



Education for Sustainable Development and the SDGs

Learning to Act, Learning to Achieve

“Education will be the lynchpin of a sustainable development agenda whose success relies on individuals, throughout their lifetime, acquiring relevant knowledge and developing positive attitudes to address global challenges”.¹

Key Messages

- 1) Education for Sustainable Development provides a valuable framework and methodology for achieving the goal of “quality education ... for all” as stated in SDG 4.
- 2) As a means of implementation, education is an important tool to support the achievement of each Sustainable Development Goal.
- 3) Improvements in the quality of education and equitable access to it can have a wide diversity of development benefits that demonstrate a high return on investment.
- 4) Educational policies play a primary role in the effective implementation of ESD and framing how it influences and benefits the curriculum, teacher training, development of learning materials, and the learning environment.

Education is essential in supporting the implementation of the sustainable development agenda, and its importance for human development is well recognised in Sustainable Development Goal 4 on education. Across the targets of all of the Sustainable Development Goals (SDGs), education can provide a valuable means in supporting their implementation and achievement. ESD helps individuals to better understand the environmental and social impacts of their daily lifestyle choices, and it can support cooperative learning and critical examination which leads to collective reimagining of lifestyle practices and identification of sustainable solutions. Through education, learners are able to gain critical life skills and the capacity to be active in the pursuit of sustainable development. This brief examines how *education for sustainable development* policies may be advanced to support the implementation and achievement of the SDGs, and ultimately help empower a learning society for sustainability.

Learning for sustainability

Education has a significant and vital role to play in the global effort to halt climate change and set humanity on a course for sustainable development. Thus, education policy needs to be aligned with national commitments towards contributing to the 2030 Development Agenda and the Paris Agreement. Quality education for sustainable development has the potential to support transformative learning and bring about fundamental change. In order to achieve this, countries must first consider how to develop plans and actions that will harness education as a powerful means of implementation, and ultimately reform education policy towards the advancement of sustainable development.

In order to ensure coherence, ESD policies and mandates must address several aspects of the education system. Key to framing the effective implementation of ESD is how it is addressed in the curriculum, teacher training, development of learning materials, and the learning environment. Additionally, there are four

¹ Global Education Monitoring Report 2015: 294

implementation modalities to address: 1) governance, accountability and partnerships; 2) effective coordination; 3) monitoring, reporting and evaluation for evidence-based policies; and 4) financing (UNESCO, 2015a). ESD policies must not only give authority for the implementation of ESD, they also need to ensure the necessary institutions, resources and capacities for its effective delivery. For example, if a country establishes a strong policy mandating ESD, but it is not supported with ESD-linked teacher training or ESD learning material development, there will be a significant shortcoming in implementation.

The role of education in SDG implementation

The 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) were adopted by the 193 Member States of the UN General Assembly on 25 September 2015. The 17 SDGs serve as *“a comprehensive, far-reaching and people-centred set of universal and transformative goals and targets”*¹ with the aim of achieving them globally by

What is ESD?

ESD empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society, for present and future generations, while respecting cultural diversity. It is about lifelong learning, and is an integral part of quality education. ESD is holistic and transformational education, which addresses learning content and outcomes, pedagogy and the learning environment. It achieves its purpose by transforming society.

Learning content: Integrating critical issues, such as climate change, biodiversity, disaster risk reduction (DRR), and sustainable consumption and production (SCP), into the curriculum.

Pedagogy and learning environments: Designing teaching and learning in an interactive, learner-centered way that enables exploratory, action oriented and transformative learning.

Societal transformation: Empowering learners of any age, in any education setting, to transform themselves and the society they live in.

Learning outcomes: Stimulating learning and promoting core competencies, such as critical and systemic thinking, collaborative decision-making, and taking responsibility for present and future generations.

2030. The magnitude of this agenda and its vision for global change towards sustainability is challenging. As the world works towards fundamental changes across the social, economic and environmental dimensions of sustainable development, a re-envisioning of socio-cultural values, norms and standards must accompany this shift, as well as developing new knowledge and skills.

Education has a long history as an international priority, and the right to education was first enshrined in the *Universal Declaration of Human Rights* in 1948. The SDGs reaffirmed the need to improve education and ensure all people are afforded a high standard of education. Education has two critical roles to play in supporting the implementation of the SDGs. First, education is addressed as a standalone goal in SDG 4 especially as a primary driver of human development. Second, education is also understood as a highly effective means of implementation across all of the Goals by serving as a vehicle to raise awareness, increase knowledge, and develop capacity of actors around the world to play active roles in the work of the 2030 Development Agenda. Improvements to the quality of education can catalyse the transformative learning needed for realising a sustainable future for all.

Education and human development

Education is championed as a vehicle for human development, and this is well supported by evidence showing that increased educational attainment has positive correlations with poverty reduction, economic growth, health improvements and reductions in child mortality rates (Lochner, 2010; Mattos, MacKinnon, & Boorse, 2012; Polacheck, 2007). At an individual level, each additional year of schooling strengthens individual earning potential by an average of 10% (Polacheck, 2007). At a national level, an increase in average school attainment by one year has a demonstrated correlation to a 0.58% increase in national GDP per capita growth rates (Hanushek & Woessmann, 2008).

Improving the quality of education can provide an even more significant boost to economic growth than simply increasing attainment. *“For countries and communities that embrace the need to bring quality education to all, the benefits are enormous”* (UNESCO, 2015a: 2). The development benefits that education supports are most notable in those countries where achievement is most lacking. One study estimated that a 12% reduction in global poverty could be achieved merely by ensuring that all children in low-income countries leave school with basic reading skills – this is the equivalent of lifting 171 million people out of poverty (EFA Global Monitoring Report, 2011: 8). Furthermore, education is linked to improvements in civic participation, engagement in decision-making processes, greater political stability and reduction in civil war (Center for Global Development, 2006; Collier & Sambanis, 2005).

