (Faculty of Economics, Faculty of Law, and Faculty of Philosophy), and 1 foreign student.
How many people can participate?	21 domestic and 1 foreign students.
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input checked="" type="checkbox"/> Others (<i>please specify</i>): international summer school.
When does the initiative take place? (<i>Please only list initiatives since 2005.</i>)	August 5-15, 2010, Ohrid, R. Of Macedonia.
How long does it take?	10 days.
What is the purpose and objective?	Building leadership skills and competences in the field of providing environmental protection and sustainable development and increasing the awareness of the necessity to act and promote so called 'green' activism.
What is the ambition (idea behind the initiative)?	The ambition was to realize in practice the principle "from global to local". For this reason, it was supposed to interlink students (participants) and the academicians with the business community and the units of local self-government.
What is the professional development initiative about (focus, thematic entry point)?	Bearing in mind that participants were students (not educators), it is more appropriate to give information on topics elaborated and explored at the summer school. In the framework of this summer school the following topics were covered: <ul style="list-style-type: none"> • Understanding New Global Landscape; • Regionalism and Global Politics; • Metropolitan Environments; • Corporate Social Responsibility; • International Responsibility for Conflict Resolution (Simulation game); • Global Civil Society;

	<ul style="list-style-type: none"> • Environmental Policy in EU; <ul style="list-style-type: none"> ○ Environment policy and the Lisbon Treaty (Lisbon Treaty and Sustainable Development Strategies); ○ Copenhagen Summit and the Global Actors.
What is the pedagogical approach?	The activities in the framework of the summer school were realized by lectures, exercises, group
What has attracted the participants to take part in the initiative?	<p>The participants were attracted by the following:</p> <ul style="list-style-type: none"> • Attractiveness of the topics and the possibility to acquire new knowledge, • Invited guest speakers in a sense of their positions in the academic world and business community, and • In some sense, the possibility to interlink the theory with practice.
What is valuable and interesting about this initiative? Why is it worth doing it?	Beside the lectures, exercises and workshops, the participants learned how to practice sustainability in the practice. Namely, there were organized field activities i.e. so-called 'green days'. The point was that participants conducted cleaning activities on some well-known touristic sites in Ohrid region, aiming to raise the public awareness for environmental protection and sustainable development, and promotion of the so-called 'green activism'.
How is the initiative being funded?	Every participant paid some amount for participation (fee) which covered 30% of the total cost. The rest was covered by sponsorships from domestic companies.
How is the initiative being evaluated? If possible, please share some of the results.	The speakers were evaluated by the participants (students). Unfortunately, the results of the evaluation were not available to the public.
Link to website/ references	Some information could be found at: www.eccf.ukim.edu.mk .

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> the interdependent nature of relationships within the present generation and between generations, as well as those between rich and poor and between humans and nature their personal world view and cultural assumptions and seek to understand those of others the connection between sustainable futures and the way we think, live and work their own thinking and action in relation to sustainable development. 	<ul style="list-style-type: none"> the root causes of unsustainable development that sustainable development is an evolving concept the urgent need for change from unsustainable practices towards advancing quality of life, equity, solidarity, and environmental sustainability the importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change 	<ul style="list-style-type: none"> why there is a need to transform the education systems that support learning why it is important to prepare learners to meet new challenges how engagement in real-world issues enhances learning outcomes and helps learners to make a difference in practice
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> create opportunities for sharing ideas and experiences from different disciplines/places/cultures/generations without prejudice and preconceptions work with different perspectives on dilemmas, issues, tensions and conflicts connect the learner to their local and global spheres of influence 	<ul style="list-style-type: none"> critically assess processes of change in society and envision sustainable futures communicate a sense of urgency for change and inspire hope use the natural, social and built environment, including their own institution, as a context and source of learning 	<ul style="list-style-type: none"> assess learning outcomes in terms of changes and achievements in relation to sustainable development
Learning to live together <i>The initiative offers an opportunity for the educator to work with others in ways that....</i>	<ul style="list-style-type: none"> actively engage different groups across generations, cultures, places and disciplines 	<ul style="list-style-type: none"> facilitate the emergence of new worldviews that address sustainable development 	<ul style="list-style-type: none"> challenge unsustainable practices across educational systems, including at the institutional level

	<i>HOLISTIC APPROACH</i> <i>Integrative thinking and practice</i>	<i>ENVISIONING CHANGE</i> <i>Past, present and future</i>	<i>ACHIEVING TRANSFORMATION</i> <i>People, pedagogy and education systems</i>
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	<ul style="list-style-type: none"> • is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and worldviews 	<ul style="list-style-type: none"> • is motivated to make a positive contribution to other people and their social and natural environment, locally and globally • is willing to take considered action even in situations of uncertainty 	<ul style="list-style-type: none"> • is willing to challenge assumptions underlying unsustainable practice • is a critically reflective practitioner.

Poland

Poland – EXAMPLE 1

Title of the professional development initiative	Series of open lectures: <i>Selected topics in environmental protection – sustainable development in theory and in practice</i>
Who is the facilitator or leading institution?	University Centre for Environmental Studies and Sustainable Development (UCBS).
Who participates?	students, university educators and various receivers outside academia.
How many people can participate?	About 100 persons
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input checked="" type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input type="checkbox"/> Others (<i>please specify</i>):
When does the initiative take place? (<i>Please only list initiatives since 2005.</i>)	Every year in the summer semester
How long does it take?	13 th seminars – one in every week of the semester.
What is the purpose and objective?	Every year different aspects of sustainable development (like biodiversity, climate protection, sustainable cities etc.) are promoted. The addressers are provided with knowledge and examples of good practices since the lectures invited to run the seminars are academic scientists as well as top level practitioners, representatives of business, governmental agencies and NGOs.
What is the ambition (idea behind the initiative)?	To advance and to disseminate knowledge about solutions promoting social and economic development in harmony with environment.
What is the professional development initiative about (focus, thematic entry point)?	The seminars have been running since 1997. The core subject is sustainable development. Every year different aspects like: biodiversity, climate change, “green cities”, education for sustainable development etc. are explored.
What is the pedagogical approach?	It is good example how the sustainable development can be incorporated in different subjects of teaching in higher education.
What has attracted the participants to take part in the initiative?	The current knowledge and practical solutions presented by specialists.
What is valuable and interesting about this	The contact with knowledge and practices presented by: university scientists from different departments and specialist from outside the

initiative? Why is it worth doing it?

university.

This is a unique opportunity to gather broad spectrum of specialists with whom the participants can discuss and learn different points of view.

How is the initiative being funded?

Partly by own sources of UCBS and partly from National Fund of Environmental Protection and Water Management.

How is the initiative being evaluated? If possible, please share some of the results.

By number of participants (audience) – particularly non students audience.

Link to website/ references

www.ucbs.uw.edu.pl

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> • Different aspects of sustainable development from theoretical and practical perspective. • How natural, social and economic system function and how they maybe interrelated. 	<ul style="list-style-type: none"> • How the past and present knowledge could influence the future towards SD. 	<ul style="list-style-type: none"> • The academic teachers are able crossover the barriers in the teaching of their discipline and incorporate holistic sustainable development approach.
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> • How to implement rules of sustainable development in professional and everyday life. 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Enrich their education methods by learning from the best examples and incorporate them in own lectures, seminars and workshops with students.
Learning to live together <i>The initiative offers an opportunity for the educator to work with others in ways that....</i>	<ul style="list-style-type: none"> • The unique specifics of that cycle of the seminars: board of lectures and broad spectrum of audience (academic lectures, students and persons of different professions outside the university) provide the sense of acting together and engaged for sustainable future. 	<ul style="list-style-type: none"> • learning and discussing current trends in policy and practices encourage participants to plane the change together. 	<ul style="list-style-type: none"> • Require students' feedback and discussion. Learning about sustainable development is no one direction process (from lecturer to students).

	<i>HOLISTIC APPROACH</i> <i>Integrative thinking and practice</i>	<i>ENVISIONING CHANGE</i> <i>Past, present and future</i>	<i>ACHIEVING TRANSFORMATION</i> <i>People, pedagogy and education systems</i>
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	•	•	•

Poland – EXAMPLE 2	
Title of the professional development initiative	Obligatory Lectures in “Environmental Law” and “International Environmental Protection Policy”, conducted by the Polish Universities for Law, Political Science and International Relations Students
Who is the facilitator or leading institution?	Jagiellonian University, University of Wrocław, Adam Mickiewicz University Poznań, University of Warsaw, Maria Curie-Skłodowska University, University of Łódź, Nicolaus Copernicus University in Toruń, University of Silesia, Gdańsk University, University of Szczecin, University of Opole, University of Białystok, University of Warmia and Mazury in Olsztyn, Cardinal Stefan Wyszyński University, Rzeszów University, University of Zielona Góra, Kazimierz Wielki University, Jan Kochanowski University in Kielce
Who participates?	The Students of Law, Political Science and International Relations
How many people can participate?	110000
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input checked="" type="checkbox"/> Others (<i>please specify</i>): Regular Lecture
When does the initiative take place? (<i>Please only list initiatives since 2005.</i>)	Every academic year
How long does it take?	One semester 30 hours
What is the purpose and objective?	The purpose of the lectures is to familiarise students with the law regulation on the environmental protection in the context of international, European Union and country law systems
What is the ambition (idea behind the initiative)?	The idea behind the initiative focuses on environmental law <i>problematic which is the matter of great importance in the context of the Sustainable Development</i>
What is the professional development initiative about (focus, thematic entry point)?	Environmental Law and International Environmental Protection Policy with a special emphasis on the Sustainable Development
What is the pedagogical approach?	Lecture
What has attracted the participants to take part in the initiative?	The practical aspect of the lectures, concerned with the implementation of the Sustainable Development has attracted the participants.
What is valuable and	The initiative is worth doing because of the reason mentioned above

interesting about this initiative? Why is it worth doing it?	
How is initiative being funded?	The initiative is being funded by the Universities
How is the initiative being evaluated? If possible, please share some of the results.	The initiative is being evaluated by the student's questionnaires
Link to website/ references	Example http://prawo.uni.wroc.pl/pliki/11992

