THE INFLUENCE OF SCHOOL PHYSICAL ENVIRONMENT ON SECONDARY SCHOOL STUDENTS' ACADEMIC PERFORMANCE IN BAYELSA STATE

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ABSTRACT

The main thrust of this study was to investigate empirically the extent to physical school environment influence students' academic performance in secondary schools in Bayelsa State. In order to accomplish this, four hypotheses were formulated to guide and direct the study. The hypotheses were meant to assess the influence of aesthetic beauty of the school, infrastructural facilities, school equipment and instructional materials and school location on students' academic performance. Ex-post facto research design was adopted for the study. The sample used for this research was one thousand, six hundred and twenty (1,620) JS3 students carefully selected through the use of multiple stages sampling techniques in secondary schools in Bayelsa State. Two research instruments an achievement test to measure student's academic achievement and a set of questionnaire to measure the sub independent variables of the study. The data obtained from the administration of the questionnaires were duly coded and subjected to statistical analysis using simple percentage and Independent t-test (t). Findings revealed that: aesthetic beauty of the school and infrastructural facilities significantly influence students' academic performance. Also, there is a significant influence of school equipment and instructional materials and school location on students' academic performance. It was recommended that adequate school physical facilities should be provided by the State Government, in all secondary schools in Bayelsa State. This will help to engage the students in meaningful activities.

Keywords: Aesthetic Beauty, Infrastructural Facilities, Equipment And Instructional Materials, School Location.

INTRODUCTION

The educational system is undoubtedly a system of production and could be viewed as a factory that requires men, money and material resources to aid production. Each factory has its peculiar environment that depicts or suggests the type of production that goes on there. The school plant, which refers to the physical facilities available in the school such as the school site, the buildings, equipment, machinery, furniture, electrical and water supply infrastructure, could simply be likened to the capital in an industrial setting. They are very necessary to ensure the effectiveness and efficiency of the system. A simple aesthetic exterior suggestive of the purpose for which the buildings are used could be a pride to the students and could have an impressive influence on the school community as a whole.The National policy on education 2004 stipulates that the school environment especially the physical environment should be made conducive to facilitate the learning process. The policy recommends that classroom should be well constructed and spacious and all types of physical facilities such as instructional materials, library, laboratory, playing ground, toilets and staff rooms should be provided for effective teaching and learning process. Good modern physical facilities in school could add significantly to the promotion of academic performance. The size of classrooms, play-grounds and availability of material resources relative to the number of students in a school could also affect learning. According to Cross, Baker and Stiles

(2006), many interactions characterize school learning and unless adequate spaces are provided for such interactions, learning could be hampered. These types of facilities would help in providing the desired education for the students, attracting them towards the different school programmes.Deteriorating conditions have encouraged incessant complaints from students. Adeboyeje (1984), Adedeji (1998), Owoeye (2000) and Ajayi (2002) submitted positive relationships between school facilities and school effectiveness. Hallack (1990) also highlighted physical facilities as a major influencing achievement in the school system. He emphasized that the availability, relevance and adequacy of these facilities contribute to students' achievement while unattractive school buildings, crowded classrooms, non availability of playground and flower beds and surroundings that have no aesthetic beauty can contribute to poor performance. Ahunanya and Ubabudu (2006) also reiterated the provision of adequate physical facilities for effective teaching and learning to take place. Adams (2004) submitted that a quiet, cool, clean and beautiful physical environment makes the teacher and students happy and enhances their performance and productivity. Wilson (2003), Okunuga (2005) and Ijaduola (2008c) cautioned that with poor physical working condition, there are usually mental fatigue, truancy, frustration, discomfort, and poor health; all those consequently reduces students academic performance.

