Influence of School Environment on Pupils' Academic Achievement in Basic Technology in Public Junior Secondary Schools in Ekiti State, Nigeria

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Abstract
This study examined the influence of school Environment on Pupils' Academic Achievement in Basic Technology in public junior secondary schools in Ikere Local Government Area of Ekiti state, Nigeria. This study employed descriptive research design. All students offering Basic Technology as a subject in public junior secondary schools in the study area formed the population of the study. Simple random sampling technique was used for the study to select a total number of two hundred (200) Basic Technology students as sample for the study. The instrument for the study was self-designed questionnaire. The instrument was subjected to validity and reliability mechanism. Test-re- test method was used to ensure the reliability of the instrument. The researcher personally administered the instrument (questionnaire) on the selected sample to elicit the relevant information needed for the study. Three research hypotheses were formulated for the study and tested at 0.05 level of significance. The data collected were analysed using Chi-Square (X^2) statistical analysis package. The findings of the study revealed that; there was significant influence of school environment on teaching and learning of Basic Technology in public secondary schools, there was significant impact of infrastructural facilities on teaching and learning of Basic Technology in public secondary schools and there was significant effect of classroom painting, lighting and aesthetic beauty of the school on Basic Technology students' attitude to school work. Based on the findings, appropriate recommendations were made.
Keywords: School Environment, Academic Achievement, Basic, Technology, Basic Technology

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 (Millian, 2011). 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. Adeolu (2013) said 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 (2014) stipulates that the school environment especially the physical environment should be made conducive to facilitate the learning process (Mark, 2010). 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. Lizy (2012) explained that 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.

Indeed, learning environment plays a major role in shaping the quality of academic achievement in mathematics (Tella, 2010). It seems there is perceptional consistency among mathematics scholars about learning environment and the student's cognitive and effective outcome (Lizzio, 2012). It was observed that the learning is optimal when body, soul and spirit are in accord; otherwise learning will be ineffective (Frenzel, 2010). Hence, clean, quiet and comfortable environment are important components of learning environment. Furthermore, creating of an ideal learning environment must be a top priority of every concern educator. Being comfortable should be a combination of several factors which include; temperature, lighting, and noise control (Murugan & Rajoo, 2013).

Basic technology is an integrated subject which comprises of woodwork, metal work, building technology, auto mechanics, electrical electronics and technical drawing at their basic level. It is a subject that is offered at the junior secondary school level. According to Elom & Ogwa (2017), the attainment of scientific and technological advancement would be facilitated if basic technology is effectively administered at the secondary school level. Basic technology was introduced into the Nigeria education system 6-3-3-4 in 1982 as a result of the national policy on education that was made after the national curriculum conference of September, 1969 that was held in Lagos to review old and identify new national goals for Nigeria education at all levels with respect to the need of individual youth and adult in the task of nation building (Elom & Ogwa, 2017).

According to Elom & Ogwa (2017), Basic technology enhances skill acquisition which makes the implementation of the 6-3-3-4 system of education successful. This can be possible if teachers are able to make student s acquire the desired technological skills. Because technological knowledge is very important in secondary education, voluntary organizations and even parents contribute to the establishment and maintenance of schools. Within the context of technology education, basic technology has been identified as a very important school subject and its importance in scientific and technological development of any nation has been widely reported. It was as a result of the recognition given to basic technology in the development of the individual and the nation that made it one of the core subjects among other science related subject in Nigeria education system. Its inclusion as a core subject in the junior secondary schools calls for the need to teach it effectively. This is because effective teaching of basic technology can lead to the attainment of technological greatness. Basic technology exposes students to their desired vocation as the goals of vocational education as stated in the National Policy on Education is to provide trained manpower in the applied science, technology and business particularly at craft, advanced craft and technical levels. If basic technology can achieve this, the nation will then be sure of bringing up youths of admirable behaviours who, rather than being liabilities to the government, will contribute positively to the social, economical and technological development of the nation (Elom & Ogwa, 2017).