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> the basics of systems thinking ways in which natural, social and economic systems function and how they may be interrelated the interdependent nature of relationships within the present generation and between generations, as well as those between rich and poor and between humans and nature their own thinking and action in relation to sustainable development the connection between sustainable futures and the way we think, live and work 	<ul style="list-style-type: none"> the root causes of unsustainable development that sustainable development is an evolving concept the urgent need for change from unsustainable practices towards advancing quality of life, equity, solidarity, and environmental sustainability the importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change the importance of preparedness for the unforeseen and a precautionary approach the importance of scientific evidence in supporting sustainable development 	<ul style="list-style-type: none"> why it is important to prepare learners to meet new challenges how engagement in real-world issues enhances learning outcomes and helps learners to make a difference in practice
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> work with different perspectives on dilemmas, issues, tensions and conflicts connect the learner to their local and global spheres of influence 	<ul style="list-style-type: none"> critically assess processes of change in society and envision sustainable futures facilitate the evaluation of potential consequences of different decisions and actions use the natural, social and built environment, including their own institution, as a context and source of learning 	<ul style="list-style-type: none"> assess learning outcomes in terms of changes and achievements in relation to sustainable development
Learning to live together <i>The initiative</i>	<ul style="list-style-type: none"> actively engage different groups across generations, cultures, places and disciplines 	<ul style="list-style-type: none"> facilitate the emergence of new worldviews that address sustainable development encourage negotiation of alternative futures 	<ul style="list-style-type: none"> challenge unsustainable practices across educational systems, including at the institutional level help learners clarify their own and others worldviews through

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
<i>offers an opportunity for the educator to work with others in ways that....</i>			dialogue, and recognize that alternative frameworks exist
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • is motivated to make a positive contribution to other people and their social and natural environment, locally and globally • 	<ul style="list-style-type: none"> • is willing to challenge assumptions underlying unsustainable practice •

Poland – EXAMPLE 3	
Title of the professional development initiative	The <i>European Master's Programme in Human Rights and Democratisation</i>
Who is the facilitator or leading institution?	The Faculty of Law and Administration of Adam Mickiewicz University Law Review as a partner
Who participates?	Students
How many people can participate?	100
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input checked="" type="checkbox"/> Others (<i>please specify</i>): Master Degree Programme
When does the initiative take place? (Please only list initiatives since 2005.)	Every year
How long does it take?	One academic year
What is the purpose and objective?	The aim of the programme is to prepare professionals to respond to the operational requirements of daily work in international organisations, field operations, governmental and non-governmental bodies, and academia
What is the ambition (idea behind the initiative)?	The idea behind the initiative focuses on the <i>Human Rights and Democratisation problematic which is the matter of great importance in the context of the Sustainable Development</i>
What is the professional development initiative about (focus, thematic entry point)?	Human Rights Institutions, Mechanisms and Standards; Human Rights in Context: Historical, Philosophical, Religious and Anthropological Perspectives; Democratisation; Human Rights and Globalisation; Human Rights and Security
What is the pedagogical approach?	Lecture, seminar, work on the Master Degree thesis
What has attracted the participants to take part in the initiative?	Interdisciplinary nature; range of high level academics, experts, officials from a variety of institutions and organizations; combination of theory and practice; a study trip to familiarise with human rights field work; European mobility; possibility to do internships and fellowships in leading human rights organisations with EU institutions and links with international governmental, inter-governmental and non-governmental organizations; attractive placement opportunities; extensive worldwide
What is valuable and interesting about this	The initiative is worth doing because of the reasons mentioned above.

initiative? Why is it worth doing it?	
How is the initiative being funded?	<i>The initiative is being funded by The European Inter-University Centre for Human Rights and Democratisation and partner Universities</i>
How is the initiative being evaluated? If possible, please share some of the results.	The initiative is being evaluated by the interest of its participants
Link to website/ references	http://www.eiuc.org/education/ema.html

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> the basics of systems thinking their personal world view and cultural assumptions and seek to understand those of others 	<ul style="list-style-type: none"> the urgent need for change from unsustainable practices towards advancing quality of life, equity, solidarity, and environmental sustainability 	<ul style="list-style-type: none"> how engagement in real-world issues enhances learning outcomes and helps learners to make a difference in practice
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> create opportunities for sharing ideas and experiences from different disciplines/places/cultures/generations without prejudice and preconceptions work with different perspectives on dilemmas, issues, tensions and conflicts connect the learner to their local and global spheres of influence 	<ul style="list-style-type: none"> critically assess processes of change in society and envision sustainable futures 	<ul style="list-style-type: none"> facilitate participatory and learner-centred education that develops critical thinking and active citizenship
Learning to live together <i>The initiative offers an opportunity for the educator to work with others in ways that....</i>	<ul style="list-style-type: none"> actively engage different groups across generations, cultures, places and disciplines 	<ul style="list-style-type: none"> facilitate the emergence of new worldviews that address sustainable development encourage negotiation of alternative futures 	<ul style="list-style-type: none"> challenge unsustainable practices across educational systems, including at the institutional level

	<i>HOLISTIC APPROACH</i> <i>Integrative thinking and practice</i>	<i>ENVISIONING CHANGE</i> <i>Past, present and future</i>	<i>ACHIEVING TRANSFORMATION</i> <i>People, pedagogy and education systems</i>
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	<ul style="list-style-type: none"> • is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and worldviews 	<ul style="list-style-type: none"> • is motivated to make a positive contribution to other people and their social and natural environment, locally and globally • 	<ul style="list-style-type: none"> • is a critically reflective practitioner • engages with learners in ways that build positive relationships

Romania

Romania - EXAMPLE 1

Title of the professional development initiative

EUROPEAN SEMINAR IN SUSTAINABLE DEVELOPMENT (ESSD) (2010-2013)

Who is the facilitator or leading institution?

University of Bucharest through an Erasmus Intensive Programme (EIP) grant (ref. no. 12-EIP-RO BUCURES09).

Who participates?

10 partner universities:
University of Bucharest (Romania)
Open Universiteit Nederland
Universidade Aberta (Portugal)
Universitat Graz (Austria)
University of Aegean (Greece)
Fern Universitat in Hagen (Germany)
Minho University (Portugal)
Universiteit Antwerpen (Belgium)
Oldenburg University (Germany)
Polytechnic University of Bucharest (Romania)

How many people can participate?

42 teaching staff members, 42 students, 15 specialists

What type of professional development is it?

- ☐ Short course
- ☐ Teaching support initiative
- ☒ Seminar
- ☐ Staff induction
- ☐ In-house certification for new teaching staff
- ☐ Mentoring/ coaching program
- ☐ Academic working group for university educators
- ☐ Work shadowing
- ☐ Others (*please specify*): Summer school

When does the initiative take place? (*Please only list initiatives since 2005.*)

The program started in 2010 and lasted until 2013.

How long does it take?

The duration of a course was 11 days, 88 hours of workload.

What is the purpose and objective?

The seminar had three major objectives:

1. To organise a three years blended learning intensive program in Conservation and Sustainable Development for staff and students from 10 partner universities.
2. To support the development of international master in Applied Geo-Biology for Conservation of Natural and Cultural Heritage.
3. To develop teaching materials and services for students, postgraduates and teachers in Sustainable Development.

What is the ambition (idea behind the initiative)?

The project created the framework to enable students and teachers to work together in multinational groups, to benefit from special

	learning and teaching conditions from Sinaia Educational Resort and to gain new perspectives on the topic of sustainable development and geoconservation.
What is the professional development initiative about (focus, thematic entry point)?	The program was about environmental protection.
What is the pedagogical approach?	<ul style="list-style-type: none"> - Blended learning (E-learning and face-to-face learning; theoretical and practical activities in ESSD) - Interdisciplinary approach: Bucegi Natural Park and its role in social and economic local development; Geoconservation in Bucegi; Education and nature conservation; Waste management; Public perception of the park; Public awareness; Management of natural and cultural resources; Tourism promotion.
What has attracted the participants to take part in the initiative?	It was new and dynamic, catchy and inspiring. Blended learning and outdoor activities were the perfect combination to approach this type of content and the perspective of geoconservation represented the best inception for a sustainable development program; because the first thing a neophyte would say about SD is that environment protection and conservation form the definition of SD.
What is valuable and interesting about this initiative? Why is it worth doing it?	It supports education for sustainable development and it is a result of experience and activities of partner universities within the European Virtual Seminar. It brings together teachers, students and SD specialists. It employs numerous teaching methods and creative assignments in real context. It rewards the participants with a certificate of 4 ECTS points offered jointly by University of Bucharest and Open Universiteit of Netherlands.
How is the initiative being funded?	Through a Erasmus Intensive Programme grant.
How is the initiative being evaluated? If possible, please share some of the results.	<ol style="list-style-type: none"> I. The assessment procedure of the Erasmus Intensive Programme was based on the assessment of EVS (European Virtual Seminar): <ul style="list-style-type: none"> - Group marking and individual marking; - Quality of the report from each case study in Bucegi (assessment done by the case study expert) - Quality of learning process made by the tutor; - Quality of presentations; - Quality of personal contribution; II. Evaluation questionnaires for students (e-mail). III. One MsC Applied Geobiology in Conservation of Natural and Cultural and Heritage was developed. IV. It started mobility exchange. V. Diploma certificate (4 ECTS) for participants.
Link to website/ references	http://evssd.eu/elgg/