The school physical facilities in most secondary schools in Bayelsa State have not been in good shape. In some cases, students sit on the ground to receive lessons, also many of the classrooms, laboratories, libraries, playing grounds are in a terrible state of despair (Mutiu, 1994) and Ahmed (2003) showed that in most of the nation's secondary schools, teaching and learning take place under a most uncomfortable environment, lacking basic materials.Physical conditions refer to those things that must be available in the working place for effective work to take place. In the context of the school system, they are those things that enable the teacher and students to be able to carry out the teaching/learning process effectively and contribute to the achievement of the school goals and objectives without fatigue and distraction (Ijaduola, 2007). As opined by Felix (2004), a good school organization must have appropriate physical conditions (aesthetic beauty, availability of instructional materials, location) necessary for effective teaching/learning.According to Subair and Awolere (2006), there should be maximum presence of physical conditions such as lighting, ventilation, good building constructions, location, instructional materials, sufficient windows, doors, vents and fans to cool the heat during hot season. All these improve work and health of both the teachers and the learners.

Denga (1993) revealed that a significant number of secondary school physical environments are not conducive for learning. He states that to achieve improved performance by the students, there should be conducive physical environment for students in the secondary schools. Unfortunately, some of the urban and rural schools lack adequate infrastructural facilities like classroom blocks as some of the students learn under shade of trees (especially the newly established ones). And where the classroom blocks exist, one discovers that most of their roofs are blown off by rain storms. Other schools have pot-holes in the greater portions of their classroom begging for repairs or renovation. Worst still, a greater percentage of the students sit and write on the bare floor for insufficient classroom seats. This situation doubtless, cannot promote students learning ability and subsequently better performance in their class work including examinations. He therefore recommended that there was need for all hands to be on deck to make sure that hindrances were removed so that a good solid foundation could be laid for future generation.

It is against this backdrop that, this work intends to investigate the influence of school physical environment on secondary school students' academic performance in Bayelsa State. The following hypotheses were formulated to guide the study:

1. There is no significant influence of the aesthetic beauty of the school on students' students' attitude to school work and academic performance.
2. There is no significant influence of infrastructural facilities on students' academic performance.
3. There is no significant influence of school equipment and instructional materials on students' academic performance.
4. School location does not significantly influence secondary schools students' academic performance.

LITERATURE REVIEW

Aesthetic Beauty of the School and Students' Academic Performance

McGuffey's 1982 synthesis of earlier studies on the influence of the beauty of schools on students' achievement corroborated better building quality, newer school buildings, better lighting, better thermal comfort and air quality, and more advanced laboratories and libraries with academic progress. More recent reviews by Earthman and Lemasters (1998) report similar links between building quality and higher test scores. For example, researchers studying Georgia's primary schools found that fourth-grade students in non-modernized buildings scored lower in basic skills assessments than students in modernized or new buildings (Plumley 2008). Similarly, Chan (2009) found that eighth-grade students scored consistently higher across a range of standardized tests if housed in new or modernized buildings. Bowers and Burkett (2007) found that students in newer buildings outperformed students in older ones and posted better records for health, attendance, and discipline. The study attributed approximately three percent of the variance in achievement scores to facility age, after considering socio-economic differences in the students' populations.In more recent work, Phillips (2011) found similar improvements in newer facilities, and Jago and Tanner (2012) also found links between building age and student achievement and behaviour.

Clearly, there is consensus that newer and better school buildings contribute to higher student scores on standardized tests (Hines 1996), but just how much varies depending on the study and the subject area. For example, Phillips (1997) found impressive gains in Maths scores, but Edwards (1992) found much lower gains in Social Sciences.Isolating the independent effects of age and building condition is essential to studies such as these but may be difficult to do; a building's age can be ascertained from public records, but its condition is harder to gauge.Building quality actually may have less to do with age and more to do with the budget for that particular building. In older buildings, a lack of maintenance can ruin an otherwise high-quality building; in new buildings, funding limitations can result in a brand new building of inferior quality. Any careful study must account for these factors. Indeed, some researchers have tried to rigorously identify the effect of building quality independent of building age. Andersen (2009) studied the relationship of thirty eight middle-school design elements to student scores from twenty-two schools on the Iowa Test of Basic Skills and found positive correlations with twenty-seven items. Maxwell (1999) found a correlation between newer facilities and students' performance levels and a significant relationship between upgraded facilities and higher Maths scores. But her study also found lower students' performance during the renovation process, since classes can be disrupted during renovation. In at least one case (Claus and Girrbach 2005), Reading and Maths scores

improved among the better students when buildings were renovated, but the scores fell among the lowest-performing students.

