AVAILABILITY AND UTILIZATION OF PHYSICAL FACILITIES AND TEACHERS' EFFECTIVENESS IN PUBLIC SENIOR SECONDARY IN EDO SOUTH SENATORIAL DISTRICT

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A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF EDUCATIONAL MANAGEMENT, FACULTY OF EDUCATION, UNIVERSITY OF BENIN, BENIN CITY IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF BACHELOR OF SCIENCE B. SC. (ED) DEGREE IN EDUCATION ECONOMICS

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CERTIFICATION

We the undersigned names hereby certify that this research work was carried out by Esther Chidinma OHIRI with Matriculation Number EDU1713742 of the Department of Educational Management, Faculty of Education, University of Benin, Benin City in partial fulfilment of the requirements for the award of Bachelor Degree (B.Sc Ed) Honors in Education Economics

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DEDICATION

This project is dedicated to God Almighty, who's able to do exceedingly and abundantly above all things that man could ever think or imagine. I also dedicate this project to my mother and siblings who never gave up on me. It's the Lord's doing.

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ABSTRACT

This study examined the availability and utilization of physical educational facilities on teachers' effectiveness in public senior secondary schools in Ovia north east local government area of Edo State. To achieve the purpose of the study, five research questions were raised and examined. The study adopted a descriptive survey research using the correlational design. The population of the study comprised 138 principals and 1,476 teachers in 138 public senior secondary schools in seven local government areas in Edo South Senatorial Districts of Edo State. The sample size of the study 16 principals and 147 teachers in public senior secondary schools in seven local government area in Edo South Senatorial Districts of Edo State. The questionnaire was titled "Availability and Utilization of Physical Educational Facilities on Teachers' Job Effectiveness" (AUPEFTJE) and the checklist were titled "Availability of Physical Educational Facilities (APEF)". The questionnaire was used to elicit opinion of the respondents on utilization of physical educational facilities and teachers' job effectiveness while the checklist was used to determine availability of physical educational facilities.

The findings generally showed that the availability and utilization of physical educational facilities on teachers' effectiveness in public senior secondary schools in Edo South senatorial district is low. The major findings of the study were as follows: Based on the findings of the study, it was concluded that the availability and utilization of physical educational facilities on teachers' effectiveness in public senior secondary schools is low. Therefore, the low availability and utilization of physical educational facilities contributed negatively to teachers' effectiveness. This simply means that, for teachers to discharge knowledge and carryout duties and responsibilities assigned to them effectively, there must be availability and utilization of physical educational facilities.

Based on the findings of the study, the following recommendations were made that there should be collaboration between Government and non-governmental agencies for the purchase of various physical educational facilities in order to foster effective management performance of teachers, Government should ensure that funds are made available for the purchase of physical educational facilities and also ensure that male and female teachers utilize these facilities for optimum job performance.

CHAPTER ONE

INTRODUCTION

Background to the Study

Physical facilities are essential for any educational institution and they will be directly linked with teachers' effectiveness, as well as to learning development. The physical environment of the school certainly provides motivation for both teaching and learning. Olanrewaju (2016) noted that the importance of physical facilities cannot be relegated. Physical facilities like modern laboratories, libraries and classrooms are to be available in all schools to facilitate teaching and learning.

Physical facilities refer to the school plant, movable and immovable items like buildings, classrooms, library, laboratories, toilets facilities, offices, furniture and other materials and infrastructures likely to motivate students towards learning. Physical facilities are items that enable a skillful teacher to achieve a level of instructional effectiveness. The interaction of the learner within the educational environment is enhanced by physical

amenities for effective teaching and learning. The quality of instruction and learning, as well as the efficiency of education, are considerably improved by the availability and use of physical facilities in every institution.

The availability and effective utilization of physical facilities in schools aids the achievement of educational objectives and goals. These facilities have been observed as a potent factor in qualitative education delivery, and they could equally determine the level of success or failure of the educational institution. This is due to the quality of the facilities, which could either render the students redundant or effective, as the case may be based on availability and utilization or vice-versa (Dambo & Kayii, 2022; Edem, 2018).

Physical facilities are important for efficient teaching and learning in schools, and their absence may have a negative impact on the students' academic performance as well as the effectiveness of the teachers. Any system's success depends on the infrastructure that may be used to run it. Resources for teaching help to stimulate students' interests. When these facilities and tools are utilized effectively, they significantly raise student

involvement in the learning process and support memory retention. In the idea of Lawanson, as cited in Jessa (2017), explains availability as something that is able to be used or can easily be found and used. That is to say, they are those facilities that are committable or usable upon demand to perform their designated task or required function. Oyeniyi (2010) maintained that instructional facilities have been positively linked with educational efficiency, students' academic performance, and their capabilities when they leave school. Owoeyi (2011) explains that the availability of school facilities is a potent factor in quantitative education and teachers' effectiveness.

In other words, they are the entire physical infrastructural facilities found in schools for the purpose of enhancing teaching and learning. These facilities play an important role in the actualization of educational goals and objectives. Therefore, no educational objective can be achieved without adequate provision of school facilities in schools. Nwabueze classified educational facilities as physical (building, space, and so on), human (academic and non-academic staff), material (all equipment or teaching aids, and so on), time, and financial facilities along with programs

offered in the institutions of learning. For the advancement of education at all levels, these are absolutely required. According to them, school facilities consist of all buildings for academic and non-academic activities; equipment for academic and non-academic functions; areas for sports and games; and landscapes, farms, and gardens, including trees, roads, and paths. Other amenities include furniture and restrooms; lighting; acoustics; storage and packing areas; security; transportation; information and communications technology (ICT); clearing materials; food services; and special facilities for the physically challenged. They enable the teacher to do his work very well and help the learner learn effectively. Teacher effectiveness has to do with the characteristics and skills of an effective teacher.

The effectiveness of a teacher is measured by the specific behaviors they exhibit in the classroom, which raise the standard of instruction for all students and support academic success. Some scholars define teacher effectiveness in terms of students' achievement, while others focus on high performance ratings from supervisors. Still others rely on comments from students, administrators, and other interested stakeholders.

Facilities are over-utilized when they are overstretched. If the rate of their usage is high, it is an indication that they are being used above their normal capacity. When they are underutilized, on the other hand, it is an indication that the facilities are not optimally used. Facilities are said to be optimally used when they are used to their full capacity. Time usage is another important factor in the capacity usage of physical facilities. If a school facility is used continually round the clock for days, thus exceeding the stipulated number of hours it is meant to work at a stretch, it is said to be over utilized. If it's below the set time, it's underused, and if it's within the set time, it's used to its fullest potential.

Availability and utilization of physical facilities or instructional facilities promote teachers' effectiveness and learning activities in schools, while non-availability may affect the academic performance of the learners negatively. The success of any system is a function of the available physical facilities to run it. Teaching facilities help stimulate the interest of the students. Whenever these facilities and equipment are judiciously used, they generate great students' interest in the learning system and also enhance the retention of ideas. Hence, the need for an assessment of the

availability and utilization of physical educational facilities on teachers' effectiveness in public senior secondary schools in Ovia north east local government area of Edo State becomes very curial.

This research will be conducted in different public senior secondary school in Edo south, based on this it will take into consideration the school size or population of student in public senior secondary school within the senatorial district. As such, school with the population of below five hundred will be consider as small school size and school with the population of students of above five hundred will be consider and large school size.

Statement of the Problem

The practical importance of the learning presupposes that the teaching aids, instructional materials, and every other school physical facility should be as close to actuality as possible. Teaching has been arbitrarily done without relevant instructional materials and other school physical facilities. They overlook and undermine the overwhelming importance of the teaching and learning process. The days when teachers only used the chalkboard lecture method of teaching and learning are over,

according to (Romiana, 2012). The combination of visual and oral presentation makes a deeper impression on the students. There is a need to provide basic formal educational instructional materials in secondary schools. In public secondary schools in Edo South Senatorial district, the lack of school facilities and how they are used when available, in terms of how effective and appropriate the materials are have remained major problems and topics of interest.

It has been observed that there is a lack of teachers' effectiveness in secondary schools because of the teachers' inability to put across ideas clearly to the students as a result of the non-availability of the instructional materials and other school physical facilities. Therefore, this study assesses the availability and utilization of physical facilities on teachers' effectiveness in public senior secondary schools in Ovia North East area of Edo State.

Research Questions

The following research question were raised to guide the study

1. To what extent is physical facilities available in public senior secondary schools in Ovia North East area of Edo State?

2. To what extent is physical educational facilities utilized in public senior secondary schools in Ovia North East area of Edo State?
3. What is the level of teachers' effectiveness in public senior secondary school in Ovia North East area of Edo State?
4. Is there a difference between utilization of physical facilities of male and female teacher effectiveness in public senior secondary schools Ovia North East area of Edo State?
5. Is there a difference in the relationship between availability of physical facilities and teacher effectiveness in public senior secondary schools in Ovia North East area of Edo State on size of school?

Hypotheses

The following null hypotheses were formulated to guide the study. Question one and two were answered directly while questions three to six were hypothesized and tested at 0.05 level of significance.

1. There is no significant difference between utilization of physical facilities of male and female teacher's effectiveness in public senior secondary schools in Edo State.

2. There is no significant difference in the relationship between availability of physical facilities and teacher effectiveness in public senior secondary schools in Edo South Senatorial district based on size of school

Purpose of the Study

The main purpose of this study was to assess the availability and utilization of physical facilities and teachers' effectiveness in public senior secondary in Edo South senatorial district. The study specifically determined.

1. The extent physical educational facilities is available in public senior secondary schools in Ovia North East area of Edo State
2. The extent physical educational facilities is utilized in public senior secondary schools in Ovia North East area of Edo State
3. The level of teachers' effectiveness in public senior secondary school in Ovia North East area of Edo State
4. The difference between utilization of physical facilities of male and female teacher effectiveness in public senior secondary schools in Ovia North East area of Edo State

5. The difference in the relationship between availability of physical facilities and teacher effectiveness in public senior secondary schools in Ovia North East area of Edo State based on size of school.

Significance of Study

The findings of this study will be significant in many respects, because the findings will benefits secondary school principals, teachers, students, the state, ministry of education and the country at large. The finding of the study will enable the determination of the available physical education facilities in schools will be of immense benefit to physical education teachers as it will help x-ray the physical education facilities available in senior secondary schools in Edo south. The determination of the extent of utilization of the existing facilities, equipment and supplies in the school will help the physical education teachers to carryout self-assessment in the teaching of Physical and Health Education and determine whether there is need for improvement or not.

The school principals and administrators will have adequate information on areas where physical education facilities are lacking or unavailable. It will provide the school principals with information whether

these instructional aides are being utilized as they supposed to. To determine whether the teachers need retraining or workshop on how to use the physical facilities in the schools, this will enable teachers' effeteness.

The students will benefit from the study because if schools procure facilities for physical and health education, it will bring improvement in teaching and learning of the subject. To the researchers, it will provide information upon which future researchers in the areas of physical and health education facilities could be based on.

The research study will enlighten educational planners, educators, ministry of education and government on the importance of availabilities and utilization of physical facilities in public senior secondary school. The study will provide information for the policy makers in the educational sectors. Also, facility managers, teachers, students, parents and the entire community will benefit from the study, since it will establish the fact, that availabilities and utilization of educational facilities aids teachers' effectiveness in senior secondary school in Edo South Senatorial District.

Scope of Study

This study primarily focused on the assessment of the availability and utilization of physical educational facilities on teachers' effectiveness in public senior secondary schools in Edo South Senatorial district senatorial district. The study also focused on content variables such as availability, utilization, physical facilities, teacher's effectiveness, gender and school.

Definition of Operational Terms

Physical Educational Facilities: physical educational facilities can be defined as the non-moveable permanent structures used in the process of teaching and learning

Availability: Availability can be defined as human and material facilities ready for use in teaching physical education.

Utilization: is defined as an act or instance of making practical or profitable use of something

Teachers' Effectiveness: Teachers' effectiveness is the teacher's ability to utilize approaches, strategies, connections to students and particular set of attitudes that leads to improved student learning and achievement.

Physical facilities availability: In this study, physical facilities availability is referred to as the presence of educational facilities or school facilities across the senior secondary school in the Edo South Senatorial District

Physical facilities Utilization: This is referred to in this study to mean the extent of putting the educational facilities and school facilities in the senior secondary school in the Edo South Senatorial District into effective and productive use.

Size of School: the size of school is referred to the population of student in the senior secondary school in the Edo South Senatorial District.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter deal with a review of literature related to this study. This will be done under the following sub-headings:

- Theoretical Framework
- Concepts Physical Facilities in Education in Public Secondary.
- Teachers Effectiveness in Public Secondary Schools
- Availability of School Physical Facilities and Teachers Effectiveness in Public Secondary Schools
- Utilization of Physical Facilities and Teachers Effectiveness in Public Secondary Schools
- The Relationship Between Availability of Physical Facility and Teachers Effectiveness in Public Secondary Schools
- The Relationship Between Utilization of Physical and Teachers Effectiveness in Public Secondary Schools
- The Relationship Between Availability of Physical Facilities and Teachers Effectiveness Based on School Size

Theoretical Framework

The present study adopted two theories in order to explain the phenomena of Availability and Utilization of Physical Facilities and Teachers Effectiveness in Public Secondary School. These theories also formed the foundation and basis for this present study and they are: Resource Dependence Theory (RDT) and Two-Factor (Motivation-Hygiene) Theory

Resource Dependence Theory (RDT)

Resource Dependence Theory (RDT) is a sociological and organizational theory that seeks to explain how organizations and individuals are influenced and constrained by their dependence on external resources. This theory was developed in the 1970s by Pfeffer and Salancik as a way to understand the relationships between organizations and their external environment, particularly in the context of resource acquisition and allocation. Key concepts and principles of Resource Dependence Theory include:

Resource Dependency: Organizations rely on various resources to function effectively. These resources can include financial capital, human

resources, information, technology, raw materials, and more. RDT argues that organizations are dependent on external sources for these resources, and this dependence shapes their behavior and strategies.