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The educator understands....</i>	<ul style="list-style-type: none"> ways in which natural, social and economic systems function and how they may be interrelated the interdependent nature of relationships within the present generation and between generations, as well as those between rich and poor and between humans and nature their personal world view and cultural assumptions and seek to understand those of others the connection between sustainable futures and the way we think, live and work their own thinking and action in relation to sustainable development 	<ul style="list-style-type: none"> the root causes of unsustainable development the urgent need for change from unsustainable practices towards advancing quality of life, equity, solidarity, and environmental sustainability the importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change the importance of preparedness for the unforeseen and a precautionary approach the importance of scientific evidence in supporting sustainable development 	<ul style="list-style-type: none"> why there is a need to transform the education systems that support learning why there is a need to transform the way we educate/learn why it is important to prepare learners to meet new challenges the importance of building on the experience of learners as a basis for transformation how engagement in real-world issues enhances learning outcomes and helps learners to make a difference in practice
Learning to do <i>The educator is able to....</i>	<ul style="list-style-type: none"> create opportunities for sharing ideas and experiences from different disciplines/places/cultures/generations without prejudice and preconceptions work with different perspectives on dilemmas, issues, tensions and conflicts connect the learner to their local and global spheres of influence 	<ul style="list-style-type: none"> critically assess processes of change in society and envision sustainable futures communicate a sense of urgency for change and inspire hope facilitate the evaluation of potential consequences of different decisions and actions use the natural, social and built environment, including their own institution, as a context and source of learning 	<ul style="list-style-type: none"> facilitate participatory and learner-centred education that develops critical thinking and active citizenship assess learning outcomes in terms of changes and achievements in relation to sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to live together <i>The educator works with others in ways that....</i>	<ul style="list-style-type: none"> actively engage different groups across generations, cultures, places and disciplines 	<ul style="list-style-type: none"> facilitate the emergence of new worldviews that address sustainable development encourage negotiation of alternative futures 	<ul style="list-style-type: none"> help learners clarify their own and others worldviews through dialogue, and recognize that alternative frameworks exist
Learning to be <i>The educator is someone who....</i>	<ul style="list-style-type: none"> is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and worldviews 	<ul style="list-style-type: none"> is motivated to make a positive contribution to other people and their social and natural environment, locally and globally is willing to take considered action even in situations of uncertainty 	<ul style="list-style-type: none"> is willing to challenge assumptions underlying unsustainable practice is a facilitator and participant in the learning process is a critically reflective practitioner inspires creativity and innovation engages with learners in ways that build positive relationships

Romania - EXAMPLE 2

Title of the professional development initiative	ENVIRONMENTAL TRAINING PROJECT (1992-2000). USAID
Who is the facilitator or leading institution?	Technical University in Cluj-Napoca (UTC-N), through an USAID, coordinated by University of Minnesota (UoMN), Program Director Prof. Dr. Zbigniew Bochniarz.
Who participates?	42 participants, Romanian university professors already teaching ecology
How many people can participate?	All participants from the project, 42. - two Romanian PhD candidates taught at UoMN on environmental economics and natural resources management, who, back in the country put basis of environmental management in their faculty chairs (IPB and USV)
What type of professional development is it?	<input checked="" type="checkbox"/> Short course <input checked="" type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input type="checkbox"/> Others (<i>please specify</i>): Summer school
When does the initiative take place? (Please only list initiatives since 2005.)	The program started in 1992 and lasted until 2000.
How long does it take?	The duration of a course was 7 days.
What is the purpose and objective?	The course had three aims: <ul style="list-style-type: none"> - to teach about Environmental University Curricula Development, by Dr. Bochniarz and Dr. Sandra Archibald (UoMN) - to make the first (and only by this time) catalogue of Romanian Universities with environmental subjects in their curricula (and respective professors) - to initiate a Post-Diploma Studies course on Eco-Management, jointly organized by TUC-N and UoMN. It begun with a course on Teaching Adults, by Dr. Victoria Mickelonis (UoMN) addressed to a class of 25 university professors from UTC-N (Technical University Cluj-Napoca).
What is the ambition (idea behind the initiative)?	The project created a positive attitude towards SD and environmental management and protection. It sustained for many years university staff from Cluj to learn and develop skills and competencies in ESD.
What is the professional development initiative about	The program was about university curricula development in SD, teaching adults, environmental protection, writing projects

(focus, thematic entry point)?	techniques, eco-management.
What is the pedagogical approach?	Interdisciplinary approach with a lot of practice.
What has attracted the participants to take part in the initiative?	The novelty and the post-diploma certificate from University of Minnesota.
What is valuable and interesting about this initiative? Why is it worth doing it?	It's worth doing it for the complex skills development for the teaching staff in the universities, related not only to sustainability issues, but to educational issues also, curricula development and adults education, for example.
How is the initiative being funded?	Through a USAID grant.
How is the initiative being evaluated? If possible, please share some of the results.	We cannot find a proper evaluation procedure for this program.
Link to website/ references	-

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The educator understands....</i>	<ul style="list-style-type: none"> the interdependent nature of relationships within the present generation and between generations, as well as those between rich and poor and between humans and nature their personal world view and cultural assumptions and seek to understand those of others the connection between sustainable futures and the way we think, live and work their own thinking and action in relation to sustainable development 	<ul style="list-style-type: none"> the urgent need for change from unsustainable practices towards advancing quality of life, equity, solidarity, and environmental sustainability the importance of preparedness for the unforeseen and a precautionary approach 	<ul style="list-style-type: none"> why there is a need to transform the education systems that support learning why there is a need to transform the way we educate/learn why it is important to prepare learners to meet new challenges the importance of building on the experience of learners as a basis for transformation how engagement in real-world issues enhances learning outcomes and helps learners to make a difference in practice
Learning to do <i>The educator is able to....</i>	<ul style="list-style-type: none"> create opportunities for sharing ideas and experiences from different disciplines/places/cultures/generations without prejudice and preconceptions work with different perspectives on dilemmas, issues, tensions and conflicts connect the learner to their local and global spheres of influence 	<ul style="list-style-type: none"> critically assess processes of change in society and envision sustainable futures communicate a sense of urgency for change and inspire hope facilitate the evaluation of potential consequences of different decisions and actions use the natural, social and built environment, including their own institution, as a context and source of learning 	<ul style="list-style-type: none"> facilitate participatory and learner-centred education that develops critical thinking and active citizenship assess learning outcomes in terms of changes and achievements in relation to sustainable development

	<i>HOLISTIC APPROACH</i> <i>Integrative thinking and practice</i>	<i>ENVISIONING CHANGE</i> <i>Past, present and future</i>	<i>ACHIEVING TRANSFORMATION</i> <i>People, pedagogy and education systems</i>
Learning to live together <i>The educator works with others in ways that....</i>	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • facilitate the emergence of new worldviews that address sustainable development • encourage negotiation of alternative futures 	<ul style="list-style-type: none"> • help learners clarify their own and others worldviews through dialogue, and recognize that alternative frameworks exist
Learning to be <i>The educator is someone who....</i>	<ul style="list-style-type: none"> • is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and worldviews 	<ul style="list-style-type: none"> • is motivated to make a positive contribution to other people and their social and natural environment, locally and globally • is willing to take considered action even in situations of uncertainty 	<ul style="list-style-type: none"> • is willing to challenge assumptions underlying unsustainable practice • is a facilitator and participant in the learning process • is a critically reflective practitioner • inspires creativity and innovation • engages with learners in ways that build positive relationships

Serbia

Serbia - EXAMPLE 1

Title of the professional development initiative	Project: "Sustainable development in Serbia: comparison of British and Serbian model and the influence on higher education for environment" Event: "University and sustainable development" (October 2010)
Who is the facilitator or leading institution?	Centre for eco-politics and sustainable development, Faculty of Political Sciences, University of Belgrade
Who participates?	University teachers and students (open event)
How many people can participate?	N/A
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input checked="" type="checkbox"/> Others (<i>please specify</i>): One-day workshop
When does the initiative take place? (<i>Please only list initiatives since 2005.</i>)	21.04.2011.
How long does it take?	One day event
What is the purpose and objective?	Main purpose was to discuss the problems of higher education for sustainable development and to contribute wider implementation of SD ideas at Serbian Universities through the comparison of ESD state-of-the-art in Serbian HE area with the experiences in some developed countries, primarily UK.
What is the ambition (idea behind the initiative)?	The event was built around two main ideas: (1) to open the discussion about HESD, given the fact that academic community remained very "quiet" concerning SD after passing NSDS in 2008; and (2) to position Belgrade University, and, more specifically Faculty of Political Science as a leader in HESD in Serbia.
What is the professional development initiative about (focus, thematic entry point)?	HESD concepts, especially when it comes to professional development in higher education institutions, were underdeveloped and not in the focus of academic community. However, Serbia was in the preparation phase of the development of National education strategy. Consequently, this workshop was more focused on situation analysis as concern of SD concepts and the position of HESD in curricula, and less on specific initiatives on professional development.

What is the pedagogical approach?

Conference-type approach, followed with Q&A

What has attracted the participants to take part in the initiative?

It was the first ever grass-rooted discussion on HESD in Serbia initiated by academic community and not imposed from the government.

What is valuable and interesting about this initiative? Why is it worth doing it?

Except for the fact that this initiative has followed clear bottom-up approach, the main achievement was the publication “University and Sustainable Development” that has been published for the event. The publication in Serbian can be found at <http://www.fpn.bg.ac.rs/wp-content/uploads/Univerzitet-i-odrzivi-razvoj.pdf>.

How is the initiative being funded?

Project: “Sustainable development in Serbia: comparison of British and Serbian model and the influence on higher education for environment”

How is the initiative being evaluated? If possible, please share some of the results.

Unfortunately, no formal evaluation was done.

