

**ASSESSMENT OF THE AVAILABILITY AND UTILIZATION OF
PHYSICAL FACILITIES ON TEACHERS' EFFECTIVENESS IN
PUBLIC SENIOR SECONDARY SCHOOLS IN EDO SOUTH
SENATORIAL DISTRICT**

BY

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**DEPARTMENT OF EDUCATIONAL MANAGEMENT
FACULTY OF EDUCATION
UNIVERSITY OF BENIN
BENIN CITY**

OCTOBER, 2023

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CERTIFICATION

We the undersigned certify that this project was carried out by **ASEKHAMHE JUSTIN** with matric number **EDU2102336** of the Department of Educational Management, Faculty of Education, University of Benin.

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DEDICATION

This work is dedicated to Almighty God for his love, support and constant show of care so far.

ACKNOWLEDGEMENTS

The researcher is sincerely grateful to God Almighty for being the author and finisher of my life for seeing me through yet another journey, and to my project supervisor, Dr. Rita Igbinovia The researcher is highly indebted to her for her sincere and valuable contributions, to ensure that this research comes out impressively. . The researcher wants to appreciate his Project Cordinator Dr. (Miss) N. Obiweluzor for her guidance and love and for always being a mother to the researcher.

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To his parents, Late Mr Vincent and Mrs A.E Asekhamhe The

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ABSTRACT

This study assessed the availability and utilization of physical facilities and their influence on teachers' effectiveness in public senior secondary schools in Edo South Senatorial District, Nigeria. The study was motivated by concerns over inadequate and poorly utilized educational facilities, which have been linked to declining instructional quality and teacher performance. Guided by the Resource Dependence Theory and Herzberg's Two-Factor (Motivation-Hygiene) Theory, the research investigated the extent of

availability and utilization of school facilities, differences in teachers' effectiveness by gender, and the influence of school size on these relationships. The study employed a descriptive survey design, drawing data from selected public senior secondary schools within the district. Data were collected through a structured questionnaire validated by experts and analyzed using mean, standard deviation, and z-test statistics at a 0.05 level of significance. Findings revealed that physical facilities in public senior secondary schools were generally inadequate and underutilized, leading to reduced teacher effectiveness. Moreover, significant differences were observed in facility utilization based on gender and school size. The study concluded that adequate provision, proper maintenance, and effective utilization of physical facilities are essential to improving teachers' performance and achieving educational goals. It recommended that government and school administrators prioritize infrastructure development, ensure regular facility maintenance, and train teachers on efficient resource utilization to enhance instructional outcomes and promote sustainable educational development in Edo State.

CHAPTER ONE

INTRODUCTION

Background to the Study

Physical facilities are vital components of any educational institution, directly influencing both teachers' effectiveness and students' learning outcomes. The physical environment of a school plays a key role in motivating teaching and learning activities. Facilities such as modern laboratories, well-equipped classrooms, and libraries are essential in supporting effective instruction and fostering academic development.

Physical facilities encompass the school infrastructure, including buildings, classrooms, laboratories, libraries, offices, furniture, toilets, and other resources that enhance students' motivation and engagement in learning. These amenities enable teachers to deliver instruction efficiently, facilitating meaningful interactions between learners and their educational environment. The availability and proper use of such

facilities significantly enhance the quality of teaching, learning, and overall educational productivity.

Education represents a fundamental tool for personal growth and national development, serving as a driver for acquiring essential skills and competencies. It equips individuals to achieve personal goals while contributing positively to society. Secondary education, positioned between primary education and tertiary institutions, prepares students for higher learning and practical engagement within society. The attainment of these objectives relies heavily on the accessibility and use of adequate educational facilities.

Despite its importance, the Nigerian educational system has faced criticism for inadequacies in preparing students for practical life and the labor market. Many secondary school graduates struggle to find employment due to a lack of necessary life skills, leaving them vulnerable to unemployment and engagement in negative activities such as crime and substance abuse. Effective utilization of physical facilities is therefore crucial for equipping students with the skills needed for self-reliance and societal contribution.

The presence and effective use of physical facilities support the achievement of educational goals, significantly impacting the success or failure of schools. Adequate facilities ensure students are actively engaged, while poorly maintained or absent resources may hinder both learning and teacher performance. When educational tools and facilities are optimally used, they enhance students' interest, retention, and learning outcomes, while also contributing to teacher effectiveness.

