

INFLUENCE OF SCHOOL PLANT ON THE MANAGEMENT OF SECONDARY SCHOOLS IN ZONE “B” SENATORIAL DISTRICT OF BENUE STATE, NIGERIA

ELUJEKWUTE, EDWIN CHUKWUAGUZIE (PhD)
Department of Educational Foundations
Faculty of Education
Benue State University, Makurdi, Benue State, Nigeria
E-mail: elujekwuteddy@gmail.com Tel: +2348037530328

&

DAAGU, JOHN IORLAHA
National Open University, Adikpo
Benue State, Nigeria
E-mail: daaguji@gmail.com Tel: +2348051797979

&

IKWEN, AUGUSTINE USHUNAMOKA
Department of Educational Foundations
Federal College of Education,
Obudu, Cross River State, Nigeria
E-mail: austineikwen@gmail.com Tel: +2348035333189

Abstract

This study investigated the Influence of School Plant on the Management of Secondary Schools in Zone ‘B’ Senatorial District of Benue State of Nigeria. Specifically the study investigated the influence of School Site/location, Medical Facilities and School Laboratories in Secondary Schools. Three research questions and three hypotheses guided the study. The review of related literature was done under the conceptual frame works which identified the Influence of school site/location, medical facilities and school laboratories on the Management of Secondary Schools in Zone ‘B’ Senatorial District of Benue State of Nigeria. The descriptive survey design was adopted for the study. The population of the study comprised two thousand eight hundred (2800) teachers in sixty-five (65) grant aided secondary schools in the study area, out of which two hundred and ninety eight (298) teachers from twelve (12) grant aided secondary schools constituted the sample of the study. A 15- item structured questionnaire developed by the researchers titled “Influence of School Plant and Management of Secondary School Questionnaire (ISPMSSQ)” was used for data collection. Data obtained for the study were analyzed using descriptive and inferential statistics. Mean and Standard Deviations were used to answer the research questions while the Chi-square(χ^2) test of goodness of fit was used to test the hypotheses. The null hypotheses were tested at 0.05 level of significance. The finding of the study revealed that school site/location, school medical facilities and school laboratories have significant Influence on the Management of Secondary Schools in Zone “B” Senatorial District of Benue

State of Nigeria. It was recommended among others that educational administrators should ensure that schools are sited/ located in areas that will encourage effective teaching and learning. The Government should ensure that sufficient medical facilities are provided for teachers and students as to encourage effective and efficient teaching and learning process in schools. Also the Educational Administrators should ensure that school laboratories are stocked with sufficient chemicals, equipment and functional instruments in schools so as to enable teachers and students carryout effective experiment and practical. The implications of the findings were highlighted and Conclusion drawn based on the study.

Keywords: Influence, School Plant, Secondary Education, School Site/Location, Benue State.

Introduction

Education is regarded as machinery for development process for bringing positive change in that society. The primary aim of the teaching and learning process is to bring about in the learner desirable change in behavior through critical thinking. The process does not take place in a vacuum but rather in the environment structured to facilitate learning. The school comprises the site, buildings, play grounds, health clinics and all forms of school equipment and all other facilities.(Asiabaka, 2015). The school plant is also known as the controlled environment which facilitates teaching and learning process as well as being of the occupants. Oyesola (2007), states that the school plant availability is to satisfy educational goals which have been predetermined by educational planners. A good school plant enhances better school programmers and the community needs by providing a place for psychological and physical safety for students and teachers and enhance the quality and quantity of instructions. School plant availability and utilization include school location, instructional space, administrative space, classroom facilities, recreational facilities which are relevant in the teaching and learning process in the educational system. The rate at which these spaces may enhance proper teaching and learning depends on the location of structure and facilities within the school environment. A proper school plant in terms of location, structure and facilities would encourage effective teaching and learning and enhance better learning environment.

However, Akpakwu (2012) states that school plant should start and end with the students and staff. This means that school facilities should be designed to satisfy the physical and emotional needs of both staff and students. The physical needs of staff and students can only be met by ensuring safe structures, adequate sanitary facilities, balanced visual environment, an appropriate thermal environment and sufficient accommodation of their work and relaxation. The emotional needs of both staff and students can be met by creating conducive and pleasant surroundings, a friendly environment and an inspiring school environment that is capable of increasing students' academic performance. The teaching and learning process involves large number of learners coming together to acquire knowledge. In view of the foregoing, this is not possible without physical spaces, and facilities which aid teaching and learning. A well developed curriculum would not succeed if it is not supported with adequate facilities. A well trained teacher who can improvise would not succeed if he or she does not have the minimum facilities to work with. Indeed, teaching and learning and other sporting activities of the school can only successfully take place in a conducive environment. The school plant therefore

has to create favorable environments for teachers to use their creativity and knowledge in teaching and for the students to learn properly (Elujekwute, 2015).

