Issues and trends in Education for Sustainable Development

EDUCATION ON THE MOVE

Education
2030

Part I

Understanding Education for Sustainable Development

Chapter 1

From Agenda 21 to Target 4.7: the development of Education for Sustainable Development

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The adoption of the 2030 Agenda for Sustainable Development has provided fresh impetus for Education for Sustainable Development (ESD) and a very favourable environment in which to scale up the implementation of ESD. The Agenda sets an ambitious universal education programme with the adoption of Sustainable Development Goal 4, which aims to 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all' (UN 2015). Under Goal 4, it is widely recognized that one of the most ambitious, interesting and challenging targets is Target 4.7, which aims to:

> "By 2030, ensure that all learners acquire the 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 nonviolence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development"

In addition, ESD can serve as a means to pursue the achievement of all the Sustainable Development Goals (SDGs). In support of this perspective, during its 74th session, the Second Committee of the UN General Assembly adopted a resolution on ESD in the framework of the SDGs (A/C.2/72/L.45) in which ESD's role as 'an integral element of the SDG on quality education and a key enabler of all other sustainable development goals' was explicitly affirmed .

Looking back from the currently favourable global policy environment for ESD, this chapter details the development of ESD by examining two strands that have been equally important for ESD: the efforts by sustainable development stakeholders to use education as an instrument to achieve sustainable development, and the efforts by education stakeholders to integrate sustainable development principles into education systems. It is thanks to the convergence of these two strands that strong support for ESD has emerged over the years.

Integrating education into sustainable development

With the adoption of the SDGs, the role of education as instrument within the global debate on sustainable development has been given renewed attention. However, education as a means to achieve sustainable development is not a new idea.

UNESCO's involvement in environmental awareness and education goes back to the very beginnings of the Organization, with the creation in 1948 of the IUCN (International Union for the Conservation of Nature, now the World Conservation Union), the first major NGO mandated to help preserve the natural environment. UNESCO was also closely involved in convening the UN International Conference on the Human Environment in Stockholm, Sweden in 1972, which led to the setting up of the United Nations Environment Programme (UNEP).

Subsequently, for two decades, UNESCO and UNEP led the International Environmental Education Programme (1975-1995), which set out a vision for, and gave practical guidance on how to mobilize education for environmental awareness. In 1976, UNESCO launched an environmental education newsletter 'Connect' as the official organ of the UNESCO-UNEP International

Environmental Education Programme (IEEP). It served as a clearinghouse to exchange information on Environmental Education (EE) in general and to promote the aims and activities of the IEEP in particular, as well as being a network for institutions and individuals interested and active in environment education until 2007.

The long standing cooperation between UNESCO and UNEP on environmental education (and later ESD) also led to the co-organization of four major international conferences on environmental education since 1977: the First Intergovernmental Conference on Environmental Education in Tbilisi, Georgia (October 1977); the Conference "International Strategy for Action in the Field of Environmental Education and Training for the 1990s" in Moscow, Russian Federation (August 1987); the third International Conference "Environment and Society: Education and Public Awareness for Sustainability" at Thessaloniki, Greece (December 1997); and the Fourth International Conference on Environmental Education towards a Sustainable Future in Ahmedabad, India (November 2007).

These meetings highlighted the pivotal role education plays in sustainable development. It was at the Tbilisi conference in 1977 that the essential role of 'education in environmental matters' (as stated in the recommendations of the 1972 Stockholm Conference) was fully explored. Organized by UNESCO in cooperation with UNEP, this was the world's first intergovernmental conference on environmental education. In the subsequent Tbilisi Declaration, environment was interpreted in its 'totality—natural and built, technological and social (economic, political, cultural-historical, ethical, aesthetic)' (UNESCO-UNEP, 1977, point 3). The goals formulated for environmental education went far beyond ecology in the curriculum and included development of a 'clear awareness of, and concern about, economic, social, political, and ecological interdependence in urban and rural areas' (ibid, point 2) which became one of the major bases of ESD.