School Infrastructural Facilities and Students' Academic Performance

The school physical facilities are known as school plant and it includes the school buildings, classrooms furniture, equipment, instructional materials, laboratories, libraries, play grounds, etc. Lezotte and Passiroque (1978) carried out a study to find out the effect of school buildings on students' academic achievement. They formulated hypotheses based on prior students' achievement with study background, school building and students' achievement as the dependent variables. A total of 2,500 randomly selected students from 20 modern schools were used as sample. The Pearson's product moment correlation coefficient statistical tool was employed at 0.05 alpha level of significance. The result showed that the school building accounts for significant variance in academic achievement.They recommended that classrooms should be spacious to promote flexibility of usage in groups and individual activities. Similarly, classroom plays a vital role in the education of the child. According to Nwachukwu (1994), the physical setting for learning affects the learner. The setting must be attractive enough to make students wish to spend long hours there. What we have presently in most of our secondary schools does not meet these requirements. The typical village classroom is part of an unattractive building. The roof may still be in place or may have been blown off by wind. If the later is the case, students are forced to study without being protected from the effects of the weather.

This kind of situation as stated by Nwachukwu (1994) in which the physical comfort of the students cannot be guaranteed is not ideal for learning and does not enhance academic achievement.Still on the possible influence of school plant, Klafs and Amhein (1981) conducted research to find out the influence of recreational facilities on students' academic performance in Lagos State. They employed questionnaire titled RFSDQ, which was administered on 500 randomly sampled secondary school students from 10 schools in Lagos. Four hypotheses were formulated for the study and analyses were made with chi-square (x^2) statistics to find out how the scores vary.The investigation revealed significant results for the study. Klafs and his colleague found that availability of recreational facilities do not only lead to increase practice in skill acquisition by individuals but also serve to encourage mass participation in sporting programmes, thereby promoting students' academic performance.In an attempt to discover the factors affecting students' performance in agriculture, Ntekpere (2008) conducted a research. He randomly sampled a total of 207 males with a mean of 21.40 and a standard deviation of 3.58, and 139 female students with a mean of 17.94 and standard deviation of 4.25. Several findings were made.

One among them was the unavailability and lack of teaching materials significantly influenced the academic performance of the students in Agriculture.Still on the influence of physical facilities on students, Essien (2004), embarked on a study titled indicators for self-reliance among Nigeria students in Cross River State as perceived by administrators of tertiary institutions. Four hypotheses involving skills of self-reliance were formulated. From a population of 1,865 tertiary institution administrators, 400 were randomly selected to constitute the sample. Data for the investigation were collected using School Administrators Perception of Self-reliance Questionnaire (SAPSQ) and the hypotheses were tested at 0.05 level of significance using t-test of single mean (population t-test) technique. From one of the results, she observed that the Nigerian students would attain self reliance in the area of exploitation of human and material resources if the educational system could make available

adequate provision of infrastructural facilities, equipment and facilities for teaching and learning in our educational institutions.

School Location and Students' Academic Performance

According to Mbipom (2000), schools are either situated in one geographical location or the other. These geographical locations are either termed rural (remote) where modern facilities such as leisure, easy transportation, cultural heterogeneity, and cosmopolitan population are lacking or urban (city) where there are adequate facilities such as leisure, cinema, easy transportation, cultural heterogeneity, and cosmopolitan population. Unlike the rural schools where the population is relatively small and the students know one another by name, interactions are personal. Urban dwellers live individualistic life and only relate with people they feel like relating with, without any form of permanency.Ogili (2009) posited that the per capital income among rural people are low and there is general poverty. About 70% of the rural populations are engaged in farming at subsistence level while the urban populations are mostly civil servants, traders and artisans. The effect of nature has compelled man to either settle or dwell in an urban or rural area. This educationally implies that in the rural settlement or location there is poor accessibility to the modern educational facilities and this serves as a hindrance to the motivation of a rural child to learning.

