

Green Education Programs Going beyond the Gowns and Caps: Focusing and Promoting Sustainable Home Grown Solutions in the Face of Adversity in Africa

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Abstract

There is no contestation that Africa has the capacity to recognize opportunities within its various sectors in view of the many resources she is endowed with. These resources include but not limited to gold, lithium, diamonds, arable land with fertile soils and chrome. The insight that can be gleaned from the business intelligence and analytics is one indicating that green education has transformative prowess for economies that embrace the green curriculum, since the 21st century has undeniably come with many challenges and demands that require a lot of critical thinking, creativeness, ingenuity and innovativeness (Chingozha and Ruvengo, 2022). Resultantly, all learning institutions are implored to ensure that their curriculum prepare graduates that will be ready to address the challenges and demands of their communities head on. This would undoubtedly change the life and livelihoods of the people within various communities consistent with the views of Toffler Alvin (2016: 24) who stated that, '...those that are going to be illiterate in the 21st century are not only those who cannot read and write, but those who cannot unlearn, learn and relearn.' The Sustainable Development Goals (SDGs) and indeed any other protocols could remain void and a pipe dream without education. In this vein education is viewed as being integral to all other SDGs since talent alone is in adequate. Through innovation that is sufficiently backed by government through the education 5.0. This study revealed that greening the education curriculum guarantees that the societies will be able to effectively adapt to their environments.

Keywords: Green education, home grown solutions, face of adversity, Africa, climate change, adaptation

Introduction

Climate change has severely ravaged communities. Drought, pandemics and disasters are now a common feature worldwide. The situation requires the use of innovation to curtail such misfortunes.

The solutions that are not imported from elsewhere are effects but for a very long time Africa has failed to exploit its competitive advantages. Africa has been known to lose a lot of its competitive advantages. Africa has been known to use a lot of its personnel due to the many frustrations that come up with the failures to be recognised through prisms of support for various innovations.

With the support of innovating hubs, Zimbabwe is destined to glide towards the desired trajectory. To date, the minister of Higher and Tertiary Education is on record shaming the milestones attained in respect of new innovations. He has actually advised that they are now numerous patients that have been registered. This position cannot be seen in isolation of the Education policy adopted by the government of Zimbabwe at independence by the Mugabe government its

education policy saw Zimbabwe rise to be the most literate country in Africa, with a literacy rate of more than 90% (Fien and Tilbury, 2002) ^[5]. This position coupled to the Education 5.0 philosophy is actually envisaged to reunite Zimbabwe, narrative as a country that will be in a position to develop its own that address into local challenges.

There are so many opportunities, for Zimbabwean students, based on the education that has been availed by the government. This will ensure that Zimbabwe will not dependent on external players with the community of nations. The education transformation from 3.0 to 5.0 made the education to realign the learners with the 1963 political view of the Pan Africanist who believed in African solutions to African problems. (Krumah, 1963). Africa has thus the capacity to develop the products and services that are backed by the technology that we can sustain. Quality is not something that can be taken for granted. Once those responsible apply their monitor mechanism through with coordinated interventions the products and services reduced

will be able to satisfy the consumers, who may be domestic or international consumers.

Zimbabwe, is regarded as one of the countries that is endured with numerous resources that only requires appropriated technologies so that the resources can be exploited. Extracted and soundly refined or proceed to foster economic growth (Mbiba, 2021) [10]. The Zambezi valley and the northern parts of Zimbabwe have witnessed the discovery of oil and gas. All this points to embracing of new ways of doing things. This project is likely to be a game changer for Zimbabwe.

