



UE4SD Innovation Report – Year 2

2014 – 2015

February 2016

Introduction

This Innovation Report is the second annual review of significant developments in Education for Sustainable Development (ESD) in Higher Education (HE), as part of the *University Educators for Sustainable Development* (UE4SD) project. The UE4SD initiative seeks to reorient the HE curriculum for sustainability by improving support and professional development in ESD for university educators.

The project has published a leading practice publication on ESD professional development in HE and is currently developing an online platform of resources and piloting an ESD training academy for university teams. The Innovation Reports aim to situate this European project within the changing global landscape of HE, ESD and professional development and to ensure that the core thinking and outcomes of the project are informed by an up-to-date and international perspective.

This second report spans important international developments during 2015 and the landscape for ESD professional development across the world. Specifically, it identifies:

- significant global dialogues, initiatives and platforms on education, sustainable development and higher education following the close of the UN Decade of Education for Sustainable Development (DESD) and the launch of the UNESCO Global Action Programme (GAP) on ESD; development of a ministerial statement and new implementation framework through UNECE to support ESD in education across Europe; elaboration of an Action Plan for the implementation of the Mediterranean Strategy on ESD; and creation of new ESD partnerships in sustainability science; and, national responses to the GAP on ESD;



- continued signs of the growth of demand for skills development and university action on ESD among higher education student populations;
- emerging dialogue on the competences and capabilities relevant to sustainability, both from employers and agencies that are looking for these attributes in higher education graduates, and from educators seeking to support the professional development of university educators.

ESD in the International Agenda:

2015 marked a historic turning point for action on education and sustainable development. In September 2015, the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development¹ were adopted by world leaders at a historic UN Summit. These Goals are unique in that they apply to all countries (poor, rich and middle-income) and promote prosperity while protecting the planet. Goal 4 recognises that quality education is the foundation to improving people's lives and sustainable development, and stresses the need to develop learners' knowledge and skills on sustainable development through ESD.

This high-level meeting was followed by another unparalleled event on climate change that took place in December 2015 in Paris², where 195 governments agreed to take action and reduce temperatures to 1.5°C. Although the COP 21 outcome document is a non-binding agreement, the Paris negotiations succeeded where twenty previous conferences had failed and united governments for a low-carbon future for the first time with an intent to submit 5 yearly nationally determined climate plans.

The critical role of education in climate change was given special attention in Paris. ESD and climate change education were included in the first article approved by country members and were afforded

¹ UN Sustainable Development Knowledge Platform provides further information on the 2030 Agenda at: <https://sustainabledevelopment.un.org/post2015/transformingourworld>

² UN COP21 Conference on Climate Change: <http://www.cop21.gouv.fr/en>



an entire thematic day as part of the conference. The Global Alliance of higher education networks and associations for sustainability (including UE4SD) played a key part in influencing the negotiations in the lead up to Paris. The Alliance issued an Open Letter³ urging ministers and governments to acknowledge and strengthen the research and education efforts that universities and colleges are making on climate change. It celebrated and confirmed their role in finding and implementing solutions towards climate change mitigation and adaptation, positioning higher education as a critical player in addressing wider sustainability issues, including social and economic policies and practices.

At international-regional level, the Mediterranean Strategy on ESD (adopted in May 2014 by the Ministers of the Union for the Mediterranean (UfM in 13 May 2014⁴) was approved as an integral part of the new “Mediterranean Strategy for Sustainable Development” (MSSD) (2016-2025) during the COP19 of the Barcelona Convention⁵. Furthermore, in the Ministerial “Athens Declaration” celebrating the 40 years anniversary of the Barcelona Convention and UNEP-MAP, the Mediterranean Strategy on ESD is recognised as a tool to achieve the SDGs: *“Mindful of the Mediterranean Strategy on Education for Sustainable Development, resolve to enhance public awareness and the role of Education promoting sustainability and the implementation of the SDGs in the Mediterranean”*.

During the COP, Environment Ministers and other delegates (more than 150 participants) from 21 Mediterranean countries and the EU renewed their commitment to enhance measures to reduce pressures on the marine and coastal environment.