Link to website/ references

<http://www.fpn.bg.ac.rs/wp-content/uploads/Univerzitet-i-odrzivi-razvoj.pdf>

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> the basics of systems thinking: exploring an SD issue and its causes and effects ways in which natural, social and economic systems function and how they may be interrelated their personal world view and cultural assumptions and seek to understand those of others the connection between sustainable futures and the way we think, live and work their own thinking and action in relation to sustainable development 	<ul style="list-style-type: none"> the root causes of unsustainable development the importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change 	<ul style="list-style-type: none">
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> create opportunities for sharing ideas and experiences from different disciplines/places/cultures/generations without prejudice and preconceptions work with different perspectives on dilemmas, issues, tensions and conflicts connect the learner to their local and global spheres of influence 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> facilitate participatory and learner-centred education that develops critical thinking and active citizenship: participants learned from the common knowledge of the group (sharing knowledge), expected outcome is further action on a local level
Learning to live together <i>The initiative offers an opportunity for</i>	<ul style="list-style-type: none"> actively engage different groups across generations, cultures, places and disciplines: diversity of participants is particularly encouraged, activity is suitable for any age/culture/discipline 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
<i>the educator to work with others in ways that....</i>			
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	<ul style="list-style-type: none"> • is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and worldviews: as above 	<ul style="list-style-type: none"> • is motivated to make a positive contribution to other people and their social and natural environment, locally and globally: ideas for a positive change are the outcome of the activity • 	<ul style="list-style-type: none"> • is a facilitator and participant in the learning process: learning is based on sharing knowledge and experience of participants • inspires creativity and innovation • engages with learners in ways that build positive relationships: highly interactive activity engages participants to discuss and build relationships with others

Slovakia

Slovakia – EXAMPLE 1	
Title of the professional development initiative	PSDEEWB Post Secondary Diploma in Energy Efficiency for the Western Balkans
Who is the facilitator or leading institution?	POLIS University Tirana
Who participates?	SPECTRA Centre of Excellence EU at the STU in Bratislava , University Podgorica, University Pristina,
How many people can participate?	Approximately 70
What type of professional development is it?	<input type="checkbox"/> Short course <input checked="" type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input checked="" type="checkbox"/> Mentoring/ coaching program <input checked="" type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input checked="" type="checkbox"/> Others (<i>please specify</i>): development of curricula, teaching capacities, teaching methods, materials, teaching books,
When does the initiative take place? (Please only list initiatives since 2005.)	2013-2016
How long does it take?	3 years
What is the purpose and objective?	Development of curricula and capacities of HES educators in efficient energy use in sustainable settlement development in Western Balkan countries, education of the educators, development of innovative teaching methods, literature, laboratories
What is the ambition (idea behind the initiative)?	To develop new capacities of the universities including the university educators in the field of sustainable development focused on sustainable efficient energy used in settlement development
What is the professional development initiative about (focus, thematic entry point)?	The development initiative is built on the innovation transfer and joint development of the capacities of the universities to educate professionals with post-secondary and university education in sustainable development focused on efficient sustainable concepts of energy use in spatial development – urban design and construction of buildings
What is the pedagogical approach?	The development of university educators capacities is based on: <ul style="list-style-type: none"> • Joint development of curricula • Learning by doing • Critical reviews and tutoring in teaching activities • Model teaching activities realised by experienced professors form

	<p>partners' institutions</p> <ul style="list-style-type: none"> • Joint development of teaching materials • Joint development of the concepts for the laboratories
What has attracted the participants to take part in the initiative?	<p>Enthusiasm and challenge in implementing new curricula attractive for students and relevant for the market</p> <p>Perspective of professional self-realisation of the participating university teachers in new study programs</p> <p>Solidarity and engagement in helping EU candidate states to develop own capacities</p>
What is valuable and interesting about this initiative? Why is it worth doing it?	<p>High efficiency and very concrete implementation outputs form the initiative – introduction of 7 new study programs with the focus on SD, the development of the capacities of more than 100 university educators directly involved</p>
How is the initiative being funded?	<p>EU TEMPUS Program</p>
How is the initiative being evaluated? If possible, please share some of the results.	<p>The initiative as a project in the frame of the TEMPUS Program has a well-developed quality assurance system including the assessment of each activity and evaluation of each output</p>
Link to website/ references	<p>http://www.co-plan.org/index.php?option=com_content&view=article&id=293%3Alancimi-i-projektit-tempus-dapeewb&catid=6%3Ate-kryera&Itemid=36&lang=en</p>

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	1. ways in which natural, social and economic systems function and how they may be interrelated 2. their own thinking and action in relation to sustainable development	3. the urgent need for change from unsustainable practices towards advancing quality of life, equity, solidarity, and environmental sustainability 4. the importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change 5.	1. why there is a need to transform the education systems that support learning 2. how engagement in real-world issues enhances learning outcomes and helps learners to make a difference in practice
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	3. create opportunities for sharing ideas and experiences from different disciplines/places/cultures/generations without prejudice and preconceptions 4. work with different perspectives on dilemmas, issues, tensions and conflicts 5. connect the learner to their local and global spheres of influence	6. critically assess processes of change in society and envision sustainable futures 7. facilitate the evaluation of potential consequences of different decisions and actions 8.	9. assess learning outcomes in terms of changes and achievements in relation to sustainable development
Learning to live together <i>The initiative offers an opportunity for the educator to work with others in ways that....</i>	10. actively engage different groups across generations, cultures, places and disciplines	11. facilitate the emergence of new worldviews that address sustainable development 12. encourage negotiation of alternative futures	13. challenge unsustainable practices across educational systems, including at the institutional level 14. help learners clarify their own and others worldviews through dialogue, and recognize that alternative frameworks exist
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	15. is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and worldviews	16. is motivated to make a positive contribution to other people and their social and natural environment, locally and globally 17. is willing to take considered action even in situations of uncertainty	18. is willing to challenge assumptions underlying unsustainable practice 19. is a facilitator and participant in the learning process 20. is a critically reflective practitioner 21. inspires creativity and innovation 22. engages with learners in ways that build positive relationships

EXAMPLE 2	
Title of the professional development initiative	Workshop to Action Plan implementation (Action Plan for education and teaching for sustainable development across all levels of education and life-long education , part: HESs)
Who is the facilitator or leading institution?	Main organiser was the Ministry of Education, Science, Research and Sport of the SR and Comenius University in Bratislava, Faculty of Natural Sciences
Who participates?	Representatives of HESs, Institutes of Slovak Academy of Science, selected students' organisations actively involved into the education for sustainability at HES.
How many people can participate?	Not limited participation, 36 participants attended
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input checked="" type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input type="checkbox"/> Others (<i>please specify</i>):
When does the initiative take place? (<i>Please only list initiatives since 2005.</i>)	On November 11th, 2007
How long does it take?	One day seminar
What is the purpose and objective?	<p>The goals of the seminar were as follows:</p> <p>The goal was, presentation of the initiatives and projects realised by individual HES supporting the development of sustainable faculties/universities and proposal to establish a network of the representatives of particular HES responsible for the education and teaching for SD.</p> <ul style="list-style-type: none"> - To introduce main goals of the Action Plan for education and teaching for sustainable development across all levels of education and life-long education, art: HESs (MŠ SR, MŽP SR, 2006) with the stress on the tasks for HESs, - to assess current state of art in the education and teaching for sustainable development at the HESs in Slovakia – to report on preliminary results from questionnaire survey focused on education and teaching for sustainable development at the HESs and presentation of the initiatives and projects realised by individual HES supporting the development of sustainable faculties/universities - to develop proposal for amendment of the Action Plan's tasks for

	<p>HESs for the years 2008+</p> <ul style="list-style-type: none"> - proposal to establish a network of the representatives of particular HES responsible for the education and teaching for SD
What is the ambition (idea behind the initiative)?	The ambition of this seminar was to strengthen the cooperation, information and experience exchange among university educators towards fulfilment of the goals in education and teaching for SD at the HESs and to create a network of the representatives of particular HES responsible for the education and teaching for SD
What is the professional development initiative about (focus, thematic entry point)?	The professional development initiative is about the development of skills and abilities with the goal to improve and complete professional competences needed in the development of sustainable faculties/universities
What is the pedagogical approach?	Applied methods: brainstorming, discussion, dialogue
What has attracted the participants to take part in the initiative?	Possibility to obtain new information, experience, deepening and improvement of professional and pedagogic abilities
What is valuable and interesting about this initiative? Why is it worth doing it?	<p>Seminar can be considered as an important event, giving clear sign about the interests of the HESs on improvement of the education and teaching for SD and on implementation of the Action Plan for education and teaching for sustainable development across all levels of education and life-long education.</p> <p>Participants became familiar with the goals of the Action Plan with the focus on the tasks for HESs. They got basic information about the current state of art in education and teaching for SD at the HESs, about best practice examples, activities supporting the development of sustainable faculties/HESs. This seminar was a platform for broad discussion and identification of obstacles in the education and teaching for SD at HESs.</p>
How is the initiative being funded?	Financed by national grants
How is the initiative being evaluated? If possible, please share some of the results.	Final evaluation was realised in the form of final discussion in which the participants positively assessed the seminar, creative atmosphere and participative approach.
Link to website/ references	

