

**LEVEL OF ENVIRONMENTAL AWARENESS IN TOURISM
TEXTBOOK FOR JUNIOR SECONDARY SCHOOLS
(JSS 1-3) IN CROSS RIVER STATE, NIGERIA**

By

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Abstract

The purpose of this study was to analyze JSS1-3 Tourism textbook used for teaching environmental education in Junior Secondary Schools (JSS 1-3) in Cross River State, Nigeria to determine the level of environmental awareness found in it. The text Tourism Concepts for Junior Secondary Schools was selected purposely because it is used in teaching environmental education in public secondary schools in Cross River State, Nigeria. To this end, the levels of awareness were looked at under biotic, abiotic, social and neutral environments. Two research questions guided the study. Data collected from the book were calculated using simple percentage technique. The findings showed that, there was reflection of all the four levels of awareness but not in a desirable ratio. Emphasis was placed mostly on the abiotic and social environments. The study concluded that, the practice of encouraging or emphasizing only the biotic and social levels of awareness does not augur well for the proper creation of environmental awareness. The researchers expressed the need to identify every aspect of the different environments that agrees with the ethics of conservation of our environment.

Keywords: Environmental awareness, basic Tourism, Junior Secondary Schools, textbooks,

Introduction

The environmental problems in Calabar as well as other states in Nigeria are endemic and have been created over a long period of time. There are about four environmental problems that are confronting Calabar and all of them are ecological in their nature and scope; among them are deforestation, soil degradation, waste disposal and pollution. These problems have over the years produced noticeable offsprings of their own namely; gully erosion, fisheries loss, wildlife and biological diversity losses to varying extents and dimensions.

The forest and water of the state once constituted veritable natural assets providing the habitat for a good number of living things that are useful in agriculture and medical sciences. The forest and water contain resources, some of which are renewable and others non-renewable. These resources range from among others, wood timber, fish and wildlife to limestone, oil, metallic ores, etc. The forest also provides the society valuables services such as regulation of climate, support of

economically important species and formation of soil (Myers, 1986; Dickson, 1981). The combination of renewable natural resources and ecological services may be viewed as the biological resource endowment of the Cross River State.

The Director General of the Nigerian Hydrological Services Agency (NIHSA) warned that from June to September this year (2019), 74 local government areas in about 30 states of Nigeria may experience flooding. Reiterating the above, the Sahara Reports (2018) stated that according to news agency of Nigeria (NAN) about 300 homes and many farmlands in Yobe State were destroyed by flood after days of heavy downpour and as many persons lost their homes and farmlands, worth millions of naira. Cross River State is not an exception as flooding around the cities and villages is very common during the rainy season. This is evident in Edim Otop, Nyangasang, Ikot Uduak and other areas of the state. Abiodun (2018) reported of continuous erosion and other land degradation in Nigeria.

Aizebeokhali (2009) confirms that the explosion in the surface temperature of the earth that has resulted in the rise in sea level is a major aspect of climate change that has created awareness and caused the stakeholders in environment to realize the need to take environmental matters more seriously than ever.

Carter and Bora (2010) observe that out of the 26 principles contained in the declaration of the first United Nations conference on the human environment in Stockholm, Sweden, Principle number 19 calls for the younger generation and adults to be educated in environmental issues. This conference set the stage for greater awareness of the need to advance Environmental Education internationally. Ilesanmi (2006) confirms that Environmental Education (EE) calls for the need of empowerment right from youth and without Environmental Education in our schools world decision making on environmental issues might be farfetched. Principle 19 of the United Nations Conference on the human environment equally affirms the education of younger generations and adults on environmental issues. The implication of the above statements stipulates that Environmental Education is for all, both young and old. The Tbilisi Declaration (1977) supports this massive Environmental Education for all meaning the young population is not to be left out in which students of Junior Secondary Schools (JSS1-3) are part of the younger generation.

Obasoro, Ogunbemi and Adu-Peters (2010) see the child as a socializing agent in the immediate environment and later the extended environment. The values that are indirectly assimilated by the child are transferred to the demanding society. From the above assertion, it could be seen that the environment and human being depend on each other for survival. Thus, any education outside the environment lacks a solid foundation and can be likened to "tea without sugar" (Obasoro, Oyinloye, Ilesanmi & Adams, 2013).

