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EQUIPPED LABORATORY AND PLAYGROUND AS CORRELATE OF STUDENTS' ACADEMIC PERFORMANCE IN PRIVATE SECONDARY SCHOOLS IN RIVERS STATE, NIGERIA

Rosemary Chigoziri IMOH

Department of Educational Management

Faculty of Education,

Ignatius Ajuru University of Education, Nigeria.

rosmary_imoh@yahoo.com

ABSTRACT

The study examined how equipped laboratory and playground acts as correlate of students' academic performance in private secondary schools in Rivers State, Nigeria. Two (2) research questions and two (2) hypotheses guided the study. The study was anchored on Albert Bandura Social Learning theories. This research employed the use of correlation research design. The population of this study consisted of 4255 private secondary school teachers from the 2653 approved private secondary schools in Rivers State according to Ministry of Education (2018/2019). The sample size for this study was determined by taking 8.45% of the total population which was about 360 respondents. The instrument was validated by two other experts from the Department of Guidance and Counseling, Ignatius Ajuru University of Education, Nigeria. Cronbach's alpha method of reliability was used in this study to obtain the coefficient of the reliability index of .781 suitable for this study. The research questions were answered using mean and standard deviation scores and the hypotheses were tested using Pearson Product Moment Correlation co-efficient at .05 significance levels with the aide of SPSS version 23.0. The findings revealed that there is a significant relationship between provision of equipped laboratory, and provision of playground or school field and students' academic performance in private secondary schools in Rivers State. Based on the findings the study recommended among other things that private school proprietors and stake-holders should make adequate provision of laboratories in private owned secondary schools in Rivers State. Laboratory assists students in their practical works, thereby, making the academic work to be realistic. This will aid students in carrying out their academic work effectively.

Keywords: Equipped Laboratory. Playground, Students, Academic Performance, Private, Secondary Schools, Rivers State, Nigeria.

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INTRODUCTION

The major components of school plants are the classrooms, library, principals' office, staffrooms, school laboratories, assembly hall, school playground, and hostels. School equipment such as blackboards, dusters, white boards, white board marker and records are seen as necessary school plant provisions. Piaget and Roger cited in Ugbe and Okafor (2015) as cited in Wordu Obele (2019) asserted that a supportive and responsible school plant planning, which permits the learners to interact freely with one another and with the subject matter, is best for learning and that in such a school plant, students will not need extensive reward or punishment as they learn naturally through their own activity

School plant planning means the provision of school building and other surrounding infrastructures such as classroom, library and other components of school plant as earlier mentioned. Studies on the relationship between availability of resources and students' academic performance have revealed that secondary schools, provided with adequate education infrastructural resources performed significantly better than those provided with inadequate infrastructural resources. Pupils acquire most of their knowledge through the interaction with facilities provided in the environment for learning, and learning is influenced by the school plant that students are exposed to, the facilities provided in such environment leads to experience, the physical disposition and the general situation of school's physical facilities are the impressing point upon which many parents and friends of the educational system make their judgment about the quality of academic activities in the school. The sight of dilapidated school building with tattered roofs and broken walls, littered lawns and path ways, unqualified and unprofessional teachers and the school's physical plants is like a mirror reflecting the image of a school and through it, the public decide whether or not to associate with the school in question.

Poor students' academic performance may be pointer to poor learning environment and lack of qualified teachers. Poor learning environment includes; schools building, library services, and school location. These are tangible structures which serve as shelter for educational activities. Despite the evidence that poor students' academic performance is connected to the quality of the school plant, most private secondary schools in rural areas of Rivers State are in poor physical condition. School building and educational goals, should be viewed as being interwoven. Apart from protecting the students from sun, rain, heat and cold, school buildings represent learning environment which has great impact on the comfort, safety and performances of the learners.

This research is aimed at assessing the status of equipped laboratory and playground in private schools in rivers state as correlate of students' academic performance. Meanwhile, effective learning and high academic performance may not be achieved if school site planning, instructional space planning such as classrooms, libraries, laboratories, teaching aids and technical workshops were not properly planned and maintained. Further, this research would list possible suggestions and recommendations on how to utilize and maintain school plants in private secondary schools in Rivers State more effectively.

Research findings have shown that there is a positive relationship between the academic performance of students and availabilities of the school plants. Academic performance in this regard is the degree to which a student, teacher, and institution has achieved their short and long-term educational goals. Usually, academic achievement is measured through examination or continuous assessment, and other means of evaluation. There are other factors that elicit

educational achievement such as school plants, sufficient equipment, facilities for teaching and learning.

