

Influence of Environmental Factors on Academic Performance of Business Studies' Students in Upper Basic Level in Edo State

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Abstract

This study investigated the influence of environmental factors on academic performance of Business Studies' students in Upper Basic level in Edo State. Three research questions were raised with three corresponding hypotheses formulated and tested at alpha level of 0.05. The study utilized a correlational design and a total sample size of 2,374 Business Studies' students and 65 Business Studies teachers were used for the study. Three instruments were developed by the researchers and they were all validated by experts and only Business Studies Achievement Test (BUSAT) was subjected to reliability and it yielded a co-efficient of 0.87. The data collected were analyzed using the Statistical Packages for Social Sciences (SPSS). The analysis yielded the following results among others: there is a no significant relationship between school location and students' academic performance in Business Studies; there is a significant relationship between facilities and students' academic performance in Business Studies and there is no significant relationship between school type and students' academic performance in Business Studies. Based on the findings and conclusion, the study recommended among others that: Non-Governmental Organizations (NGOs) should assist the government in providing some of the needed facilities in schools.

Introduction

Business Studies is one of the pre-vocational elective subjects which is offered at the Upper Basic level in the Basic Education programme in Nigeria. Business Studies has five components which comprises of Keyboarding, Shorthand, Office Practice, Commerce and Book-Keeping and most of these components are taught at the Upper Basic level in secondary schools in Nigeria. The main objective of Business Studies is to enable students appreciate the five components that make up the subject and to help to prepare students for the business world (National Open University Nigeria, 2008).

Business Studies which is taught in Upper Basic (7-9) level, forms the basis for other business related courses taught in Senior Secondary Schools and Post-Secondary Schools and experts have emphasized its usefulness. Adamu (2009) observed that, Business Studies helps youths to learn career opportunities like Accounting, Secretarial Studies, Private and Public Office management. Considering the importance of Business Studies, stakeholders are continuously encouraged to put the necessary machinery in place in order to improve students' academic performance in the subject.

Academic performance in a school subject is symbolized by a score or marks on the achievement test (Epunnam, 1999); while retention of learning according to Momoh-Olle (1999) is the repeated performance by a learner of the behaviour earlier acquired, elicited after an interval of time. It is affected by the degree of original learning, the methods of learning and learners' memory capacity among others (Demmert 2001). Performance of students in Business Studies is defined as the learning outcomes of the students which include knowledge, skills and ideas acquired and retained through his/her course of studies within and outside the classroom situation (Epunnam, 1999; Adepoju, 2011). It is quantified by a measure of student's academic standing in relation to those of other students of the same age (Adelola & Olatunbosun, 2004). The academic performance of students in Business Studies is a function of several factors which are inter-related. These factors are either internal or external. That is, it is either within the control of the individual or outside his/her control.

Environmental factor is often described as a necessity in considering students' academic performance. According to Mick (2011), school environment means the extent to which school settings promote student safety and health, which may include topics such as the physical plant, the academic environment, available physical and mental health supports and services, and the fairness and adequacy of disciplinary procedures, as supported by relevant research and an assessment of validity. Environmental factors can impact on the developmental, social, emotional and physical health of students which may in turn influence their academic performances. The main components of environmental variables that influence academic performance include: location of school, school type and facilities. According to Chukwuemeka (2013), one of the factors that influence academic performance is school location/site of the school. The location of school plays a crucial role in evaluating the learning outcomes. That is, it has a tendency of influencing the academic performance of students and Business Studies students in particular. Some schools are located in urban areas while others are in rural areas. It is sometimes perceived that schools located in urban areas have more access to educational resources compared to those in rural areas; and this have a way of influencing the teaching and learning process. Chukwuemeka (2013)

further stressed that a school that is sited in a noisy area like airport or in the heart of a city may have issues with academic performance. The school type may also have a role to play in students' academic performance.

The term school type in this context is seen as an environmental factor and it is used in describing the nature of the school; whether it is mixed or single sex. The learning environment in a mixed school is not exactly same with what is obtainable in a single sex school. Students may be more motivated in an atmosphere that is competitive; especially the competition that involves opposite sexes. Regardless of the school type, there is still need for Business Studies' students to be taught with appropriate teaching facilities.