The declaration had 41 recommendations covering three key areas: role, objectives and guiding principles of environmental education; strategies for environmental education development at national level; and international and regional cooperation. Governments came together to agree on the guiding principle that environmental education encompasses a broad spectrum of environmental, social, ethical, and cultural dimensions. However, this forward-looking vision was never fully implemented: international, and many national efforts, focused more on environmental concerns than on integrated human, social or economic development.

Nonetheless, by the fourth conference in India in 2007, the role of education to promote all three pillars of sustainable development was widely shared internationally. The meeting examined the status of environmental education and its development to meet the challenges of sustainability and the objectives of the UN Decade of Education for Sustainable Development. In 2012, to commemorate 35 years of global education efforts since the first Tbilisi Conference, an Intergovernmental Conference (Tibilisi+35) yet again reaffirmed the global appeal for environmental education as a means for achieving sustainable development.

In 1992 the Earth Summit was held in Rio de Janeiro. At the summit, an action plan, Agenda 21, was drawn up. UNESCO was designated as Task Manager for Chapter 36 of the agenda which related to education. Chapter 36 of Agenda 21 clearly states that 'promoting education, public awareness and training are linked to virtually all areas in Agenda 21.' This signalled an important change in thinking related to environmental education and the start of merging various forms of education (i.e. environment, population, development, etc.) into a single, unifying concept, that of education for sustainable development.

In 1994, the Environmental and Population Education and Information for Human Development project (EPD) was launched. The project was designed to achieve 'people-centred equitable and sustainable development through an integrated approach to environment, population and development issues' (UNESCO, 1994). As an interdisciplinary, inter-institution (UNESCO, UNEP and UNFPA in particular) project which merged different specific issues within a single, unifying concept - education for sustainable development - EPD went beyond formal teaching to propose education via a number of channels (schools, business, the media, community organizations and associations). EPD was, thus, situated within a general perspective of educational re-orientation, or even educational reform, in direct keeping with the principles of lifelong education.

Twenty years after the Rio Summit, the follow-up conference, the Earth Summit 2012 or Rio+20 was held.

The 2012 United Nations Conference on Sustainable Development highlighted the commitment of governments to the mainstreaming of sustainable development by promoting ESD in accordance with the goals of the Decade (2005-2014) (United Nations, 2012). In the lead-up to this summit (and continued in subsequent policy discussions) awareness was growing that, as UNESCO outlined in its main input document for the summit, 'Sustainable development cannot be achieved by technological

solutions, political regulation or financial instruments alone. Achieving sustainable development requires a change in the way we think and act, and consequently a transition to sustainable lifestyles, consumption and production patterns. Only education and learning at all levels and in all social contexts can bring about this critical change' (UNESCO 2012a: 13). The Rio+20 outcome document The Future We Want subsequently contained strong commitments to education as important for a green economy, for work and social protection, and for sustainability generally.

Since 2012 the role of education for sustainable development has been further recognized by global consultations organized by the United Nations around a number of specific themes taking stock of the implementation of the Millennium Development Goals and in preparation for the SDGs. Issues tackled in one of these consultations included environmental sustainability and a number of specific environmental challenges. Although the participants in this consultation came mainly from the environment rather than the education sector, education was singled out as one of the most important drivers of change. As noted in the consultation report 'Education was deemed to be one of the most powerful tools at hand to drive the transformational changes necessary for sustainable development, but to realize this potential, education systems need to be flexible, culturally sensitive, relevant and suited to changing people's values and behaviours' (World We Want 2013: iv). This also explicitly underlines that, in order to act as a driver for change, education itself needs to change, to become transformative, to change values and behaviours (UNESCO/UNICEF 2013: 14).