In addition to the aforementioned landmark events, the role of ESD in strengthening the quality of education and engaging people in creating alternative futures was also agreed at the UNESCO World Education Forum⁶ in Incheon in May 2015. This Conference restated the importance of realising the

³ The Open Letter can be viewed here: <http://cop21.grli.org/>

⁴ Details see: <http://ufmsecretariat.org/euro-mediterranean-cooperation-on-environment-and-climate-change-ufm-holds-ministerial-meeting-in-athens/>

⁵ Details see: <http://www.unepmap.org/index.php?module=news&action=detail&id=200>

⁶ 2015 UNESCO World Education Forum: <http://en.unesco.org/world-education-forum-2015/>



ambitions of the Global Action Programme (GAP)⁷ and specifically called for the reorientation of education and learning systems so that everyone has the opportunity to develop knowledge and skills in ESD.

In 2016, several international initiatives have already taken place to discuss and assess the role of education in realising the SDGs agenda. One example was the 'Education as a Driver for Sustainable Development Goals' Conference⁸ in January 2016 in Ahmedabad, which brought together over 750 participants from 22 countries to discuss key ESD actions at all levels in formal, non-formal and informal education. The recommendations⁹ from the higher education workshop clearly state the need of providing support and training to university educators, administrators and leaders.

UNESCO and the International Association for the Evaluation of Educational Achievement (IEA) have established an official agreement to collaborate in the area of measuring Global Citizenship Education and ESD. The focus is to measure Target 4.7 of the SDGs: "...ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development." The two organisations have already collaborated in identifying a set of potential indicators, one of which is being considered as a potential global indicator for the whole target 4.7.

Finally, a new series of UNESCO reports entitled the Global Education Monitoring (GEM) Reports¹⁰ have also been announced and will monitor the state of education in the new framework of the SDGs. The first report in the series, expected in March 2016, will establish a new monitoring framework for

⁷ UNESCO (2014) *Roadmap for Implementing the Global Action Programme on Education for Sustainable Development*, Paris: UNESCO.

⁸ 'Education as a Driver for Sustainable Development Goals' Conference: <http://ceeindia.org/esdg/>

⁹ The workshop report and recommendations can be found here: <http://ceeindia.org/esdg/Goal%204.3.html>

¹⁰ Global Education Monitoring (GEM) Reports: <http://en.unesco.org/gem-report/about>



education post-2015, and examine key financing and governance challenges for the post-2015 era. The report will also focus on 'Education, sustainability and the post-2015 development agenda', analysing the complex connections between education and key development sectors. It will determine which education strategies, policies and programmes are most effectively linked to the economic, social, environmental and political priorities of the new sustainable development agenda.

European HE Landscape and ESD:

The UNECE Strategy for ESD (2005-15) created a regional ~~international~~ framework that provided impetus and guidance for the implementation of ESD at national levels in European and North American countries, taking into account their national needs and priorities. It was divided into 3 implementation phases, with phase 3 (2011-2015) including the prioritisation of embedding ESD into teacher education.

One key move to fulfil this objective was the creation of an expert group that developed a competence framework for ESD, to help country members to re-orient their national education systems towards sustainability by supporting the professional development of educators. Several UE4SD partners were involved in this expert group and the framework was instrumental in the design and development of the UE4SD project.

A future (post 2015) ~~new~~ UNECE ESD implementation framework¹¹ is currently being developed and a first version was shared and discussed at the 11th meeting of the Steering Committee on ESD on 15-16 February 2016 in Geneva. Several UE4SD partners attended this meeting and presented the UE4SD project in order to inform the future framework. The first draft of the framework included the following proposed priority areas:

¹¹ The draft UNECE ESD implementation framework can be accessed here:
<http://www.unece.org/fileadmin/DAM/env/esd/11thMeetSC/Documents/1521606E.pdf>



- Encouraging whole-institution approaches by establishing ESD school plans, or embedding ESD in existing school plans, for every school by 2019.
- Promoting the extension of ESD in teacher education and in the training of all educators.
- Strengthening technical and vocational education and training in support of sustainable development and the transition to a green economy.
- Strengthening integration of ESD in both international and national ESD policies and other relevant processes.
- Linking ESD in formal, informal and non-formal education.
- Acknowledging the important role of networks, including those of civil society, academia and science, non-governmental organizations, business and enterprises, in implementing ESD.

The final document will be presented together with a Ministerial Statement that strongly supports the continuation of the UNECE Strategy for ESD beyond the first decade (2005–2015) to the High Level Meeting of Education and Environment Ministers to be held in the Eighth Environment for Europe Ministerial Conference on 8-10 June 2016 in Batumi, Georgia.

