

Embedding Education for Sustainability in the School Curriculum: the contribution of Faith Based Organisations to Curriculum Development

Leonard Ssozi
Department of Dean of Students
Uganda Martyrs University
lsssozi@umu.ac.ug
P.O.Box 16148, Kampala, Uganda

Abstract

Embedding education for sustainability, in Faith Based Organisations' (FBOs) school curricula in Uganda, puzzles. Any progressive education system should be dynamic-always calling for timely transformations in content, instructional methodologies, imparted values, skills and attitudes, to remain holistic. Once these are adequately embraced, the system tends to remain vibrant and relevant to the institutions, the learner and the community. However, in Uganda especially in education institutions of FBOs, Education for Sustainability (EfS) - a universally conceived aspect of holistic learning seems not to be whole-heartedly attended to either by omission or unawareness. Problems centre mainly on ideological and operational premises. These include lack of awareness, lack of goodwill of key stakeholders to plan for and manage EfS and lack of competent teachers in EfS aspects. Answers to these problems in essence centre on the theoretical underpinning of this report-curricular transformation. Secondly, proper capacity building, integrative planning, financing and management to enable sustainable programme growth and development should also be enhanced.

Key words: Education for Sustainability, Learning, Curriculum

Introduction and background

Uganda has a three-tier education arrangement consisting of the seven-year primary education, followed by six-year secondary education (four years of lower secondary and two years of upper secondary) and post-secondary education (Universities and other tertiary institutions). Formal schooling was introduced by religious missionaries: Catholics, Protestants and Muslims in the late 1890s. Recently, when socio-economic liberal reforms were embraced by Uganda, private entrepreneurs also came aboard - all offering literacy, numeracy, religious knowledge and limited aspects of holistic education (Byaruhanga, 2000). Although in the initial decades of formal education, curriculum development was by respective founders, this trend changed with the eventual central government legal pronouncements. The Castle Education Commission of 1963 and later, the Education Act of 1963, and its revision of 1964, in essence transferred powers of autonomy, curricula innovativeness and development from *bona fide* founders to the central government (Byaruhanga, 2001: pp 76-77). Even at the dawn of Universal primary schooling in 1997, central government further limited private participation in programme innovation and execution (Kafuuma, 2001). The resulting curricula have only tended to prepare people for the job market to perform specific tasks. As a result, such orientation has been viewed as a technical activity, and an instrument/tool for achieving predetermined behavioral goals (Kemmis *et al* 1983 and Janse van Rensburg 1995). This has created a scenario where learners have become entirely dependent on educators who are the designers of the learning environment.

The 2004 Uganda school census revealed that out of 1,696 secondary schools that responded to the census, 38% were government owned, 39.7% were privately owned and a good number were privately owned by Faith Based Organisations (cited in Jjuuko & Kabonesa, 2007). The people of Uganda have a strong attachment to their respective religions and that possibly explains why many choose to educate their children from faith based schools. Due to their centrality in Uganda's Education system, Faith Based Organisations are better placed to lobby for curricula reforms that will empower people to critique and transform the country's socio-cultural, political and economic structures through Education for Sustainability (EfS). This report proposes how EfS can be strategically embedded into curricular programmes in church schools (Catholic, Protestant, Seventh day and Orthodox), also hereinafter referred to as Faith Based Organisations (FBOs).

1.2 Conceptual orientation

1.2.1 Education

Education is conceived as the learning process that involves acquisition of knowledge and life skills essential for human well being; formally or informally. This is in conformity with the report of the International Commission on Education for the 21st Century, wherein Delors' *et al* (1996: pp 86-94) identify four pillars of education, namely; learning to know, learning to do, learning to live together and learning to be. This was also echoed by the Johannesburg World Summit on Sustainable Development (2002) that established a new vision for education; inclining it towards shaping the world of tomorrow - fostering great respect for the needs of the environment.