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> the basics of systems thinking their personal world view and cultural assumptions and seek to understand those of others their own thinking and action in relation to sustainable development 	<ul style="list-style-type: none"> the root causes of unsustainable development that sustainable development is an evolving concept the importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change 	<ul style="list-style-type: none"> why there is a need to transform the education systems that support learning why there is a need to transform the way we educate/learn
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> create opportunities for sharing ideas and experiences from different disciplines/places/cultures/generations without prejudice and preconceptions work with different perspectives on dilemmas, issues, tensions and conflicts 	<ul style="list-style-type: none"> critically assess processes of change in society and envision sustainable futures communicate a sense of urgency for change and inspire hope facilitate the evaluation of potential consequences of different decisions and actions 	<ul style="list-style-type: none"> assess learning outcomes in terms of changes and achievements in relation to sustainable development
Learning to live together <i>The initiative offers an opportunity for the educator to work with others in ways that....</i>	<ul style="list-style-type: none"> actively engage different groups across generations, cultures, places and disciplines 	<ul style="list-style-type: none"> encourage negotiation of alternative futures 	<ul style="list-style-type: none"> challenge unsustainable practices across educational systems, including at the institutional level
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	<ul style="list-style-type: none"> is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and worldviews 	<ul style="list-style-type: none"> is motivated to make a positive contribution to other people and their social and natural environment, locally and globally 	<ul style="list-style-type: none"> is willing to challenge assumptions underlying unsustainable practice is a critically reflective practitioner inspires creativity and innovation

EXAMPLE 3	
Title of the professional development initiative	Seminar: Education and teaching for sustainable development at the HESs in Slovakia
Who is the facilitator or leading institution?	The main organiser was the Comenius University in Bratislava, Faculty of Natural Sciences, the guarantor was the director general of the Section for HE at the Ministry of Education, Science, Research and Sport of the SR.
Who participates?	More than 50 participants representing 6 Slovak universities (Technická univerzita vo Zvolene, Univerzita Mateja Bela v Banskej Bystrici, Univerzita Konštantína Filozofa v Nitre, Univerzita Komenského v Bratislave, Akadémia umení v Banskej Bystrici, Technická univerzita v Košiciach, Slovenská technická univerzita v Bratislave) and 2 Czech universities (Karlova Univerzita v Prahe a Palackého Univerzity v Olomouci), Ministry of Education, Ministry of Living Environment, State Pedagogic Institute, 2 Institutes of the Slovak Academy of Sciences (Institute of Geography and Institute of Forecast and other subjects (e.g. high schools, NGOs).
How many people can participate?	The participation was not limited, more than 50 participants took part
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input checked="" type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input type="checkbox"/> Others (<i>please specify</i>):
When does the initiative take place? (Please only list initiatives since 2005.)	On November 20th, 2008, directly linked to the previous seminar on this topic in 2007.
How long does it take?	One-day seminar, but the preparation, including the discussion with the professionals, organisers, responsible persons from the Ministries took part several months. As the follows-up several meetings at the Ministry of Education focused on further elaboration of chosen topics from the seminar took place.
What is the purpose and objective?	<p>Seminar has got the goals as follows:</p> <ul style="list-style-type: none"> • to assess current state of art in the education and teaching for sustainable development at the HESs in Slovakia, • to prepare the measures for its improvement, • to present the best examples of integrative curricula dealing with sustainable development, • to assess institutional capacities for implementation of the UNO

	Strategy for education for sustainable development, to discuss the goals relevant for the development of sustainable universities/HES in Slovakia
What is the ambition (idea behind the initiative)?	The ambition was to strengthen the cooperation, information and experience exchange among university educators towards fulfilment of the goals in education and teaching for SD at the HESs and to create a network of the representatives of particular HES responsible for the education and teaching for SD in SR. Important output were the conclusions, in which the participants formulated advices regarding the implementation of the Action Plan...
What is the professional development initiative about (focus, thematic entry point)?	<ul style="list-style-type: none"> - development of skills and abilities with the goal to sustain, actualise, improve and complete professional needed for pedagogic performance and in the development of faculties and universities - development of communication skills and abilities to innovate content, methods, approaches in the realisation of the education and teaching for SD - creation of informal network of teachers on subjects including the topic of SD at Slovak HESs - initiation of the research activities on the education for SD across all HESs in SR (survey was realised under the gesture of the Ministry of Education between December 2008 and February 2009 and its results were used by the Ministry in the Interim report on the realisation of the Strategy of education and teaching for SD in Slovakia)
What is the pedagogical approach?	Applied methods: brainstorming, discussion, dialogue
What has attracted the participants to take part in the initiative?	<p>Possibility to obtain new information, skills, to improve professional and pedagogic capacities,</p> <p>Possibility to confront own experience with the outputs of the colleagues from other universities</p> <p>Several participants took part at the first seminar in 2007 and were active in the preparatory phase of the seminar, as well as in the preparation of the advices for the Ministry of Education how to improve current situation</p>
What is valuable and interesting about this initiative? Why is it worth doing it?	<p>Seminar can be considered as an important event, giving clear sign about the interests of the HESs on improvement of the education and teaching for SD and on implementation of the Action Plan for education and teaching for sustainable development across all levels of education and life-long education.</p> <p>Participants became familiar with the goals of the Action Plan with the focus on the tasks for HESs. They got basic information about the current state of art in education and teaching for SD at the HESs, about best practice examples, activities supporting the development of sustainable faculties/HESs. This seminar was a platform for broad discussion and identification of obstacles in the education and teaching for SD at HESs.</p>
How is the initiative being funded?	Organisation of this seminar was supported, incl. publishing the proceedings the Section of higher education of the Ministry of Education....
How is the initiative being evaluated? If possible, please	Final evaluation was realised in the form of final discussion in which the participants positively assessed the seminar, creative atmosphere

share some of the results.	and participative approach
Link to website/ references	Proceeding on CD were published. Each participant obtained CD as well as each from the HESs in SR. In addition the materials form the seminar including into the proceedings content additional relevant sources supporting the spread of know-how achieved in the education and teaching for SD in Slovakia and abroad

Competences for educators in education for sustainable development

Please complete this grid for each good practice you describe. Reflecting the good practice, please fill the blank fields by reflecting competences that are being developed through the initiative (and/or by describing concrete activities that promote the development of competences). The grid is based on the UNECE ESD Competences for Educators (2011); the framework can be found in the annex to this document.

Please note that a facilitator or participant of the professional development initiative might need to support the answering of this grid.

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> ways in which natural, social and economic systems function and how they may be interrelated the connection between sustainable futures and the way we think, live and work their own thinking and action in relation to sustainable development 	<ul style="list-style-type: none"> the urgent need for change from unsustainable practices towards advancing quality of life, equity, solidarity, and environmental sustainability the importance of preparedness for the unforeseen and a precautionary approach the importance of scientific evidence in supporting sustainable development 	<ul style="list-style-type: none"> why there is a need to transform the education systems that support learning why there is a need to transform the way we educate/learn why it is important to prepare learners to meet new challenges
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> create opportunities for sharing ideas and experiences from different disciplines/places/cultures/generations without prejudice and preconceptions 	<ul style="list-style-type: none"> critically assess processes of change in society and envision sustainable futures communicate a sense of urgency for change and inspire hope 	<ul style="list-style-type: none"> assess learning outcomes in terms of changes and achievements in relation to sustainable development
Learning to live together <i>The initiative offers an opportunity for the educator to work with others in ways that....</i>	<ul style="list-style-type: none"> actively engage different groups across disciplines 	<ul style="list-style-type: none"> facilitate the emergence of new worldviews that address sustainable development encourage negotiation of alternative futures 	<ul style="list-style-type: none"> challenge unsustainable practices across educational systems, including at the institutional level

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	<ul style="list-style-type: none"> is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and worldviews 	<ul style="list-style-type: none"> is motivated to make a positive contribution to other people and their social and natural environment, locally and globally 	<ul style="list-style-type: none"> is willing to challenge assumptions underlying unsustainable practice engages with learners in ways that build positive relationships inspires creativity and innovation

Slovenia

Slovenia - EXAMPLE 1

Title of the professional development initiative	Sustainable and Socially Responsible University of Maribor
Who is the facilitator or leading institution?	University of Maribor
Who participates?	All departments
How many people can participate?	
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input checked="" type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing <input checked="" type="checkbox"/> Others (<i>please specify</i>): awareness raising
When does the initiative take place? (<i>Please only list initiatives since 2005.</i>)	2006–2014
How long does it take?	All the year
What is the purpose and objective?	Quality development; effective organisation contributing to balanced, sustainable and socially responsible development of the University
What is the ambition (idea behind the initiative)?	Raise awareness about sustainable development in all its three pillars
What is the professional development initiative about (focus, thematic entry point)?	Deeper understanding of the interaction between the environmental, economic, social and ethical dimension of sustainable development
What is the pedagogical approach?	NA
What has attracted the participants to take part in the initiative?	To create an innovative environment and an effective organisation
What is valuable and interesting about this initiative? Why is it worth doing it?	To convince other public, private, governmental, non-governmental and industrial organizations to follow its lead
How is the initiative being funded?	Funded by the University (rectorate)
How is the initiative being evaluated? If possible, please	Presented at the 8 th international IRDO conference "Social responsibility and current challenges 2013", Maribor, Slovenia; 162

share some of the results.

