



Effect of Education on Sustainable Development in East African Universities: A Case of Two Universities in Uganda and Rwanda

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Abstract: Education is a key resource in society which encourages innovative approaches towards societal transition and sustainability through formal education systems, non-formal and informal learning settings. The Sustainable Development Goals (SDGs) advocate for all learners to have knowledge and skills needed to promote sustainable development. As the United Nations is advocating for that, many developing countries are still struggling to attain quality education for sustainable development. Therefore, the study assessed the effect of education on sustainable in East African Universities. Kampala University and University of Technology and Arts of Byumba participated and 44 respondents were purposively selected to participate in the study. Data was collected through interviews and checklists from education leaders' and practitioners' perspectives on the need for quality education in sustainable development. The validity of the instruments was assured through discussion and verification by experts in education to ensure their validity. Data was analyzed using content value analysis through triangulation and transcription to generate results. The study findings revealed that learners' understanding of sustainable development is enhanced, the wider knowledge gap among the learners is reduced, hands-on skills and practices for sustainable development are attained too. Therefore, the study recommended that, universities should rethink to broaden the notion of lifelong education, implement culturally-relevant and locally appropriate education in society, apply action-oriented and problem based learning as strategies to quality education for sustainable development.

Keywords: Education, quality education, sustainable development, triangulation

1. Introduction

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 (Didham & Ofei-Manu, 2015). Thus, Education for Sustainable Development (ESD) has become an important issue in the society (Lambrechts & Hindson, 2016). The United Nations Decade on Education for Sustainable development, 2005-2014) has encouraged innovative approaches in education in order to contribute to societal transition towards sustainability through both the formal education system, non-formal and informal learning settings (Buckler and Creech, as cited in Didham & Ofei-Manu, 2015). The United Nations Conference on Sustainable Development (Rio+20) in Rio de Janeiro in

2012 gave rise to the Sustainable Development Goals (SDGs). SDG No.4 emphasizes quality education through inclusive and equitable quality education that promotes lifelong learning opportunities for all (UNESCO, 2015). Thus, sustainable development refers to the development that meets the needs of the present without compromising the ability of future generation to meet their own needs (WCED, 1987).

Didham & Ofei-Manu (2015) affirmed that education is key to the global integrated framework of SDGs that serves as an important means of implementation for sustainable human development due to the number of positive benefits it brings across the development goals. Additionally, quality basic education is a necessary formation for learning throughout life in a complex and

rapidly changing world (Bokova in UNESCO, as cited in Didham & Ofei-Manu, 2015, p.96). Didham & Ofei-Manu (2015) add that, quality education is about what and how people learn and its influence of people's choices to sustainability. Quality education for sustainable development (QESD) allows every human being to acquire knowledge, skills, attitude and values necessary to shape a sustainable future (McKeown *et al.*, 2002 as cited in Nascimen to, 2016). QESD reinforces people's sense of responsibility as global citizens and better prepares them for the world they will inherit (Buckler & Creech, as cited in Didham & Ofei-Manu, 2015). Providing quality education has become a complex undertaking because it is continuously evolving (UNESCO, 2017). Fascinatingly, SDGs set by United Nations advocate for all learners to have knowledge and skills needed to promote sustainable development. This is also emphasized by UNESCO as cited in Nascimen to(2016) which calls for improving every aspect of the quality of education, and ensuring excellence that recognized the measurable outcomes are achieved by all-literacy, numeracy and essential life skills. Although, the United Nations is advocating for that many developing countries are still struggling to attain quality education which is a prerequisite ingredient for sustainable development (UNESCO, 2017). Therefore, the study assessed the effects of education on sustainable development through the following objectives: How does the integration of QESD in formal curricula promote sustainable development? How does QESD ensure sustainable development? How does education for all enhance sustainable development?

2. Review of Related Literature and Studies

This section discusses reviewed literature and studies regarding the effect of Education on Sustainable development.

2.1 Effect of integration of QESD in formal curricula on sustainable development

Education for sustainable development is learning to think about and work towards a livable world, now and in the future for ourselves and for others (van Poeck & Loones, as cited in Lambrechts &Hindson, 2016). This enables people to develop the knowledge, values and skills to participate in decisions about the way we do things individually and collectively, both at local and global levels that, will improve the quality of life now without damaging the planet for the future (Sustainable Development Panel Report, 1998 as cited in University of Plymouth, n.d). Consequently, ESD is connected to the tradition of citizenship education, preparing students to become active citizens in society. This implies that educators and researchers need to develop a deep

understanding in which sustainable issues are at stake, now and in the future.