The lead-up to the adoption of the SDGs in 2015 involved diverse discussions on the importance of education for achieving sustainable development. One of the most important stages in that process, the intergovernmental consultations through the Open Working Group on SDGs, discussed the topic of the role of education for the achievement of sustainable development. The UN Secretary-General presented the results of a questionnaire to Member States regarding the key elements of a sustainable development agenda as initial input into the discussions of the Open Working Group. Education was ranked among the top four (after food, water and energy) (United Nations General Assembly 2012). The progress report of the Open Working Group to the UN General Assembly in 2013 states: 'Education is absolutely central to any sustainable development agenda' (United Nations General Assembly 2013). In their summary to the fourth session of the group, dedicated to education, the co-chairs spoke of the relevance of education for 'the transformative shifts required for sustainable development' and emphasized that 'a holistic education can shape societal values that are supportive of sustainable

development' (Open Working Group 2013). These key discussions on the role of education for the success of the SDGs led to the creation of a single goal, SDG4, dedicated to education and the integration of education into other development goals to support their implementation (UNESCO 2013a). The global association of teachers' unions, Education International, echoed this stance in a position paper for education post-2015: 'Hence, quality education is fundamental to the achievement of all other development goals, including gender equality, health, nutrition and environmental sustainability' (Education International). The 2013-2014 edition of the Education for All Global Monitoring Report provides strong evidence that 'education transforms lives' through teaching the transferrable skills necessary for global citizenship and changing attitudes and behaviours needed to mitigate and adapt to climate change (UNESCO 2014b).

As a consequence, the 2030 Agenda for Sustainable Development adopted in 2015 fully recognizes the critical role of education. In 2016, the Global Education Monitoring Report (GEM report) stressed the importance of education in achieving all the SDGs over the next fifteen years.

> "The SDGs, targets and means of implementation are thought of as universal, indivisible and interlinked. Each of the 17 goals has a set of targets. In each set, at least one target involves learning, training, educating or at the very least raising awareness of core sustainable development issues. Education has long been recognized as a critical factor in addressing environmental and sustainability issues and ensuring human well-being." (GEM report 2016: p.9, UNESCO, 2016a)

In particular, the report highlighted the urgent need for new approaches, the importance of long-term commitments to SDG4, and the need for radical change in ways of thinking about education as a force for human well-being and global development (UNESCO, 2016a). This suggests that the potential of education to transform our world cannot be realized unless education systems embrace sustainable development.

Table 1: How education is related to other SDG targets

Goal 1	Education is critical to lifting people out of poverty.
Goal 2	Education plays a key role in helping people move towards more sustainable farming methods, and in understanding nutrition.
Goal 3	Education can make a critical difference to a range of health issues, including early mortality, reproductive health, spread of disease, healthy lifestyles and well-being.

Goal 5	Education for women and girls is particularly important to achieve basic literacy, improve participative skills and abilities, and improve life chances.
Goal 6	Education and training increase skills and the capacity to use natural resources more sustainably and can promote hygiene.
Goal 7	Educational programmes, particularly non-formal and informal, can promote better energy conservation and uptake of renewable energy sources.
Goal 8	There is a direct link among such areas as economic vitality, entrepreneurship, job market skills and levels of education.
Goal 9	Education is necessary to develop the skills required to build more resilient infrastructure and more sustainable industrialization.
Goal 10	Where equally accessible, education makes a proven difference to social and economic inequality.
Goal 11	Education can give people the skills to participate in shaping and maintaining more sustainable cities, and to achieve resilience in disaster situations.
Goal 12	Education can make a critical difference to production patterns (e.g. with regard to the circular economy) and to consumer understanding of more sustainably produced goods and prevention of waste.
Goal 13	Education is key to mass understanding of the impact of climate change and to adaptation and mitigation, particularly at the local level.
Goal 14	Education is important in developing awareness of the marine environment and building proactive consensus regarding wise and sustainable use.
Goal 15	Education and training increase skills and capacity to underpin sustainable livelihoods and to conserve natural resources and biodiversity, particularly in threatened environments.
Goal 16	Social learning is vital to facilitate and ensure participative, inclusive and just societies, as well as social coherence.
Goal 17	Lifelong learning builds capacity to understand and promote sustainable development policies and practices.

Source: ICSU and ISSC (2015)

To date, ESD has been integrated into many global frameworks and conventions on key sustainable development topics. For example, Article 13 of the Convention on Biological Diversity, and its work programmes; the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters and the subsequent Sendai Framework for Disaster Risk Reduction 2015-2030; Sustainable Lifestyles and Education Programme of the 10-Year Framework of Programmes on Sustainable Consumption and Production 2012-2021; Article 6 of the United Nations Framework Convention on Climate Change and Articles 11 and 12 of the Paris Agreement.

