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# ENVIRONMENTAL HEALTH EDUCATION AS A TOOL FOR ENVIONMENTAL PROTECTION IN NIGERIA UNIVERSITIES

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#### **Abstract:**

The correlation between humans and their environment is described as being reciprocal, because the environment has profound influence on man, whilst, at the same time man extensively alters his environment to suit his needs and desires. Man's activities in the environment do not only bring benefits to man but has also resulted in many environmental problems such as pollution, waste generation and management; health education becomes imperative in these circumstances of man- made environmental problems. Environmental health education therefore, is a tool for creating awareness on issues relating to environmental conservation and degradation impact on health, welfare and indeed human survival in the environment. This paper examines the concept of environmental health education, roles and challenges Recommendations were also made to proffer solutions to the above mentioned environmental problems: issues, challenges and way forward.

#### **Introduction:**

The world is beginning to acknowledge its natural physical limitations, the relationship between ecological well-being and economic success, and the link between the survival of all nonhuman species and the survival of our own. As this awareness increases, so does the respect for the importance of environmental health and protection activities and for the need to balance development with the environment on both a local and a global scale.

We are living at a time when human impact on the environment and the resulting impact of the environment on human health are rapidly growing global concerns. The top international priorities include slowing the rate of human-induced climate change, protecting water and air quality, reducing the health impact of disasters, and minimizing human exposure to toxic chemicals. There is also growing concern that current efforts aiming to curb climate change are insufficient. In these circumstances, it is essential that science education produces citizens capable of intelligent engagement with environmental health concerns. As educators in a democratic society, we believe that the public's understanding of science can result in social action and more effective policy (Kola-Olusanya, 2006). However, is the public well equipped for participating in the environmental health discourse?

People are manifesting their concern for the environment in myriad ways. Increasingly, environmental issues influence politics, law, education, religion, investment, life styles and health. It is for this reason that seeking solutions to environmental problems has becomes a priority on the world's political agenda especially in the 1990's. Consequently, the year 2000 was proclaimed the decade for environmental education and training (Inyang-Abia & Ubong, 1992).

Lucas and Gilles (2013) describe the relationship between man and his environment as being reciprocal, because the environment has profound influence on man, whilst, at the same time man extensively alters his environment to suit his needs and desires. Apparently, the quality of environment on which man lives determines the quality the quality of life he enjoys especially his socio-economic, and health status. Consequently, if peoples are to enjoy good health, the prime requisite is that they should live in a clean, safe and healthy environment that is conductive to this state.

There are many environmental problems around our cities and rural areas: pollution, waste disposal, slums and attendants ills and land degradation (erosion, soil infertility, flood, deforestation). The impact of environmental problem has been seen and felt by everybody. Therefore the solution to the many sided problems of environmental degradation all around us call for the involvement of all citizens. It is in recognition of this fact, that there is a global education. Environmental health education has achieved notable success in industrialized and developing countries but a large proportion of the world's population in developing countries like Nigeria is either ignorant or insufficiently sensitized to issues relating to environmental conservation, environmental degradation (pollution) and their impact on health, welfare and indeed survival of human species (Olaniran, 2015). Environmental health education assists the public to understand, appreciate and change attitude favorably towards environment.

# Concept of Environmental health education and Protection:

Environmental health education had existed in some form a long time ago, dating back to the late 1960's. Its recent re-appearance on the education arena stems primarily from widespread public concern about devastating eco crises such as over population, pollution, utilization and availability of resources (energy) and the general degradation of the environment (Inyang-Abia & Ubong,

1992). In times past, Nigeria viewed this phenomenon as being a trait of the developed nations. However, in recent times they are increasingly aware of their draconian effect on economic growth and social changes (Inyang – Abia & Ubong, 1992). It is in this bid to resolve this crisis that education has been brought in.

A comprehensive definition of environmental education by Schmieder (1977) is as follows:

- i. Education from environment. This relates to experience gleaned from the environment.
- ii. Education about the environment. This relates to the teaching we receive about the working of the environment, its nature and composition, working and utility by man.
- iii. Education for the environment. This relates to man's commitment to environmental protection and conservation for sustainable development (Inyang Abia & Ubong, 1992)

Another definition by Peter, Ekpoh and Bassey (1995) of environmental education states that it is the process of educating our citizens through communication about matters and issues that affect our environment – homes, villages, cities farmlands, water supplies, forest and weather – in order to improve our environmental awareness and skills and engender a change of attitude towards our environment; and thereby arouse concern about the physical problems around us. Through effective communication as a tool in environmental education we will be equipped to solve these problems which threatened to overwhelm us individually and collectively, whether in the family, school, local community, city, state, nation or even globally.