Ogueri (2004) reiterates the assertion by Ilesanmi (2006) that Environmental Education bears in mind that awareness and ethics among others have much to do with as sustainable society. Ilesanmi (2006) affirms that Environmental Education provides for the cooperation of disciplines and professions with regards to matters of environmental quality. Students as leaders of tomorrow need to have experience in taking initiative relative to the urgent requirements of society in terms of global challenges. Such experience can be acquired through Environmental Education by plan development of the pupils and students capabilities. There is the need to communicate the important of sustainable life/living and other environmental

related matters to people in Nigeria as Anija-Obi (2001) affirms environmental literacy and education can provide complex phenomena that shape the environment as well as how it is managed sustainably. An illiterate individual cannot save the environment. President Nyerere said, he can only be a slave to his environment. This is why environmental literacy, formal or informal is a precondition for attainment of sustainable development. Emeh, Ntia, Usang and Enuokoha (2010) argue that all environmentally sound development requires an environmentally sound literate person engaged in production consumption and policy formulation. It is believed that sustainable development requires us to be aware of ecological rules and assume full responsibility for our common future. Since environmental problems are basically human, they require a radical change of attitude and complete transformation in the way we behave and use the earth resource to change this attitude and cultivate in them environmental ethics. People must have a modified perception and behaviour towards the rest of nature.

The philosophy of education in Nigeria is based on the perception of education as the instrument par excellence affecting national development. The National Policy on Education (2014) based on this philosophy defines education and by implication, literacy as a process that helps to develop the whole man, to enable him function effectively in whatever environment he finds himself.

Nigerians need very urgent and adequate dosage of environmental literacy (Inyang-Abia, 1993). It is considered a matter of right and not privilege for humans to be adequately informed about environmental issues.

There is the need to communicate the importance of sustainable life/living and other environment related matters to people in Nigeria. Tourism is that vehicle because it is seen as a factor that could assist in integrating the Nigerian child into sound and effective learning opportunities in every level of education. Some of the aims of Tourism studies in both the primary and Junior Secondary School levels of education are to:

- Introduce the Nigerian child early enough to the diversities of Tourism centres in Nigeria;
- Provide the Nigerian child with a good knowledge of his/her environment;
- Help inculcate into the Nigerian child the ability to maintain cultural heritage from indigenous level to a higher standard among others.

In schools, it is the subject used in teaching environmental concept in Cross River State. This makes it imperative that the textbook should contain appropriate and adequate information about the subject matter. Teachers depend largely on textbooks as the only accessible instructional materials as aptly pointed by Etim and Oyetunde (1985) "the class text is often the teachers' be-all and end all". Umoh (1998) also observes that the textbook is used to teach exclusively with no deviation from the context. Having the above facts in mind, the researchers decided to analyze the contents of Tourism textbook that are used in the junior classes of the secondary schools of Cross River State to examine the contents of the chapters in order to ascertain how varied they are in terms of awareness in the various environment such as abiotic environment (consists of all those physical and non-living chemical aspects of the environment); biotic environment (an environment that is still in its natural state and has not been influenced by man in any form); neutral environment (an environment that encourages conservation for sustainable development); and social environment (the people's way of life and practices in their various

environment). This will help the students to develop reflective thinking and the right sense of judgement in their environment for sustainability.

Purpose of the study

This study was designed to analyze some selected Tourism textbook used in JSS 1-3 to determine the level of environmental awareness contents in the various chapters.

Research questions

The following research questions guided the study:

1. What is the distribution ratio of the biotic, abiotic, social and neutral environments in the Tourism textbook under study?
2. What is the sequence used in projecting environmental issues in the JSS 1-3 Tourism textbook under study?

Significance of the study

The study shall be of immense benefit to the textbook writers, teachers of Environmental Education, Ministry of Education in their text prescription and students as well as the general public.

To the textbook writers, the study may provide relevant answers to the degree of environmental awareness among the writers in the Africa context. It will also help writers and potential writers to know the direction to take when writing so as to make their work popular in the field of environmental awareness. This can help to address the environmental awareness problem in Cross River State and the country at large.

To the teacher, it will imbibe the most common sources of awareness information in environmental problems and improve on teaching environmental issues, better teaching means better learning and their perception and care of the environment vis-a-vis the inherent danger of adverse human activities on the natural environment.

To the Ministry of Education, this will help policy makers to make good choices in the selection of Tourism textbooks in future.

To the students, it will help to change their behaviour and perception of environmental issues for posterity. To the general public, it will help in monitoring the environmental changes, and their impact on man, plants and animals. This will help them immensely in the sense that it will provide enough data for people to know how to go about using the wildlife and better opportunities, democratic practices and more cardinal international relations.