Integrating sustainable development into education

The increasingly strong policy support for ESD is also the result of increased attention paid by education stakeholders to sustainable development issues in education. This is in line with an overall trend to go beyond a simple focus on access to education and basic skills and move toward relevant educational content that addresses contemporary challenges.

For many years, the focus of global development on education was the provision of basic education for all. United Nations Millennium Development Goal 2 on universal primary education and the Education for All movement (2000-2015) were geared towards this aim (UN 2015). Based on the principle that education is a fundamental and enabling human right, affirmed in key international agreements such as the Universal Declaration of Human Rights, access to basic literacy and numeracy has been at the centre of international educational efforts and will continue to be crucially important.

However, in an increasingly complex and interconnected world with a very real existential threat such as climate change, there is a growing demand for education that goes beyond acquiring knowledge and skills to find jobs. It has become clear that education is not only an instrument to sustainable development but that the concept of teaching and learning must be transformed to enable individuals to lead sustainable development as agents of change. Earlier thoughts on this can be traced to Goal 6 of the *Dakar Framework for Action on Education for All* (2000) on improving all aspects of quality education (UNESCO, 2000). These commitments to EFA identified important links with the ESD agenda, especially strengthened by the 2002 World Summit on Sustainable Development. As the 2002 Summit discussions led to the launch of the UN Decade of Education for Sustainable Development (2005-2014), reorientation of existing educational programmes to address sustainability was named as one of the four major thrusts of ESD (UNESCO 2005). By this time, it was increasingly understood that the connections between EFA and ESD include commitment to quality education; understanding of education as a human right; and promotion of quality of life through education. Moreover, the progressive move towards issues of quality, relevance and content of learning became more evident (UNESCO, 2008).

As UNESCO put it in a position paper submitted to its General Conference in 2013: 'UNESCO reaffirms a humanistic and holistic vision of education as fundamental to personal and socio-economic development. The objective

of such education must be envisaged in a broad perspective that aims at enabling and empowering people to meet their basic individual needs, fulfil their personal expectations and contribute to the achievement of their communities and countries' socio-economic development objectives' (UNESCO 2013a).

One of the key indications of the shift towards more relevant educational content was the Global Education First Initiative launched by the UN Secretary-General in 2012. This initiative with its three priorities - putting every child in school, improving the quality of learning, and fostering global citizenship - recognized that 'access to education is critical. But it is not enough.' As the follow-up to the initiative, UNESCO spelled out the outline of an education that promotes global citizenship (UNESCO 2013b; UNESCO 2014a).

One example of the increased emphasis on relevant education content is the attention being given to transferrable or transversal skills. For example, the Learning Metrics Task Force, a global consultation convened by the Brookings Institution and the UNESCO Institute of Statistics in 2015, speaks of the need for an 'adaptable, flexible skill set to meet the demands of the 21st century.' According to a Task Force report such skills may include, alongside the obvious contenders such as managing information and communication technologies, new skills like 'collaborative problem-solving' (Learning Metrics Task Force 2013). Another encouraging example of the attention given to transversal skills is the research conducted by the OECD on socio-emotional skills and the Education 2030 Learning Framework (OECD 2015; 2016). Evidence shows a growing trend away from basic access to education issues towards emphasis on the socio-emotional skills for achieving positive life outcomes and reducing educational and social disparities – something that sits very well with the overall goal to achieve sustainable development.

In 2015, at the 70th Session of the UN General Assembly, Member States adopted a new global development agenda entitled 'Transforming our World: the 2030 Agenda for Sustainable Development (Sustainable Development Goals)'. The SDGs were designed to replace the Millennium Development Goals (MDGs), a set of global, regional and national goals with an explicit path towards sustainability. Although considerable progress was made towards achieving the MDGs, recorded progress was dependent on the specific region, country and goal (Sachs, 2012). Experiences and lessons learned in implementing the MDGs have been harnessed by the UN Member States and inform the post-2015 development agenda and the SDGs (UN, 2014).