Denga (1988) maintained that each environment plays a part in shaping the development of the child academically and otherwise. Accordingly, a child gets from his environment all he needed to enable him develop best. Students of urban surrounding have more opportunities to radios, educative film shows, electricity, televisions, well equipped laboratories and libraries etc that help or contribute in moulding their approaches when compared to rural location students regarding academic achievement.Effiong (2001) on his part opined that any two individuals with approximately equal intelligence but living in two separate and distinct environments may end up attaining unequal intellectual heights. Olasunkanmi (2007), in his research on the influence of school location on students' academic achievement in Lagos State, adopted a causal-comparative design with a random sample of 500 students from a population of senior secondary twostudents in the State. A six point likert type scale questionnaire titled SLSAAQ was administered. Independent t-test analysis was used to test the hypotheses at 0.05 levels of significance. From the result, it was observed that students from rural areas tend to perform poorly while those within the urban areas tend to perform better due to the availability of modern educational facilities.

Schools Equipment/Instructional Materials and Students Academic Performance

On the issue of instructional materials, Mbipom (2000) described instructional materials as that which the teacher uses to achieve his set objectives. She further observed that lack of educational resources in our schools has been a major problem in the instructional process. She further concluded that ideally, no effective education can take place without equipment, facilities, materials etc. In her observation, a school environment that is handicapped by the non-availability of these teaching and learning facilities may strongly affect the level of students' academic performance. This then implied that learning equipment and materials have their own effects on the academic performance of the students.Instructional materials are channels through which contents stimuli are presented to the learner (Bassey, 1988). Inyang–Abia (1998) identified the following categories of instructional materials, visual, prints, graphics, electronic, projectiles and audiovisuals, instructional materials. According to him when these materials are adequately made available for studies they will facilitate the

teaching learning process, thereby increasing performance for both the students and teachers. Ajari and Robinson (1990), embarked on several researches which include the importance of instructional materials on students. They sampled 200 respondents through the simple random sampling technique. An ex-post facto research design was adopted for the study. A four point likert type scale questionnaire was used for data collection. The data were analyzed using one way analysis of variance (ANOVA). From the results they observed that educational resources in the school environment are very important in the development of an ideal teaching and learning environment. They further revealed that poor teaching and learning environment result to poor academic performance.Egbona (2002) in his research to find out to what extent instructional materials are made available for the teaching-learning process, in Ugep educational zonal district discovered that, the most common instructional materials made available for teaching is chalkboard, cardboard, and life specimen even though his findings shows that availability of instructional materials has no significant relationship with academic performance of students, he concluded that they should be made available as they facilitate the teaching – learning process.

In other words, Akpabio (2002) carry out a research on the topic Availability and Utilization of instructional and student academic performance in social studies. He formulated three hypotheses and tested them at 0.05, alpha level of significance. One of the hypotheses was test on how availability of instructional materials relates with academic performance of students in social studies. He found out that all the three hypotheses formulated were all significant. He concluded that instructional materials should always be made available during lessons as the present of these materials stimulates the interest of students and equally facilitates the teaching – learning process.Etim (2001) carried out a research on the availability of instructional materials and academic performance of students in economics. He used Calabar municipality as his study area, and adopted stratified and simple random sampling for the selection of his sample. 200 students were used for the study. He discovered that most of the schools he visited did not have any instructional materials for teaching economics. The few schools that have instructional materials available perform better in the achievement test that was given. He therefore conclude that instructional materials should be made available for teaching economics as their availability will trigger the interest of both the teacher and the students.

Acha (1999) carried out a research on the availability of instructional materials and concluded that the availability of instructional materials could influence and improve students' academic performance if only the instructional materials are constantly made available in the classroom, but that if not constantly made available, may therefore have no influence on the academic performance of students.Samati (2002) carried out a research on the important of teaching social studies with instructional materials. He discovered the availability of instructional materials does not have any significant relationship with students' academic performance in social studies. He justified his findings by saying that instructional materials will depend on how they are used to impact knowledge on students.Laboratory has been conceptualized as a room or a building specially built for teaching by demonstration of theoretical phenomenon into practical terms. Farombi (1998) argued the saying that "seeing is believing" as the effect of using laboratories in teaching and learning of science and other science related disciplines as students tend to understand and recall what they see than what they hear or were told. Laboratory is essential to the teaching of sciences and the success of any science course is much dependent on the laboratory provision made for it.