In the similar vein, the selection of school site or location is one aspect of the school plant planning that is very important and should be taken seriously by the educational administrators. The school site/location should be such that is accessible for students and teachers for effective teaching and learning. The school site/location is an essential part of school plant planning as well as educational planning because of its significant influence on effective and efficient teaching and learning process, the adequacy of school site/location is established by determining the accessibility of the site or location to students and teachers. The location of the school affects the students and teachers performance. Schools that are located in urban areas perform better than their counter parts in the rural areas (Adesine, 2012). Effective teaching and learning of science can only take place in a school that has a well equipped and maintained laboratory. According to Ada (2006) school laboratory is an inseparable part of teaching and learning in both secondary and tertiary institutions and should be properly planed to serve the purpose of its existence in the school. The contribution of the school laboratory is enormous if the laboratory is properly planned, maintained and managed; it encourages students' interest in learning of science while it helps the science teachers in teaching, carrying out experiment, research and professional development. However, Nwachukwu (2007) states that most safe health measures to be taken in schools should be proper care of buildings, number of lightings, effective ventilation suitable and attractive furniture. Other important considerations include ample-supply to safe drinking water, accident free and clean play fields, adequate storage facilities especially first aid box and other health facilities, insect free and control measures and food hygienic. This is because the performance of an individual in an educational organization depends on the level of health care that is given to such a person.

School management is concerned with formulation of plans programs and policies According to Asemah (2010) school management involves activities as planning, organizing, programming, staffing, budgeting, coordinating, reporting and evaluation. Management is the effective organization and utilization of the human and material resources in a particular school or system for the achievement of indentified objectives in educational organization. It is also a social process which is designed to ensure the cooperation, participation, intervention and involvement of others in the effective achievement of given or predetermined objective. Educational management is a variety of sequential and related activities carried out in order to effectively and efficiently meet the goals of teaching and learning in relation to the needs of the society, since the management of education in the state is in different levels, school administrators must develop certain strategies for carrying out their duties. In doing this, certain administrative strategies are used by school managers to enhance the proper maintenance of school plant in secondary schools.

Statement of the Problem

It is clear that the Nigeria government has good motives to fulfill secondary school educational policy. It has been observed that secondary education has experienced critical environmental issues in attaining the educational goals in Benue State of Nigeria. These include; school site/location, medical facilities and provision of functional school laboratories, provision of instructional materials and among others. Education is the process of bringing

desirable changes into the behavior of human beings for self use and the society. Educational goals can be achieved through effective and efficient management. This can be achieved when there are adequate school facilities, functional laboratories, libraries, instructional materials, medical facilities among other educational resources. It has been observed that there seems to be no enabling environment to enhance the management of public secondary schools in Zone 'B' Senatorial District, Benue State of Nigeria. In view of the above the staff may not be eager, encouraged or willing to teach due to inadequate infrastructural facilities and inadequate enabling environment. This greatly affects teacher's morale because the school site/location is not in the convenient environment, the essential facilities such as medical facilities, laboratories and libraries are insufficient for both teachers and students to achieve effective teaching and learning process. This is because inadequate provision of infrastructural facilities for an enhanced school learning environment has manifested in most schools today and their ineffective use lead to poor academic performance. It is a fact that teachers' moral is likely to affect the students either positively or negatively because of inadequate provision of equipped laboratories and provision of health care in secondary schools in Zone "B" Senatorial District of Benue State of Nigeria. This is because observations by the stakeholders and educational administrators revealed that the Nigeria educational institutions are faced with the problem of insufficient funds necessary to carry out their educational activities. It is against this background that the problem of this study is to determine the influence of school plant on the management of secondary schools in Zone "B" Senatorial District of Benue State in areas of school site/location, medical facilities and provision of functional laboratory facilities.

Purpose of the Study

The purpose of this study is to investigate the influence of school plant on the management of secondary schools in Zone "B" Senatorial District of Benue State of Nigeria. Specifically the study sought to:

1. ascertain the influence of school site/location on management of secondary school in Zone B Senatorial District of Benue State of Nigeria.
2. determine the influence of medical facilities on management of secondary schools.
3. examine the influence of school laboratories on management of secondary schools.

Research Questions

The following research questions guided the study

1. In what ways do school site/location influence management of secondary school in Zone 'B' Senatorial District of Benue State of Nigeria?
2. To what extent do school medical facilities influence management of secondary schools?
3. In what ways do school laboratories influence management of secondary schools?

Research Hypotheses

The following research hypotheses were formulated and tested at 0.05 of significance.

1. School site/location has no significant influence on management of secondary schools in Zone 'B' Senatorial District of Benue State of Nigeria
2. School medical facilities have no significant influence on management of secondary schools.
3. School laboratories have no significant influence on management of secondary schools.

Significance of the Study

The findings of this research could be beneficial to school administrators, students, teachers, society and other researchers in the sense that it could expose the need for the provision of enabling school environment that will enable teachers and students to perform well and achieve the goals of secondary education. The finding will also identify factors and strategies to be used by the school administrators to improve in the provision and maintenance of school plant management in Zone "B" Senatorial District of Benue State. The students could benefit if the problems are solved; for it will improve the teaching and learning process, the end result which will be an improvement of students' academic performance in the secondary schools. The result of this study will serve as guide to other researchers who may wish to carry out further research in this area; it may also serve as a source of information for a research.

