Journal of Education and Practice
ISSN 2222-1735 (Paper) ISSN 2222-288X (Online)
Vol.6, No.4, 2015

Environmental Awareness and School Sanitation in Calabar Metropolis of Cross Rivers State, Nigeria

Anijaobi-Idem, F. N. Ukata, B. N. Bisong, N. N
Faculty of Eduction, University of calabar, Calabar, Nigeria

ABSTRACT
This descriptive survey designed study explored the influence of environmental awareness on secondary school sanitation in Calabar Metropolis. 1 hypothesis was formulated to direct the investigation. 300 subjects made up of 30 principals and 270 teachers constituted the sample drawn from the population of principals and teachers in secondary schools in the area of study. Data were collected using environmental awareness and school sanitation questionnaire, designed, validated and used for the study. Data collected were subjected to statistical analysis using Pearson Product Moment Correlation statistics. Results obtained indicated a positive significant relationship between environmental awareness and secondary school sanitation in terms of classroom sanitation, school compound sanitation and provision of refuse dumps. It was concluded that environmental awareness leads to the maintenance of school sanitation in terms of classroom sanitation, school compound sanitation and provision of refuse dumps. From this finding, a number of recommendations were made.
Key words: Environmental awareness, school sanitation, classroom sanitation, school compound sanitation and pro vision of refuse dumps.

INTRODUCTION

The need to minimize possible adverse environmental degradation and maximize benefits of healthy environment that could result in the proper management of the physical environment has been acknowledged the world over. However, the general paucity of public awareness of environmental issues among the Nigerian citizenry still leaves much to be desired. The study by Mansaray, Ajiboye and Audu (1998), on environmental-related knowledge, attitudes and practices among secondary school teachers, revealed rather low knowledge-base and practices with respect to environmental issues by the populace. In view of this, low level awareness, Barrett (2005) asserted that the best way to provide awareness for environmental issues and promote environmentally responsible behaviours is through increased access to environmental education (EE). This idea is in line with the recommended programmes of action for achieving sustainable development in Agenda 21, which are to: reorient education towards sustainable development; increase public awareness; and promote training (Grubb, Koch, Munson & Sullivan (1995). Consequently, Ukpong (1991) emphasized the importance of environmental sanitation, attitudinal reorientation and behavioural change. Attitudinal change is one of the cardinal objectives of EE, which is more likely to inculcate in the citizenry a sustained culture of environmental ethic and discipline capable of engendering lasting environmental friendliness. People's perception, their attitudes, their habits, values and beliefs, must change in order to fit into the new social order. How can this be done? How can one for example, change the perception of the Nigerian child or adult who believes that 'dorti no dey kill black man' (Filth does not kill black man). Inyang-Abia (1995), attempted an answer to this question, when he suggested that; Nigerians need very urgently an adequate dosage of environmental literacy. Therefore EE remains a veritable instrument for creating public awareness on issues concerning the environment. It can help change people's perceptions, attitudes, habits, inclinations and practices, thereby reducing their negative impact on the environment. That is why the crusade for environmental quality should focus more on the human front: changing habits, perceptions, attitudes and values, rather than the physical front (ie) litter clean-up campaigns, seminars, and workshops etc. which merely attack the symptoms rather than the problems themselves. This will likely create in a child a new image of his world and it is this new image that environmental literacy aims to achieve. The goal of the national policy on the environment is to achieve sustainable development in Nigeria and in particular, to secure for all Nigerians a quality of environment for their health and well-being, among others (FGN, 1989). The right to a healthful environment is akin to the constitutional right to life. This is because a poor, filthy and putrid, environment can affect the health of the individual and result in subsequent death (Ugolo, 1998). It is therefore, a fundamental right of man to live in a clean, safe and healthy environment devoid of any hazards to life (Anijah-Obi, 2001). Contrary to this, the physical environment in Nigeria, in terms of the low level of sanitation and environmental indiscipline in our schools and communities are quite worrisome. Sanitation is still grossly inadequate

A visit to some of the secondary school's in Calabar metropolis would reveal the very low level of sanitation. The school premises are littered with papers and empty sachet water bags popularly called 'pure water'. The toilets are dirty and often inadequate for the number of students in the school. The stench from these toilets are irritating and nauseating and also the indiscriminate solid waste disposal and management. Environmental sanitation, characterized by inadequate waste management, breeding of pest and vectors of public

health importance, and poor food sanitation etc. is a very serious environmental problem, communicable but largely preventable diseases like guinea worm, diarrhea, typhoid, cholera and dysentery are very prevalent in an secondary schools. Indeed, in developing countries 80% of all diseases result from a combination of poor hygiene, contaminated water and poor sanitation (Mason, 2002). These environmental sanitation diseases affect students ability to learn and remain in school. This appalling and dehumanizing condition in our secondary schools call for sober reflections and urgent intervention. It is therefore pertinent that the consciousness of the students and teachers concerning the proper up-keep of their school environment be sharpened. Under the circumstances, one cannot but ask the question: to what extent does environmental awareness influence school sanitation? One hypothesis was used for the study.