Facilities have a way of reducing abstract concept into concrete form. That is, with facilities on ground, students may find it easy to assimilate classroom teachings and it has a tendency of enhancing the academic performance of the students. It is based on this orientation that teachers are always encouraged to utilize teaching aids (facilities) in their day to day teachings. Chukwumeka (2013) opined that schools must be equipped with adequate technological facilities such as textbooks, computer, visual and audio-visual aids, photographs and posters. Vikoo (2003) sees instructional materials as anything that can be profitably employed to facilitate teaching and learning process. The author further stressed that a class without learning materials can lead to students' poor academic performance.

Statement of the Problem

Evidence abound that the implementation of the secondary school Business Studies programme in the country over the years has left much to be desired. Students' performances over the years appear not to be impressive probably due to so many factors influencing academic performances in business studies. Njoku (1992) once observed the massive failure rate in examination and the author attributed this failure rate to several factors.

Recent observations seem to be suggestive of poor performances in Business studies in Basic Education Certificate Examination (BECE). This sends dangerous signal to the future of the subjects. Business Studies is not a core subject in Basic Education Certificate Examination (BECE) because failure in it will not result in writing the examination again unlike Mathematics and English Language. The alarming failure rate that is widely speculated has engaged the minds of so many stakeholders as to what could possibly be responsible for the poor performances in business studies examination. Literatures have it that there are several factors that could account for students' academic performances and some of the notable factors reported include: teachers' qualification, teaching experience, location of schools, school type, instructional materials and teaching strategies.

The factors that actually account for the academic performance of students in business studies seem not to be well articulated or reported in many literatures despite the importance of Business Studies in the socio-economic development of the nation. The researcher is indeed worried as to what factors actually account for the academic performance of Business Studies' students in the state. Could these factors be school location? Could it be teaching facilities or school type? It is on the basis of this that the researcher intends to empirically investigate the extent to which environmental factors influence students' academic performance in Business Studies in Upper Basic level in Edo State.

Purpose of the Study

The main purpose of the study was to find out the extent to which environmental factors influence students' academic performance in Business Studies in Edo State. The study was intended to specifically find out whether:

- i. there is a relationship between location of schools and students' academic performance in Business Studies in Edo State;
- ii. there is a relationship between the availability and use of instructional materials and students' academic performance in Business studies in Edo State;
- iii. there is a relationship between school type and students' academic performance in Business Studies in Edo State.

Research Questions

The following research questions were raised to guide this study:

- i. Would location of schools have relationship with students' academic performance in Business Studies in Edo State?
- ii. Would availability and use of instructional materials in schools have relationship with students' academic performance in Business Studies in Edo State?
- iii. Is there any relationship between school type and students' academic performance in Business Studies in Edo State?

Hypotheses

The hypotheses formulated for this study were tested at 0.05 level of significance and they are:

- i. There is no significant relationship between location of schools and students' academic performance in Business Studies in Edo State.
- ii. There is no significant relationship between availability and use of instructional materials and students' academic performance in Business Studies in Edo State.
- iii. There is no significant relationship between school type and students' academic performance in Business Studies in Edo State.

METHOD OF STUDY

This section deals with the method the researcher used in carrying out the study.

Research Design

The study adopted the correlational design because the study basically sought to investigate the correlation between environmental factors and academic performance in Business Studies in Edo State.

Population of the Study

The population of the study consists 40, 745 final year Business Studies students in Edo State. The population of Business Studies teachers is 255 (State Universal Basic Education Board, Benin City, 2014). The session under consideration was 2013/2014.

Sample and Sampling Technique

The sample size for the study was 2,734 students and 65 Business Studies teachers and they were selected through multi-stage sampling technique. Edo State was stratified into three (3) Senatorial Districts: Edo South, Edo Central and Edo North. From each district, four schools were selected from each local government areas used and it comprised of two schools from rural and urban areas.

Instrument of the Study

The following instruments were used for the study:

- A. Business Studies Environmental Factors Questionnaire (BUSEFQ)
- B. Business Studies Achievement Test (BUSAT)
- C. Checklist on Business Studies Facilities (COBSF)

The Business Studies Environmental Factors Questionnaire (BUSEFQ) was developed by the researcher and was used to gather information on the following:

- i. The location of schools; and
- ii. The school type.

The BUSEFQ was made up of one section of five questions, which sought to obtain information on the environmental factors. The instrument was used to collect the demography data of the teachers. The teachers (respondents) were required to tick the appropriate response applicable to them.