Review of Related Literature

The review of related literature is carried out under the following sub-headings;

Concept of School Plant

School plant is the process of identifying, selecting and acquiring a suitable site of the school to be located, erecting appropriate physical structure that will assist in achieving the educational goals. The planning process involves citing, construction and provision of recreation spaces for the achievement of educational objectives. School plant is a comprehensive process in which a suitable site is chosen and adequate buildings are designed with the aim of satisfying the educational needs of the students and teachers. According to Elujekwute (2015), essentially, school buildings are designed to meet the educational programmers' requirement and satisfy the students and teachers physical and emotional needs. The quality of instruction given to the students by the teachers depends on the type of school building and the learning environment. This is the reason why it emphasized that the school building should be adequately considered, planned effectively and executed thoroughly to allow for effective teaching and learning. According to Ikpuuor (2017) school plant is usually defined to include the site, the building, equipment and all facilities of a school or the controlled environment which facilitates the teaching and learning process while at the same time protecting the physical well being of the occupants.

It is in the light of this, that the children are considered very important in the school plant planning. The whole environment should be that which satisfy all the development needs of the students and teachers. School plant is the physical expression of spaces interpretation of the curriculum because the curriculum determines the type of school plants to be designed. Elujekwute (2017) views school plant as the school site buildings, equipments and play ground which are designed to facilitate effective teaching and learning and also enhance the physical and emotional needs of staff, students and the general public. In order words the school plant can be viewed as a controlled environment that facilitates the teaching and learning process while at the same time protecting the physical well being of both staff and students in a school. Elujekwute further maintains that school plant management involves the process of planning to meet the physical facilities that are needed to facilitate the teaching and

learning process in the educational organization. It includes the procurement and maintenance of the school physical facilities for effective and efficient teaching and learning.

Akubue (2009) defines school plant to embrace permanent and semi-permanent structures as well as machines, laboratory equipment, workshop tools, the chalkboards among others. There are five major spaces necessary on the school site to enable it carry on the effective activities of teaching and learning. These major spaces are instructional spaces that are set aside for students to receive instructions they include classrooms, auditorium, gymnasium, library, laboratory, workshops, art room, music room, multipurpose rooms and all other rooms set aside for students to receive learning instructions. Administrative space is any major spaces necessary on the school site, these are spaces set aside for administrative offices of the school administrators, other staff member offices. Circulation spaces are also necessary which are meant to occur in corridors, lobby, staircases and other spaces where students can recreate. Spaces for convenience are also necessary in the school site, these spaces are designed for toilets, bathrooms cafeteria, kitchen, dormitories, custodian sheds, stores and among others. Finally Accessories spaces are also major spaces necessary on the school site, these are spaces meant for car parks, relaxation and football, tennis field Volleyball court and tennis lawn. According to Elujekwute (2015) the availability of these facilities in (quantity and quality) determines the quality of instructions and students' performance in the schools internally and externally conducted examinations. Babalola (2009) opines that school plant embraces both permanent and semi-permanent structures on the school premises as well as means of transport; teaching equipment and even the School plant are the non-consumable materials in the schools for the promotion of teaching and learning activities.

Concept of School Plant Management

The school plant is the physical facilities available in the school; this can be likened to the capital in production industry. There is no gainsaying that school plant is necessary ingredients towards achievement of effective teaching and learning activities. As result of this, there is need to ensure availability of school plant and it should be maximally utilized and maintained by educational administrators, students and staff. Uko (2015) observes that inspectors' reports over the years have indicated that there is abundant evidence of catalogue of inadequacies in the provision and judicious utilization of school buildings and instructional materials. Uko further states that the proportion of increase in student population in Nigeria secondary schools year in year out is much higher than the proportion of increase in the provision of school plant. This is worrisome that government has not considered the need to expand or put in place new school plant in the same proportion to student population growth. This has let to over-utilization of the existing school plant because of the pressure on them. Therefore, management of school is the process of planning to meet the needs of the school in term of physical facilities, maintaining and keeping such facilities in good condition at all times so that the facilities can be use as at when needed for teaching and learning activities. School plants or school physical facilities are essential aspect of educational management. Effective and efficient teaching and learning may not be achieved if schools are wrongly located or sited and if classrooms are not well constructed or if equipment available are over-utilized, under-utilized or are not well maintained.

Ogundele and Moronfoye (2013) posits that effective management of school plants is a must to make the school pleasant, save and comfortable place for the activities of the community.

One of the important duties of the school administrators is the maintenance of school plants. However, according to Elujekwute (2015) maintenance of school plants is an important aspect of school management. It is the activities embarked upon by educational administrator to ensure that educational institutions remain in the same state. This activities includes repairs, servicing, painting, greasing among others. Elujekwute further maintains that maintenance can be those activities put in place to keep and restore the original condition of an item, when activities such as repairs, servicing, painting among others are put in place to keep or restore the original condition of an item is being maintained. The aim of maintenance of school plants is to ensure that it remains in the best condition for educational instruction at all times. Emetarom (2003) observes that construction of a new block of classroom and other building alteration to the existing building are not the whole housing effort, it also involves the continuing operation and maintenance of the school plants. It is therefore necessary for educational administrators to have the knowledge of operating and maintaining school plants. School plant maintenance requires maximum cooperation and hard work from the officers of Ministry of Education, the school administrators, the school staff (academic and non-academic) the students and the community where the educational institution is located. According to Akpakwu (2012) listed the types of school plant maintenance to include preventive and predictive maintenance, corrective and emergency maintenance, breakdown maintenance, running maintenance and shutdown maintenance. The achievement of the overall goals and objectives of education revolves around the ability of the learners to utilized the various opportunities offered by the educational institution and its environment. It is not just imperative that educational institution should have a functional school plant, it equally very important that each school plant be well managed and maintained to improve students' academic performance and teachers development.