The world is constantly and rapidly changing, thus what is thought to be sustainable today might not be sustainable tomorrow (Wals, 2015). As sustainable issues are complex and uncertain, ESD needs to evolve itself in order to be able to provide skills and competences that enable citizens to cope up with complexity and uncertainty (Lambrechts, as cited in Lambrechts & Hindson, 2016). Thus, ESD is not just adding sustainability as an extra topic to the curriculum, but further enabling learners to contribute to sustainable societies (Hindson, 2016).

Lambrechts & Hindson, (2016) note that for a school to train a complete person for a sustainable future, QESD should be integrated into the school curriculum and focus put on food and consumer education, social learning, energy use and personal resource management. It was noted that, a school is a perfect place to reach a whole generation in a safe learning environment thus, important integration of QESD into schools' curricula to enhance sustainable development. Thus, young people can test and develop key lifestyles and their own lifestyles which can be achieved through integration of sustainable development into the formal education system. QESD is very important for achieving sustainable world from both social and environment perspectives. This means that, it requires the promotion of knowledge, skills, abilities and attitudes to combat adverse effects to sustainable development (Bachiorriet *al.*, 2016). Consequently, for countries to best achieve the above, the easiest way is through integration on QESD into school curricula at all levels of study.

The change towards sustainability is that, a school requires more than just re-orienting curricula (Mulaet *al.*, 2016). This indicates that deeper levels of commitments where schools are not only concerned about what are taught but how student's learning occur, as a result, education engages all stakeholders at every core of the school culture, curricula, operations, management procedures, partnerships and relations with the local community. Results also indicated that learners' understanding of sustainable development is enhanced, the wider knowledge gap among the learners is reduced and hands on skills and practices for sustainable development are attained.

2.2 Effect of QESD on sustainable development

Quality education is a dynamic concept that changes and evolves with time and is modified according to the social, economic and environmental contexts. Quality education must be locally relevant and culturally appropriate and it takes many forms around the world (UNESCO, 2015). People are consuming more resources than the planet can

provide. Charmingly, governments developed plans to ensure collective education crucial for sustainable development (UNESCO, as cited in Veiga Avila *et al.*, 2018, p.1). To that note, sustainable development is not a fixed state of harmony, but rather as a process of change in which it reconciles the exploitation of resources, technological investment management, as institutional changes within the present and the future (Canepa, as cited in Veiga Avila *et al.*, 2018, p.2). Thus, sustainable development has been of importance through political and economic spheres hence, transforming world cultures.

QESD affirms progress beyond purely economic results and focuses on increasing the quality of life as it neglects environmental issues so as to ensure sustainable development. Veiga Avila *et al.* (2018) assert that, if education for sustainability is the path to global development, it is necessary to expand research and studies on sustainable development. QESD minimizes massive destruction of world's resources, consumption issues and production chain which may result into undesirable social and environmental consequences, hence, enhancing sustainable development. This means that, in those regions where resources are efficiently utilized as per community's education, better outcomes from conservation are established which are attributes to sustainable development. Results from a study by Veiga Avila *et al.* (2018) indicate that, QESD promotes preservation and conservation of environmental resources through ecological awareness implying that, it is a vital and eternal struggle challenging people and the society.

Sustainable development is a process of long term social learning which in turn is driven by the public policies of national development plan as a result of QESD. These are through the acts of Parliament as supported by nation's constitution and policy tools/ frameworks. Subsequently, nations have taken an important role in thinking about development and confirmation of alternatives for sustainable development as required by academic programs. Therefore, actions and standards are important for good quality of life for everyone, for both present and future generations. This is clarified by Cortese; Scott & Gough; Vare & Scott, as cited in Veiga Avila *et al.*, 2018, p.3) that, education institutions educate individuals to contribute to a more sustainable future. This implies that, education institutions are not only educating for the future generations to become decision and policy makers but, they also play an important role in the journey to a more sustainable global future (Jacobi, 2003).

In the process of ensuring sustainable development, QESD creates an opportunity to understand the role of different actors who engage in an articulate and committed education progress with sustainability. Thus, this opportunity is achieved through the support of a logic that favors dialogue in the areas of knowledge and skills (Jacobi, as cited in Veiga Avila *et al.*, 2018, p.3). As that is ensured, more change from the perspective of thinking and acting in the transformation of knowledge and

educational practices for sustainable development is enhanced.