An effective school facility is responsible for the dynamic programs of academic delivery and at least should provide a physical environment that is comfortable, safe, secure, accessible, well illuminated, well ventilated and aesthetically pleasing. The school facility consist of not only the physical structure and the variety of building systems, such as mechanical, plumbing, electrical, telecommunications, security and fire suppression systems. The facilities also consist of all furnishings, information technology as well as various aspects of the building grounds, namely athletic fields, playgrounds, areas for outdoor learning and vehicular access and parking space. The subject of school facilities has received great attention from the public as well as educators in recent times. In the recent times, most school facilities which are supposed to promote and enhance teaching learning and extra-curricular activities in secondary education are negatively creating serious challenges to the educational advancement needs of the learners. Others are substandard teaching and learning environment in the private school which is not suitable to motivate students to learn. School/Educational edifice in otherwise referred to as school facilities are the physical structures provided for in the school, such as the school site, the school buildings and equipment. The facilities are likened to capital in any industrial settings. In understanding the national goal of developing the education system so as to provide a satisfactory flow of men and women, capable of acquiring the skills necessary to be exploit to the fullest, the natural resources of the country makes it imperative for facilities to be abundantly available in schools.

Also, implementing educational policies that result in high quality, and high performance, the school has a direct and indirect impact on the teaching and learning process. Effective facilities management therefore contributes to the excellent performance of every student in any school. Students in classrooms with large windows, natural lighting and well-designed skylights were found to perform better than their peers in classrooms without these features.

Stressing further, for the impact of school plant planning on teaching and learning to be effective, the school building and its surroundings must be free from threats, hostility and frustration. If the physical facilities and equipment are not adequate and in good condition in the school system, the planning of the school programmes would be hampered. In most private secondary schools in Rivers State, the problems of available structures, physical facilities, teaching equipment and qualified teaching staffs is a barrier to students' academic performance. The issue of poor and ineffective academic performance of students in Nigeria has been of great concern to the government, parents, teachers and even students themselves. There is no doubt that school plant planning is a crucial part of educational planning without which students' academic performance cannot be improved. Lots of private secondary schools in Rivers State were not originally planned to be school but living homes which were later turned to schools.

A lot of private secondary schools in Rivers State are planned and planted in a noisy environment such as market places, motor parks, and industrial layout. These are some of the challenges hindering effective teaching and learning.

Most private secondary schools in Rivers State do not have laboratories at all. Imagine science experiment without tools and apparatus, this is also a barrier to effective teaching and learning. No matter how praiseworthy a school maybe without planned efficiently equipped laboratory and decorated playground, there will not be patronage by public and also if the safety of life and properties are not guaranteed, it would pose as an obstacle to academic performance. therefore, every school should have fence and gate that can be closed and opened at will.

Statement of the Problem

The problem under study has to do with the condition of the educational programmes that are operated by some private secondary schools in Rivers State. The over population, insufficient facilities (equipped laboratory and playground) for the teaching and learning and improper school plant planning are common among the factors that seems to contribute to the poor academic performance of students' in private secondary school in Rivers State.

The issue of overpopulation, equipped laboratory and playground cannot be separated from the major problems/challenges that impair students' academic performance which is a drawback to educational development. Classes designed to accommodate thirty-five (35) to forty (40) students comfortably are now taking seventy to eighty students which will certainly affect students' academic performance. Imagine learning science subjects like, Physics, Biology and Chemistry in an abstract form without practical's. Insufficient facilities such as equipped laboratory and playground cannot be effectively used by overpopulated and congested laboratory; making most of the students miss out in their practical. As such, this study aims to investigate the relationship between equipped laboratory and playground and students' academic performance in private secondary schools in Rivers State, Nigeria.

Purpose of the Study

The purpose of this study is to examine how equipped laboratory and playground correlates with students' academic performance in private secondary schools in Rivers State. Specifically, the study tends to:

- Investigate the extent to which equipped laboratory enhance academic performance of students in private secondary schools in Rivers State.
- Determine the extent to which provision of playground/school field facility enhance academic performance of students in private secondary schools in Rivers State.

Research Questions

The following research questions guided the study:

- To what extent do the provisions of equipped laboratory enhance academic performance of students in private secondary schools in Rivers State?
- To what extent do playground or school field enhance academic performance of students' in private secondary school in Rivers State?

Hypotheses

The following null hypotheses guided the study:

- There is no significant relationship between provision of equipped laboratory and students' academic performance in private secondary schools in Rivers State.

- There is no significant relationship between provision of playground or school field and students' academic performance in private secondary schools in Rivers State.

Significance of the Study

The finding from the study will be of immense benefits to the government, proprietors, teachers, parents as well as students and researchers. The findings will help the government or the policy makers in formulating effective planning and implementation policies and programs for improved school plant planning and maintenance. It will also provide policy makers with intelligent forecast and analysis of future needs of schools as regards school plant planning and maintenance.

It will provide the school proprietors the opportunity to improve in school supervision so as to ensure good quality teaching and learning process through the provision of facilities such as furniture, laboratory equipment, a well-furnished library and others. These facilities mentioned have been repeatedly found to have a positive relationship with quality education and academic performance.