Influence of School Site/location on Management of Secondary Schools in Zone "B" Senatorial District of Benue State of Nigeria.

School plant is a major component of school environment including physical facilities. The selection of school site/location is one of the school plant planning is very important and should be taken seriously. The school site should be that is accessible for students and teachers for effective teaching and learning. The school is an essential part of school plant planning as well as educational planning because of its significant influence on teaching and learning process. The adequacy of school site/location is established by determining the accessibility of the site to students and teachers. The location of the school affects the students and teachers performance. Schools that are located in urban areas perform better than their counter parts in the rural areas. The site for the building of the school should be considered as important to educational programmers as the classrooms and other instructional resources (Adsina, 2012). Akpakwu (2012) asserts that teaching and learning takes place in classroom or spaces. The teaching and learning process involves large number of learners coming together to acquire knowledge this will not be possible without physical spaces and facilities which aid teaching and learning. A well developed curriculum would fail, if it is not supported with adequate facilities. A well trained teacher who can improvise would not succeed if he or she does not have enough facilities to work with. Indeed teaching and learning and other support activities of the school can only successfully take place in a conducive environment for teachers to use their creativity and knowledge in teaching and for the students to learn properly.

Akpakwu further maintains that the appearance and flexibility of the school plant do affect the feeling and behavior of the staff and students who occupy the buildings. That very beautiful appearance can be of a special attraction not only to the students and staff, but more importantly to the people of the community and beyond. The school plant therefore satisfies the physical and emotional needs of students' teachers and non teaching staff of the school. Adebayo (2008) observes that the level of negligence of school plant planning in Nigeria educational system and in Zone 'B' Senatorial District of Benue State in particular is rather appalling, casual visit to any of the secondary schools would reveal the extent to which these educational institutions decayed. Adebayo further explains that educational facilities at all levels are in a terrible shape due to lack of planning. Schools are littered with battered structures, worn out equipment, where they exist, overcrowded classrooms, inadequate manpower in quantity and quality, instability in the academic calendar owing to strikes, very low teachers' morale due to poor remuneration and poor working condition. Therefore, it is pertinent to redress the deplorable situation of the educational system in order to improve academic standard. The school plant involves planning school items like building, furniture, among others as accurate as possible in their original position and condition. Since the school plant is the space interpretation of the school curriculum facilitating teaching process. It is therefore positively related to students' academic performance. Proper school plant location ensures effective delivery of school curriculum and enhances students' performance in secondary schools. Curriculum finds its physical expression in construction and arrangement of the school plant, which is a controlled environment that process and also protects the physical well being of the students and teachers.

In the similar vein, the topography and soil condition of some secondary school site are bad in some areas some of the secondary schools were sites very close to the industrial, market places, cinema houses and close to the high way whereby external noise of the environment may distract the attention of the students from concentration, school site in some schools lack adequate planning of school plant for instance in some schools in the rural area the instructional space are poorly located very close highways, not spacious poorly ventilated and no proper lighting while circulation space and administrative space whereby allow the teacher to be staying under the shade of trees and use it as their office it appears that the instructional space in some secondary schools are not properly planned. In some cases classrooms are not spacious enough, there no adequate ventilation and proper lighting in the classrooms which makes than not to be conducive for effective and efficient teaching and learning. According to Oyesola (2007) school plant planning is to satisfy educational goals which have been predetermine by educational planners. Oyesola further stresses that better planned school plant will enhance better programmed and community needs by providing a place for psychological and physical safely for both students and teachers and also enhance better quality control of instructions.

However, Ehiamelalor (2005), Okenwa and Igbo (2013) and Anifowose and Lawa (2013) agrees that school plant includes the school site/location, building, equipment which also include the permanent structures like workshop, libraries, classrooms laboratories, hostels, assembly halls health care among other facilities in the school. Adeogun (2005) maintains that school sites needs to be adequately planned in order to ensure both effectiveness and efficiency of the educational system. The importance of school site/location planning in the development of an effective educational programmers at levels of education particularly

secondary schools should not be underestimated. The attainment of an effective teaching and learning is closely related to the planning of school site/location (Anike & Tari, 2011). School site/location planning is essential in teaching and learning process in secondary schools.

Influence of Medical Facilities on Management of Secondary Schools

The school environment include psychological ambience, the physical facilities are critical for students and teachers to acquire healthy values and habits and should be consistent with the reinforce health instruction and practice, school buildings and surrounding should be safe health protective. Nwachukwu (2007) states that most safe health measures to be taken should be proper care of buildings adequate lightings, effective ventilation, suitable and attractive furniture. Other important consideration include ample supply to safe drinking waters accident free and clean play fields, adequate storage facilities especially first aid box and other health facilities, insect free and control measures and food hygiene. Health facilities in addition may be safe guide location of school as well as inculcation of good health habits to students and teachers. The performance of students of educational organization depends on the level of good health care. This implies that the provision of health care services by education administrators for the students and teachers will motivate them to work hard and increase their performance. This is so because, their families would no longer suffer going to hospitals where they may not be given proper attention mostly when there is no fund at hand.