QESD promotes the growth of environmental awareness, expanding the possibility of participation of the population in decision making, a way to obtain co-responsibility for supervision and control of environmental degradation agents. Jacobi (2005) contends that, for better environmental awareness, an active form of intellectual process as a social learning, based on dialogue and interaction in a constant process of the rebirth and reinterpretation of information is very important. As a result, this aids the learning of concepts and meanings based on learners' personal experiences. QESD promotes critical thinking for a collective solidarity and responsibility, for interdisciplinary, multiplicity and diversity, as in turn ensures collective commitments for planetary civil society. In this way, thinking about the environment is directly connected to the dialogue of knowledge, to participation and to ethical values to strengthen the complex interaction between society and nature (Jacobi, 2005). Laurie *et al.* (2016) add that, QESD encourages interdisciplinary and cross-curricular work. This implies that, the use of Inquiry Based Learning strengthens research skills, risk taking, critical thinking and collaborative learning; enhance sustainability in the future as advocated for by sustainable development.

2.3 Effect of education for all enhance on sustainable development

Education for all is reflected in the UNSDGs number four (UNSDG4) which states that, achieving inclusive and quality education for all reaffirms the belief that education is one of the most powerful and proven vehicles for sustainable development (UN, 2015). This implies that with the adoption of the SDGs, the role of education as instrument within the global debate on sustainable development has been given renewed attention. Therefore, quality education is fundamental to the achievement of all other development goals. This implies that access to basic literacy and numeracy are crucial to quality of life; acquire knowledge and skills (cognitive, interpersonal and social) through teaching and learning to transform individuals to enhance sustainable development (UN, 2015). Thus, education in any form provides transferable skills relevant to collaborative problem solving. This means that, access to basic education emphasizes socio-emotional skills for achieving positive life outcomes and reducing educational and social disparities that would have hindered sustainable development (World Education Forum, as cited in UNESCO, 2018).

UNESCO (2018) asserts that achieving sustainable development requires a change in the way we think and act, consequently, a transition to sustainable lifestyle, consumption and production patterns which is enhanced through education for all. Therefore, education is the most important powerful tool at hand to drive the transformation changes necessary for sustainable

development. GEM report & UNESCO as cited in UNESCO (2018) affirm that, education is crucial for addressing environmental and sustainability issues and ensuring human well-being. For that reason, education as a force for human well-being and global development can transform our world through integrating education systems through sustainable development (UNESCO, 2018).

Accordingly, the adoption of a stand-alone goal on education, SDG4, reaffirms the crucial role of education in accelerating a clear process towards sustainable development. This is emphasized by the Incheon Declaration on Education 2030 and states: 'our vision to transform lives through education, recognizing the important role of education as a main driver of development (The Incheon Declaration, 2015 as cited UNESCO, 2018, p.34). It adds that, education empowers people of all ages to take personal responsibility for creating a sustainable future.

UNESCO (2018) clarifies that, the power of education to shape attitudes, values and behaviors for developing capacities and skills to build an understanding and commitment to development goals lies in education for all. Therefore, education encourages sustainability incorporation of general principles into informal education and lifelong learning of the knowledge, values and skills needed for sustainable way of life, a requirement to sustainable development. UNESCO further emphasizes that, it is through education that an opportunity and a responsibility of developed and developing countries to intensify efforts for poverty eradication, reduction of inequalities, environmental protection and economic growth, with a view of promoting equitable sustainability are improved.

3. Research Methodology

The study adopted a case study research design which used qualitative data collection approaches. The study targeted a total population of 50 people from the selected East African Universities where a sample size of 44 respondents was obtained. The percentage of a sample of 44 respondents from the target population of 50 people is 88%. The participants were purposively selected and participated in the study.

Data was collected through interview guides and checklists from education leaders' and practitioners' perspectives on the need for quality education in sustainable development in the selected universities. The questions were open-ended to allow participants to have a broader perspective on the issues at hand and data was analyzed using content value analysis through triangulation and transcribing to generate results for the study.

Additionally, a thorough review was done from scholarly works of previous works in both hard and electronic (online) literature. In this perspective, no rigorous

statistical analysis was carried out but simple methods of tallying and cross-triangulation were used to make sense out of the information collected. The validity of the instruments was assured through discussion and verification by experts in education to ensure their validity.