The findings will enable the teachers to appreciate the need for proper and standard school plant planning and maintenance that will aid instructional delivery. It will help the teacher to improve both in teaching effectiveness and increased productivity in the school system.

It will help the parents in determining the choice of the type of school for their children, this is because, their children and wards will enjoy good school learning environment that will lead to quality school products. Finally, it will be of benefits to the students' researches as it will provide a valid working document or literature in investigating other areas not covered by this study. Thus, it will serve as a point of reference to future researchers in the field.

CONCEPTUALIZATION

Albert Bandera's Social Learning Theory

Albert Bandera in his 1977 book 'Social Learning Theory' emphasized on the importance of observational learning which occurs when the behaviour is influenced by watching the behaviour of a model or an artiste. It is the consequence of the artist behaviour that determines the behaviour of the observer. This theory is relevant to this study which is on school plant planning, school plants deals with the school environment. The common objects in our environment which children usually adopt as models include super stars, school teacher and parents. While in the school environment students' behaviour are influenced to a large extent by the school plants available in the school. Bandura listed four processes involved in observational learning which includes: intentional, retention, production and motivational processes. He emphasized that social learning is interactional in nature. He stressed that human learning involves the interaction of the person, the person's behaviour and the environment. It is note-worthy that a child's progress in the school is influenced by the attitude he develops towards not only the subject he is to learn but also the school environment, hence his attitude will depend on the sort of experience he has had (Nabavi & Bijandi, 2012). Based on the underlining principles and assumptions guiding the above discussed theories, the current study is therefore, anchored on the Bandura's social learning theory.

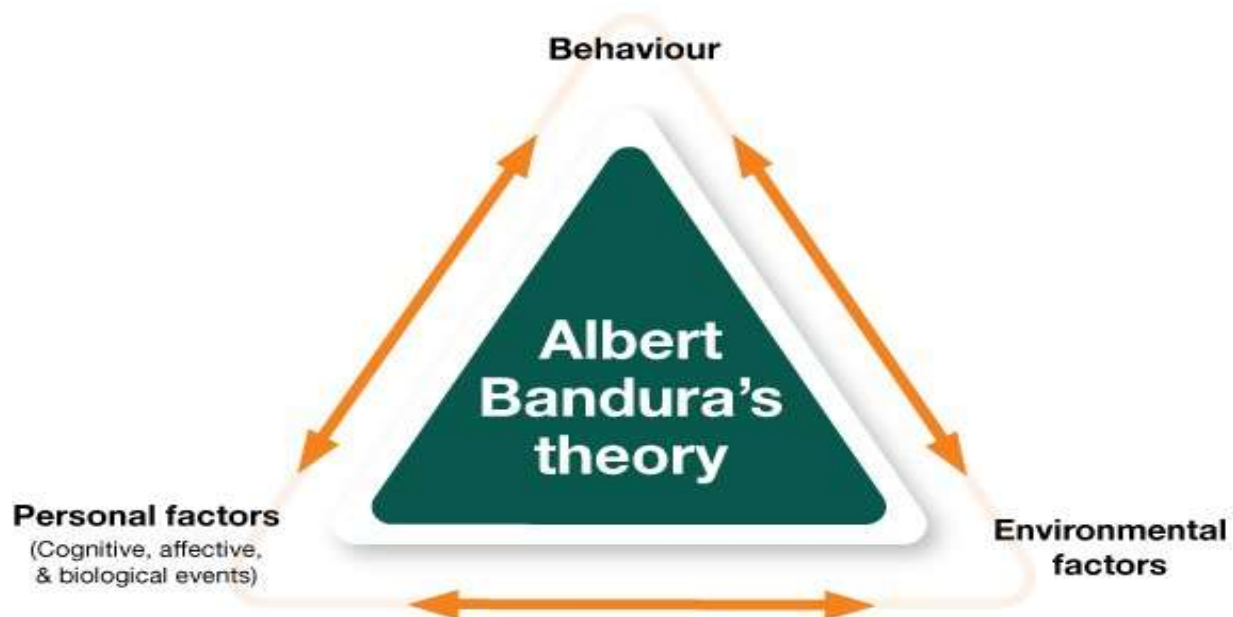


Figure 1: Albert Bandura's Social Learning Theory
Source: Nabavi & Bijandi (2012, p. 15).

Laboratory as a School Plant

According to Omiko (2007) cited in Akani (2015) a laboratory is a room or building equipped and set apart for practical or experimental studies to take place. He sees the laboratory as the heart of a good scientific programme which allows students to have experience which are consistent with the goals of scientific literacy. This implies that science teaching and learning cannot be completely done in a secondary school where there is no equipped laboratory. The Oxford English Dictionary defines "laboratory as a building set upon for conducting practical investigations in natural science originally and especially in chemistry, and for the elaboration or manufacture of chemical, medicinal and like products".