Research design

The study adopted ex-post facto design. According to Kerlinger (1986), ex-post facto research design is a method of testing possible antecedents of events that have happened and cannot, therefore, be manipulated.

The population of the study is made up of all the JSS 1 - 3 students in Cross River State, Nigeria.

In carrying out this research work, the researchers applied "rating scale" to help the researchers make a concise analysis on the content. The textbook is divided into three sections. Chapters 1-8 for JSS 1, chapters 9-15 for JSS 2 and chapters 16-23 for JSS 3. The contents of each chapter were studied to find out the level of environmental awareness reflected. For instance the total of biotic, abiotic, social and neutral environment were identified and recorded. This procedure was used for

the three sections studied and rated, calculated and summarized. The data collected comprised the total number of chapters. The environments and the accompanying chapters were processed and analyzed to see how many types of environment reflected each level of awareness. All environments of the same type in the different chapters were added together. Simple percentage was used to calculate the data.

Results

The researchers read and analyzed each chapter in the selected textbook meant for JSS 1-3 in Cross River State, Nigeria. Data were collected as follows based on the research questions:

Research question 1

What is the distribution ratio of the biotic, abiotic, social and neutral environments in the Tourism textbook under study?

Table 1
Distribution ratio of environmental awareness

Sections	Types of environments								Total	%
	Biotic (%)		Abiotic (%)		Social (%)		Neutral (%)			
Section 1 (Chapters 1- 8)	3	37.5	2	25	3	37.5	0	0	8	100
Section 2 (Chapters 9 –15)	1	14.28	0	0	6	85.71	0	0	7	100
Section 3 (Chapters 16 - 23)	1	12.5	1	12.5	5	62.5	1	12.5	8	100

Using table 1 above, in section 1, the ratio of environmental awareness is recorded thus: biotic had 3 chapters representing 37.5%, abiotic had 2 chapters representing 25%, social had 3 chapters representing 37.5 % and neutral environment had 0 chapter representing 0% making a grand total of 8 chapters representing 100%.

In section 2, the ratio of environmental awareness is recorded thus: biotic had 1 chapter representing 14.28%, abiotic had 0 chapters representing 0%, social had 6 chapters representing 85.71 % and neutral environment had 0 chapter representing 0% making a grand total of 7 chapters representing 100%.

In section 3, the ratio of environmental awareness is recorded thus: biotic had 1 chapter representing 12.5%, abiotic had 1 chapter representing 12.5%, social had 5 chapters representing 62.5 % and neutral environment had 1 chapter representing 12.5% making a grand total of 8 chapters representing 100%.

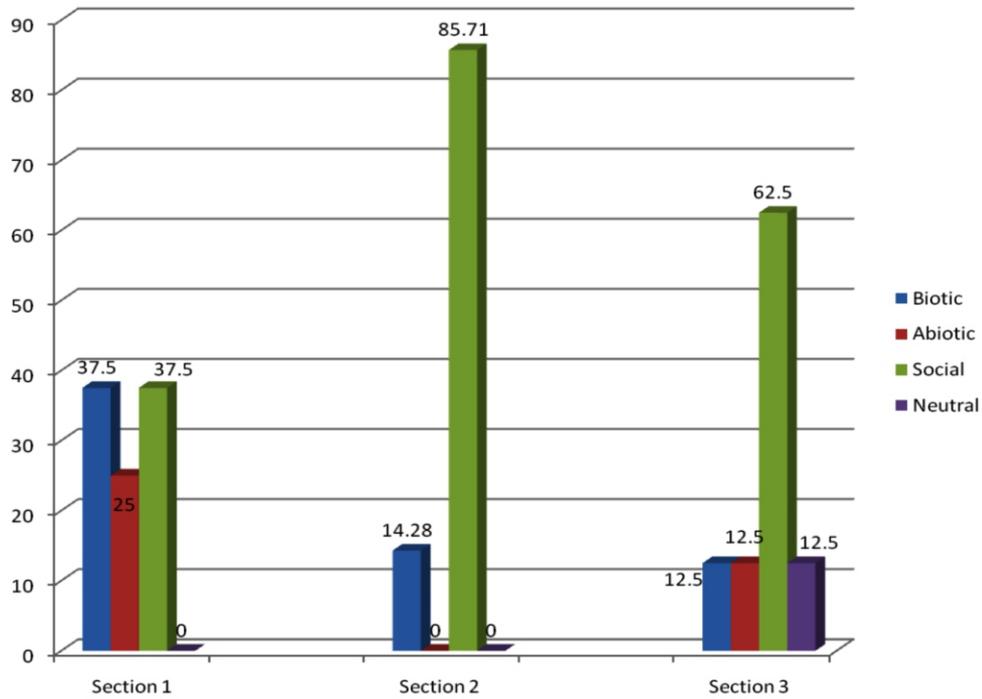


Fig 1: A bar chart showing the distribution ratio of environmental awareness in the various environment (biotic, abiotic, social and neutral)