According to Ugwusa (2003) agrees that the variety, the amount and kind of health service provided in the educational system will certainly depend upon the financial support given the secondary schools by the educational managers. The modernism, the relative conservation and political affiliation of the people of the particular community of the school also do influence the type of health services a school can have, however the society has either to choose to provide for better education and health services or choose to pay great cost for not doing so in the form of illness of staff loss at work, decreased physical capacity for production, delinquency and crime among others. It is not only sensible but imperative that health and physical well being of the people in the school should be protected as far as possible. When the government are responsible for medical ills of their staff and their family the staff will be indeed to putting up his or her best. When a staff is moving from classes to staff room in bound to affect the health of teachers and reduce performance due to stress. Organizational health care is very vital especially occupational stress reduction scheme or programmers to improve on their health thereby increasing performance. This should be done by arranging time off for staff to check their fitness level at designated places. The provision for free medical services for staff and even members of their families would motivate them to become committed in achieving the goals of the educational organization. Cook (2008) in Adesina (2012) suggests that educational organizations should ensure that specific health care services should involve the employees, such health care services should also involve the communities in which they thrive, this will enhance curdle relationship between the school and community.

In educational organizations, health is higher than productivity or performance, there is no gain saying that health is said is wealth. The state of both physical and mental well being of teachers and students should be the major concern of the employer or educational administrators. According to Out and Shima (2009), the distinction between safety and health is somewhat arbitrary in the sense that "Safety generally refers to hazards resulting in direct injuries such as cuts, bruises, sprains, impaired hearing, loss of eyesight and broken limbs"

Health refers more to the role of working environment in producing disease and illness. The situation avails in the educational institutions where teachers and students may be injured for example the physical Education teachers become sick in the course of their duties or laboratory teacher getting burnt by chemical factions and among others. All these means, that something must be done to assist the staff that is affected. For most educational organization the function of medical services has been to provide pre-employment physical examination, to review claims for workers and offer first aid and other routine. First aid and other routine medical services, it is unfortunate that in our present dispensations educational organizations do not and cannot render such medical services, what actually is rendered is the time staff may be allowed to go to clinic and hospitals but it does not cover the cost for consultation and drugs. This is a terrible situation the performance of students and teachers of educational organizations depends on the level of good health care services been provided in the schools.

Influence of Laboratories on Management of Secondary Schools

Laboratories have been found to be the scientists' workshop where practical activities are conducted to enhance meaningful learning of science concepts and theories. Laboratories are the primary vehicle for promoting formal reasoning skills and student understanding, thereby enhancing desired learning, achievement and academic performance of students (Elujekwute, 2019). A well equipped laboratory is the store house of knowledge and experiment for both teachers and students of science. If the laboratory is properly planned, maintained and managed, it encourages students' interest in learning of science while it helps the science teachers in teaching, carrying out experiment, research and professional development. On the other hand, a poorly maintained laboratories or workshop with scantily and expired chemicals, instruments, leaking roofs fallen ceilings, broken windows and cracked floors discouraged students learning of science and carry out of experiments/practical and use of the laboratory in general. According to Fenker (2004) effective teaching and learning of sciences can only take place in school that has a well equipped and maintained laboratory. Ada (2006) notes that the school laboratory is an inseparable part of teaching and learning in both secondary schools and tertiary institutions and should be properly planed to serve the purpose for its existence in the schools, the contribution of the schools, the contribution of the school laboratory is enormous in the management of secondary school education. Laboratories activities should be one as a routine, the school laboratory should be equipped with up to date chemicals, instruments to enable students carry out their experiment and practical to enhance students' desired performance. The broken doors and windows should be repaired with dispatch, the fire fighting devices should be provided and stationed at strategic points for use in times of emergency.

According to Elujekwute (2019) a laboratory is the heart of a good scientific programmer which allows students in the secondary school have experiences which are consistent with the goals of scientific literacy. This implies that science teaching and learning cannot be completely done in secondary school where there is no equipped laboratory, where laboratories running dry lab, lack of reagents and tools to conduct practical and experiment, kerosene stoves as improvised Bunsen burners. If the school laboratory is properly planned, maintained and managed, it could encourage students' interest in learning of science, while it can also help the science teachers in teaching carrying out experiments, research and professional development. Unfortunately, these types of school plant facilities such as laboratories are lacking in the secondary schools due to inadequate funding and inadequate

maintenance of existing school plant in the study areas. According to Okebukola (2005) shortage of funds available to secondary schools and lack of maintenance of school plant available to secondary schools have been responsible for poorly maintained laboratory and workshop with scarcity and expired chemicals, instrument, leaking roofs, fallen ceilings, broken windows and cracked floors which discourages students learning of science and carrying out experiment and practical and use of the laboratory in general. Effective teaching and learning of science can only take in a school that has adequate school plant facilities such as a well equipped and maintained laboratory (Alabioduwale & Fasasi, 2012).