Every secondary school must have well-equipped and well-planned laboratories for teaching science subjects. The size of the room should be more spacious to accommodate all the laboratory equipment; it should also have one or two attached rooms used as stores. The service connections and water are to be provided in the wall of the room. This arrangement will facilitate the use of movable tables in one position for class work and in another for laboratory. There should be adequate provision for individual self for students for keeping their apparatus and belongings and also a built in cup-boards for storing the chemicals in the laboratory. Proper care should be taken for adequate lighting and attention (Amanchukwu & Ololube, 2015).

Laboratory and Students Academic Performance

Science laboratory equipment allows students to interact directly with the data gathered and makes teaching and learning easy both for the teachers as well as the students. According to Bathsheba (2020), science and technology is considered vital for a nations overall economic development. The effective utilization of science and technology improves productivity and meets the need of the society. The emphasis of teaching and learning of science on ensuring that

teachers not only teach the process of science but also are able to subject scientific concepts to the sensory experience of the learners. By this the 'hands' and minds of learners must be on scientific activities such that in other to be able to participate in knowledge construction. In essence, the focus is on activity-based science lesson which entails both best classroom and laboratory practices. This direction of teaching and learning science subjects in schools is viewed to lead students to acquiring the required science process skills, life skills, and competence as enshrined in the revised edition of (FRN, 2014).

Science differs quite a bit from other subjects and in order to understand its concepts, you will need to look beyond the books and the conventional classroom teaching. Effective teaching and learning of science involve handling, seeing and manipulating real materials and objects (Mupa & Chinooneka, 2015). The knowledge that students acquire in the classroom would not be sustained unless they actually observe the process and also understand the relationship between action and reaction in a practical form. These can only be possible if the school has a well-equipped science laboratory all geared towards achieving a high level students' academic performance.

Play Grounds/School Field as a School Plant

Games and sports are the essential parts of the total education. So, every school should of a necessity make adequate provision for play grounds. Playgrounds are needed for all types of physical activities, sports and games, regular physical exercises etc. Therefore, enough area should be occupied for the playgrounds in order to provide maximum number of games to the students.

Hyndman (2017) averred that childhood and teenagers are crucial period to develop health behaviours such as physical activity that can track into adulthood. These physical activities help to improve health and to prevent the development of obesity and chronic diseases such as type 2 diabetes, cardiovascular disease (CVD) and mental health conditions. He further stated that establishing physical activity habits for students via school playground opportunities is important, with recent international trends revealing that many students prefer sedentary activities despite physical activity opportunities being readily available. Games are the activities, which are conducted with physical and mental abilities in a specific time and place for a particular purpose in accordance with specific rules, and they entertain and improve social adaptation, intelligence and skills at the same time (Çoban & Nacar, 2015 in Dilbil & Basaran, 2017).

School field/playground is a very important school plant that meets activity needs of the children. Through games and sports, organs become stronger without wearing. They enhance attentiveness, agility and courage. They prepare children for social life by helping them adopt good behaviours, habits, information and skills necessary for life through games (Alıncak, 2016). Thus, field and playground events enhance creativity, sense of responsibility, socialization, psycho-motor, physical and language development, development, health, cognitive skills, capability and coordination in students.

School Field/Playground and Students Academic Performance

Physical activities improve student's concentration and learning, increases personal confidence and self-awareness, reduce feeling of depression and anxiety, enhance self-esteem in the student

(Alincak, 2016). Savi (2011) cited in Dilbil and Basaran (2017) noted that student's participation in field and playground events affect their studying skills in a positive manner and increase their level of attachment to schools. Attachment to school is feeling positive sentiments about the school, having positive connotation about education, attending school and getting involved in extracurricular social activities. Therefore, children who lack the feeling of attachment to school are not motivated to study. Cimakilar (2010) cited in Dilbil and Basaran (2017) argued that children with higher levels of school attachment have better relation with their teachers and friends, have higher levels of self-esteem and generally feel more satisfied about their lives. All of which are important components of improved academic performance.

School Plant Planning

School plant planning entails the siting, building and provision of physical equipment and recreational spaces for the achievement of educational objectives. According to Amanchukwu and Ololube (2015), the major aim of school plant planning is to lay a solid foundation for educational structure in order to achieve educational goals and satisfy the physical and emotional needs of the learner and to provide for future expansion of the school system. This implies that adequate school plant planning enhances learner's psychological satisfaction and makes him/her proud of his/her learning environment. This is why most well-built schools tend to have more patronage than those that are not well built (Effanga, 2020).

According to Ibara (2018), a smooth implementation of an educational programme can only occur and the chances of actualizing its goals enhanced if the school plant possesses some desirable qualities or standards. Ensuring that a school plant meets these standards should be the major concern of all efforts directed to planning, designing and constructing school plants.