Interdependence: RDT emphasizes the interdependence between organizations and their resource providers. Organizations often have to negotiate and maintain relationships with external entities, such as suppliers, customers, government agencies, and other organizations, to secure the resources they need.

Resource Scarcity and Competition: RDT suggests that resources are often scarce, and organizations must compete with each other to gain access to these resources. The competition for resources can lead to power struggles, alliances, and other strategic actions.

Power and Influence: RDT highlights the role of power and influence in resource-dependent relationships. Organizations with control over critical resources have power over others, and they can use this power to influence the behavior and decisions of dependent organizations.

Resource Munificence: This concept refers to the overall availability of resources in the external environment. Organizations in environments with

abundant resources may have more options and less dependence, while those in resource-scarce environments are more vulnerable to resource dependence.

Buffering and Resource Diversification: To reduce vulnerability to resource dependence, organizations may engage in strategies such as buffering (stockpiling resources) and resource diversification (seeking multiple sources of the same resource).

Resource Uncertainty: RDT acknowledges that the external environment is dynamic and uncertain. Organizations must adapt to changes in resource availability, demand, and other external factors.

Organizational Strategies: RDT suggests that organizations develop strategies to manage their resource dependencies. These strategies can include negotiation, vertical integration (bringing resource production in-house), and creating strategic alliances or partnerships.

Resource Dependence Theory has been influential in the fields of organizational studies and strategic management. It helps researchers and practitioners understand why organizations make certain strategic choices,

how they form relationships with other organizations, and how they navigate resource constraints in their external environments.

Two-Factor (Motivation-Hygiene) Theory

The Two-Factor Theory of job satisfaction and dissatisfaction is another theory that finds an important place in the present study in the aspect of teacher job performance. This theory is also known as the Motivation-Hygiene Theory and is one of the content theories propounded by Frederick Herzberg in 1959 following an investigation into the sources of job satisfaction and dissatisfaction in order to determine the level of job performance of accountants and engineers. Content theories focus on factors within the person that start, energize, direct, maintain and stop the behaviour, which are also components of teacher job performance. The Motivation-Hygiene Theory identified that the wants of employees just like teachers in the secondary schools are divided into two groups. These groups form the Two-Factors in Herzberg's model: one consist of the satisfiers or motivator factors, because they are seen to be effective in motivating the individual to superior performance, effort and effectiveness.

These include achievement, recognition, responsibility, advancement, growth, and the work itself and are effective in motivating employees to greater productivity and which according to Herzberg are frequently unfulfilled in today's organizations. The other consists of the dissatisfies named the hygiene factors in the medical use of the term, which essentially describes the environment, while having little effect on job attitudes. Hygiene factors are job factors that create dissatisfaction and emanate from extrinsic job context such as salary, work conditions, supervision, interpersonal relationship, job security, company policy and administration. If the hygiene is at an unacceptable level, dissatisfaction will occur and low performance sets in. If managers really want motivated employees who are committed and effective, they should use the motivators because they produce high job performance, while the hygiene factors satisfy lower-order needs. This two factors impact on workers effectiveness and productivity that is, job performance.

The researcher in relating the theory also agrees with Herzberg that when certain factors are introduced within the school context, just like availability of school facilities Physical, printed and non-printed facilities,

this would directly motivate teachers to work harder (these are called Motivators). While there were also factors that would de-motivate teachers to work harder if not present (these are called Hygiene factors). Motivators are more concerned with the actual job itself. For instance how interesting the work is and how much opportunity it gives for extra responsibility, recognition and promotion.

In the school system, opportunities should be created for teachers to have access to and utilize facilities that will improve their efficiency as a way of determining their level of job performance. In essence, the presence and utilization of school facilities will enable teachers have a feeling of safe working conditions which will not only make them feel satisfied in their jobs but boost their job performances as well.

In essence, the job environment itself and its related factors that are associated with the job itself are important influences on teacher job performance. Therefore, the two theories discussed formed foundation and basis of the present study which makes it possible that the researcher adopt these theories in order to fill the gap existing for the study. The resource dependence theory is highly recommended for the present study having

based arguments on the extent of availability and utilization of facilities for commitment, high performance and productivity in any organization, including public senior secondary schools in Edo State south senatorial district. In the case of Herzberg's Two-Factor theory, the existence of two groups of factors is very essential to teachers effectiveness leading to improved job performance, whereas the satisfaction of the motivation factors leads to better performance; the satisfaction of the hygiene factors will obviously enhance teachers job stability and high performances also.

Concepts of Physical Facilities in Education

The concept of physical facilities in education encompasses the tangible and spatial elements that directly impact the teaching and learning process within an educational institution. In the context of the topic, "Availability and Utilization of Physical Facilities and Teachers Effectiveness in Public Secondary School in Edo South Senatorial District," the following concepts emerge: Infrastructure and Amenities encompass the physical structures that form the backbone of an educational institution. Classrooms, laboratories, libraries, administrative offices, and recreational spaces collectively constitute the educational

landscape. A well-designed infrastructure is essential for creating an environment that fosters effective teaching and learning. It provides the necessary spaces where knowledge is imparted, skills are honed, and ideas are nurtured.

According Olanrewaju (2016), Educational facility refers to non-human and non-financial resources. They include all movable and immovable materials, which are used for teaching, learning and other school activities. They are synonymous with schoo1 physical facilities, school material resources, and school plant and school facilities. According to the Federal Ministry of Education (FME, 2000), Educational facilities are classrooms, libraries, laboratories, workshops, school buildings, playfields, school farms, garden, electrical fixtures, the school environment, toilet facilities and portable water while human resources to include among others teachers, workshop attendance as well as the school administrators.

In the words of Olagboye (2004) educational facilities consist of instructional resources such as audio and visual aids, graphics, printed materials. Display materials and consumable materials. They also include physical resources such as land, building, furniture, equipment, machinery,

vehicles, electricity and water supply infrastructure. Also, Ogbodo in Dodo, Ajiki and Abimiku (2010) see educational facilities to include those materials resources that facilitate teaching and learning in the schools. To them, these include; teachers, laboratories, workshops, teaching aids and devices such as modern educational hardware and software in form of magnetic tapes, films and transparencies. Ehiamelator in Dodo, et al (2010) sees educational facilities as operational inputs of every instructional programme. That is to say, they are inputs which aid the teacher to achieve some level of instructional efficiency and effectiveness. Likewise, Offorma (2005) sees educational facilities as any material that facilitates teaching and learning activities and consequently the attainment of the lesson objectives. The relevance of educational facilities cannot be over emphasized in our colleges of Education. Anything a teacher used to achieve instructional objectives is called instructional materials. By implication the availability of the resource make meaningful conclusion in the teaching and learning and hence sustain development and human capacity.

According to them, there are other support facilities that render support services for effective and efficient teaching and learning processes, including the management of a school, in order to achieve the goals of the school. Some of such support facilities are good perimeter fences, trained day and night security guards, who among other qualification are agile, with good eyesight and constant electricity at night, among others.

Teachers' Effectiveness in Public Secondary Schools

In public secondary schools, where students undergo crucial stages of intellectual and personal development, the role of teachers becomes paramount. This section delves into the multifaceted aspects of teacher effectiveness, examining the key factors that contribute to their ability to inspire, engage, and facilitate meaningful learning experiences. According to Hammond (2010), Teacher effectiveness is generally referred to in terms of the focus on students, their performance, teacher behaviors, the classroom procedures and conduct that are implemented in order to better the outcomes of the students.

In the same vein Ko, Summons and Bakkum (2013), Teacher effectiveness besides focusing upon the performance of the students

centers on the number of areas; effective teachers have to be clear about the instructional goals, possess sufficient knowledge about the content of the curriculum and the strategies for teaching, communicating appropriately with the students of what is expected of them, following appropriate teaching techniques and material to make learning useful, should be knowledgeable and aware about the students, adapting instruction to their requirements, anticipating misapprehensions in their existing knowledge, teaching students meta-cognitive strategies and providing them with opportunities to master them, addressing higher as well as lower level cognitive objectives, monitoring the understanding and performance of the students by providing feedback, integrating their instruction with that in other subject areas, and accepting responsibility for student's outcomes.

Darling-Hammond (2010) defined an effective teacher as one who is intellectually challenging, motivating students, setting high standards and encourages self-initiating learning. Anderson (2004) viewed an effective teacher as those teachers who achieved the goals set for them or goals set for them by others like the Ministry of Education. As such Ko, Summons

& Bakkum (2013) state that, Teacher effectiveness centers on good teaching, possessing appropriate and sufficient knowledge of the subject matter, evaluating the students, identifying their appropriate learning needs and requirements, possessing skills regarding the usage of questions to engage and challenge the students are also an important aspect of teacher effectiveness, and consolidating understanding is considered to be the effective use of assessment for learning.

For Grant (2011) the basic dimensions that could be used to characterize an effective teacher are: Instructional effectiveness, uses of assessment for student learning, Positive learning environment and Personal quality of the teacher. Also, Goe, Bell & Little (2008), identified five major dimensions that were used to characterize teachers Effectiveness these are follows:

- Effective teachers have high expectations from the students and help students learn, as measured by the value added or other test-based growth measures or by alternative measures.
- Effective teachers render their wholehearted contribution to positive academic, attitudinal and social effects for students such as regular

attendance, promotion to the next grade, on-time graduation, self-efficacy and cooperative behavior.

- Effective teacher makes diverse use of resources and material to make learning fruitful; to plan and structure engaging learning opportunities, scrutinize the progress of the students, modifying instruction as required and evaluate learning making use of multiple sources of evidence.
- Effective teachers focus upon not just the learning and development of the students but also on enhancing the classroom climate and schools that value multiplicity and civic-mindedness. There should be no discrimination on the basis of class, caste, gender, religion or ethnicity.
- Effective teachers possess appropriate communication skills, they collaborate with other teachers, administrators, parents, and education professionals to ensure student success, particularly the teachers have to depict their effectiveness if they are dealing with students with special needs and those at high risk of failure (Goe, Bell & Little, 2008).

Availability of School Physical Facilities and Teachers Effectiveness in Public Secondary Schools

The availability of physical facilities in public secondary schools is a cornerstone that significantly influences the effectiveness of teachers. A well-equipped learning environment provides the necessary infrastructure for educators to deliver quality education. This section delves into the critical relationship between the availability of school physical facilities and the effectiveness of teachers, emphasizing how conducive spaces and adequate resources enhance the teaching-learning process.

Smith et al. (2018), states that a primary consideration in the availability of physical facilities is the classroom environment, Well-maintained classrooms with appropriate seating arrangements, lighting, and ventilation contribute to a conducive learning atmosphere. Research has shown that students in well-designed classrooms exhibit higher levels of engagement and academic performance. Furthermore, in the words of Wong and Yung (2019), technology integration within classrooms, including interactive whiteboards and audio-visual equipment, supports dynamic and interactive teaching methods. This technological

enhancement enables educators to create engaging lessons that cater to diverse learning styles. They maintained that, Laboratories, particularly for subjects like science and technology, are essential for hands-on learning experiences.

Availability of well-equipped labs allows teachers to conduct experiments and practical demonstrations, reinforcing theoretical knowledge. Additionally, specialized spaces for activities like art, music, and physical education contribute to a holistic educational experience. For instance, a dedicated art studio with adequate resources fosters creativity and artistic expression among students (Lawanson & Tari, 2011). Lawanson and Gede (2011) explains a well-stocked library provides students with access to a wide range of educational materials, fostering independent learning and research skills. Availability of reference books, digital resources, and study spaces empowers students to supplement classroom instruction. Moreover, learning resource centers equipped with technology facilitate collaborative projects and research endeavors. Online databases and e-books expand the scope of available resources, allowing students to delve deeper into subjects of interest.

The presence of teaching aids, such as audio-visual equipment, educational software, and interactive whiteboards, amplifies the effectiveness of teachers. These tools facilitate dynamic and interactive teaching methods, catering to diverse learning styles (Wong and Yung, 2019). When educators have access to modern teaching aids, they can create engaging lessons that resonate with students. Additionally, interactive simulations and virtual labs in subjects like science and mathematics enhance conceptual understanding.

Longman (2003) explains available as something that is able to be used or can easily be found and used. In other words, they are those resources that are committable or usable upon demand to perform their designated or required function. Writing on availability of school facilities and academic achievement. Owoeye (2011) opined that availability of school facilities is a potent factor to quantitative education. According to them the importance of provision of instructional facilities for teaching and learning in the education sector cannot be over emphasized. The authors added; “teaching is inseparable from learning but learning is not separable from teaching”. According to them this means that teachers do the teaching

to make the students learn, but students can learn without the teachers. They added that learning can occur through one's interaction with one's environment. Environment here refers to facilities that are available to facilitate students learning outcome. Salami (1999) in Akin & Taylor and Aboyomi (2008) noted that availability of adequate facilities and equipment is of vital importance in public senior secondary school.

The availability of physical facilities directly impacts teacher effectiveness by providing the necessary resources and conducive spaces for effective instruction. Well-maintained classrooms, specialized learning spaces, access to educational materials, and modern teaching aids collectively contribute to an environment where educators can excel in their roles. Moreover, the integration of technology and the availability of diverse resources cater to individual learning styles and abilities, creating an inclusive learning environment. In conclusion, ensuring that public secondary schools are adequately equipped with physical resources is a critical step towards enhancing the quality of education and empowering educators to deliver their best. A comprehensive approach to facility provision, encompassing classrooms, laboratories, libraries, and

technological resources, lays the foundation for effective teaching and learning. By prioritizing the availability of physical facilities, educational institutions demonstrate a commitment to creating an environment that nurtures academic excellence and fosters the growth of both students and teachers.