# The role of environmental health education to environmental protection:

United Nations Educational, Scientific and Cultural Organization (UNESCO) has stressed on the need for a widespread environmental awareness programme. It would safeguard the societal quality of life and ensure that sustainable development goals are met. The best way to spread awareness is through environmental health education. 'Catch them young', the phrase may seem out of place here but if you want to instil lifelong learning you should inculcate it during childhood. A carefully designed learning system through which youngsters are exposed to various aspects of environmental conservation would help them develop a deep understanding of it. Children should be made aware of the threats of environmental degradation and should encourage acting responsibly. A child should not only be taught the name of a flower rather he should know why that flower is important in that ecosystem.

According to Saint, Hartnett and Strassner (2003), a well designed environmental education system would include both theoretical as well as practical exposure to environment conservation. A child would think a thousand times before plucking a flower or throwing litter if he knows that every action can have a repercussion. Children learn and unlearn many things but if at regular intervals they are made aware of their role in environmental conservation they would turn out to be a green ambassador. Thus, chapters, courses and modules on environment conservation should be designed in a manner that they are imbibed in the students' psyche. Students should be exposed to it at the primary level and continue to expand their understanding of environment conservation at a higher level.

#### **Challenges of environmental health education:**

According to the World Health Organization (WHO), environmental health addresses all environmental (physical, chemical and biological) factors external to a person, and all the related factors impacting behaviours. It encompasses the assessment and control of those environmental factors that can potentially affect health and is targeted towards preventing diseases and creating health-supportive environments (World Health Organization, 2013). While most countries,

especially those in the developing world like Nigeria, are still struggling to address the existing environmental health problems, new challenges and risks are emerging which require complex solutions. Advances in technology, population growth, changes in standard of living, increase in industrialization and climate change are some of the factors that lead to emergence of challenges in environmental health. Emerging risks and challenges are those that are coming into existence because of changes in the environment.

Some of the challenges faced by Nigerian universities in the teaching of environmental health education are briefly discussed here according to Neill (2006).

#### i) Academic programmes with bias for sciences:

Despite the stipulated admission ratio of 60:40 in favour of the science and technology-based disciplines, admission into Nigerian universities is still positively skewed in favour of humanities and management sciences while the so called universities of technology also operate programmes that are outside their mandate for economic survival. This implies that when adequate interest is not shown in the sciences and allied disciplines, it is doubtful if environmental education is going to be popular since most of the potential university undergraduates prefer humanities and allied subjects. In addition the few with flair for the sciences might opt for familiar courses instead of environmental education.

## ii) Bureaucracy:

Nigerian universities are said to be rigid in outlook and therefore not responsive to necessary innovation in their curricula. For example, unlike newly established private universities that have programmes specifically designed to meet the imperatives of technological development, most Nigerian public universities still stick to the traditional programmes put in place at inception. Saint, Hartnett and Strassner (2003) distinguish between rigid institutions of higher learning and responsive institutions. A rigid institution resists making changes in institutional behaviour and often rejects possible changes without openly considering whether they are feasible or desirable. Most universities in Nigeria can be regarded as bureaucratic or traditional universities. With this orientation, it is unlikely that environmental education will be given the attention that it requires; at best it will be handled as a General Study course in the universities, particularly public universities.

# iii) Inadequacy of self-appraisal:

Although Nigerian universities have inbuilt mechanisms for self-appraisal, experience has shown that they hardly pay adequate attention to this aspect of their statutory responsibility. It is through self appraisal that decisions are made concerning which progamme to review and which one to add or expunge. For example, until the National Universities Commission (NUC) made it mandatory for most Nigerian universities to introduce entrepreneurial studies in their curricula, the need for the introduction of such programme did not occur to the universities. Since self-appraisal exercise is a rarity in most Nigerian universities, full integration of environmental education into the curricula may suffer delay.

#### iv) Problem of integration of environmental education into curricula:

The mere fact that environmental education at present is taught across different faculties in most Nigerian universities makes its integration into university curricula a major challenge. For instance, Pearson, Honeywood and O'Toole (2004) raised the question of whether

sustainability/the environment is the legitimate concern of the scientist, the geographer, the ecologist, the teacher educator or environmental scientist. They added that in practice, all of these people deal with environmental issues at some level but the experiences offered to students are fragmented. Therefore, they suggest that sustainability should be built into the core subjects of a geography or environmental science programme to ensure students gain a good understanding of sustainability and environmental issues in the local, national and global context. Until environmental education is accorded the required recognition, its impact on sustainable environment will not be felt in Nigeria and this portends great danger.

# v) Inadequate funding:

The issue of finance has been a major problem with Nigerian universities. This is so because once funding is adequate, it will be easy to provide other resources such as the manpower and physical facilities to perform primary functions of teaching and research. The root cause of most of the strike actions in Nigerian universities can be traced to inadequate funding. Without adequate funding of universities, environmental education that embraces some attributes of science, sociology, engineering, environmental science, microbiology, law and geology among others cannot be effectively taught in Nigerian universities due to its capital intensive nature.

