

The Rationale For Education For Sustainable Development: Implications On Mainstreaming In Universities In Kenya.

Ajuoga Milcah Aoko,

St. Paul's University, Private Bag, Limuru and Evans Onditi, St. Paul's University.

Abstract

Education for Sustainable Development is a broad concept that is constantly evolving and it is a holistic and transformational education that aims to address learning content and outcomes, pedagogy and the learning environment so that societal transformation can be achieved. This requires the learning content in educational institutions to integrate critical issues such as climate change, gender equality, biodiversity, poverty reduction, disaster risk reduction and sustainable consumption and production into the curriculum. The learning outcomes for ESD are expected to promote core competencies such as collaborative decision making, critical and systemic thinking as well as taking responsibility for present and future generations. Education for Sustainable Development requires learning environments to be re-organized so that they can inspire learners to act for sustainability. ESD requires the use of approaches that reflect a paradigm shift from manual training of discipline-specific content to a focus on the enhancement of quality of life enriched with intellectual and social capital. One of the main challenges the Ministry of Education has faced in the implementation of ESD in Kenya is that the concept of ESD is not fully understood and the existing teachers and instructors both at basic education and higher education levels lack ESD educator competencies this is mainly because ESD is not included in the pre-service and in-service teacher training programmes. Universities are at the apex of the educational levels' hierarchy and for ESD to succeed in Kenya, it requires mainstreaming sustainability into all aspects of the learning environment. This requires Universities to embed sustainability into their curriculum and learning processes, operations, facilities, interaction with local communities, capacity building and governance. The Ministry of Education expects Universities to provide relevant good practice examples by engaging in research on ESD and setting up sustainability learning environments such as Eco-schools or green campuses. Kenyan universities can teach topics such as de-politicization of issues of resource conservation, sustainable use of natural resources, bio-diversity and bio-safety, green lifestyles, land tenure and land use.

Key: *Educational Sustainable Development, Competencies, Competency Based Education.*

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I. Background to the United Nations Education for Sustainable Development Decade

The United Nations launched in 2005 the Decade of Education for Sustainable Development as an outcome of international deliberations on the sustainability of development models that had began way back in 1972. The Education for Sustainable Development (ESD) Kenya Country Report of 2005 – 2012 states that the international community in 1992 affirmed that education, training and public awareness had an important role in the achievement of the goals of sustainable development in chapter 36 of Agenda 21 at the United Nations (UN) conference held in Rio de Janeiro, Brazil. Agenda 21 specifically mentioned that all levels of education and training would have to be re-oriented towards a more sustainable model of development that the needs of the present generation would be met without compromising the capacity of future generations to meet their needs.

In the year 2002, the World Summit on Sustainable Development held in Johannesburg produced what is known as the Johannesburg Implementation Plan which also confirmed the important role of ESD in achieving inter-related and inter-generational economic, social and environmental goals of sustainable development. This plan recommended that a UN decade on ESD be declared and this was done at the UN General Assembly through resolution 57/254. The United Nations Educational, Scientific and Cultural Organization (UNESCO) was appointed the lead agency and it later released an international implementation plan for the UN Decade for Education for Sustainable Development. The implementation plan specified that the objectives of the decade were to improve the quality of education at all levels, re-orient education at all levels for sustainable development, enhance public understanding and awareness of sustainable development and build capacity for sustainable development (UNESCO, 2005).

African Ministers for Education made a commitment in 2006 to implement the UN Decade for Sustainable Development in the context of the second decade on education in Africa. The commitment by the ministers showed the need to have the United Nations Decade for ESD activities within key policy initiatives of African governments such as the African Union's second decade for education plan of action. However, it should be noted that the first Decade of ESD Global Monitoring and Evaluation Report emphasized that no country is close to embedding sustainable development into its systems or structures.

II. The Concept of Education for Sustainable Development

Education for Sustainable Development is a broad concept that is constantly evolving and it is a holistic and transformational education that aims to address learning content and outcomes, pedagogy and the learning environment so that societal transformation can be achieved (UNESCO, 2014). This requires the learning content in educational institutions to integrate critical issues such as climate change, gender equality, biodiversity, poverty reduction, disaster risk reduction and sustainable consumption and production into the curriculum. The learning outcomes for ESD are expected to promote core competencies such as collaborative decision making, critical and systemic thinking as well as taking responsibility for present and future generations. Education for Sustainable Development requires learning environments to be re-organized so that they can inspire learners to act for sustainability.