METHODOLOGY

The research design adopted for this study is ex-post facto research design. Ex-post facto means "from what is done afterwards ". It is a method of testing the possible antecedents of events that have happened which cannot therefore be controlled, engineered, or manipulated by the investigator. According to Kerlinger (1986), ex-post facto research is a systematic empirical enquiry in which the scientist does not have direct control of independent variables because they have already impacted on the dependent variables before the time of the research and therefore cannot be manipulated. This study involved all JSS 3 secondary students in Public Secondary School in Bayelsa State. Information from Bayelsa State Secondary Education Board (2011) revealed that there are a total of 154 Public secondary schools in Bayelsa State, with a total of10, 699 JSS 3 students**.** Stratified random sampling technique was adopted for the selection of 1680 JSS 3 students selected from 56 secondary schools in the state. This was made up of 816 males and 864 females' students. The first instrument used for this study is a structured questionnaire titled Physical School Environment Questionnaire (PSEQ). The PSEQ was a 24 items questionnaire constructed by the researcher and aimed at eliciting information from the respondents on the variables of study. The second instrument for the study was students' academic performance test in English Language, Mathematics, Social Studies, Basic Science and Agricultural Science.

RESULTS AND DISCUSSION

Test of Hypotheses

Hypotheses One

School location does not significantly influence secondary schools students' academic performance in Bayelsa State. The independent variable in this hypothesis is school location which was categorized into urban and rural area. Independent t-test statistics technique was used to test this hypothesis. The result is presented in Table 1.

Table 1: Independent t-test analysis of the influence of school location on students' academic performance

Location	N	Mean (academic performance)	SD	t-cal
Urban	630	17.42	3.13	5.34
Rural	990	16.59	2.91	

*p<0.05, d.f=1618, crit –t=1.96

The result in Table 1 showed that the calculated t-value of 5.34 was to be greater than the critical t-value of 1.96 needed for significance at 0.05 level of significance with 1618 degrees of freedom with this result, the null hypothesis is rejected. It therefore means that there exists a significant influence of school location on the academic performance of students. Specifically, the result showed that students from urban areas perform better (x=17.42) than those from rural areas (x=16.59)

Hypothesis Two

There is no significant influence of infrastructural facilities on students' academic performance. The dependent variable in this hypothesis is student's academic performance as measured by student's performance in the achievement test. The independent variable is infrastructural facility which is measured by students' scores on items 1-8 of section B of the research instrument. Students who scored above mean (i.e 9 and above) on this section were assume to have adequate infrastructural facilities while those that scored below the mean (i.e. 8 and below) on this section were assumed to have inadequate infrastructural facilities. Based on this categorization the influence of infrastructural facilities on students' academic performance was computed using independent t-test statistical technique. The result is presented in Table 2

Table 2: Independent t-test statistical technique analysis of the influence of infrastructural facilities on students' academic performance

Infrastructural facilities	N	Mean (academic performance)	SD	t-cal
Adequate infrastructure	856	17.84	3.21	11.31
Inadequate infrastructure	764	16.17	2.73	

*p<0.05, d.f=1618, crit –t=1.96

The result in Table 4.6 showed that the calculated t-value of 11.33 was found to be greater than the critical t-value of 1.96 needed for significance at 0.05 level of significance with 1618 degrees of freedom With this result, the null hypothesis is rejected. It therefore means that there exists a significant influence of infrastructural facilities on the academic performance of students. Specifically, the result showed that students from schools with adequate infrastructural facilities perform better (x=17.84) than those from schools with inadequate infrastructural facilities (x=16.17)

Hypothesis Three

There is no significant influence of the aesthetic beauty of the school on academic performance. The dependent variable in this hypothesis is student's academic performance as measured by student's performance in the achievement test. The independent variable is aesthetic beauty of the school which is measured by students' scores on items 9-16 of section B of the research instrument. Students who scored above mean (i.e 9 and above) on this section were assume to have beautiful schools while those that scored below the mean (i.e 8 and below) on this section were assumed to have ugly schools. Based on this categorization the influence of aesthetic beauty on students' academic performance was computed using independent t-test statistical technique. The result is presented in Table 3