UNESCO National Commissions of Germany and Austria and Central and Eastern Europe (CEE) countries have initiated a collaborative project to promote sustainability science policy in research and education. These partners including universities and ministries met in 2014 in Bratislava to develop an ambitious Statement on Sustainability Science¹² and in 2015 more practical steps towards its implementation have been taken. Quality assurance processes and professional development of university educators are key priority areas of this ambitious initiative. In line with these efforts, COPERNICUS Alliance will host a conference on Sustainability Transformation of Science Systems to be on 14-15 September 2016 in Vienna, Austria.

¹² Details see <https://www.unesco.de/en/wissenschaft/sust-sc/sust-sc-cee.html>



At the national policy level, Germany has been active in designing the implementation of the GAP on ESD. The process is led by the Federal Ministry of Education and Research in cooperation with the German Commission for UNESCO and expert forums with academics, politicians and NGOs. A national action plan is currently being drafted and will be launched in spring 2016. The plan will link GAP and SDGs ambitions and will identify the need to support and train educators to become change agents in sustainability as a key action priority.¹³

HE Student Perspectives:

Evidence of growing interest in ESD among student populations has emerged during the last decade. For the last 5 years in the UK, the National Union of Students (NUS) has surveyed over 25,000 students on their attitudes towards, and expectations around, sustainability. The results of these surveys attest that 85% of students want their institutions to embed sustainability in their operations, and 60% of students want their learning experiences to be linked to sustainability¹⁴. In France, a similar series of studies have been undertaken by REFEDD¹⁵; for example the 2011 study captured attitudes and engagement levels of 10,000 French higher education students. The findings showed that 92% of students were in favour of the introduction of sustainable development in the operation of the campus and 80% wanted to see the seamless integration of sustainability across the curriculum. In Germany, the Leuphana University of Lüneburg is currently undertaking a longitudinal study¹⁶ which aims to explore the impact that embedding ESD in the curriculum has to the knowledge, values and interests of students. The empirical results will inform the University's curriculum model and will serve to enhance the quality of ESD teaching and learning.

Several national and regional student organisations have also been created in the last decade with the goal of engaging the higher education community with sustainable development initiatives and

¹³ Information about the implementation of the GAP by the German Federal Ministry of Education and Research: <https://www.bmbf.de/de/bildung-fuer-nachhaltige-entwicklung-535.html>.

¹⁴ UK Higher Education Academy website: <https://www.heacademy.ac.uk/workstreams-research/themes/education-sustainable-development/students-and-esd>

¹⁵ Réseau français des étudiants pour le développement durable: <http://refedd.org/consultation-nationale-etudiante/>

¹⁶ Information about the research study: <http://www.leuphana.de/unesco-chair/forschung/lishe.html>.



projects as well as learning activities. As attested by Tilbury (2016),¹⁷ some of these organisations have also engaged effectively in key international dialogues and processes and formed strategic partnerships to influence change for sustainability at national and global levels. An example is the World Student Community for Sustainable Development (WSCSD) that now has chapters in 100 countries, with an estimated membership of 10,000 students¹⁸.

Another good example is *Rootability* in the Netherlands, an organisation run by youth for youth, which supports and inspires students to make their universities more sustainable, resilient and fair, by designing, advocating and running student-led and staff-supported sustainability hubs. In 2015, they were the recipients of the UNESCO-Japan Prize on ESD for their Green Office Model which trains university students to integrate whole-institution approaches towards ESD in their institutions.¹⁹

At the institutional level, student groups are engaged in sustainability campus projects and public engagement work, as well as transforming the teaching and learning experience and influencing the academic agenda. An example is the student driven education at Uppsala University²⁰ in Sweden, where students are employed as course coordinators and plan, run, and evaluate university interdisciplinary courses on sustainability and the environment. The syllabus and learning outcomes are developed through a collaborative process involving students and university staff.

These examples highlight the growing strength of the student position in demanding greater integration of sustainability principles into every aspect of university life. This increase in student networks and movements is adding momentum to the push for professional training of university

¹⁷ Tilbury, D. (2016). Student Engagement and Leadership in Higher education for Sustainable Development. In: Barth, M; Michelsen, G.; Rieckmann, M. and Thomas, I. (eds.). *Routledge Handbook of Higher Education for Sustainable Development*. London: Routledge, pp. 273-287.

¹⁸ <http://www.wscsd.org/>

¹⁹ More information about the laureates' work can be found here: <http://en.unesco.org/prize-esd/2015laureats>

²⁰ This initiative is further explained here: <http://www.csduppsala.uu.se/education/>



educators in ESD. It is also supported by reports from future employers²¹ and agencies²² showing the need to build these approaches into the future graduate skills profile, to address the challenges of sustainable development across economies, societies and environment.