1.2.2 Curriculum

Lotz (1999) defines two kinds of curricula: the ‘received curriculum’ and the ‘reflexive curriculum’. Contrary to the received curriculum where students passively receive classroom knowledge and concepts, a reflexive curriculum provides for teachers and learners to negotiate content (Janse and Le Roux, 1998). In the context of EfS, a reflexive curriculum is appropriate in offering learners creative problem solving skills and social literacy essential for human wellbeing and ecological sustainability.

1.2.3 Learning and learning for sustainability

Learning and learning for sustainability are seen as a symbiotic process that influences the way people think, feel and act. They equivocally presuppose experiences that take place either consciously or unconsciously and that we often learn by interacting with people and the environment; as proposed by Tilbury and Cooke (2005). However, no learning can take place without appropriate and adequate education. Consequently, learning and learning for sustainability always calls for education for sustainability, which is about learning to think and act in ways that maintain the harmony of people and their environment.

1.2.4 Environmental Education (EE)

Environmental Education is a range of diverse educational processes through which we might enable ourselves and future generations to respond to environmental issues in ways which might foster change towards sustainable community life in a healthy environment (Janse and Lotz, 1998). EE equips learners with skills, attitudes, knowledge and values of understanding of the environment in a bid to increase consciousness and sensitivity to environmental challenges.

1.2.5 Eco-pedagogy

Eco-pedagogy in this report assumes environmental education, which is constructed within a social justice framework (Kahn, 2008). It also ensures that those engaged in eco-pedagogical work; seek solutions beyond societal norms by engaging in critical analysis and discussion of existing knowledge as maintained by Misiaszek (2009). This methodology further underscores the assertion of *The Rio Global forum* of 1992; putting emphasis on the importance of sustainable development.

1.0 Theoretical and ethical considerations

2.1 Theoretical considerations

This report is grounded in the transformational curriculum development theory as suggested by several transformational theorists, such as Parker (2003); underscoring the importance of engaging students in designing their own interacting aspects of knowledge, action and self. Parker further argues that a “transformational curriculum” will engage the student’s love of knowledge in order to re-inspire the teachers and will develop a mature critical self thus leading to transformation. What is happening today, however, is a tendency of schools to champion the educational philosophy of essentialism, which is aimed at teaching basic subjects using conservative or uniform curricula. FBOs could achieve transformational curricula if their schools gave emphasis to both personal and social progress and development – sustainable holistic education or life long learning, integrating human values with environmental necessities. A transformative learning process would enable learners to

become critically aware of their own inherent assumptions and expectations and those of others, while assessing their relevance for making meaningful interpretations (Mezirow, 2000: p.4).

2.2 Ethical considerations

Ethically, as FBOs strive to embed EfS in school curricula, they ought to consider values of compassion, equity, justice, peace, cultural sensitivity, respect for the environment and recognition of the rights of future generations. These values, which underlie strategic realities of EfS and curricular development, are also recognised by Babikwa (2004: p1).

3.0 Nature of Uganda's School curriculum

Currently, Uganda's school curricula are geared towards attaining good academic grades with the goal of preparing students for the job market (NCHE, 2005). The content depicts expert approach to curriculum development, evident in many developing countries with education that does not address the harsh realities of the world (Kemmis, 1993). This means that the contribution of learners to issues of ecological sustainability, social justice and good governance are rendered rather inept. There is a tendency to emphasise coaching of the entrance assessments, ignoring non-examinable courses such as EE. Therefore, embedding EfS in school curricula should be shaped around the need to critique existing unsustainable practices and encourage alternatives aimed at developing learners' competencies to act locally within a global context (Janse van Rensburg, 1999:p17). However, this could prove a tough encounter in a volatile environment not adequately ready for systematic sustainable interventions. This would thus call for relevant strategies if EfS is to take any meaningful entrenchment in FBOs.

