

**THE VALUE OF A WORKABLE ENVIRONMENTAL EDUCATION
PROCESS IN IMO STATE SECONDARY SCHOOLS: A STUDY OF
PUBLIC SECONDARY SCHOOLS IN EHIME MBANO LOCAL
GOVERNMENT AREA OF IMO STATE**

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Abstract

The study is qualitative, which its main focus is to (1) determine the value of a workable environmental education process with reference to the curriculum (2) to study series of actions used in providing environmental education; (3) to study inhibitions and available suggestions in practice of environmental education (4) to suggest probable general rule for workable environmental education for Imo State secondary schools. In gathering data, group interview was employed in this study with a sample of 15 public secondary schools in Ehime Mbano Local Government Area. The main respondents were 140 teachers and 100 students in SS III. The instrument used was observation schedule, and interview check list. Data was analysed using frequency table and percentages and the findings indicated as follows: (1) the academic programme did not address environmental issues as a major curriculum content, rather, they were integrated in other subject areas (2) most environmental activities/projects were introduced independently by teachers (3) inadequate knowledge of the environment, lack of awareness and funding, non corporation and collaboration were major inhibitions in introducing projects for the environment.

Education has always served as a vital catalyst in developing talented, skillful and adequate future manpower to any nation. Education involves the imparting of knowledge and development of skills for self realization. The English dictionary defined

Academic Scholarship

it as “The process of acquiring knowledge, the process of imparting knowledge especially in a school, college, or university” Salvano & David (1998). “Education has always been part of the process by which people become fitted to live successfully in their world” Sir Charles, quoted in Schumacher (1973) stated that: “the essence of education is to transmit desirable values. It enables man or gives man choices to choose between one thing and another.

Therefore the future of a developing nation, like Nigeria is sorely dependent on its education system. It starts with a strong foundation at, the primary, followed closely by the secondary and terminates with the ever competitive tertiary education system. Since education is the only instrument that can take any nation to the peak, there is need to have a complete and wholistic approach towards it. The 21st century was embraced with greater challenges facing the education sector. Challenges ranging from depletion of our natural resources and environmental degradation. This has increased due to our unsustainable patterns of production and consumption, uncontrolled population growth and inequality of social and economic needs. (United Nations Educational Scientific and Cultural Organization/United Nations Environmental Program UNESCO-UNEP, 1994). These challenges if left unchecked will bring about more strain on the earth’s natural resources and habitats (Asuno, 1991). There is need for us to prepare ourselves through environmental education to enable us overcome these challenges and remain sustained on planet earth.

Many cases have been raised by several persons and institutions for a fair treatment of the environment and those who sorely depend on it for survival. Such concerns instead of coming up with the expected results, environmental degradation and human suffering have taken a greater toll. There is an immediate need to salvage humans and their environment, by using education as a tool.

The word environment is a broad concept, it may be physical, natural, social, cultural etc. it refers to living beings surroundings. It is everything that surrounds man used by man, man himself inclusive. Whiston, (2001) defined thus: “environment is not a residual, but an entity which incorporates attitudes, values, institutions, economics, science and technology”. He goes further to state “environment” is not an issue, it is life itself. This assertion cannot be questioned. Hence ones environment is part and parcel of human being and therefore cannot be separated. Also man’s ability to strive and survive is dependent on how humans handle the environment. This can only be done through environmental education.

Literature Review

Environmental education is popularized through the live sciences especially in the field of Ecology. The focus for the past ten years now has been to make student’s to be conscious of their environment. Therefore, all educational activities should be geared towards re-orientating societal values towards safeguarding the environment so as to enable it sustain life. Up-to date, various initiatives by nation’s all over the globe to promote environmental education all emerged from this perspective. These studies were

mainly American and tended to focus on individual every day action, such as house hold waste sorting for recycling and economizing on water. According to the International Union for the Conservation of Nature (IUCN), environmental education is “...the process of recognizing values and clarifying concepts in order to develop skills and attitude necessary to understand and appreciate the interrelatedness among men, his culture and his biophysical surrounding. Environmental education entails practice in decision-making and self-formation of code of behaviour about issues concerning environmental quality”. (IUCN, 1971).

Environmental education gained recognition worldwide when the United Nations Conference on the human environment held in Stockholm, Sweden in 1972 declared that environmental education must be used as a tool to address global environmental problems. United Nations Educational Scientific and Cultural organization (UNESCO) and United Nations Environment Programme (UNEP) created major declaration's that guided the course of EE. Such declaration are as follows;

Stockholm Declaration

June 5-16 (1972). This is the declaration of the united nation's conference on the human environment. The document was made up of 7 proclamations and 26 principles. All this is meant to inspire and guide the people of the world in the preservation and enhancement of the human environment.