Facilities in the school are provided for staff and students to optimize their productivity in the teaching-learning process. The realization that the transfer of knowledge does not only take place in the four walls of the classroom from the teacher to the students but rather that learning takes place through discovery, exploration interaction with the internal and external environment has necessitated the creative and innovative development of teaching and learning facilities that reflects these changes (Asibiaka, 2008). Facilities provided for teaching enhances the teacher's ability to achieve curriculum goals and objectives.

School facilities consist of the buildings, equipment, and records for academic and non-academic activities (classrooms, assembly hall, offices, libraries, laboratories, school fence and gate), Information and Communication Technology gadgets (computers, printers, scanners),

furniture, facilities for recreational activities, toilets facilities, electrical equipment (lighting, fans, air conditions), instructional materials (text books, charts, teaching aids and other writing materials), water, food services, security, storage facilities and transportation.

- School buildings: School buildings are very important in any educational programme; they are an essential part of the school plant. Ayodele (2011) studied the relationship between the school environment and learning outcomes among students in llaje Local Government Area of Ondo State. The aim of the study was to establish the importance of adequate school facilities on students' academic achievements. Stratified random sampling was adopted to select a sample of 234 respondents from a population of 1824 secondary school students. The findings indicated that adequate school buildings are necessary for the accomplishment of any educational programme.

School buildings consist of classrooms, staffrooms, library, offices, hall, cafeteria, laboratory, toilets, fence, gate etc. Effective management of school building brings about development of educational programmes and

facilitates the educational process. It also results in boosting the morale of teachers and enhances their usefulness.

Investment in education involves the provision of necessary infrastructure and facilities that will enhance the teaching-learning process. Adegboyega (2002) observed that little attention is paid to education in terms of funding and this money is spent on recurrent expenditure leading to the deterioration of existing school buildings in most public schools. The quality of school buildings, play a vital role in the utilization process. Schools with school blocks, broken walls, littered lawns and path ways, profane writing on walls, bushy lawn and overgrown hedges are unattractive to parents and students. It is important for the environment to be kept clean and attractive for the school to get patronage from members of the society (Goladd, 2004; OECD, 2015; and Ma & MacMillan, 2009).

Owoeye and Yara (2011) noted that school buildings are a very vital input in the educational system; they form the bases upon which the system thrives though, they do not teach but their use may facilitate or impede learning. They reiterated that from Inspector's report over the years, there is abundant evidence and catalogue of inadequacies in the

management of school buildings and materials for instruction. In most states in Nigeria, public secondary schools are characterized by unhygienic conditions such as broken ceiling, doors and windows, while in other cases classroom floors are characterized by broken concrete. The situation is worse in rural areas, and under these unfavorable situations; much learning cannot be expected to take place.

They are of the opinion that education institutions from Nursery to University require buildings for their effective operations Classrooms, offices, assembly halls, laboratories and libraries are needed in the school and should be in good conditions for schools to function properly. Where these facilities are not available teachers become frustrated because achieving educational goals become cumbersome.

Comparing schools in developing countries with developed countries, in terms of facilities, materials, utilization, and provision. Akintayo (2010) undertook a comparative study between schooling in developed countries and developing nations. The study revealed that schooling in a developing country like Nigeria take place under conditions that are very different from those in developed countries like United States

of America, Great Britain, and China. The study further revealed that facilities in developed countries receive more attention in terms of maintenance than those in developing countries.

- Classrooms: Powell (2010) defines a classroom as a learning space, a room in which classes are held. Classrooms are found in educational institutions of all kinds, from preschool to universities, and may also be found in other places where education or training is provided. Teaching- learning activities which are the major activities in the school are carried out in the classroom. Effective teaching and learning requires a comfortable classroom where seats and desks are available and adequately utilized.

Most classrooms have a large writing surface where the instructor or students' can share notes with other members of the class. This is usually known as the blackboard. However, in developed countries schools have moved from the blackboard to more sophisticated alternatives such as flipcharts, whiteboards, and interactive whiteboards, televisions and LCD projectors for presenting information and images from a computer (Lawrence, 2009). This is not the case in developing countries where

education has not received the necessary attention it requires Poor management and maintenance of this facility has led to most secondary schools no longer having the wooden surface to write on they make use of the wall which is darken and used as a blackboard.

- Library: The oxford advanced dictionary described a library as a building or room in which collection of books, tapes, newspapers etc. are kept for people to read, study or borrow. Library is an essential factor in teaching-learning process. It performs one of the most important educational services. The educational process revolves around a world of books. Library as a platform for sharing knowledge is aimed at rejuvenating Nigerian schools through the provision of current books and journals. A school library is an academic library that supports school programmes as well as the teaching and learning process (Alimi, 2007). The chief purpose of a school library is to make available to the student at his convenience, all books, periodicals and other reproduced materials which are of interest and value to him (Clarke, 1999). It has been observed that there is a strong relationship between school libraries and teacher's

success in the school. Keith, (2004) investigated the relationship between the school library and academic achievement of secondary school students. Results of the study revealed a correlate between a well-equipped school library and high academic achievements. The study further revealed that teachers in schools that have well equipped library have a high-performance rating than those in schools where libraries are less developed. The finding was corroborated in separate studies by Chan (2011) and Perier, (2015).

As a resource, the library occupies a central and primary place in any school system. It supports all forms of school teaching and provides services and guidance to its readers. A library must be well equipped with up-to-date materials. The role of the library is also reflected in the National Policy on Education (2012) which states that libraries constitute one of the most important educational services proprietors of schools shall provide functional libraries in accordance with the established standard. They shall provide for training librarians and library assistants for these services.

The quality of a school library services makes a difference in teacher's performance as it promotes the growth of knowledge. A well-

equipped library is a store house of knowledge if properly organized and utilized, it will promote teacher's performance and encourage students' interest in reading and learning (Clark, 2001; Crampton & Thompson, 2002). However, libraries don't make a difference in learning if they are merely warehouses of outdated materials or when staffed only by clerical staff members.

A library must be properly funded so as to meet the needs of the educational system. Absence of up-to-date materials that meet the academic demands of teachers and students in the school library will have a negative impact on these study habits of students which can affect the teaching-learning process. However, the number of books in the library would mean nothing if the books; are not utilized by teachers and students, are out-dated, unattractive or inappropriate (Clark, 2001)

With the above mentioned, it is sad to note that many public schools operate without libraries (Owoeye et al., 2011). The total absence of an organized school library would affect teachers' level of success in meeting educational goals and objectives because the school library enable student's make discovery for themselves by independent study and learning.

- Laboratories: The laboratory has been conceptualized as a room or a building specifically built for teaching by demonstration of theoretical phenomenon into practical terms. Farombi, (1998) argued that the laboratory is central in secondary school science subjects, since students must construct their own understanding of scientific ideas. This knowledge cannot simply be transmitted by the teacher, but must be developed by student's interactions with nature and the teacher. Meaningful learning will occur where laboratory activities are a well- integrated part of a learning sequence.

Soyibo and Nyong (1984) are of the opinion that laboratory helps to provide a forum wherein the learner puts his beliefs, ideas, statements, theoretical propositions to some forms of experimental test. He further stated that to maintain and arouse the interests of students in subjects involving laboratory work, the teacher should be effectively involved.

Research has shown that students who engage in well-designed laboratory experiences develop problem-solving and critical thinking skill, as well as gain exposure to reactions, materials, and equipment in a lab setting. A study conducted by Moseley and Baun (2011) in Manila high

schools revealed that practical's in the laboratory provides the students with experiences beyond imagination. Similarly, a study conducted by Graves, (2013) in New York found that teachers as well as students learn new experiences each time, they carry out experiments in the laboratories.

Yadar (2007) opines that no course in science and mathematics can be considered as complete without including some practical work. The practical work ought to be carried out by individuals either in science laboratories or in classes. At school level, practical work is even more important because of the fact that we learn by doing. Scientific practices and applications are thus rendered more meaningful it is a known fact that an object handles impuses.lt more firmly on the mind than an object merely seen from a distance or in an illustration. Thus, practical work forms an important feature in any science and mathematics course (UNESCO, 2008).

- School Fence and gate: The school fence and gate are important aspect of school facilities. They provide protection for staff, students and facilities in the school. The importance of demarcating the school environment from other areas is crucial for the educational

development of a nation. It is sad to note that most public schools have broken fence and gate, or non in some cases resulting in unchecked access into the school compound. Most public school compound are used for recreational activities such as football competition by members of the host community, in other cases the classrooms are used for religious activities and other social engagements after school hours, and recently there are cases of classrooms been taken over by cattle's, thereby putting the facilities in the school at the mercy of these intruders. Adequate securities of the school premises help protect facilities and ensure adequate management of existing facilities.

Areas mapped out as school compounds over time has been encroached by land developers as a result of absence of fence and gate in most public schools. Schools must be safe and secure to ensure the best and possible situation for teaching and learning. It is incumbent upon government and stakeholders in education to take action to protect staffs, students and facilities in the school. This will facilitate an atmosphere

where students can learn and teachers can perform their job in a positive, healthy and safe atmosphere (Brabeck, 2001).

Nigeria has been experiencing security challenges in recent times and the schools are mostly targeted, there are reports of teachers and students been abducted from their schools. This is possible because of poor state of security in the schools, a school that has a functioning fence, gate and security can provide protection for members of the school. This will enable the teachers perform their job and increase efficiency.

- Computers: Computers provide an invaluable tool in education, primarily in the acquisition and analysis of data used for research. Fields such as science, writing composition, mathematics and history all benefit from access to the internet (Daniels, 2003). Educational programmes designed to stimulate learning provide alternative ways for students to learn a subject. Milshtein (2003) is of the opinion that computers are vital to modern business, government and society, familiarity with computer systems is a necessary skill in the 21" century.

Learning to use computers and software for problem solving, data manipulation and model building is also important for science and mathematical fields. Access to the internet provides communication avenues between students and teachers about particular assignments or topics, and use of school blogs can provide quick feedback from peers (Caena, 2011). In a developing country like Nigeria, people with knowledge of computer are fewer. This account for the low number of people who has computer literacy, unlike developed countries where a large percentage of the population has computer literacy.

Computer literacy is an exposure to happenings around the world; hence, its introduction into the Nigerian educational system. The neglect experienced in the education sector over the years, has deprived a large number of Nigerians computer literacy. David and Chan, (2000) revealed in a study that computers make the teaching and learning process less cumbersome because it reduces time spent on mechanical tasks such as rewriting, producing graph, help in finding information, helping to organize information, making it easier to share information and ideas with others. The findings were upheld by Hathaway, (2012) and Hale (2015).

- Furniture: These are an integral part of the school setting. A child can have a better learning experience only in a comfortable environment. A comfortable environment requires a good set of educational furniture (Hill, 2012) it is the duty of the school management to look into and make learning both comfortable and pleasurable. The usual sets of school furniture consist of tables, chairs and desks, laboratory stools, office furniture, and computer tables. It is important that seats and desks provided are the right size for the age of the learners (Grady, 2016)

Desks and tables are the primary pieces of furniture in any classroom and learning environment. Learners spend an average of six or more hours seated each school day. In addition, teachers have to prepare for lessons, teach, grade work and often sit long hours after lessons have finished. Therefore, school furniture must be made of high quality furniture and there should not be any compromise on that (Lawrence, 2009).

Powell (2010) is of the opinion that sub-standard school furniture can get damaged easily and this can cause distraction in the classroom.

Apart from the classroom, office furniture for teachers should also be comfortable as this will motivate the teacher in performing his job.

Facilities for recreational activities: Recreation is an essential part of human life and finds many different forms which are shaped naturally by individual interests and also by the surrounding social milieu (Fickes, 2003). Recreational activities in the school are important to both staff and students. These activities are usually carried out during physical education class.

The subject physical education is an integral part of the total education of every child in the school, Recreational activities require facilities such as a field for outdoor games (football, track and field events), indoor facilities for games: such as basketball, volley ball, table tennis, scrabble, chess, and swimming (Guarneiri, 2003).

- Toilet facilities: These are equally very important in the school. Toilets in most public secondary schools portray a sorry sight in an academic environment. This is as a result of neglect experienced by many public schools over the years. Adequate management of these facilities can influence teachers' as well as students' performance in

the school. Schools that lack functioning toilets cannot have a clean environment. It is important for the school premises be kept clean as this will enhance a positive attitude towards the personal hygiene of the students (Powell, 2010).

Apart from toilet facilities another important factor is water; where toilet facilities are present and there is no water supply to make it function it will pose a big challenge to members of the school. Provision of water in the school will help keep the students inside the school premises because apart from to, water use for other activities in the school.

- Electrical facilities: These are materials that promote the teaching/learning process. Electrical facilities in school include fan, fluorescents, air conditions, computers, and laboratory devices for science practical. Availability of electricity in the school; provide access to information all around the world through the internet, helps to put the classroom in a conducive atmosphere for teaching and learning to take place and above all make the teacher job much easier.

Shelly, Cashman and Gunter (2009) are of the opinion that schools without electricity are schools without access to much information when compared to schools where electricity is provided. The growth and development of education in developed countries today is as a result of functioning electricity in the system.