Table 3: Independent t-test statistical technique analysis of the influence of aesthetic beauty on students' academic performance

Aesthetic beauty	N	Mean (academic performance)	SD	t-cal
Beautiful schools	969	17.98	3.11	13.06

Ugly schools	651	16.03	2.83

*p<0.05, d.f=1618, crit –t=1.96

The result in Table 3 showed that the calculated t-value of13.06 was found to be greater than the critical t-value of 1.96 needed for significance at 0.05 level of significance with 1618 degrees of freedom. With this result, the null hypothesis is rejected. It therefore means that there exists a significant influence of aesthetic beauty of the school on the academic performance of students. Specifically, the result showed that students from beautiful schools perform better (x=17.98) than students from ugly schools with poor aesthetic beauty (x=16.03)

Hypothesis Four

There is no significant influence of school equipment and instructional materials on students' academic performance in secondary schools in Bayelsa State. The dependent variable in this hypothesis is students' academic performance as measured by students' performance in the achievement test. The independent variable is equipment and instructional materials, measured by students' scores on items 17-24 of section B of the research instrument. Students who scored above mean (ie. 9 and above) in this section were assume to have adequate equipment and instructional materials while those that scored below the mean (i.e 8 and below) in this section were assume to have inadequate equipment and instructional materials. Based on this categorization the influence of equipment and instructional materials on students' academic performance was computed using independent t-test statistical technique. The result is presented in Table 4

Table 4: Independent t-test statistical technique analysis of the influence of equipment and instructional materials on students' academic performance

Equipment and instructional materials	N	Mean (academic performance)	SD	t-cal
Adequate	836	17.74	3.09	9.81
Inadequate	874	16.27	2.94	

*p<0.05, d.f=1618, crit –t=1.96

The result in Table 4 showed that the calculated t-value of 9.81 was found to be greater than the critical t-value of 1.96 needed for significance at 0.05 level of significance with 1618 degrees of freedom. With this result, the null hypothesis is rejected. It therefore means that there exists a significant influence of school equipment and instructional materials on the academic performance of students. Specifically, the result showed that students from schools with adequate school equipment and instructional materials perform better (x=17.74) than those from schools with inadequate equipment and instructional materials (x=16.27)

Discussion of Findings

The result of hypothesis one of this study revealed that school location significantly influence the academic performance of students. Specifically, the result showed that students from urban areas perform better (x=17.42) than those from rural areas (x=16.59). This result is in line with the findings obtained by Olasunkanmi (2007), who in his research on the influence of school location on students' academic achievement in Lagos State, found out that students

from rural areas tend to perform poorly while those within the urban areas tend to perform better due to the availability of modern educational facilities. This finding is also in agreement with the findings of Mussen (2006) who carried out a study to compare the academic achievement of rural and urban students. The results revealed among others that rural students make slower progress at school than urban students. The rural students are said to come late to school but leave earlier, they complete fewer number of years at school, score lower in national assessment tests and above all most of them end up as functional illiterates and recalcitrant. He added that these differences in location would seem to cause variations in the ways and extent to which urban and rural students have the desire to perceive schooling. Wotorufa (2008) stated that much of the reliable variable to students' academic performance can be attributed not only to aptitude of the learners but also to stimulation of the physical environment. He also added that most teachers usually detested being posted to the rural schools and they apply available means within their reach to settle in the urban schools.

The findings of research hypothesis two of this study showed that there exists a significant influence of infrastructural facilities on the academic performance of students. Specifically, the result showed that students from schools with adequate infrastructural facilities perform better (x=17.84) than those from schools with inadequate infrastructural facilities (x=16.17). The finding of this study is in agreement with the findings arrived by Klafs and Amhein (1981) who conducted research to find out the influence of recreational facilities on students' academic performance in Lagos State and discovered that availability of recreational facilities do not only lead to increase practice in skill acquisition by individuals but also serve to encourage mass participation in sporting programmes, thereby promoting students' academic performance. This finding is also in order with the findings obtained by Ntekpere (2008) who conducted a research on the influence of school infrastructural facilities on students' academic performance and found out that the unavailability and lack of school infrastructural facilities significantly influenced the academic performance of the students in Agriculture.