Education and sustainable development

In addition, education is an important means of implementation for sustainable development. It helps harmonize the tensions between economic, social and environmental development and integrate them into a single concept and pursuit. ESD can thus help address the fact that as countries achieve higher levels of education, they not only experience economic growth but also rapid increase in resource and energy usage. In order to do so, however, education must be viewed as a cross-cutting means of implementation to strengthen achievements across many SDGs. A broader understanding of education encompassing formal, non-formal and informal structures creates a strong mechanism for supporting social learning and change.

As a social process, ESD can help engender a culture respectful to the principles of sustainable development. All forms of education play an important role in cultural and social reproduction, but ESD can provide a forward-looking orientation in relation to the 2030 Development Agenda and the SDGs. ESD promotes reform towards quality education to enhance students' lifelong learning, critical reflexivity, cooperative learning relationships, and holistic interpretations of knowledge.

“Quality education is about what and how people learn, its relevance to today’s world and global challenges, and its influence on people’s choices. Many now agree, quality education for sustainable development reinforces people’s sense of responsibility as global citizens and better prepares them for the world they will inherit” (UNESCO 2014: 28).

ESD advancing quality education

ESD addresses important thematic topics such as climate change and sustainable consumption, but it also advances value and skill-based learning. Applying action-oriented and problem-based learning, ESD supports the critical examination of practices and behaviours. This aims for learners to achieve sustainable living through practical, daily actions and develop their capacities to become effective agents of social change.

Both literature and practice now underscore the value of quality education on people’s ability to live healthier, happier and more productive lives in a sustainable manner. No other development goal provides greater return on investment. Quality education outcomes have higher influence on economic growth than school enrolment rates, and improving quality can be more cost effective as it depends on systematic knowledge investments more than new resource allocation. Quality education for sustainable development supports higher order learning thus strengthening competencies to analyse, synthesise and evaluate complex information in decision-making, planning and problem solving (Ofei-Manu & Didham, 2014).

“Across all levels and types of education – formal, non-formal, informal – ESD is also helping to advance the change in teaching and learning processes, bringing in approaches that ‘stimulate pupils to ask questions, analyse, think critically and make decisions,’ that are cooperative rather than competitive and that are more student-centred” (UNESCO 2014: 65).

In order to enable measurable improvements in learning targets and performance-based outcomes, a stronger focus on quality education that is holistic and practical solutions-based is more effective. Nevertheless, in countries where enrolment rates are still a concern, the pursuit of quantitative improvements alongside qualitative improvements remains essential.

Qualitative reform of education requires progressive and dynamic curricula and effective learning spaces that support collaborative and experiential learning. This employs a comprehensive approach to educational improvements with respect to learning content, approaches for knowledge and skill transfer, the learning environment and its local contextualisation.

Education integrated across the SDGs

The Global Action Programme on ESD identifies two parallel objectives for ESD defined as 1) integrating sustainable development into education, and 2) integrating education into sustainable development (UNESCO, 2014). For the ‘integration of education into sustainable development’, the value and benefits that education bring to the achievement of the other SDGs needs to be more clearly elaborated and galvanised. This requires an understanding of education that extends beyond the boundaries of formal education institutions, and expands the opportunities for life-long learning, continuing professional development, and community-based/social learning. An appreciation of education as a ‘strategic development investment’ is also required.

Unpacking SDG 4- Target 4.7

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Target 4.7

Education for sustainability and global citizenship

by 2030 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

Education can be advanced to support sustainable development at multiple levels. Clarifying a framework for ESD that jointly demonstrates its role in: 1) developing the capacities required to achieve the SDGs, and 2) advancing the quality of educational practice through improved pedagogies and practical-relevance of learning, would clarify the important roles for ESD both within SDG 4 and across all of the SDGs.

Subsequently, national governments can respond to these international agendas through appropriately contextualising them in national policies and strategies, thus allowing ESD's roles to be more clearly elaborated and integrated in national sustainable development strategies, education plans, and curricula. Integration of a quality education for sustainable development perspective into implementation processes and monitoring and evaluation frameworks will further strengthen the execution of these recommendations.

Recommendations for advancing ESD policies

- The overall efficacy of ESD depends on a myriad of aspects including reforming educational systems, strengthening curricula, innovating pedagogies and teacher training, transforming learning environments, building diverse partnerships, and creating local learning opportunities.
- Educational transformation through curricula is an important factor of change and hence calls for built-in structures of flexibility in curricula to increase efficiency and promote effectiveness of ESD implementation with stakeholder involvement.
- Eight overarching competencies for sustainability are identified, and these can be used 1) to frame the core goals of curricula including progressive learning objectives, and 2) to coordinate both disciplinary and interdisciplinary aspects of curricula. The eight sustainability competencies are: Systems thinking competency, Anticipatory competency, Normative competency, Strategic competency, Collaboration competency, Critical thinking competency, Self-awareness competency, and Integrated problem-solving competency (UNESCO, 2017).
- Progressive pedagogies and cooperative learning approaches should be included in education practice with specific focus on student-centred learning, critical reflection and problem solving. For this to be possible, teachers must be equipped with appropriate pedagogical skills and methods through both pre-service and in-service training.
- Enhanced capacities are needed among policy-makers and authorities, curricula developers, school administrators, assessment experts, and teachers as these important stakeholders hold the key to the successful development and mainstreaming of ESD curricula.
- The supportive institutions and implementation structure of the education system must be strengthened to deliver more effectively and efficiently on these policy improvements, and key to this is the establishment of safe and effective learning environments.

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