According to a publication of the National Open University of Nigeria (2014, pp. 106-107) the following objectives should be considered when planning and constructing school plant:

- **Spatial adequacy and desirability:** One very important objective of school plant that is directly related to the implementation of the educational programme is the provision of adequate and appropriate organized spaces to facilitate and support teaching and learning activities. There should be enough space to accommodate the present school enrolment and any possible increase in students' population in foreseeable future. It is desirable that learning spaces be adequate for both individual and group work. Adequacy of space is also sought for administrative and other offices for both staff and students. Provision of adequate spaces for outdoor learning and recreation should also feature as one of the objectives of school plant planning.
- **Health and Safety:** Ensuring the safety, security and good health of the learner as well as other staff of the school is another objective that any school plant planner should accomplish. All building should be structurally adequate and enough safety features, such as fire alarm system, fire extinguisher, and emergency exits, should be provided. Toilet and other sanitation facilities should also be put in place. Learning takes place effectively in an environment in which the learner feels safe and secure.
- **Adaptability:** School buildings should have the capacity to be modified for a new use or purpose if the need arises. In the case of unforeseen development like increase in pupils enrolment, introduction of subjects requiring new teaching method, changes in

educational programme and other unforeseen development. It is a desirable objective of the school plant planners to make the buildings adaptable.

- **Aesthetics:** Providing as a school plant with beautiful surroundings is another objective of school plant planners. Attractive school environment with well-designed buildings and other structures may not only stimulate learners' interest, but may also engender a sense of belonging and pride for their school.
- **Durability:** Owing to the expected long life span of school buildings and high construction costs, durability is one of the objectives to be targeted when planning and constructing them. Durability in this case should not imply rigidity of the structures, this is because of some inevitable changes that often occur and call for flexible structures. Rather, it calls for the use of high-quality building materials and competent workmanship so that the completed school plant can be put into good use for a long time, and at the same time, it should be easily adaptable as the need arises.

Having developed a functional educational programme, most importantly before applying all of the above objectives, is to carefully select a suitable site for the construction of school buildings. In selecting the site for school, the following important criteria must be taken into consideration:

- **Accessibility:** The school should be sited where it is accessible for easy location;
- **Geographical Location:** The school should not be sited in a noisy environment like close to the highways, the market, rail line, airport and industrial areas to avoid external distraction or disturbance;
- **Topography:** Safety of the learners should be of utmost importance, therefore schools should be sited on a plain land not hilly and rocky areas in order to avoid injury;
- **Health:** Schools should not be sited in hazardous areas like industrial areas where carbon-monoxide is emitted from heavy duty machines. It should not also be sited in a potential environment;
- **The soil condition:** The planner may need to consult a soil geographer who will examine whether or not the soil condition of the selected site is prone to gully erosion or other environmental decadence so as to avoid collapse of building in the nearest future;
- **Security:** The school should not be sited in high criminalized area measured with all sorts of vices like drug abuse, cultism, stealing rape etc. The life by teachers and students in area will no doubt be threatened and thus affect teaching and learning.

Challenges of School Plant Planning in Nigeria

There are many challenges in school plant planning in Nigeria below are some that were highlighted by Yakubu and Sowunwi (2017). They stated that the following are the basic challenges, among others, confronting school plant planning in Nigeria:

- **Poor-Funding:** The frivolous way and manner in which Nigerian government responds to financial needs of education as witnessed in today's Nigeria, especially judging by the budgeting allocation to the sector, indicates, without doubt, that education is not given a top priority. For instance, in the 2016 budget, the education sector had a total allocation of N369 billion, representing 6.06% of the total budget of about (6.08 trillion). 92% of this amount was allotted to recurrent expenditure like salaries. It is from the balance 8%

that all the federal universities, polytechnics, colleges of Education, secondary schools and primary schools were run. In this circumstance, it will be extremely difficult to procure all the required school plants for all the levels of education with this meagre allocation. This challenge is not peculiar to public schools; the private schools have their funding challenges as well. The high cost involved with procurement of school plants has made school proprietors to settle for less quality ones. Amachukwu and Ololube (2015) averred that the cost factor accounts for the unavailability of very essential school plant facilities in most private owned primary and secondary schools in Nigeria.