ESD and Professional Development:

The emerging dialogue around the competences relevant to sustainability is leading to a clearer understanding of how university educators can provide these higher education experiences. In the literature and scholarship around ESD, there is an increase in the attention to the training of educators and as a foundation for future professional development, recognising the need for educators as well as students to develop these transformative approaches in their own pedagogy and practice. Some recent developments in this area include:

- **ESD best practice through educational development research:**
 - An international study in Canada based on best practices and experiences in Education for Sustainability, through education development units and education developers (led by Simon Fraser University, University of British Columbia, George Brown College).
 - A national study²³ in Spain led by the Autònoma University of Barcelona and University of Girona focused on developing an educational framework for the development of ESD professional competences and their evaluation.

²¹ IBM (2010) *People and Skills for a Sustainable Future: Report based on proceedings at IBM Summit at Start*, The Bathwick Group. Available from: http://www-05.ibm.com/uk/start-sustainable-future/pdf/people_skills_FINAL.pdf.

SKY (2011) *The Sustainable Generation: The SKY Future Leaders Study*, Isleworth, Middlesex. Available from: http://corporate.sky.com/documents/pdf/publications/2011/sky_future_leaders_study

²² EEA (2016) *Circular economy in Europe: Developing the knowledge base*, European Environment Agency Report No 2/2016. Available from: <http://www.eea.europa.eu/publications/circular-economy-in-europe>

CMI/ABS/QAA (2014) *21st Century Leaders: Building Practice into the curriculum to boost employability*, Chartered Management Institute with the Association of Business Schools and Quality Assurance Agency. Available from: http://www.managers.org.uk/~media/Files/PDF/21st_Century_Leaders_June2014.ashx

²³ See: <http://grupcomplex.uab.cat/?project=un-modelo-formativo-para-el-desarrollo-de-competencias-profesionales-en-educacion-para-la-sostenibilidad-caracterizacion-aplicacion-y-evaluacion>

- **PhD research on ESD competences:**

Two PhD theses recently awarded in Catalunya, Spain, have focused on progressing the conceptualisation and evaluation of educators' professional competences in ESD.²⁴

- **ESD competence accreditation for pre-service teacher educators project:**

An Erasmus cross-European project involving several UE4SD partners and working across 6 higher education institutions, exploring ways to establish accreditation methods, tools, guidance and training in ESD (led by University of Gloucestershire, UK, and involving UE4SD partners from Italy, Estonia and Cyprus).

- **Professional development initiatives on ESD:**

- Inspired by the UE4SD Academy and led by the University of Zurich in collaboration with COPERNICUS Alliance and the International Association of Universities (IAU), the Enabling Leadership for Transformational Teaching and Learning for Sustainable Development (ELTT)²⁵ project supports capacity building for leadership in higher education for sustainable development.

- **International special issue on ESD professional development:**

UE4SD project is preparing a special issue for the International Journal of Sustainability in Higher Education, based on the professional development and professional competence focus of the ESD project, including articles from leading practices across the partnership.

Summary of Headline Points

1. The ***global momentum around education, sustainable development and ESD*** has continued since the UN Decade of ESD, with increasing focus on the role of learning in higher education.

²⁴ A) Banqué, N. (2015). Dibuixant cartografies competencials. Un perfil competencial que afavoreix la innovació d'equips educatius en contextos de ciència. Universitat Autònoma de Barcelona. Supervisor: Dr Mercè Junyent.

B) Garcia Segura, R. (2016). Les competències professionals en Educació per la Sostenibilitat des de la complexitat: plantejament i avaluació. Universitat Autònoma de Barcelona. Supervisors: Dr Mercè Junyent and Dr Marta Fonolleda.

²⁵ See: https://files.ifi.uzh.ch/hilty/t/projects/ELTT_Transformational_Teaching_and_Learning.pdf



2. Strategic work on ESD continues *in Europe with the development of the new framework* to support implementation of the UNECE strategy and apply the UNECE ESD competence framework.
3. *Student movements are increasingly visible in driving agendas* for ESD across the university and in their learning experiences, supported by calls for ESD skills from industry and agencies.
4. The *professional development dialogue is becoming more focused* on importance of competences in the practice of university educators, with several new research and scholarship projects in 2015-16.

University Educators for ESD Project Website: www.ue4sd.eu