And for a learning environment to be ideal, learning components such as furniture, ventilation, and thermal comfort must be provided (Bosque & Dore, 2010). In addition, Fraser & Fisher, (2012) examined the normal learning climate. They proposed 68^0F to 74^0F as the required learning temperature. Although Lizzio (2012) noted that optimal learning climate varies from region of a country and with seasons of the year. So, the usage of actual learning environment varies according to different type of schools and society. Nevertheless, it is indeed a well-known fact that academic

achievement in mathematics among science students is greatly influenced by several components of learning environment as revealed by various research works (Akinsola., Tella & Tella, 2014).

The school physical facilities in most secondary schools 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, 2014) and Ahmed (2013) 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, 2010). As opined by Felix (2014), a good school organization must have appropriate physical conditions (aesthetic beauty, availability of instructional materials, location) necessary for effective teaching/learning.

Though attention has been focused on the quality of teachers and non-commitment of the students to their studies due to distractions that hamper learning but very little attention has been given to the learning environment (Lucky, 2011). But the environment in which the students learn such as classrooms, libraries and information centers, technical workshops, information and communication technology facilities, multi-purpose halls and performing art spaces, laboratories, health, physical exercises and play grounds, conveniences, sanitation, maintenance culture, aesthetics among others are variables that affect students' learning and academic performance, (Lucky, 2011). Hence, the learning environment remains an important area that should be studied and well managed to enhance students' academic performance. The fact that learning environment can impact on students' academic achievement has been established by studies (Glassman 2014, Persaud & Turner 2010).The physical characteristics of schools have a variety of effects on teachers, students, and the learning process. Poor lighting, noise, high levels of carbon dioxide in classrooms, and inconsistent temperatures make teaching and learning difficult.

 Poor maintenance and ineffective ventilation systems lead to poor health among students as well as teachers, which lead to poor performance and higher absentee rates (Fraser 2015, Lyons 2011). These factors can adversely affect student behaviour and lead to higher levels of frustration among teachers, and poor learning attitude among students.

Denga (2013) 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.

Beyond the direct effects that poor facilities have on students' ability to learn, the combination of poor facilities, which create an uncomfortable and uninviting workplace for teachers, combined with frustrating behaviour by students including poor concentration and hyperactivity, lethargy, or apathy, creates a stressful set of working conditions for teachers (Smiths, 2011). Because stress and job dissatisfaction are common pre-cursors to lowered teacher enthusiasm, it is possible that the aforementioned characteristics of school facilities have an effect upon the academic performance of students. Hence, this study intends to examine the influence of school environment on teaching and learning of Physics in public secondary schools in Ikere Local Government Area of Ekiti state.

The poor academic performance of students in schools with present educational environment has recently become a case for serious concern. This ugly development has been attributed to many factors such as teachers' poor attitude to work; poor infrastructure, examination malpractice; lack of qualified teachers; truancy; poor motivation; Non-payment of salaries and the neglect of instructional

media by teachers etc. In many secondary schools are been established at various places by government, private organizations or individuals (Tella, 2008). As a result, teaching and learning takes place under different environment.

Every school has its location, facilities and also operates under different classroom condition, but all the students are expected to write the same standard examination (i.e. Senior Secondary Certificate Examination) at a completion of secondary education. It may be reasonable to expect a uniform performance from all the candidates since they were taught using the same curriculum and syllabus but in most cases some schools seem outperform others in all respect.

Frankly speaking, there must be a definite determinant that is really responsible for the constant failure or success of various schools. To find out this, it has become necessary to investigate the influence of School Environment on Pupils' Academic Achievement in Basic Technology in public junior secondary schools in Ikere Local Government Area of Ekiti state, Nigeria.

Hypotheses

The following hypotheses are formulated from the research questions:
1. There is no significant influence of school environment on teaching and learning of Basic Technology in public secondary schools.
2. There is no significant impact of infrastructural facilities on teaching and learning of Basic Technology in public secondary schools.
3. There is no significant effect of classroom painting, lighting and aesthetic beauty of the school on Basic Technology students' attitude to school work.