Link to website/ references

participants and speakers, from 15 countries

<http://www.um.si/en/quality/Pages/A-sustainable-and-socially-responsible-University.aspx>

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> • The basics of systems thinking ways in which natural, social and economic systems function and how they may be interrelated • The interdependent nature of relationships within the present generation and between generations, as well as those between rich and poor and between humans and nature • Their personal world view and cultural assumptions and seek to understand those of others • The connection between sustainable futures and the way we think, live and work • Their own thinking and action in relation to sustainable development 	<ul style="list-style-type: none"> • The root causes of unsustainable development • That sustainable development is an evolving concept • The urgent need for change from unsustainable practices towards advancing quality of life, equity, solidarity, and environmental sustainability • The importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change • The importance of preparedness for the unforeseen and a precautionary approach • The importance of scientific evidence in supporting sustainable development 	<ul style="list-style-type: none"> • Why there is a need to transform the education systems that support learning • Why there is a need to transform the way we educate/learn • Why it is important to prepare learners to meet new challenges • The importance of building on the experience of learners as a basis for transformation • How engagement in real-world issues enhances learning outcomes and helps learners to make a difference in practice
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> • Create opportunities for sharing ideas and experiences from different disciplines/places/cultures/generations without prejudice and preconceptions • Work with different perspectives on dilemmas, issues, tensions and conflicts • Connect the learner to their local and global spheres of influence 	<ul style="list-style-type: none"> • Critically assess processes of change in society and envision sustainable futures • Communicate a sense of urgency for change and inspire hope • Facilitate the evaluation of potential consequences of different decisions and actions • Use the natural, social and built environment, including their own institution, as a context and source of learning 	<ul style="list-style-type: none"> • Why there is a need to transform the education systems that support learning • Why there is a need to transform the way we educate/learn • Why it is important to prepare learners to meet new challenges • The importance of building on the experience of learners as a basis for transformation • How engagement in real-world issues enhances learning outcomes and helps learners to make a difference in practice
Learning to live together <i>The initiative offers an opportunity for the educator to</i>	<ul style="list-style-type: none"> • Actively engage different groups across generations, cultures, places and disciplines 	<ul style="list-style-type: none"> • Facilitate the emergence of new worldviews that address sustainable development • Encourage negotiation of alternative future 	<ul style="list-style-type: none"> • Challenge unsustainable practices across educational systems, including at the institutional level • Help learners clarify their own and others worldviews through dialogue, and recognize that alternative frameworks exist

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
<i>work with others in ways that....</i>			
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	<ul style="list-style-type: none"> Is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and worldviews 	<ul style="list-style-type: none"> Is motivated to make a positive contribution to other people and their social and natural environment, locally and globally Is willing to take considered action even in situations of uncertainty 	<ul style="list-style-type: none"> Is willing to challenge assumptions underlying unsustainable practice Is a facilitator and participant in the learning process Is a critically reflective practitioner Inspires creativity and innovation Engages with learners in ways that build positive relationships

Slovenia - EXAMPLE 2

Title of the professional development initiative	Ranking of Sustainable Universities
Who is the facilitator or leading institution?	University of Maribor, Dpt of Chemistry and Chemical Engineering
Who participates?	About 60 universities
How many people can participate?	
What type of professional development is it?	<input type="checkbox"/> Short course <input type="checkbox"/> Teaching support initiative <input type="checkbox"/> Seminar <input type="checkbox"/> Staff induction <input type="checkbox"/> In-house certification for new teaching staff <input type="checkbox"/> Mentoring/ coaching program <input type="checkbox"/> Academic working group for university educators <input type="checkbox"/> Work shadowing x Others (<i>please specify</i>): awareness raising
When does the initiative take place? (<i>Please only list initiatives since 2005.</i>)	2005–2013, every second year
How long does it take?	1 month
What is the purpose and objective?	Ranking of universities regarding the three bottom lines: social, economic, and environmental
What is the ambition (idea behind the initiative)?	Raise awareness about sustainable development in all its three pillars
What is the professional development initiative about (focus, thematic entry point)?	Academic achievements in education, research & technical development, and environmental behaviour
What is the pedagogical approach?	NA
What has attracted the participants to take part in the initiative?	Competition for good students and teachers
What is valuable and interesting about this initiative? Why is it worth doing it?	It stimulates university leaders to pay more attention to SD, in particular to environmental sustainability
How is the initiative being funded?	No funding
How is the initiative being evaluated? If possible, please share some of the results.	It was published in the Journal of Cleaner Production, 15 citations; stimulated the University of Maribor project Sustainable and Socially Responsible University
Link to website/ references	http://www.sciencedirect.com/science/article/pii/S0959652609003047

Competences for educators in education for sustainable development

	HOLISTIC APPROACH <i>Integrative thinking and practice</i>	ENVISIONING CHANGE <i>Past, present and future</i>	ACHIEVING TRANSFORMATION <i>People, pedagogy and education systems</i>
Learning to know <i>The initiative offers an opportunity for the educator to understand....</i>	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Why it is important to prepare learners to meet new challenges
Learning to do <i>The initiative offers an opportunity for the educator to be able to....</i>	<ul style="list-style-type: none"> • Connect the learner to their local and global spheres of influence 	<ul style="list-style-type: none"> • Critically assess processes of change in society and envision sustainable futures • Communicate a sense of urgency for change and inspire hope • Facilitate the evaluation of potential consequences of different decisions and actions 	<ul style="list-style-type: none"> • Why there is a need to transform the education systems that support learning • Why there is a need to transform the way we educate/learn • Why it is important to prepare learners to meet new challenges
Learning to live together <i>The initiative offers an opportunity for the educator to work with others in ways that....</i>	<ul style="list-style-type: none"> • Actively engage different groups across generations, cultures, places and disciplines 	<ul style="list-style-type: none"> • Facilitate the emergence of new worldviews that address sustainable development 	<ul style="list-style-type: none"> • Challenge unsustainable practices across educational systems, including at the institutional level • Help learners clarify their own and others worldviews through dialogue, and recognize that alternative frameworks exist
Learning to be <i>The initiative offers an opportunity for the educator to be someone who....</i>	<ul style="list-style-type: none"> • Is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and worldviews 	<ul style="list-style-type: none"> • Is motivated to make a positive contribution to other people and their social and natural environment, locally and globally • Is willing to take considered action even in situations of uncertainty 	<ul style="list-style-type: none"> • Inspires creativity and innovation • Engages with learners in ways that build positive relationships

ANNEX 4 – List of resources

All resources provided by partners included

Albania

- Guidelines of UE4SD for Mapping opportunities for developing Education for SD competences.
- UNECE (2011) Learning for the future: Competences in Education for Sustainable Development
- Law on HE in Albania
- Strategy documents on Research and Innovation in Albania
- TEMPUS projects in Albania
- Report on „Connecting Science-Society Collaborations for Sustainability Innovations“ project (not published)
- Report on „Developing and Adapting Professional Programs for Energy Efficiency in the Western Balkans“ (not published)
- Report of Internal Evaluation 2012,2013 of Faculty of Social Sciences/University of Tirana.

Bulgaria

- Bulgarian Ministry of Education and Science, Bulgarian Ministry of Environment and Water and partners (2007): Program for Education for Sustainable Development.
- Bulgarian Ministry of Education, Youth and Science (2009): Program for development of the education, science and youth politics in Republic of Bulgaria 2009- 2013.
- Government of Bulgaria (2007): Project of Strategy for Sustainable development of Republic of Bulgaria.
- (Bulgarian) Higher Education Act (1995): State Gazette – Darzhaven Vestnik, no. 112/ 27.12.1995, last amendment State Gazette 99/16.12.2011 (in Bulgarian).
- A National Strategy for the Development of the Higher Education in Bulgaria is under preparation.
- The National Strategy for Lifelong learning (LLL) for the period 2014 – 2020 defines the national state policy strategic framework aimed at achieving the European goal for intelligent, sustainable and cohesive growth.
- Vision Statement of Bulgarian Ministry of Education, Youth and Science mentions no explicit SD dimensions
- Bulgarian Council of Education and Science (2012): Bulgaria 2020: National priorities for education and science. Session of the Council from 07.11. 2012. Online under: <http://www.president.bg/cat124/Bulgaria-2020-nacionalni-prioriteti-v-obrazovaniето-i-naukata/> (Statement: 07.01.2013).
- Bulgarian Ministry of Education and Science. National Institute of Science (2004): The Development of Education. National Report of Republic of Bulgaria.
- Bulgarian Ministry of Education, Youth and Science (2009): Program for development of the education, science and youth politics in Republic of Bulgaria 2009- 2013.

- Bulgarian Ministry of Education and Science, Bulgarian Ministry of Environment and Water and partners (2007): Program for Education for Sustainable Development.
- Bulgarian Ministry of Education, Youth and Science. Official website: <http://www.minedu.government.bg> (Statement: 07.03.2014).
- Bulgarian Ministry of Environment and Water (2005): National Biodiversity Conservation Strategy - National Biodiversity Conservation Plan 2005-2010.
- Bulgarian Ministry of Environment and Water (2005): National Environment Protection Strategy 2005-2014.
- Bulgarian Ministry of Environment and Water (2012): Third National Climate Change Action Plan 2013-2020. Measures for education and science.
- Bulgarian Ministry of Environment and Water. Official website: <http://www2.moew.government.bg> (Statement: 07.03.2014).
- Council of the European Union (2010): Notices from European Union Institutions, Bodies, Offices and Agencies. Council conclusions of 19 November 2010 on education for sustainable development (2010/C 327/05). Online under: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:327:0011:0014:EN:PDF> (Statement: 07.01.2013).
- Government of Bulgaria (2007): Project of Strategy for Sustainable development of Republic of Bulgaria.
- Government of Bulgaria (2009): National Report 2009 of the Bologna Declaration.
- Government of Bulgaria (no date): Report on Implementation of the UNECE Strategy for Education for Sustainable Development. Policy, Regulatory and Operational Measures at Support ESD in Republic of Bulgaria. Online under: http://www.unece.org/fileadmin/DAM/env/esd/Implementation/reportsGov/pilot/Bulgaria_addendum.pdf (Statement: 07.01.2013).
- Government of Bulgaria. Bulgarian Ministry of Education and Science. Responsible Kostadinova E. (2007): Report on Implementation of the UNECE Strategy for Education for Sustainable Development within the Framework of the United Nations Decade of Education for Sustainable Development (2005–2014).
- Higher Education Act (1995): State Gazette – Darzhaven Vestnik, no. 112/ 27.12.1995, last amendment State Gazette 99/16.12.2011 (in Bulgarian).
- Human Resource Development Centre (2007): Universities in Bulgaria.
- *The Bulgarian Academy of Sciences*. Official website: <http://www.bas.bg/> (Statement: 07.03.2014).
- *UNECE (2005): Strategy for Education for Sustainable Development*

