ASSESSMENT OF THE IMPLEMENTATION OF ENVIRONMENTAL EDUCATION PROGRAMME IN UNIVERSITIES IN BENUE STATE

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Abstract

The increase in environmental problems across communities has raised unanswered questions about the effective implementation of the Environmental Education (EE) programme across higher institutions of learning in Benue State and Nigeria at large. The overall trends in the Environmental Education programme reflect the concerns of people and societies in general. This study assesses the implementation of the Environmental Education programme in universities in Benue State. Three (3) research questions were raised to guide the study. The study adopts the descriptive survey research design. Sixteen (16) lecturers in the department of science education of University of Agriculture Makurdi and Benue State University Makurdi constituted the population of the study. The total population of all the 16 lecturers was used as respondents for the study. The study used a structured questionnaire and a checklist as instruments for the research. The instruments were validated by three experts in Measurement and Evaluation in University of Agriculture, Makurdi. The questionnaire was trial tested and yielded a reliability coefficient of 0.87 using the Conhbach Alpha Coefficient. Data collected was analyzed using simple percentage and frequency count. The finding of the study showed that the Environmental Education programme is not properly implemented as there is a lack of adequate instructional materials and infrastructural facilities which are required for the proper implementation of the programme. The study recommended that government should provide ongoing support to teachers through coaching, workshops, and supervision which will have a substantial impact on the implementation of the programme and student academic outcomes.

Introduction

The increase in environmental problems has raised many unanswered questions about the implementation of Environmental Education (EE) programme across higher institutions of leaning in Benue State and Nigeria at large. Education has been identified as a critical driving force for change. Countries and regional organizations have adopted a range of strategies for implementing programmes in environmental education (Fien in Nyibiam, 2017). The importance of environmental education and its implementation in school curricula is relevant to the general societies in transition. Effective implementation of environmental education in school curricula can be seen as an instrument and a process that enables learning by learners of all ages based on a two-way communication rather than the old paradigm of a one-way flow of information; from teachers to students. The content and substance of environmental education is also undergoing review and change. Environmental education (EE) refers to organized efforts to teach how natural environments function, and particularly, how human beings can manage behavior and ecosystems to live sustainably. It is a multi-disciplinary field integrating disciplines such as biology, chemistry, physics, ecology, earth science, atmospheric science, mathematics, and geography (Zaid, 2011). Environmental education is a branch of education within the school system that is taught from primary to post-secondary level. It is the branch of education that is aimed at educating students and the public on environmental related issues.

Environmental Education (EE) aims at teaching students and the general public to be knowledgeable about the environment and its associated problems. It also teaches the society to be aware of the solutions to these problems and motivated to solve them (Arban, 2011). The United Nations Educational, Scientific and Cultural Organisation (UNESCO) states that EE is vital in imparting an inherent respect for nature in the society and in enhancing public environmental awareness. UNESCO emphasizes the role of EE in safeguarding future global developments of societal quality of life (QOL), through the protection of the environment, eradication of poverty, minimization of inequalities and insurance of sustainable development (UNESCO, 2014).

When implementing an educational approach, providing ongoing support to teachers through coaching, workshops, and supervision has been shown to have a substantial impact on student outcomes (Artman-Meeker, Hemmeter, & Snyder, 2014; Clarke, Bunting, & Barry, 2014; Gray, Contento, & Koch, 2015; Kam, Greenberg, & Walls, 2003; Matsumura, Garnier, & Resnick, 2010; Sarama, Clements, Starkey, Klein, & Wakeley, 2008).

The teaching of Environmental Education in schools is primarily focused on equipping students and the general public to: think critically, ethically, and creatively when evaluating environmental issues; make educated decisions and judgments about those environmental issues that are prevalent in their surroundings; develop knowledge and skills and a commitment to act independently and collectively to sustain and enhance the environment; enhance their appreciation of the environment, thus resulting in positive environmental behavioural change (Bamberg & Moeser, 2007).

In order to attain the focus of this Environmental Education programme, the National Universities Commission (NUC, 2014) has set a benchmark for its implementation in various universities across the country. Implementation is the conversion or transformation of general policies to concrete public policies (Yakubu, 2017). It includes those actions that are geared towards the achievement of the objectives of the policy. It also involves outlining the activities in the programme as well as persons responsible for carrying out the activities (Achebe, 2004). Some of the salient benchmarks for implementation of ECCE programme as prescribed by NUC include; degree as the minimum qualification for teachers; student-friendly environment for learning; adequate learning materials; adequate teaching personnel; adequate teaching and learning resources; and availability of classrooms for teacher-student interactions.

Despite the clearly stated focus and objectives of the Environmental Education programme, a lot of issues and challenges are militating against its implementation. These challenges, if put into consideration, would bring about the effective implementation of the programme.

Statement of Problem

An effective implemented Environmental Education programme for students is the one that provides them with the needed skills that can aid in the investigation of environmental related problems so as to take decisive actions that can help create a conducive environment for living. It is important to note that an effective implemented Environmental Education programme in schools is one that is student-centered and focuses on the local environmental problems found around the school, village or community since that is where change should take place.

However, in view of the importance of the effective implementation of the Environmental Education programme in schools and the rise in environmental problems most especially in Benue State, it may be true to say that there is more to question in the implementation of the programme in schools in Benue State. Some studies have supported the need for an effective Environmental Education programme to make up for students' knowledge of basic environmental issues which has fallen far short of what they are expected to learn. This is because environmental education has never received strong emphasis in higher institutions of learning as shown in some studies (Ozden, 2008; Puk and Behm, 2003). Some teaching and learning factors are responsible for effective implementation of certain school programmes. Therefore an effective Environmental Education programme demands much from those who teach it. Academic qualification of teachers, availability of learning resources and a conducive learning environment therefore is of paramount importance in the implementation of environmental education programme. It is against this backdrop that this study seeks to assess the implementation of environmental education programme in Universities in Benue state.