Concept of school Environment

Many scholars have argued that school environment is a variable that can affect students' academic achievement, including performance in examinations (Ajayi, 2011 and Oluchukwu, 2010). The importance of school environment to educational development was so upheld by the authorities and regulatory institutions that school inspectors were parts and parcel of the school system before the advent of military regime in the country. The neglect this aspect has received due to poor funding by the successive regimes of government in the country also reflected in paucity of studies that focuses on this issue. As such school environment remains an important area that should be studied and well managed to enhance students' academic performance.

The recent poor academic performance of secondary school students in Nigeria has been of much concern to the government, parents, teachers and even student themselves. But the quality of education not only depends on the teachers performing their duties, but also in the effective coordination of the school's learning environment (Ajao, 2011).

School environment which include Classroom spaces planning, administrative places planning, circulation spaces planning, spaces for conveniences planning, general infrastructure planning, the teachers as well as the students themselves are essential in teaching-learning process. Adejobi (2012), explained that the extent to which students' learning could be enhanced depends on their location within the school compound, the structure of their classroom, availability of instructional facilities and accessories. It is believed that a school with adequate learning environment contributes to stir up expected outcomes of learning that will facilitate good academic performance, by encouraging effective teaching and learning.

Aesthetic Beauty of the School and Students' Academic Performance

McGuffey's (2012) 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 & Lemasters (2010) 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 2012). Similarly, Chan (2010) found that eighth-

grade students scored consistently higher across a range of standardized tests if housed in new or modernized buildings.

Burkett (2012) 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 & 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, but just how much varies depending on the study and the subject area. For example, Phillips (2011) found impressive gains in Maths scores, but Edwards (2012) 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 (2011) 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 (2014) 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 & Girrbach (2015), Reading and Maths scores improved among the better students when buildings were renovated, but the scores fell among the lowest-performing students.

School Location and Students' Academic Performance

According to Mbipom (2010), 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 learn.

Denga (2012) 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 molding their approaches when compared to rural location students regarding academic achievement.

Olasunkanmi (2014), 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 two students 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.

Influence of school Equipment/Instructional Materials on teaching and learning
On the issue of instructional materials, Mbipom (2010) 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, 2011). Inyang–Abia (2012) 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 Ajari & Robinson (2010), embarked on several researches which include the importance of instructional materials on students. They sampled 200 students 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).

Impact of school physical facilities on teaching and learning
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 & Passiroque (2013) 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 (2010), 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 (2010) 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 & Amhein (2011) 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 (2014) 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 (2014), 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.

Research Method

A descriptive survey research design was adopted for this research study on the impact of literacy intervention on learning of basic science in junior secondary schools in Ikere local government area, Ekiti State, Nigeria.

The population comprises of all Junior Schools Students in Ikere Local government area of Ekiti State which comprises of about 12 public junior secondary schools.

The selection of schools and respondents was done by random sampling technique method, because they serve the purpose of the research study.

The sample for the study was made of 200 Junior secondary School III (JSS III) students of Basic Technology. Simple random sampling was used to select thirty (25) students from each of the 8 schools selected for the study.

The instrument for the study was self-designed questionnaire titled: "Influence of school Environment on Pupils' Academic Achievement in Basic Technology in public junior secondary schools in Ikere Local Government Area of Ekiti state, Nigeria." (A case study of Ikere-Ekiti Local Government Area)" it is a structured questionnaire, developed along the lines of the research questions raised for the study. The questionnaire contains two sections: A and B.

Section A of the instrument requested for the student identity, such as: gender, class and name of school. Section B contains the questions on Influence of school Environment on Pupils' Academic Achievement in Basic Technology.

To rate the items, a four-point rating scale was used to identify the impact of literacy intervention in the learning of Basic Science. The response pattern used for the items is Strongly Agreed (SA), Agreed (A), Disagreed (D), and Strongly Disagreed (SD).