The Belgrade charter October 13th-22nd (1975). This character was the outcome of the international work shop on EE held in Belgrade, Yugoslavia. The Belgrade charter was built upon the Stockholm declaration. It added goals, objectives and guiding principles of EE programmes. It also defines an audience for EE which now includes the general public.

The Tbilisi declaration Oct 14th-26st (1977). It focused mainly on the unanimous agreement that noted the vital role of EE in the preservation and improvement of the world's environment and the sound and balanced development of the communities of the world. The Tbilisi declaration up dated and clarified the Stockholm declaration and the Belgrade charter by inclusion of new goals, objectives, characteristics and guiding principles of EE. Tbilisi conference spearheaded clarification on the nature of environmental education came on board. This conference resulted in a declaration which gave a list of seven directive principles for environmental education programmes. These are summarized thus:

- ❖ Environmental education is lifelong educational process that takes place at all levels of education.
- ❖ The understanding of how human interactions and political processes, in consonance with the nature of socio-economic issues and the impact of these on environmental degradation or enhancement.
- ❖ Environmental education is for developing attitudes and value systems which lead to socio-economic improvement through positive social interactions and the maintenance and improvement of the natural environment.
- ❖ Environmental education aims to develop an individuals understanding, skills and feelings of empowerment that are vital for both positive behaviour towards the

Academic Scholarship

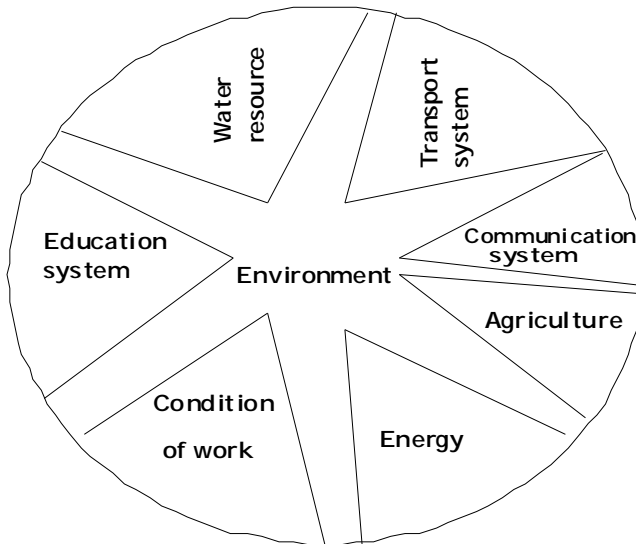
biophysical and social environment in everyday living and to find solutions for environmental problems.

- ❖ Environmental education requires a holistic and preferably interdisciplinary approach to teaching with diverse learning experiences, but with particular emphasis on direct experiential learning in nature, and social environments.

Thus environmental education is a learning process that increases people's knowledge and awareness about the environment and associated challenges and fosters attitudes, motivations and commitments to make informed decisions and take responsible action. (UNESCO, Tbilisi Declaration 1977). Environmental education is therefore not only the domain of natural scientist, but draws from the tools and resources of a wide range of discipline in order to demonstrate the root of common problems. Presently everyone knows and acknowledges environmental problems, but only a few truly understands and are truly aware of the import of the environment. It may not be easy to persuade other people to appreciate the value or worth of the environment. To achieve this feat, there is need for value re-orientation in form of new attitude, skills, knowledge, awareness and behaviours towards the environment.

Thus environmental education inclusion in all levels of our education may be vital ways of enable us face our environmental problems (Fien & Trainer, 1993; UNESCO-UNEP, 1994; Viravaday 1994). Environmental value and ethics should be instilled in the minds of the learners. This can be approached through three dimensions, education in, about, and for the environment. Education in and about the environment are meant to develop knowledge, awareness, attitude, and skill. While education for the environment is intended to enhance values, ethics, problem-solving skills and action (Spork, 1992). However it is education for the environment that seems to have the potential of contributing best to the general well being of environment, (Born, 1994). Teaching and learning in environmental education is vital since it offers students the opportunity to act for the environment. Currently in Nigeria there is no spelt out curriculum on environmental education at the secondary school level. Environmental education is only taught in the faculty of sciences in the universities while it is related to all subject areas.

Thus, inculcating environmental education in a school education curriculum is developing education for sustainability. It is equipping the students with an understanding of the environment, social, and economic issues that are involved. It will also lead to a good education which will help to re-orient their thinking and steps towards the future. It can also be explained as the environmental vicious circle illustrated below.



Environment at the centre of the circle links all: That is water resources, transportation, communication, agriculture, energy, condition of work and education systems are all dependent on the environment for their sustenance. That indicates that attention should be focused on proper utilization of this subsystem to sustain the environment. The increasing production, distribution, and consumption, and progressive growth in world population which is the after math of population explosion are mounting much pressure on the already limited environment. This demands that all persons and nations should work together and retrace their steps by accepting values and orientation that are environmental conscious. This value re-orientation can be achieved through the following.