Facilities include both tangible and intangible resources necessary for educational delivery, ranging from physical infrastructure to instructional materials and technology. Proper classification of educational facilities covers physical, human, material, financial, and temporal resources. These resources collectively ensure the smooth functioning of schools and the effective delivery of educational programs. Comprehensive school facilities include academic and non-academic buildings, sports and recreational spaces, gardens, roads, furniture, restrooms, ICT equipment, and amenities for students with disabilities. Well-maintained facilities enable teachers to teach

effectively and students to learn efficiently.

Teacher effectiveness involves behaviors, skills, and strategies that improve student outcomes. It can be measured by student achievement, performance evaluations, and feedback from administrators, colleagues, and students. Effective teachers combine subject expertise with pedagogical skill, making consistent and meaningful use of instructional resources to enhance learning.

The usage of facilities can vary. Overutilization occurs when resources are used beyond their capacity, while underutilization indicates insufficient usage. Optimal utilization ensures facilities are used to their full potential within recommended time frames, maximizing their benefits for teaching and learning.

The availability and utilization of school facilities positively affect teacher effectiveness and student achievement. Resources that are readily available and appropriately used increase student engagement and enhance learning outcomes. Assessment of these factors is essential to ensure that schools are adequately equipped and that teachers are able to perform effectively.

This study will focus on public senior secondary schools in Edo South Senatorial District, considering school population size. Schools with fewer than 500 students are classified as small, while those with over 500 students are considered large.

Statement of the Problem

Effective teaching requires access to appropriate instructional materials and school facilities. In many public secondary schools, teaching often occurs without adequate resources, undermining the learning process. Traditional teaching methods alone are no longer sufficient, and there is a pressing need for formal educational resources to support effective instruction. The lack of available and well-utilized school facilities has impacted teachers' effectiveness in public secondary schools within Edo South Senatorial District.

Research Questions

1. What is the extent of availability of physical facilities in public senior secondary schools in Edo South Senatorial District?
2. To what extent are physical facilities utilized in these schools?
3. What is the level of teacher effectiveness in public senior

secondary schools in the district?

4. Is there a difference in facility utilization and teacher effectiveness between male and female teachers?
5. Does school size influence the relationship between facility availability and teacher effectiveness?
6. Does school size affect the relationship between facility utilization and teacher effectiveness?

Hypotheses

1. There is no significant difference in the utilization of physical facilities between male and female teachers' effectiveness.
2. School size does not significantly influence the relationship between facility availability and teacher effectiveness.
3. School size does not significantly affect the relationship between facility utilization and teacher effectiveness.

Purpose of the Study

The study aims to evaluate the availability and utilization of physical facilities and their impact on teachers' effectiveness in public senior secondary schools in Edo South Senatorial District. Specifically, the

study seeks to:

1. Determine the availability of educational facilities.
2. Assess the extent of utilization of these facilities.
3. Evaluate teacher effectiveness.
4. Examine differences in facility utilization and teacher effectiveness between male and female teachers.
5. Investigate how school size affects the relationship between facility availability and teacher effectiveness.
6. Investigate how school size affects the relationship between facility utilization and teacher effectiveness.

Significance of the Study

The findings of this research will benefit school principals, teachers, students, education authorities, and policymakers. Identifying available facilities and their usage can help teachers assess and improve instructional delivery. Principals can use the findings to address gaps in school resources and determine training needs. Students benefit from enhanced teaching and learning conditions, while future researchers can build upon this study. The research will

also inform educational planners and government authorities on the importance of adequate and well-utilized school facilities.

Scope of the Study

The study focuses on public senior secondary schools in Edo South Senatorial District, examining the availability and utilization of physical facilities and their influence on teacher effectiveness. Variables considered include facility availability, utilization, teacher effectiveness, gender, and school size.

Definition of Operational Terms

- **Physical Educational Facilities:** Permanent, non-movable structures and resources used in teaching and learning.
- **Availability:** The presence of human and material resources ready for use in teaching.
- **Utilization:** The practical or productive use of facilities.
- **Teachers' Effectiveness:** The ability of teachers to employ strategies, skills, and attitudes that enhance student learning and achievement.
- **Teaching:** The process of addressing learners' needs,

experiences, and skills to facilitate learning.