- **Corruption:** Most of the public office holders in Nigeria have come to power only for the ulterior motive they stand to gain and not serve the interest of the masses. They unlawfully dip their hands in the coffers of government. Withdraw public funds meant for provision of educational facilities maintenance of existing ones and fraudulently divert it into personal accounts for their private use. Similarly, due to endemic nature of corruption that has found its way into virtually all sectors, it is not surprising that some private-owned schools also suffer in the hand of unscrupulous staff that ‘cart away’ with school fund meant to be used for procurement of school plants. Also, commonly reported cases of corrupt officers from ministry of education who visit schools to ascertain level of compliance as regards the quantity and quality of school plant on ground in the school environment only go there to extort many and leave their statutory functions unattended to. Agi and Adiele (2009) opined that some private schools are sited in residential areas without adequate and standard school plant. This kind of school can exist for years as long as the propositions are able to bribe their way through.
- **Cultural Problem:** Nigeria is an amalgamation of over 300 ethnic groups and each of these ethnic groups has its own unique culture and worldview. The fact remains that these ethnic groups within our country are not only multitudinous but are also distinctly pronounced in culture. Therefore, the task of planning school plant that will meet the entire need of students from different ethnic groups is a serious undertaking which requires the appointment of professionals who have adequate knowledge about what is required to for school plant planning (Suleiman & Yakubu, 2017).
- **Human Resources Problem:** Another ability of each worker which is his/her potentials must be identified and maximized. Ololube (2019) opined that it is important to delegate opportunities to subordinate matched with commensurate authority to enable them handle the task effectively. Most times people are given opportunities to serve in areas not their field at the end of the day the job would suffer, because it was not given to a capable hand. School plant planners should be appointed based on qualification and not by political influence, people should be placed appropriately where their qualification and ability can match for maximum productivity. It is a misfit for someone who studied Biology for instance without any prior knowledge of school plant planning to be in charge of school plant. Ineffectiveness and inefficiency will be the outcome of the school system, because a square pin was not put in a square hole.
- **Political Problem:** Another monumental challenge confronting the school plant planning/maintenance in Nigeria is the frequent change of government and this does not mean well for the smooth implementation of school plant planning, since the independence of October, 1960, policy inconsistency by the government has been one of the major challenges of the school system, Nwankwoala (2016) opined that successive administration in the country has had significant change in government policies to suit its

administration. This poses a great concern to majority of private-owned schools in the country, because school plants' requirement and recommendations frequently change as new government comes into power.

- **Administrative Problem:** Another challenge confronting the school plant planning/maintenance in Nigeria is the issue of work place rivalry. Most of the education plans put in place by the government have ended up failing because of internal conflict or clashes of interest between staffs who think they are more competent than the other. Sowumi and Yakubu (2017) maintained that internal rivalry arising from the planning of school plant usually leads to delay in the plan implementation. The private schools are not immune against this challenge where proprietors who have little or no experience professionally as regards school plant planning will be insisting that school facilities that appeal to his/her finances should be secured irrespective of its irrelevant nature as at the time.
- **The Problem of Accessibility of Fund:** Acquisition of proper and well-articulated school plants require huge funds. The government owned institutions find it difficult to access funds to acquire or maintain the existing school plants due to some constraints from the financial institutions ranging from high interest, lack of surety, lack of collateral etc. If these constraints and more are faced by the government owned institutions how much more the private schools. Accessibility of funds hamper execution of proper school plant planning in private schools in Nigeria.
- **Economic Recession:** Due to economic meltdown that had hit the nation and the world at large, the prices of facilities had gone up in the recent times. This among other things had made the procurement of quality school plant unaffordable by school administrators thereby making them run the school with poor or substandard school plant which will surely hamper the academic performance of standards.
- **Government Policies:** Sometimes policies outlined by government poses as a threat to prospective school proprietors when they cannot meet up with the policy which are rather of great benefit to the students, with the mind-set that the policy is unrealistic or too demanding for the establishment of a school, the proprietors disregard such policy and sprat with what they can afford, undermining the fact that it may hamper the effective teaching and learning process and academic performance of students.

METHODOLOGY

Research Design

This research employed the use of correlation research design. Correlation research design determines a mutual relationship between two variables without the researcher controlling either of them. Correlation research design is important in this study because it determines the relationship between equipped laboratory and playground students' academic performance, hence, the choice of correlational research design.

Population of the Study

The population of this study consists of 4255 secondary school teachers from 2653 approved private secondary schools in Rivers State according to ministry of education (2018/2019). The

classroom teachers were considered in this study because they are in better position to determine the academic performance of their students as correlates to equipped laboratory and playground.

Sample and Sampling Technique

The sample size for this study was determined by taking 8.45% of the total population which was about 360 respondents. Stratified sampling was used to group Rivers State into three senatorial districts. Multi-stage was used in three phases. Simple random sampling technique was also used to select 5 Local Government Areas each from the three (3) senatorial districts to make it 15 local government areas in phase one (1). In phase two (2) simple random sampling techniques was used to select 30 schools from the selected local government areas. In phase three (3) simple random sampling techniques was used to draw 11 teachers and one (1) proprietor from the schools selected to make up the sample size for the study.