- Instructional materials: These are tools used in educational lessons, which includes active learning and assessment. Basically, any resources use by the teacher to help him teach the students is an instructional material. They include text books and workbooks, novels, diagrams, charts, tables, flow charts and graphs. Others include pamphlets, games, maps, films and videos. Different subjects requires a specific type of instructional material to teach it, for example, language arts subject requires literature text books, writing textbooks, vocabulary and spelling workbooks, and even novels. These materials can really help to introduce new concepts to the students (Simpson, Mcllride, Spencer, Lowdermilk, & Lynch, 2009).

Science subjects requires the use of graphic representation and laboratory experiments to drive home the point the teacher wants to impress on the students, hence, graphs and other charts as well as chemicals for experiments are a very essential examples of instructional materials needed to teach a science class. Equally, organizing games helps to boost the physical and health education class and serve as recreation for the students. Other subjects such as geography and history, requires the use of maps to illustrate the factual position of an event. Films and videos help to put life into abstract objects described by the teacher in the class. They help the student to remember the events tied to a particular situation (Vandiver, 2011).

Instructional materials to teach are very important in the school, where they cannot be purchased teachers are advised to improvise because they are needed to assist the teacher in impacting knowledge to the students.

Transportation: This is a very important facility in the school. The school bus is important in the school because it provides mobility for teachers and students to enable them visit places of interest discussed during the

teaching process. Without the school bus, meeting some specific stated objectives in the curriculum becomes difficult. Apart from visiting places of interest, the school bus is needed to convey teachers and students to and from school. The effective management of these facilities will keep them useful for a much longer period than when management practice is poor.

Utilization of Physical Facilities and Teachers Effectiveness in Public Secondary Schools

The utilization of physical facilities in public secondary schools is a critical factor that significantly influences the effectiveness of teachers. It encompasses the strategic deployment of available resources, the arrangement of learning spaces, and the integration of technology to optimize the teaching-learning process. This section delves into the intricate relationship between the utilization of school physical facilities and the effectiveness of teachers, emphasizing how purposeful utilization enhances the educational experience.

Utilization of resources according to Chakraborty, Islam, Chowdhury, Bari and Akhter (2011 as cited in Ugwuanyi, 2013) is a complex behavioral phenomenon; however, it is always related to the

availability and quality of such resources or services as the case may be. Ugwuanyi (2013) explain utilization as to make use of available services at the individual's disposal. Obi (2006) asserts that from the National Policy on Education (NPE; 2004) it could be observed that one of the objectives of education is to make learning permanent. According to him the utilization of instructional materials in teaching is a sure way of achieving this objective.

The process of managing and organizing resources for teaching and learning is referred to as resource utilization (Lewin, 2000). Resources utilization has to do with the extent to when facilities are provided to schools, these are three possibilities, they are either used effective or inefficiently or they may remain unused. When item of equipment is maximally used such as equipment is effectively utilized. If the equipment is not maximally used it can be said to be underutilized. When there is so much pressure on the use of equipment this may result to over utilization which could lead to breakdown of such item of equipment.

Teaching leaning facilities improves the quality of teaching and make learning content meaningful. According to Ihiegbulem (2006)

resource materials utilization during practices lessons inculcates in the students the spirit of careful observation, manipulative skills, respective thinking and creativity in the learners, Lewin (2000) however reported that science facilities are only important when they are used. Similarly, Awoniyi (1999) as cited in Muhammad, 2017) reported that the availability of resource input into the education system has no value for achieving educational objectives if they are not actually utilised. One of the major problems facing the teaching and learning of science is connected with the management of available resources (Ogunleye, 2003). Movement of resources requires the science teacher himself be resourceful and creative and be careful in handling and using available facilities are handled cautiously especially the fragile ones. This is necessary because once the facilities are misused they cannot offer the best service required.

Based on this, Nwadiani and Ugolo (2012) observed that the facilities are not only over utilized, they are also poorly maintained Similarly, in a study conducted by Aigboje (2007) on Universal Basic Education in Nigeria, he found out that some school facilities, were inadequate while others were not available at all. These situations are

posing challenges to administrators and inspectors of schools who are supposed to manage available facilities efficiently and effectively (Abdulkareem, 2012). When real objects or their representatives are used in teaching, students see, touch and interact with these materials. Interaction with learning materials will help the students not to forget what they learnt easily. Olagunju and Abiona (2008) explained that the process of managing and organizing resources is resource utilization. They added that in a school, the available resources should be utilized in such a way that enables the effective teaching. According to Asiyai (2012) many scholars, researchers, administrators and educational planners have confirmed that school facilities in Nigerian schools are inadequate and few available ones are being over utilized due to the astronomical increase in school enrolment.

The Relationship between Availability of Physical Facilities and Teachers Effectiveness in Public Secondary Schools

The availability of physical facilities in public secondary schools is a fundamental determinant of teacher effectiveness. This relationship hinges on the premise that a well-equipped and conducive learning environment

directly influences how effectively teachers can deliver instruction. This section explores the intricate dynamics between the availability of physical facilities and the effectiveness of teachers, highlighting the profound impact that infrastructure has on the teaching-learning process. At its core the availability of physical facilities encompasses a spectrum of elements that collectively form the educational landscape. These include classrooms, laboratories, libraries, administrative offices, recreational spaces, and specialized facilities for subjects like science, arts, and physical education. When adequately provisioned, these spaces offer educators a platform to engage students effectively.

Classrooms serve as the epicenter of instruction. Well-maintained classrooms with ergonomic seating arrangements, ample natural light, and proper ventilation provide a conducive setting for learning. Research consistently underscores the link between the quality of classroom environments and student engagement, affirming that a conducive physical space directly supports effective teaching (Fisher, 2017). Laboratories, particularly crucial for subjects like science, technology, engineering, and mathematics (STEM), offer a unique dimension to the teaching process.

Equipped with specialized tools and equipment, these spaces allow teachers to conduct experiments and hands-on activities, enabling students to bridge theory with practice. Availability of well-maintained labs significantly enhances the effectiveness of science and technology instruction (Rinke & Gladstone-Brown, 2019). Libraries, often referred to as the intellectual heart of a school, play a pivotal role in supporting teachers' efforts. A well-stocked library, replete with a diverse range of books, digital resources, and reference materials, empowers educators to supplement classroom instruction. Moreover, it encourages independent research and study, fostering a culture of lifelong learning among both teachers and students.

Administrative offices and support spaces form the logistical backbone of a school. Efficiently designed administrative areas streamline operational functions, ensuring that teachers have access to necessary resources and administrative support. A well-organized administrative infrastructure directly impacts the effectiveness of teachers by minimizing bureaucratic hurdles and allowing them to focus on instructional responsibilities.

Recreational spaces, including playgrounds, sports fields, and communal areas, are instrumental in providing holistic education. Physical activity and extracurricular engagement are integral components of a comprehensive educational experience. Well-maintained recreational spaces offer opportunities for students to develop physical fitness, teamwork, and social skills, complementing the academic curriculum (Scruggs et al., 2020).

In the realm of specialized facilities, subjects like arts, music, and physical education demand dedicated spaces equipped with relevant resources. Availability of well-maintained studios, practice rooms, and sports facilities amplifies the effectiveness of educators in these domains. Specialized spaces empower teachers to deliver comprehensive instruction and nurture students' talents and interests.

Empirical studies substantiate the critical link between facility availability and teacher effectiveness. Research conducted by the National Clearinghouse for Educational Facilities (NCEF) indicates that schools with adequately provisioned physical facilities experience higher teacher satisfaction levels, lower turnover rates, and enhanced instructional quality

(NCEF, 2020). This underscores the tangible benefits of prioritizing facility provision in the educational ecosystem.

In conclusion, the availability of physical facilities is not merely a logistical consideration, but a linchpin of teacher effectiveness in public secondary schools. Well-maintained classrooms, specialized facilities, libraries, and recreational spaces collectively form the canvas upon which effective teaching and learning unfold. By recognizing and addressing the importance of facility availability, educational institutions empower teachers to excel in their roles and create a thriving learning environment for students.

In a study conducted by Nwile & Inukan-Adebayo investigated the assessment of the availability and utilization of physical facilities on teachers' effectiveness in public senior secondary schools in Rivers State. The study adopted the correlational study design. The study was carried out in Rivers State. The population of the study was comprised of 7514 male and female teachers in sampled public schools. Due to the small sample size of the population, censor sampling was adopted. Hence, the entire population was used. A self-structured instrument was used titled:

Assessment of Availability and Utilization of Physical Educational Facilities on Teachers' Effectiveness (AAUPEFTE). The instrument was validated by the expert judgment of three lecturers in measurement and evaluation from the Rivers State University, Port Harcourt. The experts assessed the instrument in terms of content, suitability of language, and appropriateness. Their corrections and modifications were incorporated before the distribution of the instrument. The reliability of the instrument was established using the test re-test method. A reliability co-efficient of 0.82 was obtained, which showed that the instrument was reliable. A mean and standard deviation were used in answering the research questions, while z-test statistics were used to test the hypotheses at a 0.05 level of significance. It was revealed that the provision of school facilities should be proportional to the increase in school population; qualitative educational facilities should be provided; there should be monitoring of facilities by school heads and teachers to ensure durability; and schools should have regular power supply so there will be adequate lighting and facilities that require electricity can be used. The study's conclusion was that the

availability and use of educational resources must go hand in hand for teaching and learning to work well.

The Relationship between Utilization of Physical Facilities and Teachers Effectiveness in Public Secondary Schools

The utilization of physical facilities in public secondary schools is intricately linked with teacher effectiveness. It encompasses the strategic deployment of available resources, the arrangement of learning spaces, and the integration of technology to optimize the teaching-learning process. This section explores the dynamic interplay between the utilization of school physical facilities and the effectiveness of teachers, shedding light on how purposeful utilization enhances the educational experience.

- Maximizing Learning Environments

Effective utilization of physical facilities begins with the layout and arrangement of classrooms. By organizing seating arrangements to facilitate interaction and visibility, teachers can create an environment that encourages active participation and engagement (Ginsberg and Hopkins, 2017). Furthermore, flexible seating options that allow for group work or

independent study can adapt to varying instructional needs and learning styles.

- Integrating Technology for Enhanced Instruction

Incorporating technology into classroom instruction is a pivotal aspect of optimizing physical facilities. Utilizing interactive whiteboards, tablets, and educational software enables teachers to deliver dynamic and multimedia-rich lessons. Moreover, technology integration provides opportunities for interactive simulations, virtual field trips, and real-time assessments, enhancing both student engagement and comprehension (Reich et al., 2020).

- Creating Specialized Learning Spaces

Beyond traditional classrooms, specialized spaces within a school environment offer unique opportunities for tailored instruction. Designated areas for project-based learning, maker spaces, and collaborative zones foster creativity, critical thinking, and teamwork. These spaces provide students with the opportunity to apply theoretical knowledge in practical, hands-on contexts, enhancing their problem-solving abilities (P21, 2020).

- Adaptive Use of Laboratories and Resources

Laboratories, often equipped for specific subjects like science and technology, hold immense potential for experiential learning. Teachers can maximize these spaces by facilitating experiments, simulations, and hands-on activities that reinforce theoretical concepts. Additionally, proper utilization of lab resources, such as scientific equipment and technology, ensures that students gain practical skills relevant to their field of study.

- Implementing Differentiated Instruction Strategies

Utilization of physical facilities plays a crucial role in implementing differentiated instruction. Varied learning spaces, breakout rooms, and quiet zones allow for the customization of learning experiences to meet the diverse needs of students. Teachers can adapt their instruction to accommodate different learning styles, abilities, and paces of learning, creating an inclusive educational environment (Tomlinson and Imbeau, 2010).

- Enabling Student-Centered Learning Environments

Well-planned utilization of physical facilities supports the transition towards student-centered learning models. By arranging spaces to accommodate independent research, group projects, and self-directed

exploration, educators foster a sense of autonomy and responsibility in students. This approach empowers learners to take ownership of their education, leading to deeper understanding and increased motivation (Larson &Lockee, 2014).

- Integrating Multidisciplinary Learning Spaces

Public secondary schools have the opportunity to create multidisciplinary learning environments that transcend traditional subject boundaries. Spaces designed for interdisciplinary projects and collaborative learning experiences encourage students to draw connections between different fields of study. This holistic approach cultivates critical thinking and problem-solving skills necessary for success in a diverse and interconnected world.

- Harnessing Outdoor and Recreational Spaces

Effective utilization of physical facilities extends beyond indoor spaces. Outdoor areas, such as gardens, courtyards, and athletic fields, offer opportunities for experiential learning and physical activity. Teachers can leverage these spaces for outdoor classrooms, scientific observations,

physical education classes, and recreational activities, enhancing the overall educational experience.

On the other hand, King and Nart (2016) carried out a study on teachers' perception of facilities maintenance in middle school of Commonwealth Virginia, using percentage, frequency and Mann-Whitney's U test. The results revealed that poor facilities maintenance reduces the teacher's productivity.

The Relationship between Availability of Physical Facilities and Teachers Effectiveness Based on School Size

The size of a school, in terms of student population, introduces a dynamic element into the relationship between physical facilities and teacher effectiveness. Larger schools often grapple with issues of scale, while smaller schools may face resource constraints. Exploring this relationship provides valuable insights into how the availability of physical facilities interacts with teacher effectiveness based on school size.

In larger schools, which may accommodate a substantial number of students, the availability of physical facilities becomes a critical factor. Adequate classrooms, laboratories, and communal spaces are paramount to

accommodating the larger student body. Moreover, larger schools often have diverse academic programs, necessitating specialized facilities for various subjects and extracurricular activities. However, larger schools may face challenges in maintaining an optimal teacher-student ratio. Ensuring that teachers have the necessary resources and support to effectively engage with a larger cohort of students is essential. Additionally, administrative and logistical considerations in larger schools require efficient facility management and utilization.

