Education for Sustainable Development (ESD)

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Abstract:
Education for Sustainable Development means including key sustainable development issues into teaching and learning; for example, climate change, disaster risk reduction, biodiversity, poverty reduction, and sustainable consumption. It 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.

1. Introduction
Education for Sustainable Development allows every human being to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future.

Education for Sustainable Development requires far-reaching changes in the way education is often practised today.

UNESCO is the lead agency for the UN Decade of Education for Sustainable Development (2005-2014).

2. Biodiversity
Biological diversity, or biodiversity, is manifested at all levels of organization (genes, species, ecosystems and landscapes) and is seen in all forms of life, habitats and ecosystems (tropical forests, oceans and seas, savannah ecosystems, wetlands, dry lands, mountains, etc.).
The effect of human activities - magnified in recent years by population growth and global climate change - has greatly reduced biodiversity in ecosystems around the world. It is therefore important to refocus education programmes so that they enable educators and learners to protect biodiversity. The issue of biodiversity should be introduced or developed within both teaching and learning perspectives, with curricula and materials developed to create desired learning outcomes. Learning outcomes should include academic understanding, acquisition of values, increased capacity, skills development and the adoption of attitudes and behaviour conducive to biodiversity preservation.

3. ESD and Biodiversity at UNESCO
The Man and the Biosphere (MAB) Comoe project developed jointly by UNESCO and UNEP, uses 6 biosphere reserves in West Africa (Cote d'Ivoire, Burkina Faso, Mali, Niger, Senegal and Benin) to preserve areas naturally rich in biodiversity on the basis of the knowledge and experience of local rural communities. The aim is to learn lessons for the preservation and sustainable use of the biodiversity of the savannah. Additionally, the project seeks to strengthen the skills and technical capacity of the communities involved in the biosphere reserves, through

the establishment of appropriate learning and training mechanisms. Training sessions are organized, along with role-playing activities, which are very effective in raising awareness of the various aspects of preservation as well as the use and promotion of the resources within protected areas. ESD is practised in order to preserve biodiversity and test options for reconciling preservation with the growth of human activities

4. Climate Change Education for Sustainable Development at UNESCO

Education is an essential element of the global response to climate change. It helps young people understand and address the impact of global warming, encourages changes in their attitudes and behaviour and helps them adapt to climate change-related trends.

Through its Climate Change Education for Sustainable Development programme, UNESCO aims to make climate change education a more central and visible part of the international response to climate change. The programme aims to help people understand the impact of global warming today and increase "climate literacy" among young people. It does this by strengthening the capacity of its Member States to provide quality climate change education; encouraging innovative teaching approaches to integrate climate change education in school and by raising awareness about climate change as well as enhancing non-formal education programmes through media, networking and partnerships.

UNESCO responds to climate change through education within the framework of the UN Decade of Education for Sustainable Development (DESD).

5. Disaster preparedness

Recent disasters in Haiti and Pakistan in 2010 showed the need to "*use knowledge, innovation and education to build a culture of safety and resilence at all levels*" as articulated in the Hyogo Framework for Action 2005-2015. The role of education for disaster risk reduction strategies can thus be presented according to three types of activities: 1) Save lives and prevent injuries should a hazardous event occur, 2) Prevent interruptions to the provision of education, or ensure its swift resumption in the event of an interruption, and 3) Develop a resilient population that is able to reduce the economic, social and cultural impacts should a hazardous event occur.

Education for Disaster Risk Reduction (DRR) takes into account the relationships between society, environment, economy, and culture and their impacts. It also promotes critical thinking and problem-solving as well as social and emotional life skills that are essential to the empowerment of groups threatened or affected by disasters.

ESD, through its interdisciplinary and holistic approach to learning, helps create resilient societies. It encourages a long-term perspective in decision-making processes, critical thinking, and holistic and innovative approaches to problem-solving. ESD, therefore, contributes to DRR while DRR increases the relevance and the quality of education in disaster-prone areas.

6. ESD and Education for Disaster Risk Reduction at UNESCO

UNESCO gives specialized policy advice and technical assistance to affected governments, UN agencies and non-profit organizations in reactivating education system in post-disaster situations. It also plays a catalytic role, including advocacy, networking and participation in inter-agency activities, to ensure that educational needs are met in post-disaster settings. It is actively involved in post-disaster programmes such as the Myanmar Education Recovery Programme (MERP) in the Asia-Pacific region. UNESCO has been playing a valuable role within the UN International Strategy for Disaster Reduction (ISDR) Thematic Platform on Knowledge and Education. With its ISDR partner agencies, UNESCO promotes the integration of Disaster Risk Reduction in national educational plans, school curricula and national strategies, as well as supporting natural

disaster preparedness. UNESCO has promoted Education for Disaster Risk Reduction at a number of international events, including the workshop on "ESD and disaster risk reduction: building disaster-resilient societies", organized during the 2009 Bonn World Conference on ESD.