Instrument for Data Collection

The instrument for data collection was a questionnaire titled, “Equipped Laboratory and Playground students’ (ELPQ)”, divided into three sections. Section A was personal information about the respondents (Bio data) Section B contains a four (4) point modified liker scale of very High extent to very Low extent was used to measure the school plant planning (SPPQ) and Section C which was used to measure the students academics performance (SAPQ).The rating scale with the response mode of Very High Extent (VHE) = 4 points, High Extent (HE) = 3 points, Low Extent (LE) = 2 points, and Very Low Extent (VLE) = 1 point.

Validation of Instrument

The instrument was validated by three experts from the Department of Guidance and Counselling of Ignatius Ajuru University of Education. Corrections made were effected and suggestions made were included to make the face and the content validity of the study acceptable.

Reliability of the Instrument

Twenty questionnaires were administered to the respondents who were not part of the population of this study and after two weeks interval; these questionnaires were administered to the same respondents. The first and final scores were correlated using Cronbach’s Alpha method to obtain a reliability index of .781.

Administration of the Instrument

The researcher and two trained research assistants from the department of educational management, Ignatius Ajuru University of Education administered the instruments to the respondents. Before the administration process, the researcher explained the purpose of the study to the respondents. This enabled the respondents who are classroom teachers to respond accurately and collection was on an agreed date for maximum retrieval rate. The researcher

issued 385 questionnaires and, in the end, retrieved only 370, of which 10 questionnaires were discarded, leaving only 360(93.5%) valid ones.

Methods of Data Analyses

The research questions were answered using mean and standard deviation scores and the hypotheses were tested using Pearson Product Moment Correlation co-efficient at 0.05 significance level. This was made easy using SPSS version 23.0. The criterion mean of 2.50 and above was accepted while below 2.50 was rejected.

RESULTS

Answer to the Research Questions

Research Question One: To what extent does the provision of equipped laboratory enhance academic performance of students in private secondary schools in Rivers State?

Table 1: Descriptive statistics of mean and standard deviation on the extent equipped laboratory is provided for academic performance of students in private secondary schools in Rivers State

S/N	Items	Mean	SD.	Remarks
1.	There is a well-equipped laboratory for students to perform better in science subjects	2.89	1.08	High Extent
2.	Students perform science practical because of the availability of the laboratories	3.37	0.79	High Extent
3.	Science students are motivated by the use of laboratory equipment for practical	3.50	0.78	High Extent
4.	The laboratory arouses students' interest in science subjects	3.17	1.13	High Extent
5.	Audio-visuals, field trips and others enhance students' academic performance	3.01	0.72	High Extent
6.	Availability of music laboratory affects students' academic performance	3.37	0.83	High Extent
Grand Mean		3.22	0.89	High Extent

Table 1 showed the extent equipped laboratory is provided for enhanced academic performance of students in private secondary schools in Rivers State. Grand mean of 3.22 and standard deviation of 0.89 showed that the extent equipped laboratory is provided for enhanced academic performance of students in private secondary schools in Rivers State is high, indicated in the teachers' responses such as; there is a well-equipped laboratory for students to perform better in science subjects, students perform science practical because of the availability of the laboratories, science students are motivated by the use of laboratory equipment for practical, the laboratory arouses students interest in science subjects, availability of music laboratory affects students' academic performance among others. Thus, to a very high extent, equipped laboratories are provided for academic performance of students in private secondary schools in Rivers State.

Research Question Two: To what extent does playground/school field enhance academic performance of students' in private secondary school in Rivers State?

Table 2: Descriptive statistics of mean and standard deviation on the extent playground or school field if provided improves academic performance of students' in private secondary school in Rivers State

S/N	Items	Mean	SD.	Remarks
7.	Students mental and physical health is enhanced by the use of playground and school field	2.89	0.70	High Extent
8.	Students enhance their social health as they interact with one another during physical exercise	2.90	0.95	High Extent
9.	Games and sports aids students overall academic performance	3.10	0.94	High Extent
10.	Talents are discovered and annexed during games on the school field or playground	3.22	0.97	High Extent
11.	Physical health enhancing students' academic performance	2.93	1.06	High Extent
12.	Regular maintenance of school field motivate students in physical activities	2.91	1.15	High Extent
Grand Mean		2.99	0.96	High Extent

Table 2 showed the extent playground or school field is available for improved academic performance of students' in private secondary school in Rivers State. Grand Mean of 2.99 and Standard Deviation of 0.96 showed that the extent playground or school field is available for improved academic performance of students' in private secondary school in Rivers State is high, this is seen from the teachers' responses such as; students mental and physical health is enhanced by the use of playground and school field, students enhance their social health as they interact with one another during physical exercise, games and sports aids students overall academic performance, talents are discovered and annexed during games on the school field or playground, physical health enhancing students' academic performance. Thus, playground or school fields to a high extent improved academic performance of private secondary school students' in Rivers State.

Testing of Hypotheses

Hypothesis 1: There is no significant relationship between provision of equipped laboratory and students' academic performance in private secondary schools in Rivers State.