The Business Studies Achievement Test (BUSAT) was made up of one section of thirty questions. Students were expected to supply the answers by ticking the correct options. BUSAT was drawn from Basic Education Certificate Examination (BECE) past questions in Business Studies. BUSAT contained three (3) aspects of Business Studies namely: Commerce, Book-Keeping and Office Practice. Each of these aspects had ten (10) questions and a total of thirty (30) questions in all. The Checklist on Business Studies Facilities (COBSF) was developed by the researcher in order to ascertain the teaching strategies adopted by Business Studies' teachers in Junior Secondary Schools.

Validity of Instrument

The validity of the instruments (BUSEFQ, BUSAT and COBSF) were certified by experts in the Department of Curriculum Studies and Instruction, Faculty of Education, Ambrose Alli University, Ekpoma; and Department of Vocational and Technical Education in the Faculty of Education, University of Benin.

Reliability of the Instrument

For the reliability of the BUSAT, a group of 64 Junior Secondary final year students (JSS 3) from private schools in Edo State were put together. The test re-test method of reliability was used and it yielded a reliability coefficient of 0.79. This instrument was therefore, adjudged to be adequate for use. Since the BUSEFQ was only used to collect the demographic data of Business Studies teachers, the instrument was not tested for reliability. The COBSF was equally not subjected to reliability test.

Administration of the Instrument

The researcher with the help of five trained research assistants administered the three instruments to the

respondents. The duration for BUSAT was thirty minutes. Thus, students were expected to answer the questions in thirty minutes.

Method of Data Analysis

The data for the analysis was obtained from BUSEFQ, BUSAT and COBSF. The three hypotheses were analyzed using linear regressions.

RESULTS AND DISCUSSIONS

This section focused on the analysis of data, the interpretation and discussion of results.

Hypothesis One: There is no significant relationship between location of schools and students' academic performance in Business Studies in Edo State

Table 1: ANOVA Analysis of Location of Schools and Academic Performance in Business Studies

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.632	1	5.632	.499	.483 ^a
	Residual	711.352	63	11.291		
	Total	716.985	64			

a. Predictors: (Constant), Location of Schools

b. Dependent Variable: Academic Performance

Table 1 shows F-value of 0.499 and a p-value of 0.483. Testing at an alpha level of 0.05, the p-value is greater than the alpha level. So, the null hypothesis which states that there will be no significant relationship between location of schools and students' academic performance in business studies in Edo state is retained. Consequently, there is no significant relationship between location of schools and students' academic performance in business studies. Therefore, the location of schools was not an important teacher factor.

Hypothesis One: There is no significant relationship between availability and use of instructional materials and students' academic performance in Business Studies in Edo State

Table 2: ANOVA Analysis of Instructional Facilities and Academic Performance in Business Studies

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	111.186	5	111.186	9.892	.041
	Residual	605.199	59	11.240		
	Total	716.985	64			

a. Predictors: (Constant), Printer, Shredding Machine, Manual Typewriter, Personal Computer, Photocopier

b. Dependent Variable: Academic Performance

Table 2 shows F-value of 9.892 and a p-value of 0.041. Testing at an alpha level of 0.05, the p-value is less than the alpha level. So, the null hypothesis which states that there will be no significant relationship between instructional facilities and students' academic performance in Business Studies in Edo state is rejected. Consequently, there is a significant relationship between instructional facilities and students' academic performance in Business Studies. Therefore, the instructional facilities in the schools were very important teacher factor.

Hypothesis Three: There is no significant relationship between school type and students' academic performance in Business Studies in Edo State

Table 3: ANOVA Analysis of Type of Schools and Academic Performance in Business Studies

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.720	1	3.720	.329	.569 ^a
	Residual	713.264	63	11.322		
	Total	716.985	64			

a. Predictors: (Constant), School Type

b. Dependent Variable: Academic Performance

Table 3 above shows F-value of 0.329 and a p-value of 0.569. Testing at an alpha level of 0.05, the p-value is greater than the alpha level. So, the null hypothesis which states that students' academic performance in Business Studies will not significantly correlate with type of schools is retained. Consequently, students' academic performance in business studies will not significantly correlate with type of schools. Therefore, the type of schools attended by students was not an important teacher factor.

Discussion of Results

The findings of this study were based on the hypotheses that were addressed at the beginning of the work and analyzed in tables. The findings of these factors are now discussed one after the other.