7. Cultural diversity

"Our rich diversity . . . is our collective strength." (Johannesburg Declaration, 2002)
Humanity has inhabited every corner of the world, except Antarctica, for centuries. As groups of people worked and lived together, they developed distinctive cultures. Together the cultures of the world create a rich and varied tapestry. The resulting cultural diversity expands choices, nurtures a variety of skills, human values and worldviews and provides wisdom from the past to inform the future. Cultural diversity is a mainspring for sustainable development for individuals, communities and countries. Thus, building an effective global approach to sustainable development and ESD needs to address respecting, protecting and maintaining the cultural diversity of the world now and in the future.

7.1 Cultural diversity exerts strong influence on ESD in that

- All ESD must be locally relevant and culturally appropriate;
- Culture influences what this generation chooses to teach the next generation including what knowledge is valued, skills, ethics, languages and worldviews;
- ESD requires intercultural understanding if people are to live together peacefully, tolerating and accepting differences amongst cultural and ethnic groups.

8. Indigenous Knowledge

ESD aims at promoting teaching which respects indigenous and traditional knowledge and encourages the use of indigenous languages in education. Indigenous worldviews and perspectives on sustainability should be integrated into education programmes at all levels whenever relevant.

Local knowledge and languages are repositories of diversity and key resources in understanding the environment and in using it to the best advantage. They foster and promote local cultural specificities, customs and values. The preservation of cultures is linked to economic development. However, tourism and cultural industries can run the risk of commodifying culture for outsiders. Cultures must be respected as the living and dynamic contexts within which human beings find their values and identity.

9. ESD and Cultural Diversity at UNESCO

Within the framework of the DESD and UNESCO's work on protecting and promoting cultural diversity, the Heritage Education for Sustainable Development project aims at strengthening the linkage between culture and education for sustainable development. The purpose of this project is to prepare inventories of communities' tangible and intangible heritage. Communities engaged in a dialogue on the significance and role of their heritage for ESD, documenting the insights gained and making some proposals for future action.

10. ESD and Indigenous Knowledge at UNESCO

In 2005, following the request of Mayangna leaders in Central America, UNESCO's Local and Indigenous Knowledge Systems (LINKS) programme launched a project to record and safeguard Mayangna knowledge and worldviews. The communities chose to focus the first phase of work

on fish and turtles, which are their primary source of protein and a vital part of the Mayangna way of life.

After extensive community-level consultations, the LINKS Programme launched the Spanish-language edition of the book Conocimientos del Pueblo Mayangna sobre la Convivencia del Hombre y la Naturaleza: Peces y Tortugas in 2009. A Mayangna language edition is in preparation.

The publication captures in meticulous detail the breadth and depth of indigenous knowledge about the aquatic world, weaving together empirical observations on behaviour, habitat, reproduction and migration patterns, with social commentaries on sharing, learning and harvesting, as well as cosmological reflections on human-animal relations and local spirits. It provides a foundation for enhancing biodiversity management by bringing indigenous knowledge on board alongside science.

11. Sustainable Urbanization

Cities are at the forefront of global socio-economic change. Globalization and democratization are an important part of sustainable development. Half of the world's population now lives in urban areas and the other half increasingly depend upon cities for economic, social, cultural and political progress.

In cities, education policies must typically serve highly diverse populations. Providing education for all – in particular girls, persons with disabilities, migrants, the poor and the marginalized – is a complex exercise requiring effective public services and the collaboration of numerous partners.

Learning to live together sustainably in cities is one of the most important educational challenges of our time. This requires a focus on:

- Creating a quality learning and educational environment that promotes sustainability;
- Providing lifelong learning opportunities in cities;
- Teaching tolerance and mutual understanding in urban societies;
- Enabling children and youth to learn to live and participate in urban life;
- Enhancing learning to create inclusive societies in inclusive cities;
- Developing learning in all its diverse forms.

The school is a unique institution where connections are made between world problems and local life. It has the potential of serving as an enabler of change and of facilitating the acquisition of the knowledge and skills necessary to function as an active and responsible citizen. Local authorities have a strategic role to play in making these centres of learning, training and personal development available to all citizens. At the same time, the capacity to live together is generated through a wide range of non-formal and informal modalities of learning. The challenge of sustainability requires learning how to change and nowhere is this more urgent or important than in urban settings.

12. Conclusion

Sustainability education (ES), **Education for Sustainability** (EFS), and **Education for Sustainable Development** (ESD) are interchangeable terms describing the practice of teaching for sustainability. ESD is the term most used internationally and by the United Nations.[1] Agenda 21 was the first international document that identified education as an essential tool for achieving sustainable development and highlighted areas of action for education.

References

1. Jones, P., Selby, D., Sterling, S. (2010). Sustainability Education: Perspectives and Practice Across Higher Education. Renouf Publishing.
2. Lang, J. (2007) How to succeed with education for sustainability. Curriculum Corporation.
3. Li, Z., and Williams, M. (2006). Environmental and geographical education for sustainability: cultural contexts. Nova Publishers.
4. Sims, G.D. (2007) Sustainability education: where does it belong? Minnesota State University.