- UNECE. Information about Bulgaria on the official website: <http://www.unece.org/env/esd/search?q=bulgaria> (Statement: 07.03.2014).
- UNESCO. World Conference on Education for Sustainable Development held in Bonn (2009): Bonn Declaration.
- University of Forestry: <http://www.ltu.bg>
- Sofia University St. Kliment Ohridski: <https://www.uni-sofia.bg/>
- SW University-Blagoevgrad: www.swu.bg/
- University of Architecture, Civil Engineering and Geodesy: <http://uacg.bg/>
- University of Mining and Geology: www.mgu.bg/
- Dimitrova, E., 2014. The 'Sustainable Development' Concept in Urban Planning Education: Lessons Learned on a Bulgarian Path. In Journal of Cleaner Production, <http://dx.doi.org/10.1016/j.jclepro.2013.06.021>
- Dimitrova, E., 2012. International Professional Networks in the Field of Urbanism: Opportunities for Educational and Research Collaboration. Papers, vol. 1, International Jubilee Conference UACEG2012, 15-17 November 2012, pp. 331-336 (*In Bulgarian*).
- Dimitrova, E., Burov, A., Nikolov, H., Trifonov, D., Yolova, M., Trifonova, D., 2011. Integrated Educational Approach on Sustainable Urban Development. Contract No. 103/2009. Research, consultancy and design centre. UACEG. Unpublished Research report (in Bulgarian).
- Dimitrova, E., A. Burov, H. Nikolov, 2010. GIS in Urban Planning Education: Support for Integrated Approaches to Sustainable Urban Development. Proceedings, Third International conference on Cartography and GIS, Nessebar, Bulgaria, 15-20 June 2010, International Cartographic Association and UACG, Sofia.
- Dimitrova, E., 2009. Urban Planning Education for Sustainable Development: Building Partnerships to Last. In Proceedings, Ecocity World Summit 2009, Istanbul.
- Dimitrova, E., 2008. Urban planning education for sustainable development: linking professional capacity to personal value systems and motivation for action. In: EESD 2008 Conference, Graz, Austria.
- The Operational Programme “Human Resources Development” is a strategic document that acts as a framework for absorption of funds, co-financed jointly by the European Social Fund of the European Union and the national budget during the programming period 2007 – 2013. It is a constituent part of the National Strategic Reference Framework and contributes to one of its main objectives to “*develop human capital potential to ensure higher employment, income and social integration*”.

Croatia

- Strategy of University of Rijeka <http://www.apuri.hr/propisi/kvaliteta/SVURI01-01Strategija.pdf>
- Strategy of University of Zagreb http://www.unizg.hr/fileadmin/rektorat/O_Sveucilistu/Dokumenti_javnost/Dokumenti/Strat_eshki_dokumenti/Istrazivacka_strategija_2008-2013.pdf
- Strategy of University of Zadar http://www.unizd.hr/Portals/0/pdf/Strategija_2011_2017_2.pdf

- Strategy of Josip Juraj Strossmayer University of Osijek <http://www.unios.hr/uploads/50STRATEGIJA%20SVEU%C4%8CILI%C5%A0TA%20HR.pdf>
- Strategy of Juraj Dobrila University of Pula http://www.unipu.hr/uploads/media/Razvojna_strategija_sazetak.pdf
- Strategy of Sustainable Development of the Republic of Croatia http://www.dalmaticaviva.hr/site/images/stories/dokumenti/StrategijaOdrzivogRazvitkaRH_NN30_09.pdf
- The Science and Higher Education Act <http://www.herdata.org/public/CROHR-Croatia-HE-law-2003.pdf>
- Rončević, Nena, and Rafajac, Branko (2012). *Održivi razvoj – Izazov za sveučilište? [Sustainable Development – Challenge for University?]*. Rijeka: Filozofski fakultet. http://euroac.ffri.hr/wp-content/uploads/2012/05/ORIZS_monografija_web_odabrana-poglavlja.pdf
- Andic, Dunja, and Tatalovic Vorkapic, Sanja (2014). Interdisciplinary Approaches to Sustainable Development in Higher Education: A Case Study from Croatia. In Thomas, Ken D., and Muga, Helen E. (eds.). *Handbook of Research on Pedagogical Innovations for Sustainable Development*. Hershey PA: Information Science Reference (an imprint of IGI Global).
- Action plan for education for sustainable development <http://www.erisee.org/downloads/2013/2/b/Action%20plan%20for%20education%20for%20sustainable%20development%202011%20ENG.pdf>
- COPERNICUS Alliance: <http://www.copernicus-alliance.org/>
- Rio+20 Treaty on Higher Education: <http://hetreatyrio20.com/>
- Zaklada Sveučilišta u Rijeci (University of Rijeka Foundation) <http://www.zaklada.uniri.hr/zaklada/>
- Ministry of Science, Education and Sport <http://public.mzos.hr/Default.aspx>
- Agency for Science and Higher Education <https://www.azvo.hr/index.php/en/>

Czech Republic

- Balázs, K., Faulkner, W., & Schimank, U. 1995. Transformation of the research systems of post-communist Central and Eastern Europe: an introduction. *Social Studies of Science*, **25**(4), 613.
- Dlouhá, J. (ed.) (2002) *Inovace vysokoškolské výuky v environmentálních oborech* (Innovation of HE in environmentally oriented disciplines) Praha : COŽP UK. 185 pp. ISBN 80-238-9228-2. Info about the conference including presentations see <http://www.czp.cuni.cz/Vzdel/Forumvs/Setkani030123/>
- Dlouhá, J. (2009) Obecné vzdělávací kvality a pojem kompetence. (Educational qualities and the term competence) *Envigogika*, IV/1 [online] [cit. 2010-06-16] Available from: <<http://envigogika.cuni.cz/index.php/cs/texty/20091/299>> ISSN: 1802-3061 DOI: <http://dx.doi.org/10.14712/18023061.35>
- Dlouhá, J. (2009) Kompetence v environmentálním vzdělání. (Competences in environmental education) *Envigogika*, IV/1 [online] [cit. 2010-06-16] Available from: <<http://envigogika.cuni.cz/index.php/cs/texty/20091/300>> ISSN: 1802-3061 DOI: <http://dx.doi.org/10.14712/18023061.34>
- Dlouhá, J., Moldan, B. 2011. Sustainability in higher education: The Central and Eastern European case. In: Higher Education's Commitment to Sustainability: from Understanding to

Action Higher Education in the World 4 Global University Network for Innovation GUNI Series on the Social Commitment of Universities. Palgrave Macmillan.

- Kohoutek, J. 2009. Setting the stage: quality assurance, policy change, and implementation. In: Kohoutek, J. (ed.). Studies on Higher Education. Implementation of the Standards and Guidelines for Quality Assurance in Higher Education in the Central and East-European Countries– Agenda Ahead. Bucharest: UNESCO [online] [cit 2011-02-15] Available from <http://unesdoc.unesco.org/images/0018/001886/188647e.pdf#xml=http://unesdoc.unesco.org/ulis/cgi-b>
- Salcedo-Rahola, B. Mulder, K. et al. Sustainable Development in Higher Education. What has Europe got to offer? Delft University of Technology. [online] [cit 2012-02-15] Available from www.sdpromo.info
- UNECE (2005). UNECE Strategy for Education for Sustainable Development. Vilnius: CEP/AC.13/2005/3/Rev.1 [online] [cit 2011-04-08] Available from <http://www.unece.org/env/documents/2005/cep/ac.13/cep.ac.13.2005.3.rev.1.e.pdf>
- National Strategy for ESD (2008 – 2015) [online] [cit 2014-07-08] Available from http://www.vzdelavani2020.cz/images_obsah/dokumenty/knihovna-koncepci/vzdelavani-udrzitelny-rozvoj/jc_svur.pdf
- Action Plan for the National Strategy for ESD (2011-12) [online] [cit 2014-07-08] Available from http://www.vur.cz/export/system/galleries/vur/download/12fc17ee-3f66-11e0-b475-00047597fda9/Akxnx_plxn_VUR_na_lxta_2011-2012.pdf
- The Strategic Plan for the Scholarly, Scientific, Research, Development, Innovation, Artistic and Other Creative Activities of Higher Education Institutions for 2011-2015; <http://www.msmt.cz/areas-of-work/tertiary-education/the-strategic-plan-for-higher-education-institutions-2011?lang=2>

Macedonia

- Government of the Republic of Macedonia (2010): “Decree on the National Framework for higher education qualifications”, November, 2010, Skopje, unpublished (in Macedonian),
- Government of the Republic of Macedonia (2014): “Law on the Bureau for the Development of the Education”, Official Gazette of the Republic of Macedonia, No. 14, 2014, Skopje, (in Macedonian),
- Government of the Republic of Macedonia (2014): “Law on the outstanding civic universities for lifelong learning”, Official Gazette of the Republic of Macedonia, No. 41, February 2014, Skopje, (in Macedonian),
- Matlievska Margarita (2011): *Sustainable Development – New Global Paradigm*. private publication, Skopje (in Macedonian),
- Ministry of Education and Science (2006): “National Program for Development of the Education in the Republic of Macedonia 2005-2015”, Skopje, unpublished, (in Macedonian),
- Ministry of Education and Science (2010): “Law on recognition of professional qualifications”, Official Gazette of the Republic of Macedonia, No. 171, December, 2010, Skopje, (in Macedonian),
- Ministry of Education and Science (2011): “Law on pedagogic service”, Official Gazette of the Republic of Macedonia, No. 18, February 2011, Skopje, (in Macedonian),
- Ministry of Education and Science (2013): “Law on National Qualifications Framework”, Official Gazette of the Republic of Macedonia, No. 137, 2013, Skopje, (in Macedonian),