Research Questions

The following three (3) research questions were raised to guide the study;

- 1. What are the qualifications of teachers teaching environmental education?
- 2. What are the available learning materials in teaching environmental education?
- 3. What are the available infrastructural facilities in teaching environmental education?

Methodology

The study adopted the descriptive survey research design and was carried out in Makurdi Benue State. Sixteen (16) lecturers from the department of science education of University of Agriculture Makurdi and Benue State University Makurdi constituted the population of the study. The total population of all the 16 lecturers was used as respondents for the study. The study used a structured questionnaire titled "Assessment of Implementation of Environmental Education Programme Questionnaire" and a checklist "Assessment of Implementation of Environmental Education Programme Checklist" as instruments for the study. Data collected was analyzed using simple percentage and frequency count.

Results and Discussion

The result of the study is presented below.

Table 1: Frequencies and percentages of Teachers Qualification

SN	Qualification	Frequency	Percentage	%Qualified	%Not qualified
1	Ph.D	8	50	50	-
2	M.Sc	5	31.3	31.3	-
3	B. ED/B.SC	3	18.7	18.7	-
4	HND	0	0	-	-
5	NCE	0	0	-	-
6	ND	0	0	-	-
7	SSCE	0	0	-	-
8	Others	-	-	-	-
	TOTAL	16		100	0

The result in table 1 shows that 50% of the respondents are Ph.D holders, 31.3% M.Sc holders and 18.7% are B.ED/B.SC holders. This implies that majority of the teachers involved in the teaching of environmental education in University in Benue State are qualified to do so.

Research Question 2: What are the available learning materials for teaching environmental education?

Result in table 1 shows that 50% of the respondents are Ph.D holders, 31.3% M.Sc holders and 18.7% are B.ED/B.SC holders. This implies that majority of the teachers involve in the teaching of environmental education in University in Benue State are qualified.

Research Question 2: What are the available learning materials for teaching environmental education?

 Table 2: Frequencies and Percentages of the available Instructional Materials

among the sampled schools

S/N	Instructional Materials	No.	%	Decision
		Available		
			Available	
1	Television	0	6%	ANA
2	Chalkboard	7	78%	AA
3	News papers, Magazines.	3	3%	ANA
4	Display of charts and	2	2%	ANA
	drawings in the			
	classroom.			
5	Mini Library	0	0%	NA
6	Computer	0	0%	NA
7	Radio	0	0%	NA
	Grand %		21%	ANA

KEY: AA: Available and Adequate, ANA: Available but not Adequate

Data presented in Table 2 revealed that 21 % of the instructional materials are available but not adequate in the sampled schools. This implies that most instructional materials that are needed for the implementation of environmental education are not available and adequate.

Research Question 3: What are the available infrastructural facilities in teaching environmental education?

Table 2: Frequencies and Percentages of the available Instructional Materials among the sampled schools

S/N	Instructional Materials	No.	% Available	Decision
		Available		
1	Television	0	6%	ANA
2	Chalkboard	7	78%	AA
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5	Mini Library	0	0%	NA
6	Computer	0	0%	NA
7	Radio	0	0%	NA
	Grand %		21%	ANA

KEY: AA: Available and Adequate, ANA: Available but not Adequate

Data presented in Table 2 revealed that 21 % of the instructional materials are available but not adequate in the sampled schools. This implies that most instructional materials that are needed for the implementation of environmental education are unavailable and inadequate.

Research Question 3: What are the available infrastructural facilities in teaching environmental education?

Table 3: Frequencies and percentages of the available Infrastructural facilities/Classroom Furniture

		No.	%	
S/N	Items	Available	Available	Decision
1	Well ventilated and spacious Classroom	7	8%	ANA
2	Well fenced schools	12	15%	ANA
3	Convenience (toilet)	3	3%	ANA
4	Administrative Block	0	0%	NA
5	Electricity supply	11	15%	ANA
6	Seats	12	15%	ANA
7	Tables	16	17%	ANA
	Grand percentage (%)		31.4%	ANA

KEY: AA: Adequate and Available, ANA: Available but not Adequate

Data presented in Table 3 revealed that 31.4 % of the infrastructural facilities/classroom furniture are available but inadequate in the sampled schools. This implies that most of the infrastructural facilities/classroom furniture needed for the implementation of environmental education are unavailable and inadequate.

Discussion

The result from the findings of the study on the academic qualification of lecturers involved in the teaching of Environmental Education showed that the lecturers are qualified. This is evident as about 50% percent of the lecturers are PhD. holders and have good years of teaching experience. Findings from the study on the available learning materials for teaching Environmental Education showed that most of the needed learning materials are not readily accessible, and those that are available are insubstantial. The finding agrees Akinnuoye and Abd Rahim (2011) who reports that most Nigerian schools facilities and resource-persons for environmental education were respectively inadequate and not considerably up-to-task. The result from the findings of

the study on the available infrastructural facilities in teaching Environmental Education showed that most of the needed infrastructural facilities are available but inadequate. The findings support the assertion of Akinnuoye and Abd Rahim (2011) that most schools in Nigeria lack Environmental Education display room.

Conclusion

The finding of the study showed that the Environmental Education programme is not properly implemented as there is a dearth of adequate instructional materials and infrastructural facilities needed for its proper implementation.

Recommendation

The study recommends that government should provide ongoing support to teachers through coaching, workshops, and supervision which will have a substantial impact on the implementation of the programme and student academic outcomes.

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