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ENVIRONMENTAL VARIABLES AND SECONDARY EDUCATION REFORMS IN PLATEAU STATE, NIGERIA

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Abstract

This study examined the relationship between environmental variables and secondary education reforms in Plateau State, Nigeria. A descriptive survey research design of correlation type was adopted for the study. The study was carried out in exposit facto. Total population for the study was 2,750 respondents which comprised of the principals, teachers parent-teacher association executives. A sample of 500 respondents was selected using stratified random sampling techniques. Three research questions were raised while three hypotheses were formulated to guide the study. A research self designed instrument tagged environmental variable for secondary education reform questionnaire (EVASERQ) was used to collect the relevant data. the instrument was indicated by the experts in environmental science education and secondary school administrators. The reliability index of 0.71 was got after subjecting the instrument to split-half reliability method and tested using spearman ranking orders statistics. All the research questions raised were answered using descriptive statistics like mean scores and standard deviation at the benchmark of 2.50 above as decision for agreement. While correlation statistics like Pearson product moment correlation statistics at 0.05 significance level. However, the findings revealed that the environmental variables have hour significant influence on the secondary education reforms in plateau state, Nigeria. It was however recommended that conducive environment should be created in secondary schools toward achieving educational objectives in Plateau State and Nigeria at large.

Keywords: Environmental variables, Educational reforms, Secondary education, Plateau State.

Introduction

It is an undisputable fact to say that education is an instrument for a sustainable national development. Over the years, there are out cry of the falling standard of education in Nigeria, due to the fact that the secondary education graduates cannot defend their certificates; many cannot construct simple sentences without committing grammatical blunders, Danbaba (2018)

many cannot pass external examination without being assisted by the teachers or hired impersonators into the examination centres and many students registered themselves in the miracle centres where there are high perpetration of the examination malpractice. The result the evil effects of the perpetration in the examination malpractice however lead to poor technological development, graduate unemployment, high wastage rates in the society. it should be noted most of the secondary education graduates are being used by the undesirable elements to be engaged in social crises such as political thuggery, arsons, robbery, fighting, public disturbance, killing, assertion kidnappers noted that the problems are resulted from the quality of the secondary education products produced for the society. However, the need to reform the secondary education is therefore important in the interest of sustainable development and for the global relevance of the secondary education. According to Eventus (2015), educational reform can be defined as the systematic ways or strategies of providing necessary innovation or changes that will make the educational system compatible to the needs and the aspiration of the society. however, secondary education system can be made relevant through effective utilization of the available environmental variables like drainages (rises, waters, wells) vegetation (forest, grassland, deserts), soil, (sandy, loamy, clay stones, hills) climate (sun, rainfall, pressures temperature, humidity Ochuma (2010) all which constitute the physical environment so also social environmental variables like human resources like principals, teachers and students with their level of interaction their administrative strategies and the interpersonal relation that encourage the peaceful co-existence among the students, teachers, community and the principals. Environment therefore according to Abubakar (2013) is the sum total of the components that constitute the surrounding of man. As it affects the existence of man, the basic for this study is to examine the strategies by which the environmental component can be arrested and used effectively towards effective secondary education reformation and for sustainable national, development of the education especially in plateau state, Nigeria. Therefore, the study need to find out the indices influence the indicators of secondary education reformation like skills acquisition, moral upbringing, respect for the culture of the land and the relevance of the secondary education product to the society.

Statement of the Problem

Since the Plateau State is blessed with abundant rich environmental variables that can be used for leading the secondary education to a desirable reformation and sustainable national development. However, the problem of this study is to examine the of the types of environmental variables and their influence on the secondary education reform in Plateau state, Nigeria.

Aim and Objectives of the Study

The aim of this study is to investigate the influence of environmental variables on secondary education reforms in plateau state, Nigeria. Superficially, the objectives of the study are to.

1. Find out the categories of the environmental variables that can be harnessed for effective secondary education reform in plateau state, Nigeria.
2. Examine the strategies by which the environmental variables can be harnessed towards enhancing secondary education reform in plateau state.
3. Investigate the influence of the environmental variables indicators on the indices of the secondary education reform in plateau state.

Research Question

The following research questions were raised to guide the study.

1 To what extent do the environmental variables influence secondary educational reform in plateau state, Nigeria
2. What are the involved strategies for improving environmental variables for towards improving environmental variables for secondary educational reforms in plateau state Nigeria.
3. What are the problems militating against environmental variable towards secondary education reform in Plateau State.