Conversely, smaller schools, characterized by a more intimate student population, may encounter resource constraints in terms of physical facilities. Limited physical space may lead to creative solutions such as multi-purpose rooms or flexible scheduling to make the most of available resources. However, smaller schools may benefit from a closer-knit community, allowing for more personalized interactions between teachers and students.

In smaller schools, the challenge lies in balancing resource allocation to meet diverse educational needs. Effective utilization of limited space and resources becomes paramount. This may involve

creative scheduling, innovative classroom layouts, and collaborative use of facilities to maximize their potential. The relationship between the availability of physical facilities and teacher effectiveness in schools of varying sizes underscores the importance of tailored approaches. Larger schools require strategic facility planning to accommodate their larger student population, while smaller schools necessitate resourceful utilization of limited space.

Empirical studies examining schools of different sizes have shown nuanced effects of facility availability on teacher effectiveness. For instance, research indicates that in larger schools, the presence of well-maintained and adequately equipped facilities positively correlates with teacher satisfaction and perceived effectiveness (Fowler et al., 2018). Conversely, in smaller schools, the emphasis shifts towards adaptability and creative use of available spaces to optimize teaching and learning experiences (Ellis & Fouts, 2019).

The relationship between the availability of physical facilities and teacher effectiveness is modulated by the size of the school. Understanding this dynamic provides valuable insights for educational administrators and

policymakers. By tailoring facility planning and utilization strategies to the unique challenges and opportunities presented by schools of varying sizes, educational institutions can create environments that optimize teacher effectiveness and enhance the overall learning experience.

Summary of Literature Reviewed

This chapter reviewed literature related to the study which is availability and utilization of physical facilities as correlate of teachers' job effectiveness. The concept physical facilities were adequately given. The theoretical framework adopted in the study was the system theory. Several empirical studies were adequately reviewed. It is noticeable in the study that there were divergent opinions as to the availability and utilization of physical facilities in the various public senior secondary schools. Also noticeable in the empirical review is the fact that only one was studied in Edo south senatorial district. Again, none of the studies dealt with the influence of availability and utilization on teachers' effectiveness. These are the gaps that this study is aimed to fill. This study will be conducted in public senior secondary school in Edo south senatorial district and in

relation to the influence of availability, and utilization of educational facilities and teachers' effectiveness.

The concept of availability and utilization of physical facilities and teachers' job effectiveness wits extensively discussed. The study examined the extent to which facilities are available in schools the study also explained how effective utilization of these physical facilities, enable the process of teaching and learning process, also school plant operation has impact on teachers' job effectiveness. The level of motivation to work reduces when facilities and equipment to work as well as good working available such as salary, fringe benefits, sense of achievement and recognition are poor.

Nathan (2002) found that schools where there is effective monitoring of teaching and learning activities, teachers and students pay more attention to physical than schools where monitoring is poor. Jeffery (2010) observed that quality of facilities provided for teachers' to work with contributes to a sense of ownership, safety and security in the school. It was therefore concluded that there was a significant relationship between quality of school facilities and teachers' job performance.

Although it was observed that a lot of studies have been conducted on school availability and utilization of physical facilities in Nigeria, the researcher observed that not much has been done on the components of availability and utilization of physical facilities and teachers' job effectiveness discussed in this study. In other to fill this gap, the researcher decided to embark on this investigation. Therefore, the study on the correlation between availability and utilization of physical facilities and teachers' job effectiveness will provide an insight into the aspiration of both teachers and school administrators in their day-to-day activities in the school.

CHAPTER THREE

METHODOLOGY

In this chapter, the procedures that were used in the study are presented under the following sub-headings: Research Design, Population of the Study, Sample and Sampling Procedure, Research Instruments, Validity of the Instruments, Reliability of the Instrument, Method of Data Collection, Method of Data Analysis.

Research Design

The study adopted a descriptive survey research using the correlational design. A correlation survey measures two or more relevant variables and determines the relationship between or among the variables. This design was considered appropriate for this study, because it was primarily meant to establish the extent to which the independent variables (availability and utilization of physical educational facilities) correlates with the dependent variable (teachers' job effectiveness) in Ovia north east area of Edo State.

Population of the Study

The population of the study comprises of teachers from the twenty six (26) secondary schools in Ovia North East L.G.A. of Edo State. Which comprises of 10 teachers from ten selected schools.

Sample and Sampling Procedure

The sample size for this study comprised of teachers in public secondary schools in Ovia North East Local Government area. Ten percent of teachers in schools were selected which amounted to 100 teachers and 10 schools. The simple random sampling technique was used to select teachers and schools.

Research Instruments

The instruments used for data collection were two structured questionnaire and checklist. The questionnaire was titled "Utilization of Physical Facilities and Teachers' Job Effectiveness (UPFTJE)" and "Teachers' Job effectiveness Questionnaire (TJPQ)". And the checklist was titled "Availability of Physical Educational Facilities (APEF)" The questionnaire was used to elicit opinion of the respondents on utilization of physical educational facilities and teachers' job effectiveness while the

checklist was used to determine availability of physical educational facilities. The questionnaire was segmented into two sections: Section A and B. Section A measured the demographic variables of the respondents such as gender, school size and school location while section B was segmented into two subsections. The first subsection was a 12 items checklist measuring availability of physical educational facilities. The second subsection comprised 25 items where 10 items measured utilization of physical educational facilities while 15 items measured teachers' job effectiveness. Each addressing the research questions. The utilization of physical educational facilities was measured on a four-point rating scale ranging from Very high (4), High (3), Low (2) and Very Low (1) while teachers job teachers' job effectiveness was weighted on a four-point rating scale of Very High Extent (4), High Extent (3), Low Extent (2) and Very Low Extent (1).

Validity of the Instruments

The instruments for data collection were subjected to face validity by the researcher's supervisor, one expert from the Department of Educational Management as well as one statistician (evaluator) from the

Department of Educational Evaluation and Counselling Psychology (EECP), all from Faculty of Education, University of Benin, Benin City. Their observations, corrections, constructive criticisms, suggestions and recommendations incorporate into the final draft of the instruments.

Reliability of the Instrument

To establish the reliability of the instrument, the internal consistency method was used and this was done using Cronbach alpha statistics. The instrument was administered to 20 secondary school teachers and 10 principals from senior secondary school that was not part of the study sample. The responses were analyzed and a coefficient of 0.71 was obtained for the utilization of physical educational facilities while teachers' job performance items indicated a coefficient of 0.83 which indicated that the items were all reliable.

Method of Data Collection

The instrument was administered to the respondents with the help of four research assistants. The assistants helped in the distribution and retrieval of the questionnaire which lasted for four weeks. The research assistants were also briefed on the purpose of the study, questionnaire

distribution, and collection. Completed copies of the questionnaire were checked at the point of retrieval in order to ensure a high level of completeness by the participants. 16 principals responded to the teachers' job effectiveness questionnaire while 147 teachers responded to the utilization of physical facilities questionnaire. A total of 163 copies of questionnaire were administered and retrieved, which resulted to 100% return rate.

Method of Data Analysis

The data collected was analyzed using frequency count, simple percentage, mean ($\bar{x}$), standard deviation (SD), two sample independent t-test and Fisher Z transformation statistics. The frequency count, simple percentage, mean ($\bar{x}$) and standard deviation (SD) were used to answer the research questions while two sample independent t-test and Fisher Z transformation statistics were used to test the hypotheses. Two sample independent t-tests were used to establish the difference between the independent variable and the dependent variable of the study. The Fisher Z transformation statistics was test if there is any difference in relationship between the independent and the dependent variables by the intervening

variables (class size) all tested at 0.05 level of significance. Decision rule for the research questions was based on any calculated mean equal or greater than 2.5 and was regarded as high and high extent while any calculated mean less than 2.5 was regarded as low and low extent. For the hypothesis, the probability value (p) was used. If the p-value was less than or equal to 0.05, the null hypothesis would not be retained, but if the p-value is greater than 0.05, the null hypothesis would be retained. More so, the critical value of ±1.96 was used such that when the calculated z-value is higher than ±1.96 the null hypothesis would not be retained, but where calculated z-value is less than ±1.96, the null hypothesis was retained.

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

This chapter deals with the presentation of results and discussion of the findings. The results of the analysis are presented in the order of the research questions and hypotheses that guided the study. The results are presented under the following sub-headings:

- Presentation of results
    - Data analysis for the research questions
    - Hypotheses Testing.
- Discussion of findings

Presentation of Results

Data collected to answer the research questions were analyzed using the simple percentage, mean and standard deviation and the results are shown in Tables 2 to 4.

Research Question One: To what extent is physical educational facilities available in public senior secondary schools in Ovia north east area of Edo State?

Table 2: Simple percentage analysis showing physical educational facilities available in public senior secondary schools

S/N	Availability of ICT facilities	Yes	No	Decision
1.	Audio-visual materials	18.1	81.9	Available
2.	Instructional materials.	34.7	65.3	Available
3.	Computer	-	100	Not Available
4.	Projector	-	100	Not Available
5.	Spacious Classrooms	-	100	Not Available
6.	Adequate desk and chairs	24.2	75.8	Available
7.	Adequate school laboratory	29.2	70.8	Available
8.	Spacious school compound	75.0	25.0	Available
9.	Well ventilated classrooms	95.8	4.2	Available
10.	Electric power supply	11.1	88.9	Available

Key: NR:

In response to research question two, Table 2 showed that item one, two and six to ten indicated items available while items three to five indicated not available. Hence, physical educational facilities are relatively not available for secondary school teacher usage in the management of secondary schools. This implies that majority of the schools under study does not meet up to the standard set by the Federal Ministry of Education with regards to the required physical educational facilities available in public senior secondary schools in Edo South Senatorial district.

Research Question Two: To what extent is physical educational facilities utilized in public senior secondary schools in Ovia north east area of Edo State?

Table 3: Mean and standard deviation showing utilization ofphysical educational facilities in public senior secondary schools

S/N	Item Statement	N	Mean	SD	Remarks
1	Toilet facilities are open for use on a regular basis for proper hygiene	147	2.39	.671	Low
2	Cleaning materials are provided to staff whom are responsible for maintenance of school facility	147	2.55	.513	High
3	Broken desk and seats are replacement on time with the required facility standard	147	2.26	.565	Low
4	Replacement of faulty facilities in the staffrooms for teachers are regular assessable	147	2.31	.606	Low
5	Standers electrical appliances, school machines, and other general facilities are provided with the standard measure	147	2.25	.610	Low
6	Lawns and walkways are kept clean and free of dangerous objects	147	2.18	.601	Low
7	White board, Chalkboard and other learning materials are provided to enhance teaching effectiveness	147	2.98	.666	High
8	Faulty school materials and equipment's are quickly repaired or replaced.	147	2.48	.578	Low
9	Dilapidated buildings, broken doors and window, absence of perimeter fence and school gate are not provided nor repaired	147	3.00	.609	High
10	Classrooms and staff rooms are large enough to accommodate teachers and students.	147	2.40	.616	Low
	Cluster		**2.48**	**0.05**	**Low**

Table 3 depict that the respondents rated item one, three and six, as well as item eight and ten as low with a mean rating ranging from 2.18 to 2.48 while items two, seven and nine were rated as high with a mean rating from 2.55 to 3.00. The standard deviation also ranges from 0.513 to .671. With these results, the above mean score shows that the extent to which

physical educational facilities is utilized in public senior secondary schools in Ovia north east area of Edo State is low.

Research Question Three: What is the level of teachers' effectiveness in public senior secondary schools in Ovia north east area of Edo State?

Table 4: Mean and standard deviation showing the level of teachers' job effectiveness in public senior secondary schools

S/N	Item	No	Mean	SD	Remarks
1	The school teachers do not prepare their lesson note/lesson plan at the beginning of every week.	16	2.92	.422	High Extent
2	Lesson notes, laboratory equipment's and other available materials are arranged appropriately from lesson content and current textual materials	16	2.40	.632	Low Extent
3	Materials or resources such as text books for teaching are available and carefully selected by teachers	16	2.33	.943	Low Extent
4	The school teachers do not complete scheme of work	16	2.70	.823	High Extent
5	Teachers delivers their lesson according to the lesson content	16	2.70	.823	High Extent
6	Teachers prepares well for their lessons when facilities and resources are available in the school.	16	2.40	.699	Low Extent
7	Availability of enough teaching materials helps teachers to be effective in their teaching	16	2.00	.943	Low Extent
8	Teachers ensure that student performance objective are achieved	16	2.40	.699	Low Extent
9	The school teachers mark class notes and assignment promptly	16	2.50	.850	High Extent
10	Teachers evaluate student class performance and behavior at the end of each class by giving assignment	10	2.50	.699	High Extent
11	Teachers conduct continuous assessment exercises	16	2.60	1.075	High Extent
12	spacious examination hall to enable invigilation by teachers to avoid malpractice	16	2.30	.483	Low Extent
	Cluster		**2.48**	**0.19**	**Low Extent**

Note: SD (Standard Deviation), N (Sample Size)

The data analysis presented in research question three, indicated the level of teachers' job effectiveness in public secondary schools in Edo

South Senatorial District of Edo State. The respondents rated item one, two, six to eight and twelve as low extent with a mean rating ranging from 2.00 to 2.40while item one, four, five, nine to eleven is rated as high extent with a mean rating ranging from 2.50 to 2.92. The standard deviation also ranges from .422 to 1.075. With these results, the above mean score shows that level of teachers' job effectiveness in public secondary schools in Ovia north east area of Edo State is low.

Hypotheses Testing

The data analysis for testing the hypotheses was carried out using two sample independent t-test and Fisher Z statistics. The results of the hypotheses are presented in Tables 5-7.