3.1 Short term strategies

These are short-term measures intended to cause meaningful and realistic sensitisation on the problem at hand; especially with regard to the stakeholders in the education industry and development partnerships – policy makers, politicians, parents, finance sources, and others perceived relevant to this, to map out clear goals and objectives of the intended programme (Kerzner, 2002). It is hoped this will invaluablely translate into awareness and actualisation of the nature and magnitude of the problem, to lead to more democratic solutions or decisions. According to Donnelly, Gibson, and Ivancevich (1987), decisions that come by because of group involvement tend to lead to harmonious and sustainable compliance.

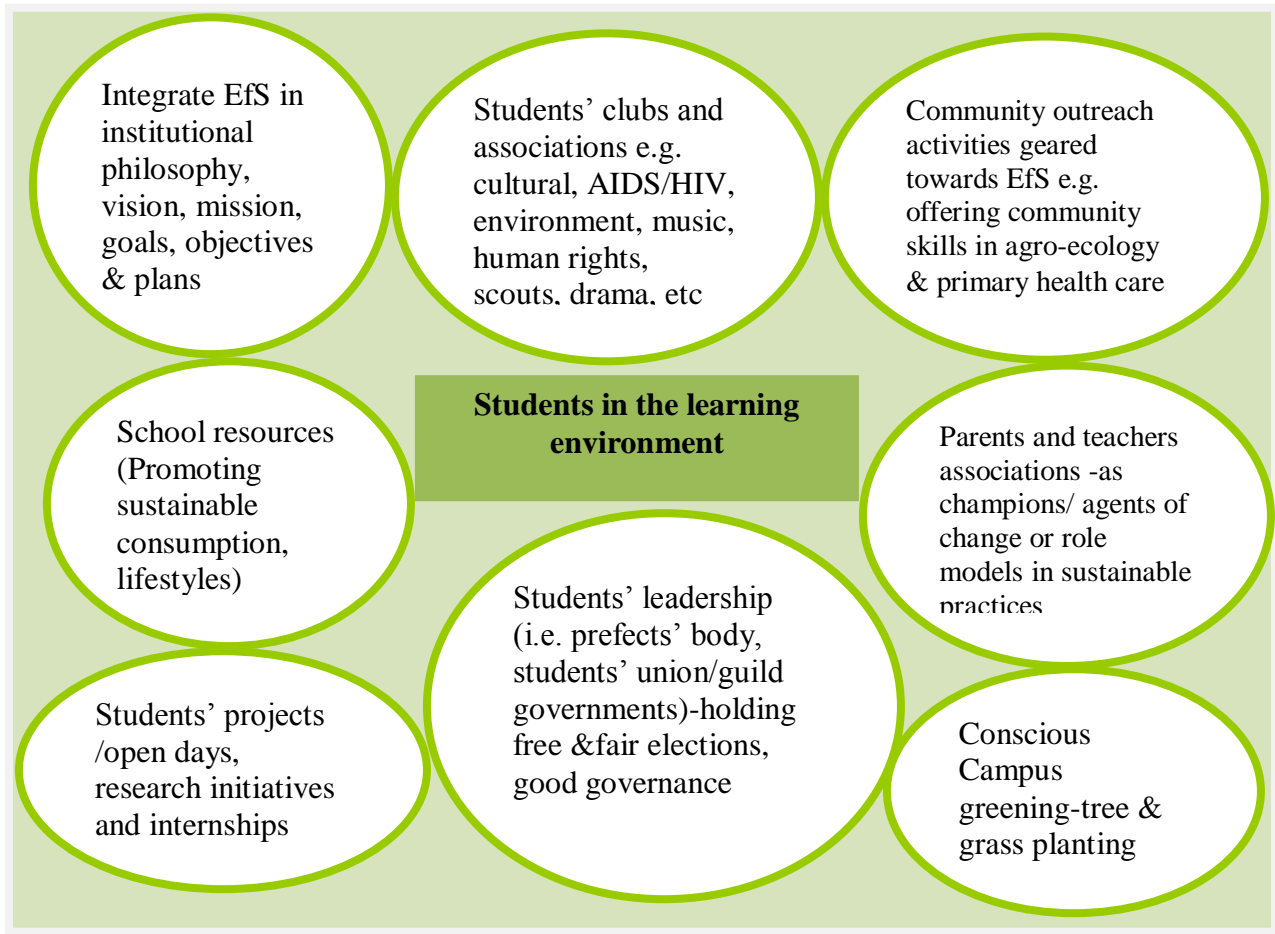
3.2 Long term strategies

These are relatively lasting solutions for achieving goals and objectives, as a result of short-range mechanisms alluded to in organisational change programmes (Kaufman, 1974: pp300-307). Accordingly, the policy makers, education system and the institutional framework of FBOs ought to comply, just of necessity. These measures include greening the learning environment through an interactive approach and integrating EfS in existing disciplines or creation new EfS courses.

3.2.1 Greening the learning environment

I conceive greening the learning environment as an approach and process where there are interactive actions deliberate through institutional activities, to sustain environmental variables that are crucial to ecological wellbeing. Green is thus, assumed to represent life enhancing innovations. My model below shows a number of activities in which FBOs may entrench EfS practices in various non-compliant instances where only examinable issues have hitherto been emphasised. The approach strives to enrich the students' learning environment.

Greening the learning environment through an interactive approach



In this respect, curriculum integration is possible only if the school becomes a true learning community where teachers, students, administrators and parents are interlinked in a network of relationships, working together to facilitate learning (Capra 1997 p.17). Hence, it is important that FBOs refocus visions, missions, goals and objectives of their respective schools towards EfS while aligning their strategic development plans likewise. By this very fact, parents and teachers' joint forums as well as students' associations should be involved in formulation of school policies to yield to sustainability practices. EfS should be reflected in the learner's social clubs and associations. Through focused clubs, learners would be