Methodology

This study was conducted in Calabar Metropolis. It is the capital city of Cross River State as well as the hub of economic activities in the state. Public secondary schools provided the setting. There are 40 of them located in Calabar metropolis. The population comprised of all the principals and teachers in the public secondary schools. The sample consisted of 300 subjects made up of 30 principals and 270 teachers. No sampling technique was used in drawing the principals, since the secondary schools sampled were 30, their principals automatically constituted the sample because only 1 principal is found in each secondary school. However, the teacher sample of 270 was drawn with single random sampling technique, where 9 teachers were drawn from each of the 30 secondary schools to give a total of 270 teachers.

A 28 item Likert type instrument called Environmental Awareness and School Sanitation Questionnaire (EASSQ) was designed by the researchers and validated by experts in measurement and evaluation. It had 2 sections A and B. Section A was made up of 4 demographic variables while section B consisted of 24 items of 4-point Likert format, where 6 items measured each of the four main variables used in the study, which included-environmental awareness, classroom sanitation school compound sanitation and provision of refuse dumps. A trial test was carried out to establish the reliability of the instrument. Principals and teachers in 5 secondary schools, who were not part of the study's sample were used. A Cronbach Alpha reliability was adopted and the estimates ranged from 0.72 to 0.88, figures which confirmed that the instrument was reliable in realizing the study's objectives. Administration of the instrument was personally carried out by the researchers with the aid of research assistants recruited for the study. This measure yielded 95% percent returns rate. Pearson Product Moment Correlation analysis was used in analysing the data collected for the study.

Analysis of results

Hypotheses

There is no significant relationship between environmental awareness and school sanitation in terms of classroom sanitation, school compound sanitation and provision of refuse dumps. The independent variable in this hypothesis is environmental awareness while the dependent variable is school sanitation in terms of classroom sanitation, school compound sanitation and provision of refuse dumps. The hypothesis was tested using Pearson's Product Moment Correlation statistics since the variables were measured on a continuous scale. The results are shown table 1.

Table 1

Pearson product Moment Correlation of environmental awareness and school sanitation in terms of classroom sanitation, school compound sanitation and provision of refuse dumps (N = 300).

Variables	**X**	**SD**	**$\sum X^2$ $\sum Y^2$**	**$\sum XY$**	**R**	**Sig. Level**
Environmental awareness	15.443	2.144	1604.357			
Classroom sanitation	14.511	2.161	162.454	1161.729	.719	.000
School compound sanitation	14.957	2.375	1968.357	1023.643	.576	.000
Provision of refuse dumps	15.094	2.103	1543.889	957.386	.620	.000

* $p < .05$, df = 298 critical r = 01113

The result indicates that the calculated value for environmental awareness and classroom sanitation is .719, which implies that there is a positive relationship between environmental awareness and classroom sanitation. The positive relationship means that as environmental awareness increases, classroom sanitation also increases

and vice versa. Since the calculated r value (.719) is greater than the critical r value of 0.113 at .05 significant level and 298 degrees of freedom, it means that the observed positive relationship between environmental awareness and classroom sanitation is statistically significant. Therefore, the null hypothesis is rejected. Also, for environmental awareness and school compound sanitation, the calculated r value is .576, which indicates that there is a positive relationship between the two variables. In other words, as environmental awareness increases, school compound sanitation also increases and vice versa. As it is, the observed positive relationship is statistically significant because the calculated r value (.576) is greater than the critical r value of 0.113 at .05 significance level and 298 degrees of freedom. This means that there is a significant positive relationship between environmental awareness and school compound sanitation. The null hypothesis is therefore rejected. Similarly, for environmental awareness and provision of refuse dumps, the results in table 1 indicate that the calculated r value is .620. This implies that there is a positive relationship between environmental awareness and provision of refuse dumps. Indeed the positive relationship means that as environmental awareness increases, provision of refuse dumps also increases, and vice versa. Again since the calculated value (.620) is greater than the critical value of 0.113 at .05 significance level and 298 degrees of freedom, it means that the observed positive relationship between the two variables is statistically significant. Therefore the null hypothesis is rejected.

Also lack of proper implementation of environmental education at all levels of education in the state could be responsible for the low level of environmental awareness observed in the area. The findings support Ebong (2002), who attributed most urban problems to lack of public awareness on matters concerning the environment. He therefore recommended a well articulated environmental education as a panacea for solving these problems. According to him, for Environmental Education to be effective and result oriented, it must involve a wide range of methods and strategies aimed at increasing public awareness and understanding, as well as sensitivity and concern for their environment. A well articulated Environmental Education programme will also enable people to be responsive, willing and committed to issues affecting the environment.