Hypothesis One

There is no significant difference between utilization of physical educational facilities of male and female teacher's effectiveness in public senior secondary schools in Ovia north east area of Edo State.

Table 5: t-test analysis showing the mean difference between utilization of physical educational facilities of male and female teacher's effectiveness in public senior secondary schools

Respondents	N	Mean	SD	Df	t-value	p-value	Decision
Male	76	3.49	0.31				
				145	0.25	0.06	**Significant**
Female	71	3.39	0.34				

P-Value Not Significant at 0.05 level (2-tailed) (Reject Hypothesis) SD: Standard deviation
DF: Degree of freedom

Testing hypothesis one as presented in Table 5, revealed mean responses on the difference between utilization of physical educational facilities of male and female teacher's effectiveness in public senior secondary schools in Edo State. The Table revealed a mean of 3.49 for male and 3.39 for female. The corresponding standard deviations are 0.31 and 0.34 for male and female respectively. The t-value of 0.25, at degree of freedom of 145, which showed significant at p-value of 0.06. Testing at an alpha value of .05, the null hypothesis was rejected since the p-value is less than alpha value. Thus, there is a significant difference between utilization of physical educational facilities of male and female teacher's effectiveness in public senior secondary schools in Ovia north east area of Edo State.

Hypothesis Two

There is no significant difference in the relationship between availability of physical facilities and teacher effectiveness in public senior secondary schools in Ovia north east area of Edo State based on size of school.

Table 6: Fisher Z statistic showing significant difference in the relationship between availability of physical facilities and teacher effectiveness in public senior secondary schools in Ovia north east area of Edo State **based on size of school**

School Size	N	r	Zr	Z.Cal	Z.Tab	Decision
Below 500	7	0.59	0.68	0.75	1.96	Not Significant
Above 500	9	0.19	0.19			

The data analysis of Table 6 indicates difference in the relationship between availability of physical facilities and teacher effectiveness in public senior secondary schools in Ovia north east area of Edo State based on size of school. The Table depicts that the correlation coefficient value of relationship between availability of physical facilities and teacher effectiveness in school below 500 is 0.59 while that of school above 500 is 0.19. The Z-calculated value of 0.75 is less than the critical value of 1.96 which connotes that the hypothesis is retained. Therefore, there is no

significant difference in the relationship between availability of physical facilities and teacher effectiveness in public senior secondary schools in Ovia north east area of Edo State based on size of school.

Discussion of Findings

Research question one findings indicated that majority of the schools under study does not meet up to the standard set by the Federal Ministry of Education with regards to the required physical educational facilities available in public senior secondary schools in Ovia north east area of Edo State. These teachers rarely have access to physical educational facilities to improve teaching and facilitate learning due to non-availability of computer, projector, spacious classrooms, adequate desk and chairs, adequate school laboratory, well ventilated classrooms and electric power supply. This finding is in line with that of Jack (2021) whose study revealed that the mean available values of ICT resources in secondary schools in Jalingo Metropolis, in Taraba State is low. The finding also agreed with the research carried out by Amuchie (2015) which showed that the seventeen physical resources listed were available to a very poor extent. Other findings indicated that there is low availability of

physical educational resources (Bello, 2017; Ifeakor, 2018; Imogie, 2018; Itighise & Babayemi, 2018, Nwana et al.2017; Okoli & Osuafor, 2018; Onyegegbu, 2016; Osadolar, 2018). On a contrary, the findings of Ezeuwa (2015) showed that 11 out of 15 items were available which indicates that physical educational resources or facilities are available in Ebonyi state public secondary schools. Similarly, Okoro (2009) maintained that public secondary schools in south Eastern Nigeria had fared well in terms of access to ICT facilities.

The findings of research question three showed that the level of teachers' job effectiveness in public secondary schools in in Ovia north east area of Edo State is low. This connote that teachers are not performing optimally which can be attributed to poor physical facilities as well as staff welfare. Teachers can discharge knowledge and skills seamlessly to the students when the working environment is conducive and comfortable but the reverse is the case when the physical environment is nothing to write home about. Investing on the physical educational facilities cannot be overemphasized this is because; no nation can rise above the quality of his

teachers. This finding is line with that of Gupta and Gupta (2020) stated that the job performance of employees in the organization is low.

The findings of hypothesis one showed that there is a significant difference between utilization of physical educational facilities of male and female teacher's effectiveness in public senior secondary schools in in Ovia north east area of Edo State. In other words, male and female teachers do not share similar idea about the utilization of physical educational facilities. Consequently, they have different opinion. The finding is contrary to that of Alagu and Thanuskudi (2018) who study showed that there is no significant difference between male and female undergraduate students and awareness of information and communication technology.

The findings of hypothesis two revealed there is no significant difference in the relationship between utilization of physical educational facilities and teacher's effectiveness in public senior secondary schools in in Ovia north east area of Edo State based on size of school. This simply means, teachers exhibited the same level of ideas on the relationship between availability of physical facilities and teacher effectiveness. That, both male and female believed that teacher's effectiveness is hinged on the

physical facilities provided by the government and school management. This finding is support to that of Chiazoka, Oduntan and Olayemi (2021) who reported that there is a positive significant effect on male and female farmers in their utilization of ICT in the studied area.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter dealt with summary, conclusion and recommendations arising from this study.

Summary

This study assessed the availability and utilization of physical educational facilities on teachers' effectiveness in public senior secondary schools in Edo South senatorial district. Six research questions were raised to guide the study.

1. To what extent is physical educational facilities available in public senior secondary schools in Ovia north east area of Edo State?
2. To what extent is physical educational facilities utilized in public senior secondary schools in Ovia north east area of Edo State?
3. What is the level of teachers' effectiveness in public senior secondary schools in Ovia north east area of Edo State?
4. Is there a difference between utilization of physical facilities of male and female teacher effectiveness in public senior secondary schools in Ovia north east area of Edo State?

5. Is there a difference in the relationship between availability of physical facilities and teacher effectiveness in public senior secondary schools in Ovia north east area of Edo State based on size of school?

Research questions one to three were answered directly while questions four to six were hypothesized and tested at 0.05 level of significance.

1. There is no significant difference between utilization of physical educational facilities of male and female teacher's effectiveness in public senior secondary schools in Ovia north east area of Edo State.
2. There is no significant difference in the relationship between availability of physical facilities and teacher effectiveness in public senior secondary schools in Ovia north east area of Edo State based on size of school.

The study adopted a descriptive survey research using the correlational design. The population of the study comprised 138 principals and 1,476 teachers in 138 public senior secondary schools in seven local government areas in in Ovia north east area of Edo State. The sample size of the study

16 principals and 147 teachers in public senior secondary schools in seven local government area in Ovia Edo South Senatorial Districts of Edo State. A proportionate sampling technique of 10% was used to arrive at the sample size of the study. The instruments used for data collection were a structured questionnaire and checklist. The questionnaire was titled "Availability and Utilization of Physical Educational Facilities on Teachers' Job Effectiveness" (AUPEFTJE) and the checklist were titled "Availability of Physical Educational Facilities (APEF)". The questionnaire was used to elicit opinion of the respondents on utilization of physical educational facilities and teachers' job effectiveness while the checklist was used to determine availability of physical educational facilities. The instruments for data collection were subjected to face validity by the researcher's supervisor, one expert from the Department of Educational Management as well as one statistician (evaluator) from the Department of Educational Evaluation and Counselling Psychology (EECP), all from Faculty of Education, University of Benin, Benin City. To establish the reliability of the instrument, the internal consistency method was used and this was done using Cronbach alpha statistics. The

instrument was administered to 20 secondary school teachers and 10 principals from senior secondary school who were not part of the study sample. The responses were analyzed and a coefficient of 0.88 was obtained for the utilization of physical educational facilities while teachers' job performance items indicated a coefficient of 0.83.The data collected from the respondents were analyzed using simple percentage (%), Mean ($\bar{x}$), standard deviation (SD), two sample independent t-test and Fisher Z statistics using Statistical Packages for the Social Science (SPSS). The findings generally showed that the availability and utilization of physical educational facilities on teachers' effectiveness in public senior secondary schools in Edo South senatorial district is low. The major findings of the study were as follows:

1. Majority of the schools under study does not meet up to the standard set by the Federal Ministry of Education with regards to the required physical educational facilities available in public senior secondary schools in Ovia north east area of Edo State.
2. Physical educational facilities are utilized in public senior secondary schools in Ovia north east area of Edo State is low.

3. Level of teachers' job effectiveness in public secondary schools in Ovia north east area of Edo State is low.
4. There is a significant difference between utilization of physical educational facilities of male and female teacher's effectiveness in public senior secondary schools in Ovia north east area of Edo State.
5. There is no significant difference in the relationship between availability of physical facilities and teacher effectiveness in public senior secondary schools in Ovia north east area of Edo State based on size of school.

Conclusion

Based on the findings of the study, it was concluded that the availability and utilization of physical educational facilities on teachers' effectiveness in public senior secondary schools in Edo South senatorial district is low. Therefore, the low availability and utilization of physical educational facilities contributed negatively to teachers' effectiveness. This simply means that, for teachers to discharge knowledge and carryout duties and responsibilities assigned to them effectively, there must be availability

and utilization of physical educational facilities. This support the assertion that, no nation can rise above the quality of its teachers.

Recommendations

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

1. There should be collaboration between Government and non-governmental agencies for the purchase of various physical educational facilities in order to foster effective management performance of teachers.
2. There should be constant training and retraining of teachers on the utilization of these physical education facilities in order to foster effective and efficient teaching and learning process.
3. School management should ensure that the working environment is conducive and hospitable in order to promote effective and efficient job performance of teachers. This is because conducive working energizes employees in an organization to perform optimally towards the actualization of the organizational growth and development.

4. Government should ensure that funds are made available for the purchase of physical educational facilities and also ensure that male and female teachers utilize these facilities for optimum job performance.
5. Government should ensure that physical facilities are made available to all secondary schools regardless of the school size in order to achieve the stated goals and objectives.
6. Government should also set up mechanism to ensure the physical facilities provided are constantly maintained for effective utilization.

Suggestions for Further Studies

This study assessed the availability and utilization of physical educational facilities on teachers' effectiveness in public senior secondary schools in Edo South senatorial district. The following suggestions for further research were outlined:

1. The availability of school facilities and their effects on the quality of education in senior secondary schools in Ovia north east area of Edo State t.

2. Management of business studies facilities, equipment and supplies in senior secondary schools in Nigeria: issues and challenges
3. Utilization of physical facilities as it affects the teachers' job effectiveness in senior secondary schools in Ovia north east area of Edo State.

REFERENCES

Abdul Kareem, M. M. (2012). *M. Abdul Kareem, 2012; Communicate with fellow professional;.*

Adegboyega, A.A (2002). Trends in public financing of fed. inventors in Nigeria, s case study of Uni. Ibadan.

Adiele, E. E., Leasha, M. B. & Abraham, L.N. (2010). *Introduction to teaching profession*. Port Harcourt; Harmony publishers.

Adulkareem, A. Y. (2012). Management of educational facilities in Nigeria secondary schools. The role of administrators and inspectors. *East African Researcher.*

Aigboje, C.D. (2007). Strategies for improving the quality of academic staff n universities for quality assurance. In: JB Babalola, GD Akpa, AO Ayeni O Adedeji (Eds.): *Higher Education.* Ibadan: NAEAP, pp. 455- 461.

Aina, J.K., Olanipekun, S.S. & Garuba, S.O. (2015). A review of teachers' qualifications and its implication on students' academic achievement in Nigerian Schools. *International Journal of Educational Research and Information Science, 2*(2), 10-15.

Akande, O. M. (1985). *Hints on teaching practice and general principles of education.* Lagos: OSKO Associates.

Akinsolu A. O. (2021). Resource utilization and internal efficiency in Nigerian secondary schools. Implications for socio-problems of education*. International Journal of Sociology and Anthropology,* 4(1), 23-30. Retrieved from https://www.academicjournals.org/ijsa on 10/12/2021.

Akin-Taylor, M.A. & Aboyomi, O. (2008). *Sports resources: Predictors of sport performance in colleges of education in western Nigeria.* Fourth International Council for Health, Physical Education,

Recreation, Sport and Dance (ICHPER.SD) Africa Regional Congress 14-17. vol.1 No. 5.

Akintayo, D. (2009). Managerial effectiveness: Impact of emotional intelligence and work-family role conflict in Work Organizations in Nigeria.. Lwati: *A Journal of Contemporary Research, 6*, 10.4314/lwati.v6i1.46536.

Alagu, A. & Thanuskodi, S. (2018). Awareness and Use of ICT among Undergraduate Students of Rural Areas in Dindigul District: A Study. Library Philosophy and Practice. 2018.

Alimi, O. S. (2007). Physical plant maintenance practices in the public secondary schools in Akoko Zonal Education Area of Ondo State. *Ife Journal of Educational Studies, 13*(1), 73-78

Amie-Ogan, O. T., Nwile, C.B & Elenwo, P. M. (2021). Management of physical resources for academic improvement of junior secondary school students in Rivers State Nigeria. *International Journal of Progressive and Alternative Education, 7*(1), 327-342.

Amuchie, A.A (2015). Availability and Utilization of ICT Resources in Teaching and Learning in Secondary Schools in Ardo-Kola and Jalingo, Taraba State. *Journal of Poverty, Investment and Development, 8,* 94-100.

Amuko, S; Miheso, M. & Ndeuthi, S. (2015). "Opportunities and challenges: Integration of ICT in teaching and learning mathematics in secondary schools, Nairobi , Kenya," *Journal of Education and Practice*, *6*(24), 1–7.