Table 3: Pearson Correlation Coefficient of respondents' answer equipped laboratory and students' academic performance

		Provision of Equipped Laboratories	Students' Academic Performance
Provision of Equipped Laboratories	Pearson Correlation	1	.019
	Sig. (2-tailed)		.023
	N	348	348
Students' Academic Performance	Pearson Correlation	.019	1
	Sig. (2-tailed)	.023	
	N	348	348

** . Correlation is significant at the 0.05 level (2-tailed)

The results from table three of the analysis for hypothesis one stated above showed that there is a significant relationship between provision of equipped laboratories, and students' academic

performance in private secondary schools in Rivers State, where (correlation value $r=.451$, $p<0.041$). The implication of this result is that the respondents agreed that having access to equipped laboratories, often positively influences students' academic performance in private secondary schools in Rivers State. Thus, hypothesis one was rejected.

Hypothesis 2: There is no significant relationship between provision of playground or school field and students' academic performance in private secondary schools in Rivers State?

Table 4: Pearson Correlation Coefficient of Respondents' Answer provision of playground and students' academic performance

		Provision of Playground or School Field	Students' Academic Performance
Provision of Playground or School Field	Pearson Correlation	1	.116
	Sig. (2-tailed)		.030
	N	348	348
Students' Academic Performance	Pearson Correlation	.116	1
	Sig. (2-tailed)	.030	
	N	348	348

** . Correlation is significant at the 0.05 level (2-tailed)

The results from table four of the analysis for hypothesis two stated above, showed that there is a significant relationship between provision of playground or school field, and students' academic performance in private secondary schools in Rivers State, where (correlation value $r=.451$, $p<0.041$). The implication of this result is that the respondents agreed that having access to playgrounds or school fields, often positively influences students' academic performance in private secondary schools in Rivers State. Thus, hypothesis two was rejected.

DISCUSSION OF FINDINGS

Provision of Equipped Laboratory and Students' Academic Performance

Data in Table three above showed the coefficient of relationship between provision of equipped laboratory and students' academic performance in private secondary schools in Rivers State. Hypothesis one states that: there is no significant relationship between provision of equipped laboratory and students' academic performance in private secondary schools in Rivers state. The hypothesis was rejected after obtaining a correlation value of $r=.451$, $p<0.041$.

The above finding is consonant with the work of Akani (2015) which investigated 'The role of laboratory in the academic achievement of chemistry students in Ebonyi State'. Nigeria. The result showed that the use of the laboratory helps to develop scientific attitude in students towards the learning of chemistry especially practical, develop skills for problem solving in students. The finding is also in conformity with the work of Ekundaya and Timilehin (2020). Their study revealed that there was a significant relationship between provision of equipped laboratory and students' achievement in the affective domain of learning as well as a significant relationship between school facilities and students' achievement in the psychomotor domain of learning.

Provision of Playground or School Field and Students' Academic Performance

Table four above showed the coefficient of relationship between provision of playground or school field and students' academic performance in private secondary schools in Rivers State. Hypothesis two states that: there is no significant relationship between provision of playground or school field and students' academic performance in private secondary schools in Rivers state. The hypothesis was rejected after obtaining a correlation value of $r=.451$, $p<0.041$.

The above finding correlate with the finding made by Ekundaya and Timilehin (2020), the study revealed that there was a significant relationship between school facilities such as playground, and students' achievement in the affective domain of learning as well as a significant relationship between school facilities and students' achievement in the psychomotor domain of learning. The study is also min consonant with the finding made by Shamaki, (2015) carried out a research to determine the influence of learning environment on students' academic achievement in Mathematics at senior secondary school level. The study revealed that friendly school environment encourages learning, thus, resulting to student's high performance in their examinations.

CONCLUSION

The study examined how equipped laboratory and playground acts as correlate of students' academic performance in private secondary schools in Rivers State, Nigeria. The result of the study provided a good basis for continuity and it was concluded that well-equipped laboratory enhances students' academic performance in private secondary schools, and provision of playground/school field facility also enhances students' academic performance in private secondary schools in Rivers State. A good school environment encourages learning and students' academic performance is always at the top of the game in schools that have conducive learning environment. That is to say, poor school environment discouraged learning thereby resulting to low academic performance. Therefore, it is good to state that the provision of well-equipped laboratory and playground/school field facility improve students' academic performance.

Recommendations

Based on the finding in the study the following recommendations were made:

- Proprietors should make adequate provision of laboratories in private owned secondary schools in Rivers State. Laboratory assists the students in their practical works, thereby, making the academic work to be realistic. This will aid students in carrying out their academic work effectively.
- Finally, the proprietors should consider and make provision for modern playground/school field for games and sports and other extracurricular activities. The above facilities will make the school environment to be attractive to the students. It will also help the students in carrying out some practical's in physical education subject.

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