enabled to engage in sustainability practices and in so doing; they would acquire hands-on experience, which could be helpful in attempting their own assignments. Through participation in initiatives of environment and human rights clubs, learners would be able to confront the changes of unsustainable practices of deforestation, environmental degradation and social injustices in their communities. Being part of cultural associations would be rewarding in terms of dissemination of cultural practices and African Indigenous Knowledge (AIK), especially to students who have spent their entire lives in urban centres to learn riddles, slogans, tales, poetry and commentaries that inform EfS (Osei-Amakye, 1993). AIK plays an important role in ecological sustainability. It underscores the role of African tradition in nature conservation. As Emeagwali (2003) postulates, African tradition encouraged conservation of botanical gardens and sacred grooves as these were sources of medical plants and places for reflection and meditation.

Further still, EfS should be reflected in the schools' energy use policies, as well as consumption patterns and food preparation techniques. FBOs should minimise wastage of food resources through preparation of what is enough for students. Appropriate storage procedures and mechanisms should be encouraged to exist in institutions of learning, in these times when food is increasingly becoming very scarce and dear in Sub – Saharan Africa. My experience in an FBO education institution where I work has enabled me to realise that there are meals that are not palatable to students; majority of whom often refuse to eat. Yet, the catering department continues to prepare such meals, something resulting into wastage and loss of the scanty revenue resources (Kasibante, 2004). It is also surprising that many Ugandan FBO schools with large farms put negligible attention to harnessing of wastes that would otherwise generate biogas fuel.

FBOs have a role to play in promoting school-community involvement in sustainability practices. This could be done through undertaking community sanitation improvement projects where students participate in the proper disposal of refuse or even helping the needy community to construct latrines. It is imperative to encourage students to carry out their class projects, research and internships in the communities to expose them to the realities of life, and social change dynamics and unsustainable practices in the communities.