Hypotheses

The following hypotheses are formulated for the study:

1. There is no significant relationship between the environmental variables and secondary education reforms in plateau state Nigeria.
2. There is no significant relationship between secondary school teachers factors and educational reforms in plateau state, Nigeria.
3. There is no significant relationship and secondary education reforms in plateau state, Nigeria.

Methodology

This study examined the relationship between environmental variables and secondary education reforms of in plateau state. The research design for the study was descriptive research design of correlational type. The study was carried out in ex-post factor. The population for the study was 2750 respondents comprised of the principals, teachers, students and the parent-teachers association executives. Five hundred respondents were sampled using stratified random sampling technique. Three research questions were raised and three hypotheses were generated for the study. The instrument was self developed questionnaire tagged environmental variables for secondary education reform questionnaire (EVASERQ). The instrument was validated by the experts in environmental science education and secondary schools administrators. All the research questions were answered using descriptive statistics like mean scores and standard deviation at the bench mark of 2.50 below for disagreed and 2.50 above for agreed decision making. The hypotheses were tested using Pearson product moment correlation statistics at 0.05 significance level. Find below the results.

Research question 1

To what extent do the environmental variables influence secondary education reform in Plateau State, Nigeria?

Table 1: Environmental variables as it influences secondary education reform I Plateau State, Nigeria

S/N	Statements	X	Sd	Decision
1.	There are positive principal teachers interpersonal relationship in the school s	15.86	3.58	Agreed
2.	The open climate of the school allow positive 25.38 initiatives from both the staff and students	25.38	2.78	Agreed
3.	The principals provide adequate instructional facilities for embracing educational reforms in the schools	18.44	3.11	Agreed
4.	School environmental resources are open for use by the school for practical teaching-learning process	12.37	2.69	Agreed
5.	Transformational leadership style of the principal encourage educational reform agenda	28.24	3.17	Agreed
		Total	**21.**	

Table 1 shows that the available environmental variables and effective utilization in the plateau state help to influence secondary educational reform. However, the respondents agreed that the posture principal interpersonal relationship in the school embrace the positive reforms which encourage positive change and innovations that the open climate of the schools and positive imitative from both the principals and students which is an indicators of positive education reform in the school system. The instructional resources are always put into use by the teachers during teaching and learning processes. However, the transformation leadership styles and system oriented aid secondary educational reforms in plateau state. The result in line with the opinion of Usman (2018), Ogundele (2012) and Ibitoye (2008) which noted that effective and conducive environment and high productively.

Research Question 2: What are the involved strategies towards improving environmental variables for achieving secondary education reforms in plateau state, Nigeria.

Table 2: strategies for improving environmental variables for enhancing secondary education reforms in plateau state, Nigeria.

S/N	Items	X	Sd	Decision
6.	There were regular training for the teachers and students on environmental sustainability	22.48	3.11	Agreed
7.	The school environment are regularly protected from the external intruders	18.20	2.13	Agreed
8.	Teachers make use of the school environmental resources for their instructional activities.	19.78	2.83	Agreed
9.	The principals adopt opens school climate which enhance innovations and change in the school	18.78	2.88	Agreed
10.	The school make use of inter-school visitations which and translation of ideas in the schools	14.33	3.88	Agreed

Table 2 shows all the strategies that the principles adopted towards improving the secondary education environment so that effective educational reforms can take place in plateau state.

The strategies agreed upon are regular teachers training and retraining opportunities, effectives use of environmental resources for developing instructional faculties, there is open school climate which lead to intercorrelation of ideas. The principles allow inter school visitations which bring about relocation of ideas. The result was supported by Adedebu (2003) which stated that environmental sustainability.

Research Question 3: What are the problems militating against environmental variables for enhancing secondary education reforms in plateau state, Nigeria.

Table 3: Problems militating against environmental variables for secondary education reforms

S/N	Items	X	Sd	Decision
11.	Security challenges constitute threat to school environment	42.32	3.46	Agreed
12.	Climate change affect effective use of environmental resources	47.28	3.44	Agreed
13.	The schools are not strategically located for effective patronage	24.26	3.68	Agreed
14.	Poor teachers morale and satisfaction discourage innovative ideas and change	18.22	2.63	Agreed
15.	Insurgency had constituted threat to access secondary schools which affect initiatives for standard education	24.66	3.79	Agreed

Table 3 shows that there are problems that militate against environmental variables for secondary education reforms in Plateau State. The problems agreed upon by the respondents are the security challenges, climate change, poor school mapping for effective patronage, poor teachers morrate and job satisfaction incessant teachers strikes leading to unstable academic calendar and constrast insurgency and social crises in plateau state leading to the destruction of the school environment. the problems however lead to less thinking about the education reforms in plateau state. The result is therefore related to the work of Sofoluwe, Ogundele and Oduwaye (2016) which noted that socio-economic crises lead to quality delivery of secondary education in North central Nigeria.