Anderson, V. (2004) *Research methods in human resource management.* CIPD, London.

Asiabaka, I. P. (2008). The need for effective facilities management in Nigeria. New York Science *Journal. http//www.sciencepub.org*.

Asiyai, R. I. (2012). Assessing school facilities in public secondary schools in Delta State, Nigeria. *African Research Review International Multidisciplinary Journal, 6*(2), 192-205.

Awoniyi, M. A. (1999). *Selection and designing of instructional aids.* Ibadan: University Press, 50-51.

Awoniyi, T.A (1991). *Principal goals of pre-primary educational institutions and how to achieve them, Education Today.*

Ayodele, O. J. (2011). Self-concept and performance of secondary school students in Mathematics. *Journal of Educational and Developmental Psychology, 1*(1), 176-183.

Bello, G. (2017). Problem and Prospects of Integration of ICT into Biology Teacher Education in Nigeria. *Journal of Curriculum and Instruction, 10* (1), 106-118.

Bojuwoye, O. (2006). Home-school partnership – a study of opinions of selected parents and teachers in Kwazulu Natal Province, South Africa. *Research Papers in Education. 24.* 461-475. 10.1080/02671520802150004.

Brabeck, K. (2001). Justification for and implementation of peace education [Review of the book Attitudes toward tolerance and cooperation in multicultural settings: evaluation and educative intervention in a concrete setting: the city of melilla, by S. Sánchez Fernández & M. C. Mesa Franco, Eds.]. Peace and Conflict: *Journal of Peace Psychology, 7*(1), 85–87. https://doi.org/10.1207/S15327949PAC0701_09

Caena, F. (2011). *Literature review: Teachers' core competences: requirements and development.* Accessed January 2017 from https://en.wikipedia. org/wiki /Teacher

Castaldi, Basil (1994) *Educational facilities: Planning, modernization, and Management.* Boston: Allyn & Bacon

Chakraborty, N., Islam, M.A., Chowdhury, R.I., Bari, W. & Akhter, H.H. (2003) Determinants of the use of maternal health services in rural Bangladesh. *Health Promotion International, 18*, 327-337. http://dx.doi.org/10. 1093 /heapro/dag414.

Chan, T. C. (2011). *Environmental impact on student learning. Valdosta, GA: Valdosta State College, School of Education.* (ERIC Document Reproduction Service No. ED 406 722).

Chiazoka, E., Fadiji, T., & Sennuga, O. (2021). Awareness and usage of information and communication technologies (ICTs) among farmers in Federal Capital Territory, Nigeria. *2*. 1-4.

Clark, C. (2001). Texas state support for school facilities, 1971 to 2001. *Journal of Education Finance, 27*(2), 683-700.

Clarke, R.V. (1999). *Hot products: Understanding, anticipating and reducing demand for stolen goods*.

Colgan, P. (2015). Inducing higher level of Resources Utilization on Integrated Science Teachers. *Unpublished Ph.d Thesis University of Miami.*

Crampton, F. E., & Thompson, D. C. (2002). The condition of America's schools: A national disgrace. *School Business Affairs, 68*(11), 15-19.

Dambo, B.I & Kayii, N.E (2022). Utilization of open educational resources for enriched instructional content of business education courses in Rivers State universities. *International Journal of Innovative Technology Integration in Education, 6*(1), 15-21

Daniels, T. (2003) *The environmental planning handbook: for sustainable communities and regions.* American Planning Association.

Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of Teacher Education, 61*, 35-47. http://dx.doi.org/10.1177/002 24871093 48024.

David, O., & Chan, V.C. (2014). Competencies needed by graduates of schools of agriculture in turkey production for sustainable food security in Benue State. *Nigerian Vocational Association Journal, 19*(2), 151-161.

Dodo, A. Y., Ajiki, S. I. & Abimuku, J. M. (2010). Provision and management of material resource for effective teaching and learning of vocational and technical education in Nigeria. *A Journal of Vocational and Technical Educators (JOVTED), 2*(4).

Edem E .F. (2018). Availability and utilization of resource for the implementation of vocational subjects in technical colleges in Rivers State. *Unpublished master dissertation University of Port Harcourt, Rivers state.*

Edo State Post Primary Education Board, Benin City (2023).

Ehiamitalor, E. T. (2001). School facilities management practice in Nigeria. In Nwagwu, N. A., Ehiametalor, E. T, Ogunu, M. and Nisadiani, M.(eds) *Current issues in educational management in Nigeria.* Benin: Nigerian Association for Educational Administration and Planning (NAEAP).

Ellis, A. & Fouts, J. (2019). Interdisciplinary curriculum: The research base. *Music Educators Journal. 87.* 10.2307/3399704.

Ezeuwa, L. (2015). *Issues in educational management*. Hipuks Additional Press, Enugu.

Famous-Izedomi, B.O. & Nwadiani, M. (2021). Issues and problems in educational planning and implementation in Nigeria. In Peretomode, J. (Ed). *Introduction to educational administration, planning and supervision*. Lagos Goga Education research and publishers, Ltd.

Farombi, J. G. (1998). Resource concentration, utilization and management as correlates of students' learning outcomes: A study on school

quality in Oyo State (Unpublished Ph.D. Thesis), university of Ibadan, Ibadan.

Federal Ministry of Education (FME). (2000). *Implementation guidelines for the Universal Basic Education (UBE) Programme,* FMOE, Abuja.

Federal Republic of Nigeria (2013). *Nature Policy Education,* Abuja: NERDC.

Fisher, C. D. (2017). Padlet: An online tool for learner engagement and collaboration. *Academy of Management Learning & Education, 16,* 163-165.
https://Padlet.com.

Fiske, E. B. (2003). *Smart schools, smart kids: Why do some schools work?* New York: Simon & Schuster.

Fowler, K.M., Solana, A.E. & Spees, K. (2005). Building cost and performance metrics: Data Collection Protocol, Pacific Northwest National Laboratory, Rich land, WA.

Ginsberg, A. & Hopkins, P. (2017). The role of minority serving institutions in transforming teacher education and diversifying the teaching profession: A literature review and research agenda. *Teachers College Record*, *119*(10), 1-31.

Goe, L., Bell, C., & Little, O. (2008). *Approaches to evaluating teacher effectiveness: A research synthesis*. Washington, DC: National Comprehensive Center for Teacher Quality. Retrieved March 3, 2009.

Goladd, J. P. (2004). Approaches to the goal of educational equality in renewal of Australian Schools; In Cruz, J. V. D & Sheehan, P. J (Eds) *A Changing Perspective in Educational Planning*, Malbourne; ACER 92-107.

Goldring, E., & Huff, Jason & May, Henry & Camburn, Eric. (2008). School context and individual characteristics: What influences principal practice?. *Journal of Educational Administration. 46.* 332-352. 10.1108/09578230810869275.

Grady, F. (2016). Factors influencing use of ICT in Technical and Vocational Education to make Teaching – learning effective and efficient: A case study of Polytechnic Institutions in Bangladesh. *International Journal of Basic and Applied Sciences IJBAS – IJENS, 11*(3), 164 – 170.

Grant, J. L. (2011). Two year impacts of a universal school-based social-emotional and literacy intervention: An experiment in translational developmental research. *Child Development, 82*(2), 533–554.

Graves, B. E. (1993). *School ways: The planning and design of America's schools*. New York: McGraw-Hill.

Guarneiri, M A. (2003). Indoor air quality in schools: Clean air is good business. *School Business Affairs, 69*(6), 26-30.

Gupta, S., & Gupta, A. (2020). Tracking Public and Private Response to the COVID-19 Epidemic: Evidence from State and Local Government Actions. Working Paper 27027, National Bureau of Economic Research.

Hale, W. (2015). Selection and utilization of instructional media for effective practice teaching. *Institute Journal of Studies in Education*, *2*(1), 127-133.

Hathaway, P. (2012). Factors influencing use of ICT in Technical and Vocational Education to make Teaching – learning effective and efficient: A case study of Polytechnic Institutions in Bangladesh. *International Journal of Basic and Applied Sciences IJBAS – IJENS, 11*(3), 164 – 170.

Hill, S. (2012). *Developing early literacy: Assessment and teaching* (2nd Edition). Eleanor Curtain Books: Sth Yarra.

Ifeakor, A.C. (2018). Availability and usage of information communication technology facilities by science teachers in Anambra State. *Journal of Women in Colleges of Education, 11* (2),.

Ihiegbulem, O. T. (2006). Correlates of job satisfaction among secondary school principals in Imo State of Nigeria. *An Unpublished Doctoral Thesis, University of Port-Harcourt, Nigeria.*

Ilueme L. N. (2018). Manpower availability for the teaching of entrepreneurial subjects in public senior secondary schools in Rivers State. *A master dissertation from the University of Port Harcourt.*

Imogie, A. (2018). *Information and communications technology*. Indicators Bulletin.

Ingersoll, R., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers. *Review of Educational Research, 81,* 201-233. https://doi.org/10.3102/0034654311403323.

Itighise, A.E. & Babayemi, J.O. (2018). Availability and utilization of educational technology laboratory gadgets in higher education for life long learning in basic science and technology. *Ibadan Journal of Education Studies, 15* (2), 1-10.

Jack, G. U. (2021). Availability, adequacy and effective utilisation of ICT resources by practising pre-service science teachers in Jalingo Metropolis, Taraba State, Nigeria. *UNIZIK J. Educ. Res. Policy Stud. 9*, 57–66.

Jaja, S.O.S. (2019). Professional development for teaching effectiveness in secondary schools in Rivers State. *An unpublished master dissertation University of Port Harcourt, Rivers State, Nigeria.*

Jeffrey, C. (2010). *Degrees without freedom? education, masculinities and unemployment in North India*. Stanford: Stanford University Press.

Jessa M. O. (2017). *Availability, adequacy and utilization of educational facilities and school administrators' effectiveness in Colleges of Education In Delta State.* Retrieved from academia. Edu/35596759/availibility_ adequacy _and_utilization_of_educational_facilities_and_school_administrations'_effectiveness.

Jonathan, O. C & Ngozi, A. (2011). *Effective utilization of information and communication.*

Keith, C.L. (2004). *The impact of school library media center on academic achievements.* Available: http://www.news66c.co.uk/2/hi/uk-news/education al/249463.stm

King, A. & Nart, S. (2016). *Resource Management For School Administrators Optimizing Fiscal, Facility, And Human Resource.* U.S.A, Rowman and little field education.

Ko. J. Sammons P & Bakkum L. (2016). *Effective Teaching: Education Development Trust. Highbridge House,* 16-18 Duke street berkshine RGT. 4RU. Retrieved from https://www.education developemnt trust.com/educationdevelopementtrust/files/98/98ad6340_oef6_4eyd_a541_d66018fce7d

Kola, A.J., & Sunday, O.S. (2015). A review of teachers' qualifications and its implication on students' academic achievement in Nigerian schools.

Kpee G. G. (2013). School Climate and Teacher Effectiveness*:* In J.D Asodike, J.M. Ebong, Oluwuo (Eds). *Contemporary issues in teaching*. Owerri: palm press.

Krüger, E.L., & Zannin, P.H. (2004). Acoustic, thermal and luminous comfort in classrooms. *Building and Environment, 39*, 1055-1063.

Larson, M.B., & Lockee, B.B. (2014). Streamlined ID: A practical guide to instructional design (2nd ed.). Routledge. https://doi.org/10.4324.

Lawanson O. A. & Gede N. T. (2011). Proceedings from the 2011 International Conference on Teaching, Learning and Change. International Association for Teaching and Learning. (IATEL), 497-507.

Lawrence, B. K. (2009). Rural gifted education: A comprehensive literature review. *Journal for the Education of the Gifted, 32*(4), 461-494. https://doi. org/10.1177/016235320903200402

Lewin K M (2000). Escaping the low financing trap: Strategies for sustainable educational development in low income countries

Longman (2003). *Longman dictionary of contemporary English*. Pearson Education Limited England.

Ma X., MacMillan R. (1999). Influences of workplace conditions on teachers' job satisfaction. *J. Educ. Res.93*(1), 39–47.

Martica C. (2013). School infrastructure and resource matter: Analysis of the incidence of school resource on the performance of Latin American Students. Effectiveness and school improvement. *International Journal of Research, Policy and Practice, 22*(1), 29-50.

Martin, M. A. (2012). Using interaction in online discussion boards. *Educause Quarterly, 4,* 61–62.

Milstein, M. B. (2003). Creating sustainable value. *Academy of Management Perspectives, 17*, 56-67.https://doi.org/10 .5465 /ame.2003.10025194

Mohanty J. (2000). *Current trends in higher education*. New Dehli: Deep and Deep Publications.

Mosley, L. & Baun, P (2004) 'Government-financial market relations after emu: new currency, new constraints?', *European Union Politics, 5*(2), 181–209.

Muhammad, N. (2017). Critical analysis of the legal and infrastructural frameworks for e-commerce and consumer protection in Nigeria. *The International Journal of Business & Management, 5,* 58-62.

Muhammed, S., Muhammed, M. C. & Abdullahi, A. (2013). *Availability and utilization of facilities in Nigeria's educational system*. Retrieved from academics.edu/23341333/.

Muirillo, F. O. & Roman, M. (2013). *Using Information and Communication Technology Facilities to Facilitate Learning.* Ohio: Orient Press.

Musibau A.Y & Oluwarotimi L. A. (2011). Towards optimal utilization of schools. *Journal of Research in National Development (JORIND) 9*(1), 167-171.

Nathan, K. (2002). Management of facilities at public universities in africa: current challenges and the way forward. *Real Estate Management and Valuation. 29.* 21-29. 10.2478/remav-2021-0003.