Students should also be given opportunity to participate in democratic management of their affairs through electing their leaders. Some FBOs discourage students of other denominations from contesting for key positions in the prefect body (for primary and secondary schools) and in the students' union governments (for post secondary schools). In other schools, there are leadership positions that women may not take up. As Apple (1996) illustrates, such rigidities and discrimination discourage participatory institutional management. Students should be represented (by their leaders) on some of the key decision making bodies of their schools. In this way, they will be in position to participate in monitoring accountability and good governance.

3.2.2 Integrating EfS in existing disciplines or creation of new EfS courses

This intervention suggests that democratic inclusion of identified aspects of EfS ought to be incorporated into the once conservative curricular models and syllabi in FBO child, youth and other education institutions; school activities and programmes require utmost

cooperation from all. Therefore, to reap the benefits of transformational and systems approaches to curricular development as identified by Parker (2003), concerted efforts of all stakeholders remain imperative. In Uganda, higher education curriculum development is not so much state controlled as that of the primary and secondary school sections.

Curriculum development is entirely an affair of the respective University academic teams with guidance of the National Council for Higher Education (NCHE, 2005). Thus, the strategy of integrating EfS in existing disciplines or creation of new EfS courses could work reasonably well in a University setting if the FBOs and University academics were willing to embrace the perceived initiative. FBOs could facilitate the enrichment of the existing course units to address the effects of human activity and decisions on environment as well as society and economic development concerns that cater for the present and future generations. Facilitation could be in form funds committed towards curriculum development and capacity building in EfS. It would also be necessary for the academics to carry out collaborative action research initiatives (Stuart; 1997); as avenues to discover relevant instruction techniques which put into account the needs of the learner. This could go hand in hand with action research to curriculum development and teacher change. Secondly, new course units and programmes specifically addressing EfS, could also be developed.

3.0 What can embedding EfS in school curricula offer Uganda?

According to the forum demonstration project of the United States President's Council on Sustainable Development (1994), EfS is a lifelong learning process that leads to an informed and involved citizenry having the creative problem-solving skills, scientific and social literacy, and commitment to engage in responsible individual and cooperative actions. These actions help ensure an environmentally sound and economically prosperous future.

Uganda's education curricula have a few components of environmental education; however, these are not enough to address the current sustainability challenges of the country. EfS goes far beyond mere environmental education and as such, could offer Uganda a change strategy to assist citizens and organisations to move towards sustainability. Sustainability cuts across the economic, social and environmental spheres of any nation. Therefore, embedding EfS in school curricula will enable students acquire problem solving skills, values and perspectives necessary to champion good governance. Like other African countries, Uganda still grapples with corruption and abuse of human rights which could be systematically reduced by informed citizenry. According to Transparency International, an international corruption watch dog, Uganda was ranked the 126th corrupt country among 180 surveyed countries (cited in Mugisha 2008). There is also increased police and army brutality as evidenced in the 2011 World Report of Human Rights Watch. To remedy such challenges, EfS equips citizens with the knowledge necessary to support only those government policies, ideals and initiatives that promote human wellbeing.

Embedding EfS in school curricula could enhance learners' acquisition and application of knowledge and skills that champion sustainable resource use. Today, Uganda is faced with high levels of deforestation and wetland reclamation that are causing severe environmental degradation. Through education for sustainability, citizens are able to appreciate the goals of a sustainable society and work towards achieving those goals. In the Ugandan context, EfS

could provide a platform for learners to apply the knowledge obtained from classroom experiences, via media and even through indigenous sustainability practices to champion sustainable resource use through advocacy and participation.