Promotion of Green Education Programmes to Improve Lives

The government of Zimbabwe's ability through its Ministry of Higher Education to constantly and consistently make information relating to the green education programmes available to all and sundry at the material times demonstrates that the community's resilience to climate change will be beyond reproach. This will fuel the institutions' leaners with the urge to innovative ways that promote the lives and livelihoods of communities. This dovetails into the thinking of the Minister of Higher and Tertiary Education Innovation Science and Technology Development (Zimbabwe) Professor Murwira who advanced the Education 5.0 philosophy after realizing the inadequacies that characterized the Education 3.0 philosophy which the country was seemingly content with since year 1980 when the country attained independence (Mbiba, 2021) [10]. The Education 3.0 philosophy emphasized teaching, research and community engagement while the Education 5.0 emphasizes on teaching, research, community engagement, innovation and industrialization.

The higher education learning institutions should show beyond any shadow of doubt that they fully appreciate the potential resident in adapting to and sustaining the green education programmes which ought to go beyond gowns and caps. The idea of promoting this type of education should be to improve the lives and livelihoods of communities and not merely for the attainment of qualifications (Chimhowu, Manjengwa and Feresu, 2010) [3]. Learners should not be prepared for employment alone when they attain their various qualifications. Rather their degrees, certificates and diplomas should ideally prepare them to survive through the rigors that characterize the uneven terrain where man finds himself having to contain with various challenges. The green education should go beyond the ululations and thrills of graduation gowns and caps which colour the graduation ceremonies. Rather, green education should be the chemistry that the world requires in order to transform the realities that characterize a sustainable environmental management (Meiboudi, Lahijanian, Shoberi, Jozi and Azizinezhad, 2016). Through a well deigned green education curriculum, countries should undoubtedly be in a position to identify and seize opportunities that help to reconfigure and realign their resources and capabilities (Palmer, 2010) [13]. This is what the world is missing in the face of so much adversity in Africa, vet Africa is endowed with so much talent (Miller, 2022) [11]. The growth of economies rests upon the strength of skills, attitudes and knowledge of the people. The development of an appropriate curriculum is thus the best way to ensure that the learners within higher education institutions are sufficiently prepared through the provision of appropriate curriculum (Bengtsson, 1996) [2]. Various stakeholders must therefore be engaged during the drafting of a curriculum so that all the fears, aspirations and dreams are embraced.

There is no contestation that greening education programmes have the unadulterated capacity to create new horizons for the world (Fien and Tilbury, 2002) ^[5]. The efforts contained in the green curriculum have shown that the probability of fostering a dispensation that will create harmony between man and the environment in the face of the many environmental challenges. If the status quo is sustained then Africa and indeed the entire global space will always be characterized by adversity. This can be mitigated to measures that are being considered at such fora as the COP 26 and COP 27 recently in Egypt (Moffat, 2022) ^[12]. Once these ideas are put into a curriculum then the 'idea of catching them young will be on point'. The culture of preserving the environment will be engrained and sustained.

Mahatma Gandhi once said '....the future is what you do today...' (Bengtsson, 1996:110) [2]. In view of this thinking the green curriculum that is being promoted today is 'as sure as day' the only way to ensure that schools and institutions of higher learning will assume their rightful role of bringing change and solutions to communities. To this end Mandela once said, '...education is the only tool to bring change to the world.' (Lopes, 1996:29) [8]. In this view the facts are just bare for all to see that once the green education programmes go beyond gowns and caps which is a leap beyond mere graduation or certification then the world will be a better place.

Green Institutions are now viewed as the way to go because they ensure that there is sustainability in everything man does as a way of achieving harmony in the natural ecosystem (Palmer, 2010) [13]. The Institutions should be future centric, that is to say, once their plans are preoccupied by tomorrow then they will instill positive behavior among their learners. Learners ought to be transformed from their traditional way of thinking which characterized by just drawing from the environment without meaningfully contributing towards its sustainability in view of the fact that the future generation will equally have to benefit from the same resources (Bengtsson, 1996) [2]. This is a function of the curriculum that should be designed and implemented in schools. The adoption of the education 5.0 philosophy in Zimbabwe is a giant step which is envisaged to promote localized responses to challenges within communities. The pledges and commitment advanced by World leaders at the Cop 27 in Egypt in the year 2022 for instance equally helps to improve the environment (Moffat, 2022) [12]. Biden, the President of the United States of America for instance pledged USD 150 million by 2030 towards reduction in carbon emissions (Miller, 2022) [11]. It cannot be contested that there is a conflict so pronounced between society and the environment. If society does not change then it will perish hence the need to engrain through an appropriate curriculum the need to sustain the environment.