This implies that in order to achieve societal transformation, learners of all ages need to be empowered in any education setting to be able to transform themselves and the societies they live in. ESD also includes climate change education, global citizenship education, health education, human rights education, environmental education, peace education, HIV-Aids education and values education. According to Armstrong (2011), the skills associated with sustainable development include conflict resolution, imagination, creativity, collaboration, cooperation, future mindedness and civic engagement. ESD requires the use of approaches that reflect a paradigm shift from manual training of discipline-specific content to a focus on the enhancement of quality of life enriched with intellectual and social capital (Nyatuka, 2020). The ESD pedagogy that was initiated by UNESCO (2004) points to a shift towards active participation of learners and experiential learning which engages the learner in thinking and equips them with the skills needed to act responsibly.

III. The Status of Education for Sustainable Development in Kenya

The Constitution of Kenya under Article 10 describes sustainable development as a national value. Article 42 and 69 make it an obligation for the Government of Kenya and citizens to protect the environment. Every child is entitled to free and compulsory basic education under Article 53 of the constitution. Section 42(4) of the Basic Education Act of Kenya states that the Cabinet Secretary for Education shall after getting advice from the National Education Board advise the National Government on the promotion of education relating to the protection of the environment. In the Kenya Vision 2030 document, education is identified as a key driver for development under the social pillar. The National Education Sector Plan of 2013 – 2018 provides a strategy for education and training to promote ESD with reference to the Global Action Programme.

Education for Sustainable Development activities have been implemented in Kenya under the framework of the UN Decade for ESD and the Kenya ESD Implementation Strategy of 2008. The ESD interventions have been done through consultation and ownership, advocacy and vision building, capacity building and training, partnerships and networks, use of information and communication technology, research and innovation, monitoring and evaluation and regional centres of expertise (Republic of Kenya, 2008). Kenya has a National ESD policy in Sessional Paper No. 11 of 2014 on National Education for Sustainable Development. The policy provides mechanisms for engaging all stakeholders in addressing sustainable development challenges through education.

The Ministry of Education has established partnerships and network with the Ministry of Health, UNESCO, UNEP, WFP, UNICEF, Ministry of Environment and Natural Resources and Israel's Agency for International Development Cooperation also known as MASHAV for effective implementation of the National Education Sector Plan. The Ministry of Education has reported various achievements with regard to the status of ESD in Kenya. For example, the government has been able to incorporate education strategies, tools and targets into national sustainable development strategies, the green economy and climate change plans (Republic of Kenya, 2015a). Similarly, education officials and teachers have been trained on ESD related pedagogy and several schools are currently practicing ESD. How about in higher education at the universities.

IV. Challenges in Implementing Education for Sustainable Development

One of the main challenges the Ministry of Education has faced in the implementation of ESD in Kenya is that the concept of ESD is not fully understood and the existing teachers and instructors both at basic education and higher education levels lack ESD educator competencies this is mainly because ESD is not included in the pre-service and in-service teacher training programmes. There is also a low level of awareness among the public

on ESD and this can be attributed to the limited involvement of the media in ESD programmes. Another common challenge has been lack of adequate financial resources to purchase the resources and put in place the infrastructure needed to successfully implement ESD learning activities at all levels of education.

V. Implication of Mainstreaming in Universities in Kenya

Teachers are critical drivers of change in Education for Sustainable Development. Through the Sustainable Development Goal (SDG) number 4, ESD provides a cross-cutting mechanism for the achievement of all the SDG's in Kenya (Ministry of Education, 2017). This is in-line with Agenda 2063 of the African Union which calls on governments to catalyze an education and skills revolution to build knowledge, human capital, capabilities and skills necessary to drive innovation in Africa. This implies that ESD is the key to the delivery of quality education and for building the capacity for Kenya to achieve a green economy (Nyatuka, 2020). The Competency Based Curriculum (CBC) in Kenya provides learners with an opportunity to nurture their potential through quality education and this is the goal of ESD. The CBC seeks to empower learners with knowledge and skills to make informed decisions and act accordingly to achieve economic viability, environmental integrity and a just society for the current and future generations.

Universities are at the apex of the educational levels hierarchy and for ESD to succeed in Kenya, it requires mainstreaming sustainability into all aspects of the learning environment. This requires Universities to embed sustainability into their curriculum and learning processes, operations, facilities, interaction with local communities, capacity building and governance. The Ministry of Education expects Universities to provide relevant good practice examples by engaging in research on ESD and setting up sustainability learning environments such as Eco-schools or green campuses (Republic of Kenya, 2015b) as well as allowing educators and students to integrate principles of sustainability into their daily activities while on campus. In 2019, the Ministry of Education published a document titled "A Guide to Mainstreaming Education for Sustainable Development and Global Citizenship Education (GCED) into Kenyan Universities". The objectives of the document were to provide guidelines on how ESD and GCED concepts can be mainstreamed in programmes in Universities in Kenya, how to mainstream ESD and GCED concepts in planning and decision-making processes of Universities and finally how to strengthen the capacity of the University staff to become learning facilitators for ESD and GCED.