The adoption of a stand-alone goal on education, SDG 4, reaffirmed the critical role of education in accelerating progress towards sustainable development. The Incheon Declaration on Education 2030 states: 'Our vision is to transform lives through education, recognizing the important role of education as a main driver of development and in achieving the other proposed SDGs' (The Incheon Declaration, 2015).

The seven targets and three enabling targets of SDG 4 are manifestations of the shift towards quality, relevance and content of education. Consequently, while the Incheon Declaration reaffirmed that SDG 4 is 'inspired by a humanistic vision of education and development', it clearly places ESD as a key part of quality education:

> Quality education fosters creativity and knowledge, and ensures the acquisition of the foundational skills of literacy and numeracy as well as analytical, problem-solving and other high-level cognitive, interpersonal and social skills. It also develops the skills, values and attitudes that enable citizens to lead healthy and fulfilled lives, make informed decisions, and respond to local and global challenges through Education for Sustainable Development (ESD) and global citizenship education (GCED) In this regard, we strongly support the implementation of the Global Action Programme on ESD launched at the UNESCO World Conference on ESD in Aichi-Nagoya in 2014. We also stress the importance of human rights education and training in order to achieve the post-2015 sustainable development agenda (World Education Forum, 2015: para 9).

The UN Decade of ESD and the Global Action Programme on ESD

The roots of ESD lie in the two processes discussed above; of integration of education into sustainable development and of sustainable development into education. The primary goal for the UN Decade of Education for Sustainable Development (2005-2014, DESD) was laid out in the United Nations General Assembly resolution 59/237 in which the General Assembly recognized 'the internationally agreed development goal of achieving universal primary education'. It also welcomed 'the fact that the Commission on Sustainable

Development, at its eleventh session, identified education as one of the cross-cutting issues of its multi-year programme of work', and thus reaffirmed that 'education for sustainable development is critical for promoting sustainable development' (UNESCO, 2005).

ESD is understood as an education that 'allows every human being to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future.' Among other things, this means 'including key sustainable development issues into teaching and learning; for example, climate change, disaster risk reduction, biodiversity, poverty reduction, and sustainable consumption. [ESD] also requires participatory teaching and learning methods that motivate and empower learners to change their behaviour and take action for sustainable development. Education for Sustainable Development consequently promotes competencies like critical thinking, imagining future scenarios and making decisions in a collaborative way' (UNESCO 2011; cf., e.g., UNECE 2011; de Haan 2010). ESD is a dynamic concept and term that incorporates a new vision of education that seeks to empower people of all ages to take personal responsibility for creating a sustainable future (UNESCO, 2002, 2005, 2014a). It is interdisciplinary and transdisciplinary, meaning that no discipline can claim ESD as its own, but all disciplines can respond and contribute to ESD individually and/or collectively.

All major international development conferences[1] of the 1990s recognized and stressed the power of education to shape attitudes, values and behaviours, to develop capacities and skills and to build an understanding and commitment to development goals. The Earth Charter (2000), for example, stressed that civil society's call for sustainability incorporates the general principle of 'integrating into formal education and lifelong learning the knowledge, values and skills needed for a sustainable way of life'.

The 2002 Johannesburg World Summit on Sustainable Development (WSSD) recommended ESD as a key concept in its implementation plan, highlighting the critical role education plays in sustainable development. The WSSD Plan of Implementation suggested that sustainable development concepts, actions and principles should be integrated into all levels of education, in order to promote education as a key agent for change (United Nations, 2002).

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1   Earth Summit 1992; Cairo Conference on Population and Development 1994, World Summit for Social Development 1995, Fourth World Conference on Women 1995, Second UN Conference on Human Settlement 1996

In response, the United Nations General Assembly adopted UN Resolution 57/254 in December 2002, designating 2005-2014 the United Nations Decade of Education for Sustainable Development (UNDESD) (United Nations, 2002). The overall goal of the Decade was to integrate the principles, values and practices of sustainable development into all aspects of education and learning, and to encourage changes in knowledge, values and attitudes with the vision of enabling a more sustainable and just society for all (UNESCO, 2005, 2014a, 2014b). Under the International Implementation Scheme (UNESCO, 2005a), the Decade was implemented in two distinct phases: The first phase (2005-2008) was invested in defining and promoting ESD, identifying actors and developing partnerships. During the second phase (2009-2014), the emphasis shifted towards advancing ESD in the context of quality education, with focus on three key issues of climate change, biodiversity and disaster risk reduction (UNESCO, 2014a).