Through the Brundtland report, (1987) there was a global awakening on the need to guarantee the sustainability of the environment. Through this report the world learnt that there was need to be responsible for the environment-resources needed to be used sparingly, that is striking a balance before the profit, people and planet (Triple Ps). This helps to ensure the best use of available resources in view of the needs and demands of generations to come.

Greening an Institution is a method of modifying the Institution's awareness, behaviors and activities with the goal of matching them up with the broader principle of sustainability that is economically, socially and environmentally responsible (Palmer, 2010) [13].

Methodology

The study adopted a qualitative approach on respondent's conveniently selected key informants. The authors through direct interaction with respondents, observations of events and listening to naturally occurring talk, review of available literature within various communities, were inspired to pursue this study so as to understand how greening the school can transform environments. The respondents were also asked through open end survey questions a couple of questions that sought to secure conclusive answers to questions that were in their minds. The generated responses provided insights into this exciting yet central area in the life of human kind.

Beneficiaries of Greening

It cannot be contested that greening has the capacity to benefit in several ways: the following:

- **Society:** The lives and livelihoods of the people are likely to change with greening education. The education is likely to improve various sectors of the economy.
- **Industry:** There are also industry wide benefits that greening can provide. The working environment will immensely improve with green education and exploit resources responsibly.
- Learners: Graduates will be capacitated with green skills. With green technology the learners will be more useful within their environments. This will also guarantee a reduction in the mistakes and risks that could come as the learners and workers navigate their working space.
- Institutions of Higher Learning: Reputation of Institutions will be enhanced as they produce graduates with green skills.

The new ethic for sustainable living and supporting the translation of articulated principles into practice will be enhanced. These principles are concerned with respect and care for nature (ecological sustainability) the quality of human life, preserving biodiversity, challenging ecological practices, supporting communities to care for their own environmental and having natural frameworks that integrate development and having natural frameworks that integrate development and conservation (IUCN, UNEP and WWF, 1991) [6]

Education for Sustainable Development as advanced by the World Earth Summit at Rio de Janeiro in 1992 is thus central to the improvement of the lives and livelihoods of citizens of the World. Education was also cited through the Jomtein and Dakar declarations as central to humanity and improvement of the environment. The summit stated that "The overall human settlement objective is to improve the social economic, and environmental quality of human settlements and the living and working environments of all people…" (UN, 1992)

Innovative ways include simple initiatives relating to even recycling resources. In the process this supports the tourism sector. Once children are encultured through green education they will immensely support the ideals of the broader economy in several ways.

Empirical evidence is now abound that confirms that Green education has the capacity to change the environmental challenges and indeed the world outlook. In the process this will improve the wellbeing of all the stakeholders (Kobet, 2009) [7].

Research has also shown that Entrepreneurship Skills Development (ESD) can be implemented through the following pillars

- Greening the campus
- Greening the Curriculum and Training

- Greening research
- Greening the Institutional culture

Innovation in Higher Education (HE) simply refers to some new way of doing things or a change that improves administrative or scholarly performance or a transformational experience based on a new way of thinking. Quality in HE is a multidimensional concept which should embrace all its functions, activities, teaching and academic programmes, research and scholarship, staffing students building, facilities, equipment, services to the community and academics environment (UNESCO, 1998)

The Findings

The outcome of the research was that:

- For a country to survive into the future it has to conceive innovative ways of dealing with their challenges.
- Government ought to invest in education, particularly Science Technology Engineering and Mathematics (STEM)
- For sustained innovation and unparalleled critical thinking to advance greening the environment students needed to be rewarded to develop innovative ideas.
- Participation at various platforms to learn from other technologies from other countries was critical.