As a multidisciplinary programme, education for sustainability blends well with indigenous sustainability knowledge. Pre-colonial Ugandan communities lived within nature's limits; strict codes and spirituality governed resource use. For instance, among the Baganda tribe in Uganda, it is abominable to destroy certain plant species. The underlying reason behind this abomination is that these species are a source of medicine and are beneficial to the entire community. Similarly, the Baganda clan system holds that every member must belong to a particular totem (a totem is an animal or plant of cultural importance and it is forbidden to eat one's totem). This traditional ecological knowledge thus promotes conservation of biodiversity. Nevertheless, the importance of African Indigenous Knowledge (AIK) has been subdued by western religions who view it as evil and satanic. It is therefore imperative for FBOs to change the negative perception they have towards some of the traditional ecological practices associated with African spirituality. As a result, embedding EfS in school programmes could revitalize the relevance of AIK insofar as environmental sustainability is concerned. In view of this, the UNESCO Management of Social Transformations Programme (1994-2003) recognises that since AIK is generated within communities and is culture specific, it can suitably address critical issues of human and animal life, namely: primary production, food security and natural resource management.

4.0 Challenges of entrenching EfS aspects in FBO education institutions

4.1.1 Ideological challenges

Ideological challenges stem from contrasting objectives of FBOs versus EfS. The fact that FBOs are founded on religious principles, they tend to champion religious and moral education in their education institutions. For example, catholic schools generally promote a Catholic outlook of the real world with intent to instil Catholic virtues and values in the school subjects (Barlett *et al* 2001: pp 70-105). This position is no different from the religious philosophical orientations of other denominations in the country. Largely, majority of FBOs do not understand EfS; and yet, given their positions of authority, they are better placed to champion embedding EfS in school curricula. FBOs thus ought to focus on integrating EfS in the curricula of teacher colleges and higher learning institutions so as to equip teachers with relevant skills to guide their students.

4.1.2 Teachers' education and training orientations

EfS follows an interdisciplinary and multidisciplinary approach but the nature of teachers' education and training orientations in FBOs and the entire country impedes integration of EfS in school curriculum. The formal education system in Uganda, as well as many in Sub Saharan Africa emphasise examinations - preparing learners for the office job market. The underlying challenge here is that EfS is viewed as a threat to both the teachers and the education policy makers. In the context of higher education, EfS is perceived as an external force aimed at subduing academic freedom (Holmberg 2006). Similarly, the fact that most of the Ugandan educators have a disciplinary background makes them oppose any reform towards multidisciplinary teaching due to fear of loss of jobs. However, embedding EfS in teacher training institutions does not call for complete overhaul of the curricula. Reforms

should hinge on reorienting the content and methodologies of instruction to incorporate education for sustainability in course subjects as well in the co-curricular programmes.

5.1.3 Institutional micro-politics

Institutional micro-politics (locally known as pull him/her down-PHD) as illustrated by Grunsell and Wade (2000), discourages willing teachers from getting involved in EfS endeavours thereby breeding “arenas of struggle” in schools. Similarly, embedding EfS in the curriculum requires knowledgeable work force at micro (school & FBO) and macro (policy development and implementation) levels. Putting the foreseen teachers’ (personnel) resistance aside, the financial implications associated with work force training as opposed to national priorities, hinder successful integration of EfS in school curriculum. Government support to religious founded schools is minimal and thus not adequate to support EfS endeavours in schools.

6.0 Conclusion

So far, what has been proposed could be ideal and relevant to an environment ready to embrace timely transformations, but this is still not around in Uganda, especially in Faith Based Organisations. With appropriate and adequate sensitisation, mobilisation and awareness of the resultant benefits of Education for Sustainability, the apparent obstacles in training, funding, planning, management and politics could be harmonised.

6.0 Recommendations

6.1 Sensitisation and awareness

As short term measures, deliberate efforts are proposed in way of sensitization and bringing about of meaningful awareness to all stakeholders about the importance of EfS to ecological sustainability.

6.2 Planning and funding

Putting into consideration the awareness and sensitization programmes, policy makers, the system and institutional authorities in FBOs should carefully plan and allocate reasonable resources to EfS programmes and innovations.