The Bonn Declaration adopted in 2009 at the UNESCO World Conference on Education for Sustainable Development held in Bonn, Germany, represents a turning point in the visibility and understanding of ESD by ministers and provided the shift to the second phase. The Declaration emphasized the importance of investing in ESD, referring to it as a 'life-saving measure' for the future that empowers people for change (UNESCO, 2009: 1). While recognizing that 'education is a significant factor in improving human well-being', the Declaration recommended promoting ESD as 'an investment in the future', which is directly related to the two processes of linking education and sustainable development.

To mark the end of UNDESD, the World Conference on ESD in Aichi-Nagoya in 2014 produced the Aichi-Nagoya Declaration, which agreed to revisit the purpose of education systems with a view to adding a sustainable future as an overall purpose of education. The Aichi-Nagoya Declaration stresses that:

> 'ESD is an opportunity and a responsibility that should engage both developed and developing countries in intensifying efforts for poverty eradication, reduction of inequalities, environmental protection and economic growth, with a view to promoting equitable, more sustainable economies and societies benefiting all countries' (UNESCO, 2014e).

These processes, yet again, reaffirmed the relevance of education in key sustainable development issues as well as sustainable development in education.

As a follow-up to the UN Decade of ESD, the Global Action Programme (GAP) on Education for Sustainable Development (2015-2019) was launched at the World Conference on ESD in Aichi-Nagoya.

As endorsed by the UNESCO General Conference, the Global Action Programme on ESD has as its overall goal 'to generate and scale up action in all levels and areas of education and learning to accelerate progress towards sustainable development' (UNESCO 2014d). This translates into two objectives, the first directed at the education sector, which is called upon 'to reorient education and learning so that everyone has the opportunity to acquire the knowledge, skills, values and attitudes that empower them to contribute to sustainable development'. The second objective addresses all other sectors relevant to sustainable development and requests them 'to strengthen education and learning in all agendas, programmes and activities that promote sustainable development.' These two objectives build from the two processes examined earlier in the chapter and thus do justice to the fact that learning our way towards sustainable development requires the participation of all sectors of the society, and not merely the integration of sustainable development-related issues into education.

One of the key features of the future Global Action Programme on ESD is the concentration on five 'priority action areas': '1. Advancing policy, 2. Transforming learning and training environments, 3. Building capacities of educators and trainers, 4. Empowering and mobilizing youth, 5. Accelerating sustainable solutions at local level' (UNESCO 2014b: 15). Each of the five areas will be discussed in the following chapters of this volume.

Continued dialogue between education and sustainable development

The development of Education for Sustainable Development has been a dialogue between education and sustainable development, i.e. integration of education into sustainable development and integration of sustainable development into education.

As this chapter reviewed, over the years, growing importance has been placed on the role of education to successfully achieve the goals of sustainable development. The message is clear; if people around the world do not value and practice the principles of sustainable development in their daily choices,

we will never be able to create the future we want. As we build onto the achievements of Education for All, there has been strong recognition in the last decade of the crucial importance of the knowledge, skills, values and attitudes needed to address key issues of sustainable quality life.

To date, ESD has been promoting knowledge, skills, values and attitudes that empower learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society. Through the UN Decade and the Global Action Programme on ESD, efforts have been made to mainstream ESD in education policies, curricula, and teacher training. The need to continue this dialogue between sustainable development and education is greater than ever.

With the launch of the 17 Sustainable Development Goals, continents, regions, countries, institutions and individuals are committed to achieving progress for sustainable development. Intentional, strategic and continuous integration or mainstreaming of sustainable development into education at all levels is also in demand. Education for Sustainable Development is increasingly understood as the cross-cutting means for sustainable development and all areas of the SDGs. No doubt, the fruitful dialogue and cooperation between the education sector and sustainable development sectors will continue with ever more urgency.