Students Involvement in Education

This entails that their involvement will be problem oriented; since environmental problems may not be easily identified by mere writing or talking to them in the classroom. When they get involved, they develop experience on how to take initiative as future leaders in issues of global challenge. Such experiences can only be acquired by their embracing a well planned environmental education curriculum. Experimental education, the possibility of acquiring a wholistic education in the classroom may not be possible. There is need for students to go out of their classroom to study, observe and work directly with members of the community; either in the manufacturing, drilling or oil serving industries where the picture or impact of oil spill/pollution and other terms of environmental degradation will be felt. Future re-orientation will be just to emphasis that environmental education's main concern is on the urgent problems that are fully facing the globe recently due to the aftermath of

Academic Scholarship

advancement in science and technology. This demands for a total shift from our old ways of education and paying more emphasis on environmental education. This implies that knowledge must be reorganized to capture the challenges and needs of the time. This calls for revision of curricula and teaching methods as they relate to the current societal needs. The focus of the study is to gain information on the value of environmental education.

Purpose of the Study

The general purpose of the study is to explore the value of a workable environmental education at Imo state secondary schools. Specifically, the study aimed at:

- 1) Determining the value of environmental education in secondary schools.
- 2) Study strategies and procedures in providing environmental education activities.
- 3) Suggest guidelines for valuable environmental education for Imo State secondary schools.

Methodology

The descriptive survey design was adopted. This enabled the researcher collect data without manipulating any variable of interest. The population of the study was 18 public secondary schools with 282 teachers in Mbanzo Local Government Area of Imo-State. Sample sizes of 15 secondary schools were selected using stratified random sampling technique. The respondent were 140 teachers and 100 students in SS III classes. The instrument used for the study was a 22 items structured interview check list and environmental schedule. The instrument was tested in a pilot study to determine its reliability. It was subjected to a split half test retest method to ascertain its reliability. The set of scores were correlated using Pearson's correlation co-efficient formula which produced a coefficient reliability of 0.76. Based on these the instrument was considered reliable. The content validity was done with colleague research follows. The researchers tried to ascertain the face validity of the instrument by submitting it to a senior colleague for perusal and comments.

The instrument addressed the following: demographic profile, awareness of schools on environmental issues, environmental projects initiated by teachers/students/community, inhibitions on environmental activities and suggestions can how to manage environment. The respondents were asked to indicate on a four point modified likert scale. Each item has four options ranging from strongly Disagree (SD) 1, Disagree (D) 2, Agree (A) 3, strongly agree (SA) 4. The data collected were analysed using frequency tables and percentages.

Findings and Discussion

Table 1: Frequency and Percentage of Activities of Schools on Environment as Reported by Respondents (15 seconds)

| Item | Activities in Schools | Respondents | |
|------|--|-------------|----------|
| | | Teachers | Students |
| 1. | Suitable learning environment | 95(19) | 85(17) |
| 2. | The future of the school about environment | 75(15) | 75(15) |
| 3. | School based curriculum with infusion of health education, social studies, physical education and integrated science | 100 (15) | 100 (15) |
| 4. | Locally made resource materials for learning | 75(15) | 80(16) |
| 5. | E-learning and lesson plan on environment | 20(4) | 0 |

Activities of Schools on Environment

With reference to table 1, the percentage scores obtained reveal that variable 1, 2, 3 and 4, indicates that adequate knowledge/ awareness of environmental issues is not contestable among teachers and student. While variable 4, teachers showed very low score of 20% while the students showed zero (0) score.

That is a strong indication that EE is not a core subject in the curriculum rather it is an integral part of social studies. One therefore wonders how secondary schools students who are trained to serve as middle level manpower be familiar with environmental problems. This finding is in agreement with Adara (1977), which posited that inadequate environmental awareness knowledge and skills can only be removed through education. The education here is nothing but creating awareness and including in the syllabus those subjects that would expose the student's to EE knowledge.

Table 2: Percentage of Environmental Project, Introduced by Either Teachers, Students/Community

| Rank | Environmental Projects | % |
|------|-------------------------|------------|
| 1. | Introduced by teachers | 40 |
| 2. | Introduced by students | 25 |
| 3. | Introduced by community | 35 |
| | Total | 100 |

Environmental Project Introduced By Either Teachers/Students/ Community

The data in table 2 show that no meaningful environmental project is initiated by both teachers, students and community at large. This explanation can be partly due to their limited knowledge of environmental problems which suggests that EE should be

Academic Scholarship

introduced at all levels of education. Communities should be *adequately sensitized* on the need for them to engage on project that would expose them more to environment issues and how to manage them when there is need. This finding is in agreement with Born (1994) who maintained that educating people on the environment contributes greatly to the wellbeing of the environment.