Conclusion

The world has been subjected to the evils of climate change to the extent that it now understands why it is important to take care of the environment in a sustainable manner. The numerous disasters in their various forms have shown man that, 'the environment does not need man yet man cannot survive without the environment.' In that vein greening education concludes that an appropriate curriculum is necessary as a tool to help learners on the importance of sustainably exploiting world resources.

Recommended

In view of these findings it is recommended that:

- Innovation and continuous improvement be adopted as a culture
- Students pursuing science and technology should be guided accordingly in order for them to exploit their potential
- Leaders within institutions should be encouraged to remain in the learning mood. This means they will always be challenging the way things are or how traditionally things have been done.
- Lecturers, teachers and students should participate on various academic technological exchange programs offered by other countries.
- Lecturers and teachers should attend professional development programs

References

- Arizona S, Sarbassova S, Dzhubalieva Z, Meldebekova A, Zhapanova, M, Zhumadilova, G and Zubets A. Greening education as a Foundation Sustainable development of the environment. Journal of Current Engineering and Technology. 2021, 2(3).
- Bengtsson E. 'Zimbabwe's Response to Agenda 21' In Lopes, Carlos (ed). Balancing Rocks: Environment and Development in Zimbabwe, SAPES Books, Harare, 1996.

- Chimhowu, A., Manjengwa J, Feresu S. Moving Forward in Zimbabwe: Reducing Poverty and Promoting Growth, Institute of Environmental Studies, University of Zimbabwe, Harare, 2010.
- 4. Chingozha MP, Ruvengo L. Learning Adaptation and Greening Education in The Face of Climate Change and World Conflict. 2022; 1(1):87-89
- Fien J, Tilbury D. The global challenge of sustainability. In D. Tilburry, R.B. Stevenson, J. Fien, D. Schreuder (Eds.), Education and Sustainability: Responding to the Global Challenge. IUCN Commission on Education and Communication CEC. IUCN, Gland, Switzerland, and Cambridge, UK, 2002, 1-12.
- 6. IUCN, UNEP, WWF. Caring for the Earth: A Strategy for Sustainable Living. IUCN, UNEP, WWF: Gland, Switzerland, 1991.
- 7. Kobet HD. *Growing up green: Education for ecological renewal*, New York, NY, Teachers College Press, 2009.
- Lopes C. Balancing Rocks: Environment and Development in Zimbabwe, SAPES Books, Harare, 1996
- Macheridis N, Pavilosson A. Greening higher education? From responsibilozation to accountabilization in the incorporation. *International journal of Sustainability in* higher Education. 2021; 22(2):288-222
- 10. Mbiba H 'Teacher's Perceptions of an Alternative Environmental Education Curriculum for Primary School Science', Unpublished Bachelor of Education degree Dissertation submitted to the Department of Curriculum Studies, Masvingo State University, Masvingo, 2021.
- 11. Miller JR. Living in the Environment: Principles, Connections and Solutions, Wadsworth Publishing Company, Belmont, 2022.
- 12. Moffat I. The Evolution of the Sustainable Development Concept: A Perspective from Australia', Australian Geographical Studies. 2022; 30(1):27-42.
- 13. Palmer J. Environmental Education in the 21st Century: Theory, Practice and Promise, Routledge, London. SADC Annual Report 4, 2010. Policy Support for ESD in Southern Africa, Share-net, Howick, 2010.
- 14. Smith FB. The Greening of Educational Vol 18 No 2 Orchids, 1997, 167-171.
- 15. Tofler A. (3rd edition) Knowledge, Technology and Change in Future Society. *International Journal of Islamic Thought*, 2016, 1(1).