However, laboratory teaching makes the students/learner to learn about the nature of science and technology in order to faster the knowledge of human enterprise of science and thus enhance the aesthetic and intellectual of the child. Akwam (2005) emphasizes that science education needs to build on the knowledge and skills acquired by the learners so that students can understand the scientific principles, laws and theories. The adequacy of school plant facilities such as laboratories used during science instruction help to develop values that aid the learners in decision-making. Asiyai (2012) states that science educators believe that the laboratories are an important means of instruction in science. Asiyai further states that the laboratory instruction is considered essential because it provides training in observation, supplies detailed information and arouse students' interest. Asiyai also goes further to adds that developing and teaching in an effective laboratory requires as much skill, creativity and hard work as proposing and executing a first-rate research project. Mgbodile (2004) states that hands on experiment encourages students to develop a spirit of inquiry and allows them to acquire scientific skills and the right attitude to handle scientific tools and materials science laboratory provides students with the richest experience which the will transfer to the society and their various of work.

Methodology

The area of the study was Benue North-West Senatorial District is known as Zone 'B' in Benue State of Nigeria. The Senatorial District has Seven Local government which includes Buruku, Tarka ,Guma, Makurdi, Gwer and Gwer West. The population of the study comprised Two thousand eight hundred (2800) teachers from 65 grant aided secondary schools in Zone 'B' Senatorial District of Benue State, Nigeria. Sample of two hundred and ninety-eight (298) teaches from twelve (12) selected secondary schools was used for the study. Stratified random sampling techniques were used to select the sample size because the population was heterogeneous. A 15 item structured questionnaire developed by the researchers titled "Influence of School Plant and Management of Secondary School Questionnaire (ISPMSSQ)" was used for data collection. The questionnaire was validated by experts in Department of Educational Management and Test and measurement from the Faculty of Education, Benue State University, Makurdi. The questionnaire was trial tested using 30 teaches from two secondary school in Katsina-Ala Education Zone that were not part of the sampled population. The data collected was analyzed using Cronbach Alpha Correlation Co-efficient which yielded 0.84. The coefficient indicated high internal consistency which proved that the instrument was reliable to be used for field work. The data collected was analyzed using simple descriptive statistics of Mean and Standard Deviations to answer research questions. A mean cut-off point of 2.50 was used for decision making. Any mean score of 2.50 and above was accepted as been significant while any mean score below 2.50 was rejected as not been

significant. The research hypotheses were tested using chi-square (χ^2) of goodness of fit at 0.05 level of significance.

Result and Findings

Research Question 1:

In what ways do school site/location influence management of secondary schools in Zone 'B' Senatorial District of Benue State, Nigeria?

Table 1:

Mean Ratings and Standard Deviation of Teachers on the Influence of School Site/Location on the Management of Secondary Schools in Zone 'B' Senatorial District of Benue State of Nigeria.

Item No	Item Description	SA	A	DA	SD	X	STD	Decision
1	Our school is located close to the high way	101	108	70	19	2.98	0.91	Accepted
2	The school has permanent site	86	127	52	33	2.89	0.95	Accepted
3	The school site has trek able distance from the home	96	115	66	21	2.96	0.91	Accepted
4	The school site if properly managed promotes teaching and learning process.	119	114	39	26	2.25	0.75	Accepted
5	Sitting of schools close to cinema houses, market places among others is not conducive for learning	202	62	23	11	3.37	1.01	Accepted
Cluster mean/standard deviation						3.09	0.91	Accepted

Data presented on Table 1 showed that the mean ratings for item 1-5 were 2.98, 2.989, 2.96, 2.25 and 3.37 respectively with corresponding standard deviations of 0.91, 0.95, 0.91, 0.75 and 1.01. The mean ratings of items 1, 2, 3 and 5 are above the cut-off point of 2.50. This means that the respondents agreed that school site influence the management of schools. They also agreed that their school is located close to the high way, the schools have permanent site, the schools have trek able distances from the home. However, item 4 with the mean score of 2.25 is below the cut-off point of 2.50 with means disagreement. The respondents disagreed that the school site is if properly managed will promotes teaching and learning process and sitting of schools close to the cinema houses, market places among others is not conducive for learning. The cluster mean of 3.09 with the standard deviation of 0.91 was also found to be above the cut-off point of 2.50. This implies that school site influence the management of secondary schools in Zone 'B' Senatorial District of Benue State.

Research Question Two:

To what extent does a medical facility influence the management of secondary schools in Zone 'B' Senatorial District of Benue State, Nigeria?

