



Review

Introducing environmental sanitation education in the primary school curriculum

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Abstract

The physical environment is very important to the survival of the entire universe, and Nigeria as a nation has been battling to reduce the risks, resulting from poor sanitary conditions and unwholesome toilet habits in our cities and communities. Unfortunately, efforts to keep Nigeria clean, which culminated in a national crusade against filth has not succeeded in enthroning a sense of decency and the culture of environmental self discipline among the citizenry. This article is not only aimed at bringing to the fore the need for making Environmental Sanitation Education (EES) an integral part of Environmental Education content in the National Primary Science Core Curriculum (NPSCC) but also identifying the objectives, content, implementation strategies and evaluation processes of the said programme. Sanitation education will no doubt sharpen the citizens' consciousness and encourage them to accept their responsibility in the proper management of the environment, thereby instilling a lasting sense of decency and engendering environmental friendliness.

Keywords: Environmental sanitation, school curriculum and environmental health.

INTRODUCTION

Throughout the world, the problem of polluted environment has become a very disturbing phenomenon. Environmental problems plaguing the world are enormous. But perhaps the most serious and worrisome in Nigeria is the physical environment in terms of the low level of sanitation and gross environmental indiscipline in our cities and communities. Apart from the health significance of heaps of refuse as a health hazard, they also make our environment ugly. The problem of solid waste disposal in Nigeria has become a national malaise. Filth is an eyesore and a nuisance. It signifies decadence and backwardness. A look at the Nigerian homes, toilets, streets, kitchens, corridors, gutters, staircases, markets, abattoirs, would reveal the very low levels of sanitation. The woe of poor environmental sanitation such as indiscriminate waste disposal is evidence of the crucial role environment occupies in deciding the health of a man.

In fact, never before, in the history of Nigeria has the need become more imperative and urgent to sharpen our

consciousness concerning our surroundings. For in such consciousness lies our dignity and salvation as a people and as a nation. This is because some Nigerian still go about with the dangerous impression that *dorti no dey kill black man* (Filth does not kill black man) However, over the years, specific measures undertaken by the Nigerian Government both in the past and present have not yielded significant success.

The objectives of environmental sanitation are to create and maintain conditions in the environment that will promote health and prevent diseases (Lucas and Gilles, 1973). This is because Environmental Sanitation deals with:

- Methods for the disposal of excreta, sewage and community wastes to ensure that they are adequate and safe.
- Water supplies, to ensure that they are pure and wholesome.
- Housing to ensure that it is a character likely to:
 - a. Provide as few opportunities as possible for the direct transmission of disease especially respiratory and other highly infectious diseases.
 - b. Encourage healthful habits in the occupants.
- Milk and other food supplies to ensure that they are safe.

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- Personal and public health cleanliness especially in relation to diseases.
- Control of arthropod, rodent, mollusc or other alternative hosts associated with human disease.
- Atmospheric conditions to ensure that the external atmosphere is free from deleterious elements and that internal conditions of workshops, houses etc are suitable for the occupations undertaken in them and finally,
- Factories, workshops, dwellings, streets and the general environment, to ensure freedom from risk to health, whether mechanical or biological and to provide the best working and living conditions (Abam, 1998).

Environmental Sanitation in Nigeria

The promulgation of environmental decrees and legislations have also proved ineffective. During the colonial era, sanitation bye-laws were strictly enforced and sanitary inspectors carried out regular and surprise inspection of households, buildings and premises to ensure compliance. Another initiative was in 1985 when the government declared the "War Against Indiscipline" (WAI) and launched the fifth phase of WAI, called the "War Against Filth," which emphasized environmental Sanitation. Environmental Task Forces and Sanitation Courts were established in all the states of the federation and the last Saturday of every month was set aside as National Environmental Sanitation Day. Unfortunately the sanitation courts and other Agencies charged with the responsibility of implementing/enforcing Environmental Sanitation, were more interested in revenue generation for the government (or for their personal pockets), than actually using the exercise as a corrective measure, by persuading defaulters to change their habits and attitudes and show more commitment to keeping their environment clean. The objective of the sanitation exercise was therefore completely missed and defeated. Thus, the 'clean up' campaigns did not appreciably succeed in inculcating the culture of environmental self-discipline in the citizenry.

This could be attributed to the fact that in Nigeria, just like in some developing countries, emphasis has been on the environmental front, such as rendering basic sanitary services, enforcing environmental sanitation and clean-up campaigns which merely attacked their symptoms rather than the problems themselves. The general feeling today is that the fight for environmental quality should be focused more on the human front, that is, changing habits, attitudes, perceptions and inclinations through education which is more likely to inculcate in the people a sustained culture of personal hygiene and interest in the maintenance of environmental quality.