The instrument was subjected to validity and reliability mechanism. Test-re- test method was used to ensure the reliability of the instrument.

The researchers personally administered the instrument (questionnaire) on the selected sample to elicit the relevant information needed for the study. Three research questions were raised and tested at 0.05 level of significance. The data collected were analysed using Chi-Square (X^2) statistical analysis package.

Results and Discussions

Research Hypothesis 1
There is no significant influence of school environment on teaching and learning of Basic Technology in public secondary schools.

Table 1: Chi-Square Analysis on the influence of school environment on teaching and learning of Basic Technology in public secondary schools.

S/N	Items	X^2 – cal	X^2– table	df	Remark
1	Students who feel safe, cared for and supported have better academic achievement in Basic Technology.	18.40	7.82	3	*
2	Students who do feel secured in a school environment achieve better in their academics	16.12	7.82	3	*
3	Positive interpersonal relationships and optimal learning opportunities in a school environment can increase achievement levels of students in Basic Technology.	17.23	7.82	3	*
4	Culturally conscious school environment can significantly shape the degree of academic achievement level of students in Basic Technology.	23.03	7.82	3	*
5	Students in schools with a better school environment have higher achievement and better socio emotional health.	10.34	7.82	3	*

P<0.05   * = Significant

Research Hypothesis 2
There is no significant impact of infrastructural facilities on teaching and learning of Basic Technology in public secondary schools.

Table 2: Chi-Square Analysis on the impact of infrastructural facilities on teaching and learning of Basic Technology in public secondary schools.

S/N	Items	X^2– cal	X^2–table	df	Remark
1.	Lack of infrastructural facilities affects the students' academic achievement in Basic Technology and their progress in school.	18.23	7.82	3	*
2.	Inadequate infrastructural facilities among teachers results to retarding students' academic achievement in Basic Technology.	21.23	7.82	3	*
3.	Unavailability of learning resources is serious threat to effective teaching and learning of Basic Technology.	31.87	7.82	3	*
4.	Lack of well-equipped Basic Technology workshop tends to have tremendous influence on teaching and learning of Basic Technology.	38.52	7.82	3	*
5.	Adequate instructional materials result to good academic performance of students in Basic Technology.	26.42	7.82	3	*

P < 0.05,   *= significant

Research Hypothesis 3

There is no significant effect of classroom painting, lighting and aesthetic beauty of the school on Basic Technology students' attitude to school work.

Table 3: Mean Ratings on the effect of classroom painting, lighting and aesthetic beauty of the school on Basic Technology students' attitude to school work.

S/N	Items	X^2– cal	X^2–table	df	Remark
1.	Adequate provision of infrastructures makes students learn with ease thus bringing about good academic achievement in Basic Technology.	20.04	7.82	3	*
2.	Poor and inadequate physical facilities, obsolete teaching techniques, overcrowded classrooms leads to poor academic achievement of students in Basic Technology.	24.52	7.82	3	*
3.	School facilities when provided will aid teaching learning programme and consequently improve academic achievement of students in Basic Technology.	32.43	7.82	3	*
4.	Facilities form one of the potent factors that contribute to academic achievement of students in the school system.	27.08	7.82	3	*
5.	Unattractive school buildings and overcrowded classrooms contributes to poor academic achievement of the students in Basic Technology.	19.42	7.82	3	*

$P < 0.05$,   *= significant

Discussion

The results in 1 (i.e Chi-Square Analysis on the influence of school environment on teaching and learning of Basic Technology in public secondary schools) revealed that X^2 – calculated value of 18.40, 16.12, 17.23, 23.03 and 10.34 for items in serial numbers 1,2,3,4 and 5 respectively in the questionnaire at $P < 0.05$ and if df = 3. A cursory look at the values showed that all the calculated values (i.e X^2– cal) is greater than the critical values of 7.82 (i.e X^2 – table value). This shows that all the items are significant. This implies that there is significant influence of school environment on teaching and learning of Basic Technology in public secondary schools. This finding agrees with the views of Megan (2012), whose research on school environment in high-risk urban environments indicates that a positive, supportive, and culturally conscious school climate can significantly shape the degree of academic success experienced by urban students". This result is in line with the findings obtained by Olasunkanmi (2013), who in his research on the influence of school l environment 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.