Table 3: Percentage of Teachers and Students Opinions About Inhibitions Bothering on Environmental Activities.

| No | Inhibitions | Respondents | |
|-----|--|-------------|------------|
| | | Teachers | Students |
| 1. | Inadequate knowledge on environment | 20 | 10 |
| 2. | Non availability of learning resources | 5 | 10 |
| 3. | Lack of financial allocation | 25 | 25 |
| 4. | Lack of provision for collaborative knowledge | 10 | 20 |
| 5. | Lack of expertise | 5 | 0 |
| 6. | Lack of awareness | 10 | 5 |
| 7. | Lack of support from donor organizations | 0 | 0 |
| 8. | Lack of policy implementation | 10 | 0 |
| 9. | Lack of adequate learning facilities | 10 | 10 |
| 10. | Lack of interest by both teachers and students | 50 | 20 |
| | Total | 100 | 100 |

Inhibitions Bothering on Environmental Activities

The data in table 3 reported that inhibitions to EE activities include: non availability of learning resources (Funding), lack of expertise, lack of awareness, lack of policy implementation and lack of support from donor organizations. However, there is the indication that any new thing will demand the above mentioned, and when they are not available, implementation becomes difficult. There is need for education to be refocused as to meet global demands of information and communication technology.

Table 4: Suggestions from Both Teachers and Students on How to Manage Environmental Activities in Schools

| S/No | Items | Respondents | |
|------|---|-------------|------------|
| | | Teachers | Students |
| 1. | Secondary schools, should make a provision for subject in environmental education | 10 | 5 |
| 2. | Learning activities on environmental education should integrate all the discipline | 15 | 10 |
| 3. | Education policy on secondary education should clearly address Environmental Education | 25 | 10 |
| 4. | School administrators should develop suitable environment for learning activities on environment | 15 | 30 |
| 5. | School administration should employ any available media to communicate and announce about Environmental Education | 15 | 15 |
| 6. | School should provide more awareness programmes on environment education | 10 | 25 |
| 7. | More funds should be allocated for environmental education | 5 | 0 |
| 8. | School administrators should pay desirable attention in environmental education management | 10 | 0 |
| 9. | Teachers who teach environmental education should be motivated | 5 | 5 |
| | Total | 100 | 100 |

Suggestions on How to Manage Environmental Activities

Table 4 gave a number of suggestions that will help schools manage environmental activities at all levels of education. Such suggestions range from the following: more funds should be allocated for EE, school administrators should pay attention to environmental education by integrating it in all disciplines. This is in agreement with Whiston (2001) who maintained that “environment is not an issue, it is life itself”. This assertion can be accepted since human beings cannot be separated from their environment. Therefore there is need for a multi-disciplinary approach of integrating all the disciplines. Students and the teachers are also of the opinion that EE should be part of the core subjects in the school syllabus and taught as a subject. Thus, the findings of this study agree with the study of (Yenken 2000) who posited that curricular materials especially at secondary school level should focus on strategies that will enable learners exploit and explore the abundant natural resources found in their environment. When this is done it will make education at that level more functional.

Conclusion

Educating students on the protection, preservation and improvement of the environment is vital since humans and its institutions depend on the environment for survival. Thus, it will be erroneous if students are not taught how to protect or manage their environment. They should also be made to be aware of how their interaction with their environment can either sustain or destroy the environment which their life is dependent upon. Therefore acquiring knowledge through education on how to safeguard the environment is inevitable, so as to make man's quality of life meaningful.

Recommendations

From the study some recommendations were proffered for a valuable environmental education for Nigeria secondary schools.

1. Environmental Education should be inculcated in the school curriculum.
2. Environmental Education should be given top priority in national policy on education.
3. Learning activities in environmental education should be student centered, using resources of the community where the school is located.
4. More awareness should be created on the part of the teachers by giving them opportunities to attend workshops, seminars and conferences on environmental education.
5. The school's physical environment should be beautified as to act as a learning resource. However, in an information and communication technology century, a new approach to the education system must prepare individuals in diverse ways of thinking. This will ensure a more problem solving individual and promote changes in attitudes and behaviours that will help solve existing environmental problems.
6. Training and re-training of teachers on the need to be environmentally conscious.
7. Environmental issues should be treated as a school based core-curriculum.

8. The school strategic plan should pay special attention to environmental education.
9. Environmental education should be student focused, employing all available community resources in the provision of learning activities.
10. Promoting teachers awareness in environmental activities by offering them opportunities to attend environmental education training, the trainer workshop public lectures, seminars and conferences.
11. The physical learning environment of the learners should be beautified as to act as a source of resource to the learners.
12. School administrators should always support environmental projects and activities by making funds available were need be.

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Academic Scholarship

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