- Ministry of Education and Science (2014): “Law on scientific research”, Official Gazette of the Republic of Macedonia, No. 14, 2014, Skopje, (in Macedonian),
- Ministry of Education and Science (2014): “Law on Higher Education”, Official Gazette of the Republic of Macedonia, No. 41, February 2014, Skopje, (in Macedonian),
- Ministry of Education and Science (2014): “Law on Vocational Education and Training”, Official Gazette of the Republic of Macedonia, No. 41, February 2014, Skopje, (in Macedonian),
- Ministry of Education and Science (2014): “Rulebook on verifying the compatibility of the National Framework of Qualifications to the European Qualifications Framework for Higher Education”, www.mon.gov.mk, April, Skopje, (in Macedonian),
- Ministry of Education and Science (2014): “Rulebook on the form, content and manner of keeping the register of qualifications for Higher Education”, www.mon.gov.mk, April, Skopje, (in Macedonian),
- Ministry of Environment and Physical Planning (2005): “Law on Environment”, Official Gazette of the Republic of Macedonia, No. 53, July 2005, Skopje, (in Macedonian),
- Ministry of Environment and Physical Planning (2009): “National Strategy for Sustainable Development”, Skopje, unpublished, (in Macedonian).
- Nedanovski Pece (2011): “Implementation of the Sustainable Development as a Significant Precondition for Approaching European Union – The Case of the Republic of Macedonia”, *Proceedings – International Scientific conference “Economic theory and practice in modern conditions”*, Brčko, Bosnia and Herzegovina, 10 November, p. 52-57.
- Trpevski Strahinja (ed.). Sustainable development – Key challenges for Republic of Macedonia, *Journal of Sustainable Development*, Skopje, 2008, June, pp. 64.
- United Nations, Economic Commission for Europe - Committee on Environmental Policy (2005): “UNECE Strategy for Education for Sustainable Development”, Vilnius, March.
- UNESCO World Conference on Education for Sustainable Development (2009): “Bonn Declaration”, March-April, Bonn.

Romania

- Stefanescu, R. (2013) *Alumni and the Sustainable University*, The 7th book of the Research Series THE SUSTAINABLE ENTERPRISE, Editors: Prof. Dan Căndeă, Ph.D. & Senior Researcher - Deputy Rodica M. Căndeă, Ph.D./ U.T.PRESS, Cluj-Napoca, Romania, December 15, 2013 See: <https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWVpbnxvcmdhbmI6YXRpYXN1c3RlbnFiaWxhfGd4OjFhYzEyYTJhYTQwNDM2NzA>).
- Costoiu, Mihnea (Minister of Higher Education), *Interview*, <http://www.hotnews.ro/stiri-esential-15701687-mihnea-costoiu-ministrul-delegat-pentru-invataman-superior-numarul-studentilor-universitatile-publice-crescut-aproximativ-10-fata-anul-trecut.htm>. Accessed on the 1st of May, 2014.

Serbia

- Loncar, J. (2011). Obrazovanje za održivi razvoj na fakultetima društveno – humanističkih nauka, in: Pavlovic, V. (Ed.), *Univerzitet i održivi razvoj*. Belgrade: CEPOR, 241 – 262.
- Milutinovic, S., S. Zivkovic (2014). “Planning local sustainable development in Western Balkans”. *Management of Environmental Quality*, Vol. 25, No 1., 19 – 29.

- Milutinović, S., V. Nikolić (2014). "Rethinking higher education for sustainable development in Serbia: an assessment of Copernicus charter principles in current higher education practices". Journal of Cleaner Production, Vol. 62, No 1, 107 – 113.
- Milutinovic, S. (2013), "Higher Education for Sustainable Development in Serbia", in M. Adomson & I. Otte (Eds.), Higher Education for Sustainable Development in Central and Eastern Europe, Bad Homburg: VAS Verlag, 127 – 137.
- Milutinovic, S., D. Radojevic (2009), "Sustainable Development Strategy of the Republic of Serbia", Invited paper, Proceedings, 5th Dubrovnik Conference on Sustainable Development of Energy, Water and Environment Systems, Special Session "National Strategies for Sustainable Development", Sept 29 / Oct 3 2009, Dubrovnik, Croatia, 58.
- National Sustainable Development Strategy of the Republic of Serbia 2009 – 2017. http://www.un.org/esa/agenda21/natlinfo/countr/serbia/nsds_serbia.pdf
- Strategija razvoja obrazovanja u Srbiji do 2020. godine. http://www.srbija.gov.rs/vesti/dokumenti_sekcija.php?id=45678

Slovakia

- **National Strategy for SD for Slovakia** (Slovak Government, 2001)
- **Action Plan for SD in Slovakia for 2005-2010** (Office of the Slovak Government, 2005)
- **Action Plan for ESD in Slovak Educational Institutions** (Ministry of Education, Science, Research and Sport of the Slovak Republic, 2006)
- National Strategy for Global Education for the Period 2012-2016 (Ministry of Education, Science, Research and Sport, 2012) - Národná stratégia pre globálne vzdelávanie na obdobie rokov 2012-2016 (Ministry of Education, Science, Research and Sport, 2012)
- **National Program for Education and Schooling in Slovak Republic for the Period of the Coming 15- 20 years – „Millennium"** (approved by the Government of the SR in 2000)
- **The Concept of Future Development of HE in Slovakia for 21st Century** (approved by the Government of the SR in 2000)
- **Long-term Intent in Educational, Research, Development, Artistic and Other Creative Activities in HE Establishments for the period 2010-2014**(discussed in the Government of the SR on 9.6.2010)
- Law act No. 131/2002 Call. On HES and About the Changes and Completion of Some Law Acts as Amended by Later Legal Documents - ZÁKON č. 131/2002 Z.z. o vysokých školách a o zmene a doplnení niektorých zákonov v znení neskorších predpisov
- Order of the Government of SR No. 104/2003 Call. About Accreditation Committee in the Wording of Later Legal Documents especially the Novelization of this Order by the Order No. 427/2013 Call. (Acquired activity since January 1st, 2014) - Nariadenie vlády Slovenskej republiky č. 427/2013 Z. z. ktorým sa mení a dopĺňa nariadenie vlády Slovenskej republiky č. 104/2003 Z. z. o akreditačnej komisii v znení neskorších predpisov (nadobudlo účinnosť 1.1.2014)
- **Academic carrier of researcher and educators at the HES in SR and possibilities of its optimization**"(IBS SLOVAKIA, s.r.o., December 2009, 136 pp.)
- **Report on the State of Art of Educational System in Slovakia in 2013**" (MSVVS SR, 2013) - Správa o stave školstva na Slovensku na verejnú diskusiu (materiál bol predložený aj na rokovanie Národnej rady Slovenskej republiky) Bratislava, marec 2013
 - Project: Transformation of the HE of the teachers in the context of the reform of regional educational system - Transformácia vysokoškolského vzdelávania učiteľov v kontexte reformy regionálneho školstva - Ministerstvo školstva, vedy, výskumu a športu SR (2010)

<http://www.minedu.sk/projekt-transformacia-vysokoskolskeho-vzdelavania-ucitelov-v-kontexte-reformy-regionalneho-skolstva/>

- Long – term perspective of educational, research, development, artistic and other creative activities at HESs for the period 2010-2014 - Dlhodobý zámer vo vzdelávacej, výskumnej, vývojovej, umeleckej a ďalšej tvorivej činnosti pre oblasť vysokých škôl do roku 2014(prerokovaný vládou SR 9.6.2010) Zdroj: <http://www.minedu.sk/dlhodoby-zamer-ministerstva-a-jeho-aktualizacie/>
- Assessment criteria of QAS in HES (Accreditation commission, 2013)- Kritériá hodnotenia vnútorného systému zabezpečovania kvality vysokoškolského vzdelávania (Akreditačná komisia, december, 2013) <http://www.minedu.sk/kriteria-pouzivane-pri-vyjadrovaní-sa-akreditacnej-komisie/>

Slovenia

- Slovenian "Legal information system" web page: <http://www.pisrs.si/Pis.web/> --> Of special interest on this web page are:
 - Resolution on National programme of higher education: <http://www.pisrs.si/Pis.web/pregledPredpisa?id=RESO71>
 - Decree on budgetary financing of higher education institutions and other institutions: <http://www.pisrs.si/Pis.web/pregledPredpisa?id=URED5405>
 - Research and Development Act: <http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO3387>
 - Higher Education Act: <http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO172>
- The Centre for Pedagogical Education (Faculty of Arts, University of Ljubljana): <http://www.ff.uni-lj.si/en/1/Activities/The-Centre-for-Pedagogical-Education.aspx>
- COPERNICUS Alliance: <http://www.copernicus-alliance.org/>
- Rio+20 Treaty on Higher Education: <http://hetreatyrio20.com/>
- R. Lukman et al., University ranking using research, educational and environmental indicators, J. Cleaner Prod. 18 (2010) 619–628.
- University of Maribor: A Sustainable and Socially Responsible University, <http://www.um.si/en/quality/Pages/A-sustainable-and-socially-responsible-University-.aspx>
- Urquiza, F. J., Adaptable model to assess sustainability in higher education: Application to five Chilean Institutions, <http://repositorio.uc.cl/xmlui/bitstream/handle/123456789/1783/608595.pdf?sequence=1>
- McKeown, R., Education for Sustainable Development Toolkit <http://www.esdtoolkit.org/discussion/default.htm>;
full text, http://www.esdtoolkit.org/esd_toolkit_v2.pdf
- The Higher Education Academy, Education for Sustainable Development (ESD), <http://www.heacademy.ac.uk/education-for-sustainable-development>

- United Nations University, Institute for the Advanced Study of Sustainability, Education for Sustainable Development, <http://ias.unu.edu/en/research/education-for-sustainable-development-rces-and-prosper-net.html#outline>