6.3 Education and training of teachers

The United Nations Decade of Education for Sustainable Development (2005-2014), in its guidelines and recommendations for reorienting teacher education to address sustainability, underscores the critical role of teacher training institutions in bringing changes within educational systems that are capable of shaping the knowledge and skills of future generations. In view of this, there should be deliberate attempts to beef up local capacity in terms of capable teachers with relevant methods of instruction, materials and content. Therefore, the education system and the respective institutions should come in to give necessary facilitations. Furthermore, through collaborations and exchange programmes with similar institutions in other countries, teachers could be facilitated to undertake EfS studies offered abroad.

6.4 Rewarding sustainability practices and achievements

A culture of recognizing and rewarding students and teachers who demonstrate sustainable practices should be encouraged in all schools. Similarly, teachers’ and students’

sustainability research achievement should be rewarded. Rewards could be in form of scholarships, certificates of recognition or incentives to the achievers. Rewarding sustainability practices will encourage teachers to change their lifestyles and become role models for students (Cogan, 2000: p177 and Larkley *et al*, 2008). Motivating achievers in the area of sustainability should be carried out at both institutional and national level.

References

APPLE, M. (1996) 'Education, identity and cheap French fries', Extract from Chapter 1 in *Cultural Politics and Education*, pp. 1-5. Open University Press

BABIKWA, J. D. (2004) *Education and the Creation of Sustainable Rural Communities in Uganda and Japan: some lessons for the Decade of Education for Sustainable Development*: UNU/IAS

BARTLETT, S. et al. (2001) 'Knowledge, beliefs and curriculum', in BARTLETT, S. et al. *Introduction to education studies*, pp. 1-35. London: Paul Chapman.

BYARUHANGA A, (2001) 'The Legal Framework, Policies and Education Reforms in Uganda, 1900-2000', in *Catholic Schools 2000: Issues and Challenges*, Marianum Press

CAPRA, F. (1997) *Ecology, Systems thinking and education*. Journal of Contemporary Health 6 pp. 16-17

COGAN, J. (2000) Extracts from 'The challenge of multidimensional citizenship for the 21st century', Chapter 7, in COGAN, J. & DERRICOTT, R. (eds) *Citizenship for the 21st Century*, pp. 172-179. Kogan Page.

DELORS, J. (1996), *Learning the Treasure Within: Report to UNESCO of the International Commission on Education for the Twenty-first Century*. Paris: UNESCO.

DONNELLY, J. H. Jr., Gibson, J. L. & Ivancevich, J. M. (1987). *Fundamentals of Management* (6th ed.). Illinois, Homewood

EMEAGWALI, G (2003) 'African indigenous knowledge systems (AIK): Implications for curriculum', in FALOLA, T. (ed.) *Ghana in Africa and the world: essays in honour of Adu Boahen*. New Jersey: Africa World Press

GRUNSELL, A & WADE, R. (2000). Unit 2 Study Guide: *Processes and Management of Change*. London South Bank University, Faculty of Arts and Humanities

HOLMBERG, J. and Samuelsson B. (Eds.) (2006), *Drivers and barriers for Implementing Sustainable Development in Higher Education*, UNESCO, Paris

JANSE VAN RENSBURG, E. & Lots H, (1998) *Enabling Environmental Education as a cross-Curricular Concern in Outcomes-Based Learning Programmes*. Howick: Share-net

JANSE VAN RENSBURG, E (1999) 'Strands weaving southern African dreams of development, education and sustainability', *The Development Education Journal*, 5 (2) pp. 15-18. Trentham Books

JANSE VAN RENSBURG, E & Le Roux, K (1998) *Gold Fields Participatory Course in Environmental Education: An evaluation in process*. Grahamstown: Rhodes University Environmental Education Unit

JANSE VAN RENSBURG E. & LOTZ H. S (2000). *Monograph: Learning for Sustainability. An environmental education professional development case study informing education policy and practice*. Learning for Sustainability project: South Africa

JJUUKO, W. & KABONESA, C (2007) *Universal Primary Education in Uganda: Right or Privilege*. Kampala: Human Rights Peace Centre