The result of the first analysis revealed that the location of schools was not significantly related to students' academic performance in Business Studies. It therefore implies that the place where a school is located be it

urban or rural does not necessarily influence the academic performance of Business Studies' students. This finding also corroborated the finding of Mersch (2012), where the author found that rural high schools in the state of Wisconsin performed as well as town and city high schools and in some subject areas as well as suburban high schools. Musibau and Adigun (2010), also corroborate this finding where the author stressed that school location had no significant influence on students' academic performance. The author further opined that whether a student attends rural or urban secondary school, it does not make a difference in his academic performance.

This finding contradicted the finding of Korir and Kipkembor (2014), where the authors stressed that school environmental factor made significant contribution to the students' academic performance. This study also agrees with the study of Ong, Chandran, Lim, Chan and Poh (2010), where they stressed that geographical location was not a significant predictor of academic achievement. In a similar vein, Owoeye and Yara (2011) had contrary finding where the authors stressed that there was a significant difference between students' academic achievement of rural and urban secondary schools in senior school certificate examinations. The author further stressed that students in urban areas had better academic achievement than their rural counterpart. Okereke (2011) equally contradict this finding where the author found that students from rural schools. The author further stressed the importance of school location in students' academic achievement. Adepoju (2011) also contradicted this finding where the author concluded that the mean percentages recorded in urban secondary schools in respect of general performance were higher than those recorded in rural secondary schools throughout the period under consideration. In a similar study conducted by Rekha and Shobhna (2011), the authors found that the academic achievement of urban adolescents were higher as compared to rural adolescents. According to Musibau and Adigun (2010), the contradictory findings in respect of school location could not be divorced from variation in supervision techniques of school leaders, motivation of teachers and availability of facilities in various schools.

The result of the second analysis revealed that instructional facilities were significantly related to students' academic performance in Business Studies. It therefore implied that instructional facilities (that is, printer, shredding machine, manual typewriter, personal computer, and photocopier) play a great role in the academic performance of students in Business Studies. It also supported the findings of Jagero (2011), and Udoh (2013). It also corroborated the findings of Al-Enezi (2002), where the author stressed that there was a significant positive relationship between the overall, structural and cosmetic building condition and student achievement in the sciences major when all 56 school building were analysed. The work of Ekundayo (2015) also supported this finding where the author stressed that there was a significant relationship between school facilities and students' achievement in the affective domain as well as a significant relationship between school facilities and students' achievement in the psychomotor domain of learning. Alokan, Osakinle and Onijingin (2013), in a similar study, found that there was a significant difference between the academic performance of students having study facilities at home and students with no study facilities at home.

The result of the third analysis revealed that students' academic performance in business studies was not significantly dependent on school type. It therefore implied that whether a school is a mixed or single sex school, it will not necessarily influence the students' academic performance in business studies. This finding corroborated the finding of Musibau and Adigun (2010), where the authors found that school sex (school type) had no significant influence on students' academic performance. The author further stressed that whether a student attends single sexed school or mixed school does not make a difference in his academic performance. This finding also corroborated the finding of Pahlke, Hyde and Allison (2014), where the authors found that there was only trivial differences between students in single sex versus coeducational educational.

The findings by Woodward, Fergusson and Horwood (1999), contradicted this finding where the authors found a pervasive tendency for children attending single-sex schools to have greater success in the school certificate examinations, higher but reading scores, greater school retention, less likelihood of leaving school without qualifications and less exposure to unemployment than children attending coeducational schools. The authors further stressed that these differences were evident for both boys and girls. However, a substantial amount of these differences were explained by pre-entry differences in children's academic, behavioural, social and family functioning.

Conclusion

This study has carefully examined the influence of environmental factors on academic performance of Business Studies' students in upper basic level in Edo State. The study x-rayed three (3) environmental factors: school location, facilities and school type. Based on the analysis of the data, it can be concluded that school location and school type were not significant predictors of students' academic performance while facilities was a significant predictor of students' academic performance in Business Studies in Edo State. It therefore implies that efforts should be made by all stakeholders to ensure that teaching facilities are available in the teaching of Business Studies in schools in Edo State.

Recommendations

Based on the findings, the following recommendations are therefore advanced:

- i. Conscious efforts should be made by stakeholders to ensure that instructional facilities are provided for the smooth teaching and learning of Business Studies in our schools;
- ii. Non-Governmental Organizations (NGOs) should assist the government in providing some of the needed facilities in schools;
- iii. Business Studies' teachers should learn to improvise when facilities are not available in order to ensure meaningful learning;
- iv. Schools should be given proper attention by the government irrespective of the location of the schools; and
- v. The idea of stereotyping or gender discrimination in schools should be discouraged.

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