Table 2:
Mean Rating and Standard Deviation of Teachers on the Influence of Medical Facilities on the Management of Secondary Schools

Item No	Item Description	SA	A	DA	SD	X	STD	Decision
6	Provision of medical services enhance teaching and learning process	169	100	19	10	3.44	0.76	Accepted
7	Our school provides medical facilities for teachers and students.	146	91	43	18	3.42	0.91	Accepted
8	Free medical services when given to staff reduce their expenses.	124	118	34	22	3.15	0.90	Accepted
9	Medical services give staff and students a sense of belonging.	128	94	61	15	3.12	0.91	Accepted
10	Medical services boost staff and students morale	115	112	45	26	3.06	0.94	Accepted
Cluster mean/standard deviation						3.20	0.88	Accepted

The data presented on Table 2, showed that the mean ratings for item 6 – 10 were 3.44, 3.42, 3.15, 3.12, and 3.06 with the corresponding standard deviations of 0.76, 0.91, 0.90, 0.91 and 0.94 respectively. Based on the cut-off point of 2.50, the respondents agreed that provision of medical services enhance teaching and learning process, the school provides medical facilities for teachers and students, free medical services when given to staff reduce their expenses and also gives staff and students a sense of belonging as well as boost staff and students morale that enhances effective teaching and learning process. The cluster mean of 3.20 with the standard deviation of 0.88 was also found to be above the cut-off point of 2.50. This implies that school medical facilities influence the management of secondary schools in Zone 'B' Senatorial District of Benue State, Nigeria.

Research Question Three:

In what ways do school laboratories influence management of secondary schools?

Table 3:
Mean Rating and Standard Deviation of Teachers on the Influence of Schools Laboratories on the Management of Secondary Schools in Zone 'B' Senatorial District of Benue State

Item No	Item Description	SA	A	DA	SD	X	STD	Decision
11	A well planned science laboratory stocked with relevant chemicals and equipment will influence teaching and learning of science	161	104	23	10	3.40	0.77	Accepted
12	Poorly planned, unventilated, and dilapidated laboratory facilities will have influence on teaching and learning of science subjects.	140	92	42	24	3.17	0.95	Accepted

13	Damage caused to laboratory facilities will have influence on teaching and learning of science subjects	147	81	51	19	3.19	0.94	Accepted
14	Absence of science laboratory in schools will have influence on teaching and learning of science subjects	95	96	64	43	2.82	1.04	Accepted
15	Regular repair of laboratory and provision of chemicals and equipment improves students' academic performance.	106	120	39	33	3.00	0.97	Accepted
Cluster mean/standard deviation						3.12	0.93	Accepted

The data presented on table 4 showed that the mean ratings for items 11-15 were 3.40, 3.17, 3.19, 2.82 and 3.00 with the corresponding standard deviations of 0.77, 0.95, 0.94, 1.04 and 0.97 respectively. All the mean ratings are above the cut-off point of 2.50. This means that the respondents agreed that a well planned science laboratory will influence teaching and learning of science subjects in secondary schools. They agreed that poorly planned, unventilated and dilapidated laboratory facilities will have influence on teaching and learning of science subjects. Also absence of science laboratory in schools will have influence on teaching and learning while regular repair of laboratory and provision of chemicals and equipment improves students' academic performance. The cluster means of 3.12 with the standard deviation of 0.93 was also found to be above the cut-off point of 2.50. This implies the provision of school laboratories has influence on the management of secondary schools in Zone 'B' Senatorial District of Benue State, Nigeria.

Testing Research Hypotheses

In testing the three hypotheses of this study, the Chi-Square (χ^2) statistical tool was used to test the hypotheses at 0.05 level of significance and the results are presented on tables 4 to 6 and the detailed analysis shown in.

Research Hypothesis One:

School site/location has no significant influence on the management of secondary school in Zone 'B' Senatorial District of Benue State.

Table 4:

Chi-square (χ^2) test of Teachers on the influence of school site/location on the management of secondary schools in Zone 'B' Senatorial District of Benue State of Nigeria

Opinion	Observed frequency	Expected frequency	df	Level of sign.	χ^2 - cal	χ^2 - tab	Decision
No influence	85(29%)	149(50%)	1	0.05	68.20	3.84	Ho
Influence	213(71%)	149(50%)					Not accepted

Value in parentheses are percentage ($\chi^2 = 68.20$, $df = 1$, $P = 0.05 > 0.05$)

Table 4, showed that the descriptive statistics of percentages and the inferential statistics of chi-square were used to test the influence of school site/location on the management of

secondary schools. The results showed that 71% of the respondents agreed that schools site/location has significant influence on the management of secondary schools as against 29% respondents who disagreed.

Chi-square calculated value of 68.20 was greater than the chi-square table value of 3.84 checked at 0.05 level of significance and at 1 degree of freedom. The null hypothesis was therefore Not accepted. This implies that school site/location has significant influence on the management of secondary schools in Zone 'B' Senatorial District of Benue state.

Research Hypothesis Two:

School medical facilities has no significant influence on the management of secondary schools

Table 5:

Chi-square (χ^2) test of Teachers on the Influence of School Medical Facilities on the Management of Secondary Schools in Zone 'B' Senatorial District of Benue State

Opinion	Observed frequency	Expected frequency	df	Level of sign.	$\chi^2 - \text{cal}$	$\chi^2 - \text{tab}$	Decision
No influence	61(20%)	149(50%)	1	0.05	110.56	3.84	Ho Note accepted
Influence	237(80%)	149(50%)					

Value in parentheses are percentage ($\chi^2 = 110.56$, $df = 1$, $P = 0.05 > 0.05$)

Table 5, showed that the descriptive statistics of percentages and the inferential statistics of chi-square were used to test the influence of school medical facilities on the management of secondary schools. The results showed that 80% of the respondents agreed that school medical facilities influence on the management of secondary schools as against 20% respondents who disagreed.