The findings of research hypothesis three of this study indicated that there exists a significant influence of aesthetic beauty of the school on the academic performance of students. Specifically, the result showed that students from beautiful schools perform better (x=17.98) than those from ugly schools (x=16.03). The finding of this study is in corroboration with the findings obtained by Bowers and Burkett (2007) who found that students in newer buildings outperformed students in older ones and posted better records for health, attendance, and discipline. The study attributed approximately three percent of the variance in achievement scores to facility age, after considering socio-economic differences in the students' populations.This finding is also in agreement with the findings of Phillips (2011) who found out that there existed a significant influence of aesthetic beauty of the school on students' academic performance. He found a link between building age and student achievement and behaviour. Clearly, there is consensus that newer and better school buildings contribute to higher student scores on standardized tests.

The finding of research hypothesis four of this study revealed that there exists a significant influence of school equipment and instructional materials on the academic performance of students. Specifically, the result showed that students from schools with adequate school equipment and instructional materials perform better (x=17.74) than those from schools with inadequate equipment and instructional materials (x=16.27). This finding is agreement with the finding obtained by Egbona (2002) who in his research to find out to what extent instructional materials are made available for the teaching-learning process, in Ugep educational zonal district discovered that, the most common instructional materials made

available for teaching is chalkboard, cardboard, and life specimen even though his findings shows that availability of instructional materials has no significant relationship with academic performance of students, he concluded that they should be made available as they facilitate the teaching – learning process.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary of The Study

The main thrust of this study was to investigate empirically the extent to physical school environment influence students' academic performance in secondary schools in Bayelsa State. In order to accomplish this, four hypotheses were formulated based on the research questions raised to guide or direct the study. The hypotheses formulated were stated as follows:

1. There is no significant influence of the aesthetic beauty of the school on students' students' attitude to school work and academic performance.
2. There is no significant influence of infrastructural facilities on students' academic performance.
3. There is no significant influence of school equipment and instructional materials on students' academic performance.
4. School location does not significantly influence secondary schools students' academic performance.

Relevant literatures based on these variables were reviewed to support the study. The sample used for this research was one thousand, six hundred and twenty (1,620) JS3 students carefully selected through the use of multiple stages sampling techniques in secondary schools in Cross River State. Two research instruments an achievement test to measure students' academic achievement and a set of questionnaire to measure the sub independent variables of the study. The data obtained from the administration of the questionnaires were duly coded and subjected to statistical analysis using simple percentage and Independent t-test. The entire hypotheses were tested at significance 0.05 alpha level. The following findings emerged from the data analysis;

1. Aesthetic beauty of the school significantly influences students' students' attitude to schoolwork and academic performance.
2. There is a significant influence of infrastructural facilities on students' academic performance.
3. There is a significant influence of school equipment and instructional materials on students' academic performance in secondary schools.
4. School location significantly influences secondary schools students' academic performance.

CONCLUSION

Based on the findings gathered from the test of the hypotheses that directed the study, the following conclusion was made; the aesthetic beauty of the school significantly influences students' academic performance. There exists a significant influence of school infrastructures on students' academic performance. That is students from schools with good infrastructure perform better academically than students from schools with poor infrastructure. School equipments/instructional materials significantly influence students' academic performance.

On the issue of the location of the school, students from urban schools perform better than students from the rural schools.

RECOMMENDATIONS

1. Adequate school physical facilities should be provided by the State Government, in all secondary schools in BayelsaState. This will help to engage the students in meaningful activities.
2. More classrooms should be built by the State Government to reduce congestion mostly in the urban secondary schools in Bayelsa State, and equally more teachers should be employed so as to meet the minimum standard of class sizes as stipulated by National Policy on Education. This will enable a teacher have a firm control over his/her class and consequently will be able to checkmate the activities of students which will further increase students academic performance.
3. The Ministry of Education and indeed all stakeholders in the education sector should work towards the provision of adequate physical facilities and instructional materials s, most especially in the rural schools to ensure that students in those schools enjoy some privileges and exposures like their counterparts in the urban schools.

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