Discussion of Results

The statistical analysis carried out on the above hypothesis showed that environmental awareness has a significant relationship with school sanitation in terms classroom sanitation, school compound sanitation and provision of refuse dumps. This implies that the desire and need of school personal to maintain a healthy school environment depends completely on their level of awareness concerning the environment. School personnel who are aware that the environment is part of their existence tend to make their schools convenient and conducive for teaching and learning with the availability of eco-friendly facilities. In other words, school personnel who know the negative impact of poor and substandard environment on human health and teaching and learning are more likely to maintain quality school sanitation in terms of classroom sanitation, school compound sanitation and provision of refuse dumps than those with little or no knowledge or awareness. It is obvious that school personnel with good level of environmental awareness would likely carry out varying environmentally friendly activities, these would include keeping their classrooms clean, proving dust bin around the school premise, cleaning up toilets and gutters, sweeping their surroundings, planting trees to create buffer zones for the regulation of the local temperature and disposing waste in an eco-friendly manner. The choice of keeping classrooms clean, school compound tidy and providing refuse dumps depends on school personnel awareness of inherent consequences of either lack of or wrong choice of these basic features of a school in terms of durability and safety, in coming solar radiation and reflexivity, and air movement. For instance, if school personnel are aware of the health and environmental implications of indiscriminate disposal of waste in the school environment, they would be motivated to make provision for facilities to collect and dispose waste in the regular sanitation of their school environment, and avoid indiscriminate disposal of refuse.

The observed positive environmental behaviour may be due to the fact that, through environmental awareness school personnel have come to gain ample knowledge of the workings of the school environment and the consequences of not taking good care of the school environment. The result of the study with respect to this hypothesis further highlights the importance of environmental awareness' in tackling school sanitation problems. It is therefore imperative that all aspects of human development, should incorporate environment education components to address behavioural factors and enhance public participation and active involvement in environmental issues.

CONCLUSION

From the result of the study, it was concluded that environmental awareness significantly relates to school sanitation in terms of classroom sanitation, school compound sanction and provision of refuse dumps. That is, environment awareness leads to the maintenance of classroom sanitation, school compound sanitation and provision of refuse dumps. The later increases as the former is sustained and vice versa.

RECOMMENDATIONS

1. Adequate measures should be put in place where environmental awareness is sustained in the secondary schools in Calabar metropolis. This will not only increase the principal and teachers awareness about environmental issues, but also sensitize the student. With this measure, every member of the school is carried along and school sanitation because a collective effort.
2. Environmental experts should be brought to the schools once in a while to mount workshops or seminars on school sanitation. This will equip the school community with the necessary information and knowledge in the maintenance of a healthy school environment.

REFERENCES

Anijah-Obi, F. N. (2001). Fundamentals of Environmental Education and management: Calabar: University of Calabar Press.

Bareh, S. (2005). Understanding the importance of environmental Education: An examination of I have a clean San Diego: A Local Environmental Nenprofit Org. ESYS 190B Senior Project June 2.

Ben-Elia, N. (1980). Environmental values and the subjective assessment of residential quality: Dissertation Abstracts International 41 (1), 433 A

Diettz, T., Stem, P. & Guagnamo, G. (1998). Social structural and social psychological bases of environmental concerns: Environment and Behaviour. 30

Inyang- Abia, M. E. (1995). Dimension of literacy for all by the year 2000: implication for Teachers Education and Media Design and Publication, in A. O. Abodeni et al: Literacy and Reading in Nigeria, Vol. 6 Calabar Unical Computer Centre

Jiboye, A. (2009). The significance of household characteristics on housing quality in Nigeria Journal and geography and planning science. 2 (2) 1- 10.

National Policy on Environment (1989), Lagos; Federal enviormental Protection Agency

Okonkwo, A. C. (2000). The socio-cultural and economic Factors in enviormental protection, Paper presented at a seminar for enviormental Health Officers in the United Local Government Service of Delta State. 22-24 August.

Mansaray, A., Ajiboye, J. O., & Audu, U. F. (1998). Environmental Education Research, Vol. 4 (3, 10-16.)

Ugolo, M.J. (1998) Enviormental Law Enforcement: Roles, option and Methods; Paper presented at a Train – the - Trainers Workshop on Environmental Management at Enugu, Nigeria 21-22 May.

Ukpong, S. (1991) Environmental Education batis Calabar. Saju Institution and Research

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:
http://www.iiste.org

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: http://www.iiste.org/journals/ All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: http://www.iiste.org/book/

Academic conference: http://www.iiste.org/conference/upcoming-conferences-call-for-paper/

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library , NewJour, Google Scholar