Hypotheses testing

The following hypotheses were tested at 0.05 level of significance.

$H0_1$: there is no significant relationship between physical environmental factors and educational reforms of secondary schools in plateau state, Nigeria.

Table 4: Correlation of physical environmental factors with the educational reforms of secondary education in plateau state.

Variables	No	X	Sd	Df	Calculated r-value	Critical r-value	Decision
Physical environment factors	500	18.78	3.53		.69		$H0_1$
				499		.195	Rejected
Educational reforms	500	25.88	3.				

Table 4 shows correlation between the physical environmental variables and secondary education reform in plateau state. however, the result indicates that the calculated r-value of .69 is greater than the critical r-value of 0.195 at the degree of freedom of 499 and tested 0.05 significance level. Hence the null hypothesis which shows that there is no significant relationship between the physical environmental factors and secondary education reform is however rejected it means that there is high positive significant relationship existed between physical environment variables and education reforms in plateau state. however, the result shows that the teachers make use of physical environmental resources to improvise the instructional facilities in the absence of original or readymade materials; the utilization of environment resources to develop entrepreneurial skills and materials for the society. The result is in line with Ogundele (2015) which noted that environmental resources can be diversified

3/26/2016 There is no significant relationship believes teachers' variables and secondary education reforms in Plateau State, Nigeria.

Table 5: Teachers' variables and secondary educational reforms in Plateau State, Nigeria.

Variables	No	X	Sd	Df	Calculated r-value	Critical r-value	Decision
Teachers' variables	500	20.52	4.33		0.69		$H0_2$
				499		0.196	Rejected
Educational reforms	500	25.88	3.88				

Table 5 shows the result of the correlation between the teacher variables and secondary education reforms in Plateau State Nigeria. However, the result indicates that the calculated r-value of 0.68 in greater than the critical r-value of 0.68 is greater than the critical r-value of 0.196 at the degree of freedom of 499 and tested at .05 significance level hence the null hypothesis which stated that there no significant relationship between teachers variables and secondary education reform in plateau state is rejected. It means that in plateau state the teachers factors like qualifications, experience, pedagogical skills, interpersonal relation, methodological, zealous, committement, job satisfaction's and positive initiative have aid effective educational reforms in the secondary schools in plateau state. the result was supported by Ibrahim (2010) that environmental variables is an impetus with the students

academics performance of secondary schools in Nigeria. The result was negated by Zubair and Yusuf (2009) that for the environmental sustainability to be enhanced, the teachers motivation used to take place by ways of prompt salary, constant grab achievement and the positive recognitions, but according to the authors these motivational strategies are absent in the schools which do affect the teachers proximity in Nigeria.

Conclusion

Based on the data analysis and discussion made, there is an indication that environmental variables like physical environmental factors and teachers factors have significant relationship with secondary education reforms in Plateau State, Nigeria. It could therefore be concluded that the environmental variables are being affected by certain problems which made the educational reforms like skills acquisition environmental suitability and quality of the secondary education difficult. Therefore, the school environmental variables used to be adequately sustained for the benefit of enhancing positive educational reform in the Plateau State secondary schools.

Recommendations

Based on the data analyses and conclusion made however, the following recommendations were made:

The school environment needs to be made conducive for both the teachers and the students so that they will have the positive thinking initiatives that will enhance secondary education reforms in Plateau State and Nigeria at large.

Effective strategies can always be employed by the principals that will eradicate security challengers in the school. However, every secondary school needs to be adequately fenced to avoid unnecessary porosity and unpredictable entrance of those elements that constitute threats to the environmental security of the school environment.

Also, the school environment should be provided with all necessary infrastructural facilities that will provide adequate educational reforms for the secondary school. Such infrastructural facilities like networking, computer, scientific and entrepreneurial bring about effective reforms to secondary education system.

Finally, adequate training and retraining of the secondary school teachers on the environmental sustainability for providing conducive school environment for effective reforms in Nigerian secondary education in Plateau State and Nigeria in general.

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