4. Results and Discussion

This section was guided by four interview questions which were analyzed using content value analysis through triangulation and transcribing to generate results for the study as follows:

4.1 Effects of the integration of QESD in formal curricula on sustainable development

Respondents revealed that integrating quality education sustainable development into formal curricula enables learners to develop knowledge, values and skills to participate in decisions. This is key to learners to think individually and collectively at local and global levels. The finding is in agreement with van Poeck & Loones (as cited in Lambrechts & Hindson, 2016) who assert that, education for sustainable development is learning to think about and work towards a livable world, now and in the future for ourselves and for others. We therefore, note that, education improves quality of life without damaging the planet.

Fascinatingly, governments have implemented policy briefings where educators and researchers have developed models for curriculum innovation and the integration of sustainability competences. Consequently, ESD is connected to the tradition of citizenship education, preparing students to become active citizens in society. This implies that, educators and researchers need to develop a deep understanding in which sustainable issues are at stake, now and in the future.

However, the world is constantly and rapidly changing thus what is thought to be sustainable today might not be sustainable tomorrow (Wals, 2015). As sustainable issues are complex and uncertain, ESD needs to evolve itself in order to be able to provide skills and competences that enable citizens to cope up with complexity and uncertainty (Lambrechts, as cited in Lambrechts & Hindson, 2016). Thus, ESD is not just adding sustainability as an extra topic to the curriculum, but further enabling learners to contribute to sustainable societies (Lambrechts & Hindson, 2016).

Additionally, pupils and students spend an increasing part of their daily lives in schools so that schools become place of authentic real life experiences (Lambrechts & Hindson, 2016). This implies that for a school to train a complete person for a sustainable future, QESD should be integrated into the school curriculum and focus put on

food and consumer education, social learning, energy use and personal resource management. It was noted that, a school is a perfect place to reach a whole generation in a safe learning environment thus, important integration of QESD into schools' curricula to enhance sustainable development. Thus, young people can test and develop key lifestyles and their own lifestyles which can be achieved through integration of sustainable development into the formal education system.

The integration of QESD in school curriculum ensures students' and all other actors' participate in any possible ways into sustainable development. This inculcates knowledge on sustainable development from an early stage until they grow up. This implies that they grow up; students empowered to fight for sustainable development as well as environment conservation. Furthermore, participation entails resource management, the culture of learning, health promotion and collaboration of training institutions with community. It was also revealed that, QESD is very important for achieving sustainable world from both social and environment perspectives. This means that, it requires the promotion of knowledge, skills, abilities and attitudes to combat adverse effects on sustainable development (Bachiorri *et al.*, 2016). Consequently, for countries to best achieve the above, the easiest way is through integration of QESD into school curricula at all levels of study.

Finally, change towards sustainability is that, schools require more than just re-orienting curricula (Mula *et al.*, 2016). This indicates that deeper levels of commitments where schools are not only concerned about what are taught but how student's learning occur, as a result, education engages all stakeholders at every core of the school culture, curricula, operations, management procedures, partnerships and relations with the local community. Findings also indicated that if learners' understanding on sustainable development is enhanced, the wider knowledge gap among the learners is reduced and hands on skills and practices for sustainable development is attained.

4.2 Effects of QESD on sustainable development

Quality education is a dynamic concept that changes and evolves with time and is modified according to the social, economic and environmental contexts. Quality education must be locally relevant and culturally appropriate and it takes many forms around the world (UNESCO, 2015).

Interestingly, findings indicated that, people are consuming more resources than what the planet can provide. This was as a result ignorance of the people towards resource conservation a necessity to sustainable development. I note universities put more effort on resource conservation, through sensitization among the

learners so as to avert the negative behavior resource degradation. Charmingly, universities and governments have come up with various plans to ensure collective education crucial for sustainable development (UNESCO, as cited in Veiga Avila *et al.*, 2018, p.1). To that note, sustainable development is not a fixed state of harmony, but rather as a process of change in which it reconciles the exploitation of resources, technological investment management, as institutional change within the present and the future (Canepa, as cited in Veiga Avila *et al.*, 2018, p.2). Thus, sustainable development has been of importance through political and economic spheres hence, transforming world culture. This ensured as communities are encourage to take part in resource conservation. I recall that in most African countries, culture has been looked at as key resource conservation, for example, in Uganda, resources are conserved due the bondage people have through totems. This enhances conservation paramount to promoting sustainable development.