KAHN, R (2008) 'From Education for Sustainable Development to Ecopedagogy: Sustaining Capitalism or Sustaining Life?', in *The Journal of Ecopedagogy*, Volume 4, No. 1 (2008)

KAFUUMA, S (2001) 'Financing Uganda's Primary Education', in *Catholic Schools 2000*. Kampala: Marianum Press

KASIBANTE, I. F (2004) *A new Education Agenda for Uganda*. Kampala: Marianum Press

KAUFMAN, H. (1974) 'The Direction of Organisational Evolution,' *Public Administration Review*, July-August 1974, pp. 300-307

KEMMIS, S. (1993) Getting our thinking straight: three views of education *In: Foundations of environmental education*, pp. 162-165

KERZNER, H. (2002) *Project Management: A systems Approach to Planning, Scheduling and Controlling*, New Dehli, CBS Publishers and Distributors

LARKLEY, J.E and MAYNHARD, V.B (2008) *Innovation in Education*, Nova Science Publishers

LEE, J. C-K. & Tilbury, D. (1998) *Changing Environments: the challenge for environmental education in China*, *Geography*, Vol. 83 (360), pp.227-236. The Geographical Association

LOTZ, H. (1999) *Developing Curriculum Frameworks: A source book on Environmental Education among Learners*. Howick, South Africa: SADC Regional Environmental Education Centre (REEC)

MEZIROU, J. (2000) *Learning as transformation: critical perspectives on a theory in progress*, San Francisco: Jossey Bass.

MISIASZEK, G. W. (2009) "Adult ecopedagogy in the Americas: A pilot study of programs in Argentina, California, and Appalachia" *Paper presented at the annual meeting of the 53rd Annual Conference of the Comparative and International Education Society, Francis Marion Hotel, Charleston, South Carolina.* http://www.allacademic.com/meta/p301623_index.html viewed 15th December 2010.

MUGISHA, A (2008) *Uganda: Level of Corruption Rises Says Watchdog: Kampala. The New Vision (23 September 2008)*, New Vision Publication

OSEI-AMAKYE, S. (1993) *Sacred Grooves: the forgotten traditional botanical gardens in tropical Africa*, pp. 53-57. Ghana: Environmental Protection Council

PARKER, J. (2003) 'Reconceptualising the curriculum: from commodification to transformation', in *Teaching in Higher Education*, Volume 8, Number 4, pp. 529-543(15)

PARKER, J. (2008). *Unit 1 Study Guide: Introducing Education for Sustainability*. London South Bank University, Faculty of Arts and Humanities

Report of the United Nations Conference on Environment and Development (Rio de Janeiro, 3-14 June 1992), New York, USA

Report of the National Council for Higher Education (2005), Uganda

STUART, J. (1997) Extract from 'Classroom action research in Africa: A Lesotho case study of curriculum and professional development', in Lewin, K.M. and Stuart, J. (eds) *Educational Innovations in Developing Countries*, pp. 127-139. Macmillan Ltd

The Uganda Episcopal conference Education Policy (1997)

TILBURY, DANIELLA, *et al* (eds). 2002. *Education and sustainability: responding to the global challenge*. Gland, Switzerland and Cambridge, UK: Commission on Education and Communication, IUCN.

TILBURY, D and COOKE, K. (2005) 'A shift in thinking', in *A national review of environmental education and its contribution to sustainability in Australia: frameworks for sustainability*, pp. 5-15. Canberra: ARIES

UNESCO (2002), *World Summit on Sustainable Development: Johannesburg*

UNESCO *Management of Social Transformations Programme-MUST* (1994-2003)

UNITED NATIONS DECADE OF EDUCATION FOR SUSTAINABLE DEVELOPMENT (2005-2014) *Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability*. UNESCO

WADE, R (2008) 'Education for sustainability: Challenges and opportunities' in *Policy & Practice: A Development Education Review*, Vol. 6, Spring 2008, pp. 30-48. <http://www.developmenteducationreview.com/issue6-focus3> viewed 19th December 2010)