# vi) Aloofness from the society:

One of the problems against Nigerian universities is that of aloofness from the society where they are located. For instance, Aminu (1986) remarked that an eminent Nigerian was quoted as having said that Nigerian universities were "a cultural transplant whose roots lie elsewhere" and "appears to belong to us only in name" just to express his mind over the existing gap between universities and their immediate community. Since environmental education is about people interaction with their environment, lack of interaction with the people by the universities denies them first hand information about cultural practices that destroy the ecosystem. This in turn prevents the universities from getting that vital information that should have been incorporated in designing their curriculum on environmental education to make it relevant.

#### vii) Obsolete mode of instructional delivery:

Traditional mode of instructional method is the bane of universities in Nigeria; a development that does not encourage creativity. For instance, it is possible for a science student in Nigerian university to graduate without any exposure to practicals since the facilities are not there. Most Nigerian universities do not have access to instructional aids such as overhead projectors to facilitate teaching. Therefore, a subject like environmental education that entails a lot of practicals and field trips cannot be properly handled. The use of instructional aids will go a long way in facilitating instructional delivery on environmental education.

# viii) Low level of research:

One of the areas where inadequate funding has affected Nigerian universities is in the area of research. Research activities in Nigerian universities are abysmally low when compared with that of their counterparts even in Africa. Through research efforts, innovations to enrich university curricula on environmental education are made available but without research new knowledge that enriches curriculum design for environmental education will not be there.

#### ix) Lack of sufficient lecture time for environmental education:

The emphasis on field trip and practicals as method of instructional delivery during lectures on environmental education requires sufficient time but with less recognition that is given to environmental education in most Nigeria universities, it is doubtful if sufficient time can be allotted to it for any meaningful learning to take place. This is because it has to compete with other disciplines for time.

# x) Inadequate physical facilities:

As mentioned under time and funding, environmental education requires a lot of resources because it entails both practicals and fieldwork. So just like other science subjects that suffer from inadequate physical facilities, newly introduced discipline like environmental education will suffer more.

#### xi) Inadequate specialists on environmental education:

Since environmental education is relatively new and is taught in different faculties, therefore the academic staff that handle are scattered all over the various faculties in the universities. At best, these people can be called generalists. As of now, to have specialists on environmental education in most Nigerian universities are rare.

#### xii) Lack of inter-departmental cooperation for environmental education:

In most Nigerian universities, no single department handles environmental education; a situation that entails exposure to different learning experiences on the same discipline but from different faculties. This implies duplication of courses that could have been successfully handled by a department. This has the disadvantage of wasting human and material resources.

#### **Conclusion:**

The issues of climate change are of universal concern and various governments have identified environmental education as solution, with universities playing prominent roles in areas of teaching, research and community service. There are constraints that are likely to prevent Nigerian universities from performing these roles. These problems are surmountable provided the various key stakeholders in education discharge their statutory obligations, effectively and efficiently.

#### **Recommendation:**

Based on observable challenges confronting Nigerian universities in the area of environmental education, the following recommendations are made:

- i) Universities must ensure compliance with 60:40 admission ratios between sciences and arts on admission policy as stipulated in the National Policy on Education.
- ii) There must be flexibility in university management to make it proactive and responsive to what goes on in its environment.
- iii) There is the need for drastic improvement in self-appraisal mechanisms in the universities. Through this, relevant programmes will be introduced while obsolete ones are jettisoned.
- iv) There must be greater cooperation and collaboration among various departments offering environmental education in the universities to avoid duplication of efforts so as to conserve resources.
- v) Proprietors of universities must ensure adequate funding while their management must ensure judicious utilisation of the funds and improve on internally generated revenue.

- vi) A symbiotic relationship between universities and society must be put in place for mutual benefits. While the society benefits from the knowledge base of universities, there is also the possibility of in flow of resources from society.
- vii) There is an urgent need for adequate provision of instructional facilities to improve instructional delivery on environmental education in the universities.

#### **References:**

- Inyang-Abia, M. E. & Usang, E. (1992) Environmental education for teachers. Zaria: Nirvana Publishing Coy.
- Kola-Olusanya, A.(2006). Environmental education in Nigeria: A looking beyond the infusion problem. Paper presented at the annual meeting of the North American Association for Environmental Education, TBA, St. Paul Minnesota.
- Lucas, A. O. & Gilless, N. M. (2003). A short Textbook of Public Health medicine for the Tropics (4th ed.). Hodder Arnold.
- Neill, J. (2006). What is environmental education? Retrieved on September 14, 2010 from <a href="http://wilderdom.com/environment/Environmental Education.html">http://wilderdom.com/environment/Environmental Education.html</a>
- Olaniran, N. B. (2015) Environment and Health. Lagos: Macmillan Nigeria Publishers Ltd.
- Saint, W., Hartnett, T.A. and Strassner, E. (2003). Higher education in Nigeria: A status report, Higher Education Policy, (pp 259-281)
- WHO | Environmental health [Internet]. WHO. [cited 2013 Jul 14]. Available from: http://www.who.int/topics/environmental\_health/en/