Findings revealed that, QESD affirms progress beyond purely economic results and focuses on increasing the quality of life as it neglects environmental issues so as to ensure sustainable development. The study on quality education by Veiga Avila *et al.* (2018) found that, if education for sustainability is the path to global development, it is necessary to expand research and studies on sustainable development.

It is also important to note that, its longest form followed by its short form minimizes massive destruction of world's resources, consumption issues and production chain which may result into undesirable social and environmental consequences, hence, enhancing sustainable development. This means that, in those regions where resources are efficiently utilized as per community's education, better outcomes from conservation are established which are attributes to sustainable development. Results from a study by Veiga Avila *et al.* (2018) indicate that, QESD promotes preservation and conservation of environmental resources through ecological awareness implying that, it is a vital and eternal struggle challenging people and the society.

It can be recalled that, sustainable development is a process of long term social learning which in turn is driven by the public policies of national development plan as a result of QESD. These are through the acts of Parliament as supported by nation's constitution and policy tools/ frameworks. Subsequently, nations have taken an important role in thinking about development and confirmation of alternatives for sustainable development as required by academic programs. Therefore, actions and standards are important for good quality of life for everyone, for both present and future generations. I note that actions such as sustainable resource uses, environmental education, policies and regulation are all actions and plans which enhance resource development in any country. Cortese; Scott & Gough; Vare & Scott, as cited in Veiga Avila *et al.*, 2018, p.3) assert that higher

learning institutions educate individuals to contribute more on a sustainable future. This implies that, higher learning institutions are not only educating for the future generations to become decision and policy makers but, also play an important role in the journey to a more sustainable global future (Jacobi, 2003).

Accordingly, in the process of ensuring sustainable development, QESD creates an opportunity to understand the role of different actors who engage in an articulated and committed education progress with sustainability. Thus, this opportunity is achieved through the support of a logic that favors dialogue in the areas of knowledge and skills (Jacobi, as cited in Veiga Avila *et al.*, 2018, p.3). As that is ensured, more change from the perspective of thinking and acting in the transformation of knowledge and educational practices for sustainable development is enhanced.

It was also revealed that, QESD promotes the growth of environmental awareness, expanding the possibility of participation of the population in decision making, a way to obtain co-responsibility for supervision and control of environmental degradation agents. Jacobi (2005) contends that, for better environmental awareness, an active form of intellectual process as a social learning, based on dialogue and interaction in a constant process of the rebirth and reinterpretation of information is very important. As a result, this aids the learning of concepts and meanings based on learners' personal experiences. Jacobi further informs that,

“Education promotes a critical view of reinforcing practices which make explicit the need for problematize and act upon the socio-environmental problems, based on understanding the conflicts and sharing an ethical concerned with environmental justice.”

Based on Jacob scenario, it is noted that in Uganda for example the case is different; despite the existing policies on environmental conservation and the increased levels of education the levels of sustainable development are very low. This is eminent in most parts of the country where resources destruction is very high and environmental disasters have occurred and devastated the country. The clear example is the floods which happened and resulted into death, loss of property, and destruction of crops, farms and cut-off of road networks in the country.

The study findings revealed that QESD promotes critical thinking for a collective solidarity and responsibility, for interdisciplinary, multiplicity and diversity, as in turn ensures collective commitments for planetary civil society. In this way, thinking about the environment is directly connected to the dialogue of knowledge, to participation in an ethical value to strengthen the complex interaction between society and nature (Jacobi, 2005). Laurie *et al.* (2016) add that QESD encourages interdisciplinary and cross-curricular work. This implies

that, the use of Inquiry Based Learning strengthens research skills, risk taking, critical thinking and collaborative learning and enhances sustainability in the future as advocated for by sustainable development.

4.3 Effects of Education for all on sustainable development

Study findings indicated that education gives a chance to everybody in the community to have ideas and knowledge on conservation of resources. One of the respondents noted that,

“Education for all had helped people in community on how to read and write an important factor for survival in any community or country.”

This means that education for all widens the understanding of the people. In addition, education for all is reflected in the United Nations Sustainable Development Goals number four (UNSDG4) which states that, achieving inclusive and quality education for all affirms the belief that education is one of the most powerful and proven vehicles for sustainable development (UN, 2015). This implies that with the adoption of the Sustainable Development Goals (SDGs), the role of education as instrument within the global debate on sustainable development has been given renewed attention.