National Clearinghouse for Educational Facilities (2020). *The effects of school facility quality on teacher retention in urban school districts.* Retrieved on 5/2/2024 from: https://www.academia. edu/9748 9265/National_Clearinghouse_for_Educational_Facilities.

National Teacher's Institute (2000). Pivotal teacher training programme. *Unpublished mimeograph.*

Norwood, P. (2003). "Science game in the national curriculum". *Science Education Newsletter, 140*, 5-6.

Nwabueze, A. I. (2O16). Resources in Education: In J. M. Ebong, J. D. Asodike & N.J. Izuagba (Eds) *Economics of Education: expository Issues* (186-205). Port Harcourt: Ragle Lithograph publishers.

Nwadiani, M. & Ugolo, S. P. (2011). The availability, adequacy, in quantity utilization of physical facilities in public secondary schools in Bayelsa.*Journal of studies in education, 8* (1&2), 34-47.

Nwana, S.E., Ofoegbu, T.O. &Egbe, C.I. (2017). Availability and utilization of ict resources in teaching computer education in secondary schools in Anambra State, Nigeria. *Mediterranean Journal of Social Sciences, 8*(5), 112-116.

Nwile, Charles & Inukan-Adebayo, Rita. (2022). *Assessment of the availability and utilization of physical educational facilities on teachers' effectiveness in public senior secondary schools in Rivers Stat*e. 2955-0785.

Obi, C. (2006). A political economy of the petroleum industry in Nigeria. Seminar on the Political Economy of Mining in Africa, Accra, 2-4 March 2006, 21.

OECD. (2015). *Students, computers and learning: Making the connection*. Paris: OECD Publishing.

Offorma, G. C. (2005). *Curriculum for health creation.* WCCI 3rd Biennial Seminar Lecturer, held in FCE. Kano, on 25 th October 2005.

Ogbodo, C.M. (2004). Managing educational facilities in schools. In V.F. Peretomode (Eds). *Introduction to educational administration and planning and supervision.* Ikeja: Joja Educational research and publishers, 2004.

Ojedele, P. K. (2004). Facilities provision and management for the successful implementation of the universal basic education (UBE) programme in Nigeria. In E.O. Fagbamiye, J.B. Babalola, M.Fabunmi & A.O. Ayeni (Eds.). *Management of primary and secondary education in Nigeria.* Ibadan: NAEAP/Codat publications.

Ojiri, B. I. (2017). Provision and utilization of facilities in secondary schools in Imo State. *A master dissertation from the University of Port Harcourt*.

Okoli, J.N. & Osuafor, A.M. (2018). Availability, accessibility and extent of use of new Technologies for STM Curriculum Delivery. *49th Annual Conference Proceedings of STAN.*

Okoro, J. (2009). Information and communication technology (ICT) skills required of office education graduates as perceived by managers/supervisors. *Delta Business Education Journal, 1*(5), 147-158.

Olagboye, A. A. (2004). *Introduction to educational management in Nigeria*. Ibadan: Published for Kemsio Educational Consultants by Daily Graphics (Nigeria).

Olagunju, A. & Abiona, O. (2008). Production and utilization of resources in biology education: A case study of South West Nigerian Secondary Schools.

Olalekan, A. W. (2015). Effects of training on knowledge, attitude and practices of malaria prevention and control among community role model care givers in South Western Nigeria. *Ethiopian journal of health sciences*, *25*(4), 329–336. https://doi.org/ 10.431 4/ejhs.v25i4.6

Olanrewaju, F. O. (2016). The impacts of terrorism on education: The North Eastern Nigeria's experience. *JIPAD: Journal of International Politics and Development*, *14*, 59-74.

Oni, J. O. (1992). Resource and resource utilization as correlates of school academic performance *(Unpublished Ph.D. Thesis), University of Ibadan, Ibadan.*

Onukan, I. A. (2008). Assessing school facilities in public secondary schools in Delta State Nigeria. *An international multidisciplinary journal Ethiopia*. Retrieved from https://Dx.Do.Org/10.4314/Afrrer.v612 on 10/12/2023.

Onyegegbu, N. (2016). Using New Technologies in Creating Excitement in Biology Laboratory Activities. *47th Annual Conference Proceedings of STAN*.

Osadolar, L.(2018).Students' perception of Information and Communication Technology in university education. *Learning, Media and Technology*, *27*(1), 55-67.

Osakunih, B.C. (2002). *Towards sound and effective sports administration in the 21st century curriculum offerings. In professionalization of sports administration and management in Nigeria- Issues and challenges.*

Owoeye A. & Yara H. (2010). School facilities and academic achievement of secondary school agricultural sequence in Ekiti State Nigeria. *Asiansiciak Sciences*, *7*(7).

Owoeye, J.S. & Yara, P.J. (2011). School facilities and academic achievement of secondary school Agricultural Science in Ekiti State, Nigeria. *Asian Social Science, 7*, 64-74. https://doi.org/10.5539/ass.v7n7p64.

Owoeye, O., Akinbo, S., Aiyegbusi, A. & Ogunsola, M. (2011). Prevalence of Hallux Valgus Among Youth Population in Lagos, Nigeria. *The Nigerian postgraduate medical journal. 18*. 51-5. 10.4103/1117-1936.170323.

Owoeyi J. S. (2011). School facilities and academic achievement in secondary school agricultural science in Ekiti State, Nigeria. *Unpublished phd. Thews Kampala* nternational university, kampala ans Uganda.

Owuamanam, D.O. (2005). Threats to academic Integrity in Nigerian Universities. Lead paper presented at the conference of the National Association of Educational Researchers and Evaluators, University of Ado-Ekiti, June 13-17.

Oyeniyi, O. L. (2010). Analysis of the educational facilities in southern universities in *Nigeria Academic Leadership Journal* B(2).

Perier, O.P. (2015). *Educational administration: Theory and practice*. New Delhi: Vikas Publishing House Pvt. Ltd.

Pfeffer, J. & Salancik, G. (1978). *The external control of organizations: A resource dependence perspective.* Harper & Row, New York.

Powell, P. (2013). The dance of elementary school classroom management. *Educational Horizons, 92*(2), 8-13. https://doi.org/10.1177 /0013175X130 9200204.

Reich, J., Buttimer, C., Fang, A., Hillaire, G., Hirsch, K., Larke, L., Littenberg-Tobias, J., Moussapour, R., Napier, A., Thompson, M., & Slama, R. (2020). Remote learning guidance from state education agencies during the COVID-19 Pandemic: A First Look. 10.35542/osf.io/437e2.

Rinke, C. R., & Gladstone-Brown, W. (2019). Characterizing STEM teacher education: Affordances and constraints of explicit STEM preparation for elementary teachers. *School Science and Mathematics, 116*(6), 300–309.

Salami, S.O. (1999) Influence of single parenting on academic achievement of adolescent in secondary school: Implication for Counseling. *An Unpublished Handout, Department of Guidance and Counseling, University of Ibadan,* Ibadan.

Scruggs, T. E., Brigham, F. J. & Mastropieri, M. A. (2020). Science education and students with learning disabilities. *Learning Disabilities Research & Practice, 26*(4), 223-232. https://doi.org/10.1111/j.1540-5826.2011.00343.x.

Shelly, G. B., Cashman, G. A. & Gunter, R. E. (2009). Teachers discovering computers: Integrating technology and digital media in the classroom (Shelly Cashman Series) - Tapa blanda. Course Technology Cengage Learning, U.S.A.

Simpson, C., McBride, R., Lowdermilk, J., Spencer, V., & Lynch, S. (2009). Assistive technology: Supporting students in inclusive classrooms. *Kappa Delta Pi Record, 45,* 172-175. 10.1080/00228958.2009.10516540.

Smith, M., & Firth, J. (2018). *Psychology in the classroom: A teacher's guide to what works. Oxon*: Routledge.https://doi.org/10.4324/9781315163420.

Soyibo, K. & Nyong, G.O.E. (1984). An analysis of the school certificate biology result of old and new secondary schools in Cross Rivers State 1978 – 1982. *Nigerian Educational Forum, 7*(2), 245 – 250.

Tomlinson, C. A., & Imbeau, M. B. (2010). *Leading and managing a differentiated classroom.* Alexandria, VA: ASCD.

Ugwuanyi, J. I. (2013). Availability, adequacy and utilization of physical education teaching resources in secondary schools in Enugu State. *Unpublished M.Ed. thesis. Submitted to the Department of Health and Physical Education, University of Nigeria, Nsukka*. Retrieved from http://www.unn.edu.ng/.

UNESCO (2008). *Education for All Global Monitoring Report 2009.* Paris: UNESCO.

Vandiver, B. (2011). The impact of school facilities on the learning environment. *Unpublished Doctoral Dissertation, Capella University.*

Wong, C. C. & Yung, K. (2019). Multiliteracies pedagogy promoting young children's ecological literacy on climate change. In K. Kumpulainen & J. Sefton-Green (Eds.), *Multiliteracies and Early*

Years Innovation: Perspectives from Finland and Beyond. London: Routledge.

Yadar. K. (2007). *Teaching of Life Sciences*. New Delhi, Anmol Publication. Ltd. India.

Yesuf, A. & David, N. (2003). Intelligence, personality, and interests: evidence for overlapping traits. *Psychological bulletin. 121*, 219–245.

APPENDIX A

Dept., of Educational Management
Faculty of Education,
University of Benin, Benin City
Edo State

18/04/2024

Dear Respondent,

LETTER TO RESPONDENTS

I am an undergraduate student of the above-named institution and currently carrying out a research titled "Availability and Utilization of Physical Educational Facilities on Teachers' Job Effectiveness" (AUPEFTJE) and the checklist was titled "Availability of Physical Educational Facilities (APEF)".The attached structured questionnaire is designed to elicit the necessary information for the study. Any information provided will be treated with utmost confidentiality and used only for research purpose.

Thanks for your anticipated co-operation.

(Research Student)

APPENDIX B

AVAILABILITY OF PHYSICAL EDUCATIONAL FACILITIES (APEF)

SECTION A (DEMOGRAPHIC DATA)

Name of School: ----------

Gender: Male ☐ female ☐

SECTION B

Instruction: Please read the following items carefully and tick (√) the appropriate column that best describe your view about each statement.

SECTION B

S/N	Physical Educational Facilities	Number of School Facilities	Number of School Facilities Required
1	Audio-visual materials		
2	Instructional materials.		
3	Computer		
4	Projector		
5	Spacious Classrooms		
6	Adequate desk and chairs		
7	Adequate school laboratory		
8	Spacious school compound		
9	Well ventilated classrooms		
10	Electric power supply		

UTILIZATION OF PHYSICAL EDUCATIONAL FACILITIES ON TEACHERS' JOB EFFECTIVENESS (AUPEFTJE)

Section A (Demographic Data)

Please fill and tick ( ) as appropriate:

1. Name of School:_____
2. School Location Urban [ ] Rural [ ]
3. School Enrolment Below 500 [ ] 500 and Above [ ]

Please, indicate your choice with a tick (V) in the corresponding boxes for such statement which mostly indicates your feelings about the issue raised, given the following alternative Key: **VH**-Very High, **H**-High; **M**-Moderate; **L**-Low and **VL** -Very Low

S/N	To what extent does utilization of physical education facilities affect teacher's effectiveness in senior secondary schools of Edo South senatorial District	VH	H	M	VL	L
1	Toilet facilities are open for use on a regular basis for proper hygiene					
2	Cleaning materials are provided to staff whom are responsible for maintenance of school facility					
3	Broken desk and seats are replacement on time with the required facility standard					
4	Replacement of faulty facilities in the staffrooms for teachers are regular assessable					
5	Standers electrical appliances, school machines, and other general facilities are provided with the standard measure					
6	Lawns and walkways are kept clean and free of dangerous objects					
7	White board, Chalkboard and other learning materials are provided to enhance teaching effectiveness					
8	Faulty school materials and equipment's are quickly repaired or replaced.					
9	Dilapidated buildings, broken doors and window, absence of perimeter fence and school gate are not provided nor repaired					
10	Classrooms and staff rooms are large enough to accommodate teachers and students.					

TEACHERS' JOB EFECTIVENESS QUESTIONNAIRE ITEMS (TJPQ)

Section A (Demographic Data)

Please kindly fill and tick ( ) as appropriate:

1. Name of School _____
2. Location of school Urban ( ) Rural ( )
3. School enrollment below 500 ( ) above 500 ( )

Section B (Teachers' Job Performance Assessment by Principals)

Key: **VH**-Very High, **H**-High; **M**-Moderate; **L**-Low and **VL** -Very Low

Instruction: Rate the extent to which teachers perform the following job on a 5 pointlikert scale

S/N		VH	H	M	VL	L
	Level of Teachers Job Performance (lesson preparation)					
1.	The school teachers do not prepare their lesson note/lesson plan at the beginning of every week.					
2.	Lesson notes, laboratory equipment's and other available materials are arranged appropriately from lesson content and current textual materials					
3.	Materials or resources such as text books for teaching are available and carefully selected by teachers					
4.	The school teachers do not complete scheme of work					
	Level of Teachers Job Performance (Lesson Delivery)					
5.	Teachers delivers their lesson according to the lesson content					
6.	Teachers prepares well for their lessons when facilities and resources are available in the school.					
7.	Availability of enough teaching materials helps teachers to be effective in their teaching					
8.	Teachers ensure that student performance objective are achieved					

	Level of Teachers Job Performance (Evaluation)					
9.	The school teachers mark class notes and assignment promptly					
10.	Teachers evaluate student class performance and behavior at the end of each class by giving assignment					
11.	Teachers conduct continuous assessment exercises					
12.	spacious examination hall to enable invigilation by teachers to avoid malpractice					