The appalling and dehumanizing conditions of our physical environment calls for sober reflections. It has

therefore become pertinent and urgent to sharpen the consciousness of Nigerians concerning the proper upkeep of their environment. For in such consciousness lies our dignity and salvation as a people and as a nation. Under the circumstances, the need for greater emphasis on environmental Education (EE) and the re-orientation of the public on the immense benefits of a decent environment becomes imperative. It is, therefore, believed that with appropriate Environmental Sanitation education, inculcated at the formative age of the child, Nigerians can still achieve the vision of the type of environment considered most desirable to bequeath to our nation. Also, environmental education which is geared towards changing the habits, attitudes and perceptions of the adults could be achieved through non-formal education using the mass media and any other acceptable sources.

Importance of Environmental Health and Sanitation

The fact that most human beings dread death makes environmental health and sanitation important to every individual. This recognition must have influenced the use of cliches such as "prevention is better than cure," "health is wealth," 'cleanliness is next to Goldliness.' Environmental health and sanitation could therefore be said to be phenomena that help to promote a better life (Okonkwo, 2000).

Environmental Sanitation goes beyond occasional street sweeping and the clearing of dirty drainage systems, it embraces personal hygiene and purification for spiritual and health purposes, as well as the control of all the factors in man's physical environment which exercise or may exercise a deleterious effect on man's physical, mental or social well-being. For example, air, water and land pollution have very serious consequences on our health. This is evidenced in 2 Kings 5:10; when Elisha sent Naaman's messenger back to him saying:

Go and wash yourself in the Jordan seven times; and your flesh shall be restored, and you shall be clean."Also Levi. 15:13 states:

And when he who has a discharge is cleansed of his discharge, then he shall count for himself seven days for his cleansing, and wash his clothes; and he shall bath his body in running water and shall be clean (RSV)

From Islamic perspective, the first condition of worship or communion with the Supreme Being in Islam is cleanliness. The Holy Quran 5:6 states:

O you who believe, when you rise up for prayer, wash your faces, and hands up to the elbows, and wipe your heads, and (wash your feet up to the ankles. And if you are under an obligation, then wash (yourselves). And if you are sick, or on a journey, or one of you comes from the privy or your have had contact with women. And you cannot find water. Betake yourself of pure earth and wipe you faces and your hands therewith. Allah desires not to

place a burden on you but he wishes to purify you, and that he may complete His favour on you, so that you may give thanks.

According to Okonkwo, purity of the body in Islam is a pre-requisite to the purity of the mind. A Muslim who prays five times daily needs to keep himself and his clothes clean always. The Holy Prophet Mohammed (SWA) further buttresses purification of the body, when he said: The key to paradise is prayer and the key to prayer is purification (Ah-Msh 3).

Rationale for Environmental Sanitation Education

The reasons for the introduction of Environmental Sanitation Education in Nigerian Primary School curriculum are as follows:

The physical environment is very crucial to the very survival of man and it is a fundamental right of man to live in a clean and unpolluted environment that is worthy of his dignity and well-being

The various efforts of all the state governments in Nigeria to keep our nation clean and healthy, culminating in the national crusade against filth underscores the need to introduce environmental sanitation education as an integral part of Environmental Education in our primary schools. Other people have also expressed the need for the inclusion of environmental education into the school curriculum. The primary school age is regarded as the most impressionable age, when children are more receptive, strongly motivated and more likely to develop positive environmental attitudes. Geddes (1889) argued that a child brought into contact with the profound realities of his environment would not only be more likely to learn better, but also develop a creative attitude towards his surroundings.

To enrich the content of the primary science curriculum. Umozurike (1992) analyzed the National Primary Science Core Curriculum in order to identify the elements of environmental education and to determine the adequacy/inadequacy of environmental Education elements vis-a-vis the basic objectives of EE which aims at producing a citizenry that has the knowledge, attitude, skills and commitment towards solving environmental problems. The content analysis revealed some inadequacy of EE in the content of the primary science curriculum. She therefore recommended that the primary science core curriculum be reviewed in order to ensure a balance through an infusion of more EE topics into the core curriculum. It is the role of primary schools to create adequate awareness about the environment. According to Olaitan (1982), primary education aims at performing certain roles which among others include developing aesthetic awareness. There is therefore little doubt that the beauty and aesthetics of our environment lies squarely on an effective, well planned and coordinated programmes of environmental sanitation.

Environmental Sanitation Education

The key to a healthy and beautiful environment is based on preventive measures rather than curative services. Environmental sanitation, therefore, must go beyond spasmodic and sporadic clean-up exercise. There is no doubt that the clean-up campaigns and sanitation edicts have succeeded to some extent in instilling the required sense of cleanliness among Nigerians. But Environmental Sanitation Education programme will serve to complement existing activities and strategies such as seminars, yearly world Environment Day Celebrations, Saturday Environmental Clean-up Exercises, environmental exhibitions, competitions, workshops and even award of cash prizes to the best and cleanest schools or communities. These activities are necessary in order to effectively impart, sensitize and infuse in the citizens a sense of decency, discipline and responsibility towards the environment.