For Kenyan Universities to effectively mainstream ESD into their academic programmes, the Ministry of Education (2019) suggested that the Universities adopt role playing, storytelling, dramatization, question and answer method, demonstrations, use of music and art as well as use of resource persons. This is because mainstreaming of the content for ESD requires learner-centered learning which involves the use of transformative learning approaches through which learners can discover and construct knowledge, acquire skills and attitudes needed to solve problems in society. The Universities are expected to use field trips for learners to be able to relate theory to practice. Some of the recommended methodologies are experiential, interactive, participatory and transformative and this helps to attain the objectives of ESD. Mainstreaming ESD in Universities is about equipping the graduates with knowledge and skills to be able to understand the value of utilizing current resources without compromising the future. This can be done effectively using in-class and out of class activities. The approaches used by each University depends on the actual thematic area.

In the water and sanitation thematic area, the relevant topics that may be included by Universities are sources of water, the hydrological cycle, water harvesting, water recycling and water sanitation. The learners in this area can be assessed using projects, assignments, practical sessions and innovations relating to water. Some of the out of class activities that can be used as learning activities are tree planting events, water walks, training on water conservation and public lecture on water issues. For the disaster awareness, preparedness and management, the topics include the concept of disaster awareness, types and causes of disasters, disaster response and mitigation, post-disaster recovery and effects of disasters. The learners can be assessed using assignments and projects while audits can be used out of class.

In the area of food and nutrition, the universities need to teach topics such as sustainable agriculture and livestock farming, fisheries and fish farming, alternative common and indigenous food preservation and storage methods, post-harvest management, organic farming, reduction of food wastage and genetically modified organisms. The learners can be assessed on these topics using field work, research projects and innovations on food security. A good example is the Kabarak University students who found a way of converting grass into flour in order to help the country overcome their over-dependence on maize flour (Citizen TV, 20 October 2023). St. Paul's university invented sanitary pad using banana fibers and the scooped Hult Award worth US 100 million. Another area in ESD is sustainable production and utilization of resources. Kenyan universities can teach topics such as de-politicization of issues of resource conservation, sustainable use of natural resources, bio-diversity and bio-safety, green lifestyles, land tenure and land use. Learners can be assessed through practical projects and innovations in sustainable production and consumptions. These topics can be customized depending on the relevant university common courses. Out of class activities such as production engineering clubs, environmental

clubs, science and technology clubs and UNESCO clubs can be part of the curriculum so that learners gain benefit from experiential learning opportunities.

As a country, Kenya has been negatively affected by issues such as religious radicalization, tribalism, post-election violence and other conflict related issues. This means that peace and conflict is an important thematic area in ESD which universities can make a significant contribution to by engaging in activities such as peace walks, cultural fairs, anti-radicalization debates, cohesion and integration events, appointment of students as peace champions, encouraging learners to take up volunteering opportunities and organizing peace conferences. These activities can be done through Peace/Amani clubs, recognition of peace champions, religious associations, drama and community service.

VI. Conclusion

The ESD concept is yet to be fully embraced by all Kenyan universities and this applies to both private and public ones because the level of awareness on ESD and its objectives is still low. This implies that within the Kenyan universities, little progress has been made to promote whole-institution approaches to ESD at all management levels. Universities in Kenya are yet to move beyond offering individual courses and specialist training to offer more ESD-relevant content and learning activities. What some universities have done is partial implementation of a few topics on ESD mainly as curriculum add-ons or experiential learning units

VII. Recommendation

For ESD to succeed in Kenyan universities, the university management need to establish an institution wide process that will enable all stakeholders such as learners, lecturers and the local communities to jointly develop a plan and vision for implementing ESD in all Kenyan universities. The universities should also engage in research activities on ESD thematic areas and publish finding for the public to know and this will help to strengthen the institutional approach to ESD. It is also important for the universities to enhance the linkages they have with industry players and local communities to facilitate field work opportunities for learners. ESD should also be made compulsory in all teacher training programs at university level. Local communities should also be involved in the curriculum development process. The universities should also invest in facilities, programmes and public-private partnerships that promote youth participation in sustainable development since they are the future of the country.

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