Chi-square calculated value of 110.56 was greater than the chi-square table value of 3.84 checked at 0.05 level of significance and at 1 degree of freedom. The null hypothesis was therefore not accepted. This implies that school medical facilities have significant influence on the management of secondary schools in Zone 'B' Senatorial District of Benue state.

Research Hypotheses Three:

School laboratory has no significant influence on the management of secondary schools.

Table 6:

Chi-square (χ^2) test of Teachers on the Influence of School Laboratories on the Management of Secondary Schools.

Opinion	Observed frequency	Expected frequency	df	Level of sign.	$\chi^2 - \text{cal}$	$\chi^2 - \text{tab}$	Decision
No influence	70(23%)	149(50%)	1	0.05	105.17	3.84	Ho Note accepted
Influence	228(77%)	149(50%)					

Value in parentheses are percentage ($\chi^2 = 105.17$, $df = 1$, $P = 0.05 > 0.05$)

Table 6, showed that the descriptive statistics of percentages and the inferential statistics of chi-square were used to test the influence of availability of school laboratories on the management of secondary schools. The results showed that 77% of the respondents agreed that availability of school laboratories has influence on the management of secondary schools as against 23% respondents who disagreed.

Chi-square calculated value of 105.17 was greater than the chi-square table value of 3.84 checked at 0.05 level of significance and at 1 degree of freedom. The null hypothesis was therefore not accepted. This implies that availability of school laboratories has significant influence on the management of secondary schools in Zone 'B' Senatorial District of Benue state of Nigeria.

Discussion of Findings

The first finding of this study revealed that there is a significant influence of school site/location on management of secondary schools in Zone 'B' Senatorial District of Benue State of Nigeria. The finding agrees with the views of Adesina (2012) who stated that the school site/location influences the students and teachers academic performance. Schools that are located in urban areas perform better than their counter parts in the rural areas. The site for the building of the school should be considered as important to educational programmers as the classroom and other instructional activities. Adebayo (2008) observes that the level of negligence of school plant planning in Nigeria educational system and in Zone 'B' Senatorial District of Benue State in particular is rather appalling. Adebayo further maintained that a casual visit to any of the secondary schools in the study area would reveal the extent to which these educational institutions decayed. The educational facilities at all levels are in a terrible condition due to lack of planning. Schools are littered with battered structures, worn out equipment. Where they exist, overcrowded classrooms, inadequate manpower in quantity and quality therefore, it is pertinent to redress the deplorable situation of the educational system in order to improve academic standard. The educational administrators should consider the proper school plant site/location during planning so as to ensure effective instructional delivery of school curriculum and enhances student's academic performance in secondary schools.

The second finding of this study revealed that there is a significant influence school medical facility on management of secondary schools in Zone 'B' Senatorial Districts of Benue State, Nigeria. This finding is in agreement with the opinion of Nwachukwu (2007) who stated that most safe health measures to be taken by Educational administrators should be proper care of buildings, number of lighting, effective verification, suitable and attractive furniture and among other. Other important considerations include ample supply of safe drinkable water, accident free and clean playfield, adequate storage facilities especially first aid box and health facilities, insect free and control measures and food hygiene, this is because the performance of students and teachers of educational organization depends on the level of good health care. This implies that the provision of good health care services by educational administrators for students and teachers will motivate them to work harder and increase their performance. This is so because their families would no longer suffer going to hospital where they may not given proper attention mostly when there is no fund at hand. Also in consonance with the finding, Ugwusa (2003) agrees that the variety, the amount and kind of health service provided in the

educational system will certainly depend upon the financial support given the secondary schools by the educational managers.

The third finding of this study revealed that there is a significant influence of functional laboratories on management of secondary schools in Zone 'B' Senatorial Districts of Benue state, Nigeria. This finding agrees with the views of Ada (2006) who noted that the school laboratory is an inseparable part of teaching and learning in both secondary and tertiary institution that should be properly planned and maintained to serve the purpose for its existence in the school. Therefore, the school laboratory should be stocked with sufficient chemicals, equipment and instruments to enable student and teachers to carry out their experiments and practical's for the student's desired performance.

Conclusion

Based on the findings of the study, it was concluded that school site/location, medical facilities and school laboratories has significant influence on the management of secondary schools in Zone 'B' Senatorial District of Benue state Nigeria.

Recommendations

Based on the findings of the study, the following recommendations were made;

1. The selection of school site/location is one aspect of the school plant planning that is very important and should be taken seriously therefore, the educational administrators should ensure that schools are sited/located in areas that will encourage effective teaching and learning process.
2. The performance of students and teachers of educational organization depends on the level of good health care services therefore, the educational administrators should ensure that adequate medical facilities are provided in schools to student and teacher so as to motivate them to work hard and increase their performance.
3. Since most laboratories are shabbily furnished or creamed with broken and dilapidated roof, cracked floors and walls that has made teaching and learning more complex and highly hazardous, Government and educational administrators should ensure that laboratories are stocked with sufficient chemicals, equipment and functional instruments so as to enable teachers and students to carry out experiment and practical's in secondary schools.

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