Environmental Sanitation education as a progressive policy cannot be disputed, for it is only when the majority of the people are physically and philosophical involved that sustained environmental ethnics can be assured. To this end Environmental Sanitation education should not only focus on basic hygiene, and keeping the surroundings clean, but also campaigns against bad toilet habits such as indiscriminate defecation and urination as well as inefficient disposal of waste. It must also in addition concern itself with the major problems of air and water pollution. The prevalence of communicable diseases as evidenced in the increasing number of cases of typhoid, malaria, cholera, dysentery, guinea worm infections throughout the country underscore the need to be well informed about the environment and health. A good many of these cases could be avoided through a programme of environmental education aimed at developing the appropriate attitudes and values that are consistent with effective environmental sanitation.

The importance of Environmental Sanitation and quality will be more fully appreciated when they form the foundation of a specific curriculum for Environmental Sanitation education.

This curriculum will have a well articulated set of objectives, content, implementation strategies and evaluation as suggested below:-

Objectives

The objectives may be stated as follows:-

- a. Demonstration of good sanitary behaviour;
- b. Description and operation of waste disposal systems;
- c. Identification of the causes and consequences of air and water pollution
- d. Justification of the need for timely collection and disposal of refuse or wastes;
- e. Description of the mechanics associated with effective

- use of public lavatories and urinals;
- f. Explanation of the relevance for a good and efficient system of drainage.

Content

The content which would logically be derived from the objectives may incorporate the following among other units;

- a. The culture of sanitary behaviour
- b. Methods of waste disposal
- c. Air and water pollution
- d. Principles of public health
- e. Public health and Drainage systems
- f. The psychology of waste management
- g. Tips on healthful habits
- h. Simple waste management techniques
- i. Consequences of improper techniques waste disposal
- j. Out-door activities.

Implementation

Since Environmental Education as an autonomous or distinct subject has not been fully developed at the primary and secondary school levels, the infusion or integrated approach is suggested. This means that Environmental Sanitation education will be integrated as part of Environmental education elements in the primary science core curriculum. This demands skills in the identification and integration of relevant aspects of Environmental Education concepts and calls for the retraining of existing personnel to meet the demands of the new programme.

Evaluation

The programme will be evaluated in accordance with the federal approved system of continuous assessment with emphasis on assessing individual students in terms of their efforts towards attaining the objectives specified above. The evaluation programme must incorporate the cognitive, the affective and the psychomotor dimensions of learning with respect to a programme of environmental sanitation education.

Only such would ensure that pupils do not merely acquire cognitive skills relating to the programme but also develop a mental attitude and disposition that are consistent with the development and maintenance of environmental sanitation, while quizzes and other forms of tests may be appropriate for the evaluation process. They must be duly complemented with a system of observation and other relevant data-gathering techniques that seek to obtain information on pupils outside the classroom or the school environment.

CONCLUSION

The mere fact that most human beings dread death makes environmental health and sanitation important to every citizen. Living healthfully is not and does not imply living expensively. Rather it involves an attitude towards life that brings about the highest attainable level of physical, emotional and social well-being. Essentially, the basic efforts that lead to good health and longevity include the taking of sensible actions and precautions based on sound health information, of which the curriculum remains the surest way of instilling new skills, technology and attitudes in individuals. Environmental sanitation education will no doubt help in educating and reconditioning the minds and attitudes of citizens in consonance with the norms of their environment.

REFERENCES

- Abam OT (1998). Man and Environmental Behaviour, An unpublished lecture note, Institute of Education university of Calabar, Calabar.
- Geddes P (1889). The genesis of environmental education. In F. Anijah-Obi, Fundamentals of Environmental Education and Management. Nigeria: Clear Eines Publications. Edinburgh. Oliver Boy;12
- Lucas AO, Gilles HM (1973). A short Textbook of preventive medicine for the Tropics. Eondon: Modder and Stoughton
- Okonkwo TC (2001) Religion, Environmental Health and Sanitation - Paper presented at a seminar for Environmental health Officers in the Unified Local Government Service of Delta State 22nd - 24th August.
- Olaitan SO (1982). Vocational education and national manpower development constraints and strategies: In Niger. J. curriculum stud.; 2:s69
- Umозurike JC (1993). Improving the primary curriculum for acquisition of environmental attitude and problem solving skills. In NCF/WWSF 1st National Conference on Environmental Education. Conference proceedings; 65-67. Nigeria.