Research question 2

What is the sequence used in projecting environmental issues on the JSS 1-3 Tourism textbook under study?

Table 2
Showing the sequence used in projecting environmental issues in the JSS 1-3

Classes	Chapters	Types of environment		
JSS 1	1-8	B	S	A
JSS 2	9-15	S	B	-
JSS 3	16-23	B	S	N

B = Biotic, A = Abiotic, S = Social, N = Neutral

The sequence adopted in presenting environmental issues in J.S.S 1 is biotic, social and abiotic. It is observed that, the author did not follow this strategy. It is also observed that in JSS 2, the authors projected the social and biotic environment and none for the abiotic and neutral environment. The same trend followed in JSS 3, as the authors projected the biotic, social and neutral environments.

A cursory look at the tables reveals that each section featured more of the social environment than abiotic, neutral and biotic environments. In as much as the authors are trying to project Tourism in the state, there must be development through deforestation. The authors should try as much as possible to project if not the

environment in its totality, at least the neutral environment. The featuring of neutral environment is necessary at this level to promote sustainable development among students.

One of the goals of the national policy on the environment is to raise public awareness and to promote understanding of essential linkages between environment and development and to encourage individuals and community participation in environmental efforts (FEPA, 1989). The implementation of this policy therefore will lead to:

1. The publication and dissemination of relevant environmental data.
2. Establishment of adequate environmental standard.
3. The monitoring and evaluation of behavioural and attitudinal changes in the environment.

In the foreword to Nigerian Environment Study and Action Team (NEST, 1991) definitive study of the Nigerian environment, Dr Bukar Shaib, Chairman of the governing board of the Federal Environmental Protection Agency (FEPA) makes it clear that the aim of Environmental Education would be achieved only if there is adequate communication.

Featuring of more neutral environment is necessary at this level because one can use text that featured more of neutral environment to teach environmental awareness in secondary schools since environmental education is projected in Tourism in secondary schools in Cross River State. This will help the students to really appreciate nature and lead them to conservation of biodiversity. This can also help them to facilitate the creation of conservation clubs in their various secondary schools. Featuring of the neutral environments is very necessary for students who are likely to aspire to become environmentalists. Such featuring is a covert counselling strategy on decision-making exposure for the students.

From the table above, the nature of distribution is biotic, abiotic, social and neutral environments. The researchers found out that, the distribution of neutral and abiotic environments was lopsided with the neutral being very low and presented only as 1 chapter in the entire series, which is JSS 3 followed by the abiotic environment with 3 chapters, 2 in JSS 1 and 1 in JSS 3. The social and biotic environments are mostly emphasized in all the sections with social environment being the highest featured.

From the above observation, the variation and distribution of the different aspects of the environment is not even. This aspect neglected could be used in teaching environmental awareness to students. If environment awareness should be learnt in secondary schools, then there must be some conscious effort made to emphasize and develop the spread of other environments in the Tourism textbook. It is important to develop in the students the type of skills and techniques which will help them to develop in full their attitudes towards the environment so that they may live a meaningful life for themselves and for the community as well as for posterity. Some students may leave school for future academic studies and the skills acquired from the Tourism textbook will help them to achieve balanced overall development if the contents are varied enough.

Conclusion

From the results of the study, it was very clear that the level of environmental awareness in the Tourism textbook used in JSS classes in Cross River State cannot be said to be high enough to bring about the desired change of attitude through understanding, respect, responsibility action about issues on the environment.

Environmental awareness is a means to the sensitization of people on environmental issues and actions that will lead to a change in behaviour and attitude. This is very vital if we must conserve our resources for the present and future generations. The low level of environmental awareness in the Tourism textbook used in Cross River State requires that conservation education be integrated into the textbook as much as possible. Environmental awareness should constitute a life-long education that is responsive enough to changes in the world in which we find ourselves. This awareness will help students understand the major problems of the world and the skills and attitude needed to play a productive role towards improving life and protecting the environment.