Therefore, quality education is fundamental to achieving other development goals. The management of resources in any country can be ensured if people's mindset is changed through education. When they are enlightened, they acquire a valuable tool for resource conservation. UN (2015) emphasizes that access to basic literacy and numeracy are crucial to quality of life; acquire knowledge and skills (cognitive, interpersonal and social) through teaching and learning to transform individuals to enhance sustainability. Thus, education in any form provides transferable skills relevant to collaborative problem solving. This means that, access to basic education emphasizes socio-emotional skills for achieving positive life outcomes and reducing educational and social disparities that would have hindered sustainable development (World Education Forum, as cited in UNESCO, 2018, p.34; UNESCO, 2018).

Moreover, education serves as a means to pursue achievements for sustainable development. From this perspective, one of the respondents indicated that, sustainable development can be achieved only when awareness is enhanced and people understand the values of the environment and the natural resources. Additionally, the three components of sustainable development have to be incorporated for better environment conservation which is worthwhile for better development. Therefore, in this case stakeholders should use education as an instrument to achieve sustainable

development rather than destroying it as it commonly in Uganda. For example, UNESCO as cited in UNESCO (2018, p.29) asserts that achieving sustainable development requires a change in the way we think and act, consequently, a transition to sustainable lifestyle, consumption and production patterns which is enhanced through education for all. Therefore, education is the most important powerful tool at hand to drive the transformational changes necessary for sustainable development. UNESCO (as cited in UNESCO, 2018, p.30) affirms that, education is crucial for addressing environmental and sustainability issues and ensuring human well-being. For that reason, education as a force for human well-being and global development can transform our world through integrating education systems through sustainable development (UNESCO, 2018).

Findings indicated that, education plays an important role in helping people to move towards more sustainable farming practices and understanding nutrition, all of which are elements of sustainable development. Accordingly, the adoption of a stand-alone goal on education, SDG4, reaffirms the crucial role of education in accelerating a clear process towards sustainable development. This is emphasized by the Incheon Declaration on Education 2030 and states: *'Our vision to transform lives through education, recognizing the important role of education as a main driver of development'* (The Incheon Declaration, 2015 as cited UNESCO, 2018, p.34). This implies that educating people transforms them into better lives and livelihoods of communities. This ensures that the future will be better, provided education is enhanced to achieving sustainable development. It adds that, education empowers people of all ages to take personal responsibility for creating a sustainable future.

Findings also revealed that, the power of education shapes attitudes, values and behaviors for developing capacities and skills for the future. This implies that building a clear understanding and commitment for developing goals lies in education for all. The findings concur with UNESCO (2018) which clarifies that education encourages incorporation of general principles into informal education and lifelong experiences. This enhances the learning of the knowledge, values and skills as needed for sustainable life, a requirement to sustainable development. UNESCO (2018) further emphasizes that, it is through education that an opportunity and responsibility of developed and developing countries to intensify efforts for poverty eradication, reduction of inequalities, environmental protection and economic growth, with a view of promoting equitable sustainability are improved. It is always stated that education is key to success, implying that, those who have joined education have a high chance of better knowledge and skills for sustainable development.

5. Conclusions and Recommendations

In the light of the proceeding analysis and discussion regarding the effects of education on sustainable development, the study concluded that quality education for sustainable development (QESD) contributes to sustainable development in a variety of ways. Thus, QESD is a deliberate intervention for addressing global justice and sustainability issues and results highlighted the need for QESD across the global village. With the integration of QESD into school curriculum, learners become active citizens in the society and sustainable development. That is why QESD affirms the progress beyond purely economic results and focus on increasing the quality of life to minimize massive destruction and play a role in rethinking alternatives to national development. Consequently, education is fundamental for quality of life, knowledge and skills acquisition through teaching and learning to transform individuals for sustainability.

Based on the above conclusions, it is recommended that, there is a need for universities to rethink and broaden the notion of lifelong education. The implementation of education for sustainable development should be culturally-relevant, locally appropriate and occurring across all levels in society. Universities should also apply action-oriented and problem-based learning as strategies to ensure clear understanding of sustainable development. Sustainability should be broken into environment and economic boundaries for the path of real decisiveness into the realm of the true education. Universities should integrate transformative learning approaches in standard education policy reforms and should also expand research on sustainable development. The findings should be disseminated to various stakeholders and participants, and universities' management to use them as strategies for better teaching and learning process. As such, this would inspire and encourage learners on the relevance of education in sustainable development in East African universities and the World at large.

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