Similarly, the result in table 2 (i.e Chi-Square Analysis on the impact of infrastructural facilities on teaching and learning of Basic Technology in public secondary schools) revealed that X^2 – calculated value of 18.23, 21.23, 31.87, 38.52, and 26.42 for items in serial numbers 1,2,3,4 and 5 respectively in the questionnaire at $P<0.05$ and df=3. A good look at the values revealed that all the calculated values (i.e X^2 – cal) is greater than the critical value of 7.82 (i.e X^2 – table). This shows that

all the items are significant. This implies that there is significant impact of infrastructural facilities on teaching and learning of Basic Technology in public secondary schools. This finding is in consonance with the opinion of Hallak (2010) who states that facilities form one of the potent factors that contribute to academic achievement of students in the school system. They include the school buildings, classroom, accommodation, libraries, laboratories, furniture, recreational equipment, apparatus and other instructional materials. He went further to say that their availability, relevance and adequacy contribute to academic achievement of students. He however, quickly added that unattractive school buildings and overcrowded classrooms among others contribute to poor academic achievement of the students in primary and other levels of education.

Moreover, the result in table 3 (i.e Mean Ratings on the effect of classroom painting, lighting and aesthetic beauty of the school on Basic Technology students' attitude to school work) revealed that X^2 – calculated value of 20.04, 24.52, 32.43, 27.08, and 19.42 for items in serial numbers 1,2,3,4 and 5 respectively in the questionnaire at $P<0.05$ and df=3. A good look at the values revealed that all the calculated values (i.e X^2 – cal) is greater than the critical value of 7.82 (i.e X^2 – table). This shows that all the items are significant. This implies that there is significant effect of classroom painting, lighting and aesthetic beauty of the school on Basic Technology students' attitude to school work. Thus, students' academic achievements are tried to these components of learning environment. Owolabi (2012) explains that students can perform better if classrooms have enough lighting and the quality of lighting and painting influence students' academic performance in science. The research also reveals that poor ventilation must be catered for and equally be discouraged so that the classroom temperature should be kept moderate in order not to hinder quality academic activities. Overcrowd does harm to learning science as indicated by the research.

Conclusion

Based on the results of this study, it was concluded that school environment, physical facilities and classroom painting, lighting and aesthetic beauty of the school has significant influence on teaching and learning of Basic Technology in public junior secondary schools in Ikere-Ekiti Local Government Area.

Recommendations

Based on the findings of this study and conclusion, the following recommendations were made:
i.   Government should provide adequate school physical facilities in secondary schools to enhance teaching and learning processes.
ii.   The Parent Teacher Association (PTA), philanthropist and other charitable organizations are also implored to compliment the effort of the government to boost availability of physical facilities and classroom painting, lighting and aesthetic beauty of the school.
iii.   Government should provide facilities like modern laboratories, functional libraries, and comfortable classrooms for better academic performance; in addition to effective maintenance or renovation of old buildings, chairs, desks, recreational equipment among others should be part and parcel of the schools system.
iv.   The state governments should pay more attention to education by providing the necessary funds to the principals and school administrators to not only provide necessary learning facilities but maintain existing structures, while a board at the level of the state government can be established to regulate private schools to ensure that standards are maintained.
v.   Parents and the stakeholders through P.T.A. should work to see that the learning environment conform to UNESCO standard.
vi.   Government should improve the condition of classroom by providing electric fittings besides renovations of schools.
vii.   The Ministry of Education and indeed all stakeholders in the education sector should work towards the provision of adequate physical facilities and instructional materials.

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