Recommendations

The conclusion drawn from the findings and results of this research work have given the researchers the urge to make some recommendations to the authors of Tourism textbooks used in Cross River State, Nigeria as follows:

1. Writers of Tourism textbooks should present environmental issues in their books to cover the four different aspects of the environment especially the neutral environment as much as possible.
2. They should emphasize on the teaching of environmental issues in the JSS 1-3 students using the textbooks as a medium for teaching environmental issues.
3. Conservation clubs should be spelt out in the various textbooks used so that the students will imbibe the ethics of environmental issues as they use these textbooks.
4. The celebration of the world environment day (5th June) should be effectively advertised in the various Tourism textbooks so that the students will be sufficiently aware of the importance of the celebration.
5. The celebration of related events like the world habitat day should be given more prominence. Similarly, the observance of national programmes like the National Trees Planting campaign, Green Carnival and monthly Environmental Sanitation day should be treated with more seriousness.

From the above recommendations, the researchers wish to say that by and large, awareness creation is the immunization needed to protect us from consequences of environmental degradation. To be able to achieve this, a lot need to be done through awareness activities, to relate culture, beliefs and religion to environmental conservation and for posterity sake.

References

- Abiodun, E. (2018). *Ravaging effect of erosion*. <http://www.pressreader.com>
Retrieved on 13th September, 2019.
- Aizebeokhali (2009). Level of environmental awareness in junior English project for JSS 1-3: An English textbook used by public secondary schools in Cross River State. *www.researchgate.net*.
- Anijah-Obi, F. N. (2001). *Fundamentals of Environmental Education and management*. Ibadan: NEST.
- Carter, R. L. & Bora, S. (2010). History and philosophy of environmental education. <http://www.researchgate.net/cite>.
- Dickson, R. C. (1981). Effect of tropical deforestation on climate studies. *Third World Societies*, 14, 411-442.
- Emeh, J. U., Ntie, M. U., Usang, T. & Enuokoha, O. I. (2010) (Eds.). *Philosophical issues in environmental education*. Lagos: NCF Publication.
- Etim, J. S. & Oyetunde, O. T. (1985). English language use in primary education: An analysis of the new primary course in literacy and reading in Nigeria. *Literacy and Reading in Nigeria*, 7, 232-240.
- Federal Republic of Nigeria (2014). *National policy on education*. Lagos: Federal Government Press.
- Ilesanmi, A. A. (2006). The relevance of environmental education to secondary education level in Nigeria. Unpublished M.Ed project, Obafemi Awolowo University, Ile-Ife.
- Inyang-Abia, M. E. (1993). Contemporary environmental problems and issues in Cross River State: The erosion dimension. Paper presented at the CREPSA, Calabar.
- Kerlinger, F. N. (1986). *Foundations of behavioural research*. Netherlands: Holt-Saunders International Editors.
- Myers, N. (1986). *Conservation of tropical moist forest*. Washington D.C.: National Research Council.
- Nigerian Environmental Study/Action Team (1992). *Nigeria's threatened environment. A national profile*. Ibadan: NEST Ford Foundation.
- Nigerian Hydrological Services Agency (NIHSA, 2019). Prediction of severe flooding in 30 states. Premium Times. <http://www.premiumtimesng.com/news/more-news/1337228-agency>.

- Obasoro, C. B., Ogungbemi, S. T. & Adu-Peters, R. (2010). The importance of traditional education in Nigeria education system. In O. O. Olukoya (Ed.). *Culture and education in Nigeria perspective on historical pedagogical issues*. Lagos: Classy Prints & Co.
- Obasoro, C. B., Oyinloye, O. A., Ilesanmi, A. A. & Adams, A. B. (2013). The importance of environmental education to secondary education in Akure South Local Government Area, Ondo State, Nigeria. *International Multidisciplinary Journal*, 7 (1), 298-302.
- Ogueri, A. C. (2004). The need for environmental education in secondary education level in Nigeria: Problems and challenges. <https://www.researchgate.net>.
- Sahara Reporters (2018). <http://www.saharareports.com/2019/08/10>.
- Tbilisi conference (1977). The Tbilisi conference on environmental education final report. <https://unesco.org.auk>
- Umoh, S. J. (1998). Maximizing the utilization of precum primary textbooks: A teacher's self-help technique. *OMEP*, 3 (1&2), 212-220.