- **Physical Facilities Availability:** The presence of educational resources in schools within the district.
- **Physical Facilities Utilization:** The extent to which educational resources are effectively and productively used in schools.

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
- The Relationship Between Utilization of Physical Facilities and Teachers Effectiveness Based on School Size

Theoretical Framework

The present study utilized two theoretical frameworks to explain the relationship between the availability and utilization of physical facilities and teacher effectiveness in public secondary schools. These frameworks provided the foundation for this research and include the Resource Dependence Theory (RDT) and the Two-Factor (Motivation-Hygiene) Theory.

Resource Dependence Theory (RDT)

Resource Dependence Theory is a concept in sociology and organizational studies that explains how organizations are shaped by their reliance on external resources. Developed in the 1970s, it highlights how organizations' strategies and behaviors are influenced by their dependence on critical resources such as finances, personnel, technology, information, and materials. The theory emphasizes the

interconnection between organizations and external entities, stressing that maintaining these relationships is crucial for resource acquisition. Scarcity of resources often generates competition, influencing power dynamics and strategic decision-making. Organizations may respond to these dependencies through various approaches, including negotiations, alliances, or integrating resource production internally. This theory provides insights into organizational behavior, strategic choices, and interactions with the external environment, particularly in contexts where resources are limited and highly sought after.

Two-Factor (Motivation-Hygiene) Theory

The Two-Factor Theory, also known as the Motivation-Hygiene Theory, examines job satisfaction and its effect on performance. Proposed in 1959, the theory categorizes employee needs into two groups: motivators and hygiene factors. Motivators, which drive higher performance and commitment, include achievement, recognition, responsibility, advancement, and the work itself. When present, these factors enhance productivity and job satisfaction. Hygiene factors, on the other hand, relate to the work environment

and include salary, supervision, interpersonal relationships, job security, and organizational policies. While they do not inherently motivate, deficiencies in these factors can lead to dissatisfaction and reduced performance. For teachers, applying this theory implies that effective motivation requires both addressing hygiene needs and leveraging motivators to enhance teaching effectiveness and overall job performance.

Concepts of Physical Facilities in Education

Physical facilities in education refer to the tangible resources and spaces that support teaching and learning. These include classrooms, laboratories, libraries, administrative offices, and recreational areas. Properly designed and maintained facilities provide an environment conducive to learning, enabling both knowledge acquisition and skill development. Educational facilities also encompass teaching materials, instructional aids, furniture, ICT equipment, and infrastructure that support both academic and non-academic activities. These resources play a critical role in facilitating effective teaching, enhancing curriculum delivery, and promoting the overall educational experience.

The presence and quality of such facilities directly influence the ability of teachers to achieve instructional objectives.

Teachers' Effectiveness in Public Secondary Schools

Teacher effectiveness refers to the ability of educators to facilitate meaningful learning and achieve desired student outcomes. Effective teachers are those who can intellectually challenge students, motivate them, set high expectations, and create opportunities for self-directed learning. Teacher effectiveness encompasses instructional competence, appropriate assessment practices, classroom management, and the ability to adapt teaching strategies to students' needs. Effective teachers also cultivate positive learning environments, promote inclusivity, and collaborate with colleagues and parents to support student success. Key indicators of teacher effectiveness include high academic and social outcomes, resourceful use of materials, and the ability to foster a supportive and equitable classroom climate.

Availability of School Physical Facilities and Teachers' Effectiveness

The presence of adequate physical facilities in public secondary

schools significantly affects teacher performance. Well-maintained classrooms, laboratories, libraries, and recreational spaces provide the necessary conditions for effective instruction. Proper infrastructure, ergonomic furniture, and technology-enhanced learning tools facilitate dynamic and engaging teaching methods. Specialized spaces, such as science laboratories or art studios, allow for practical learning experiences that reinforce theoretical knowledge. The availability of diverse resources supports differentiated instruction and caters to varied student learning needs.

School buildings, including classrooms, staff rooms, offices, halls, and libraries, form the backbone of educational infrastructure. Their quality directly impacts the morale and effectiveness of teachers, contributing to successful curriculum implementation. Similarly, furniture, ICT devices, instructional materials, and recreational facilities enhance teaching efficiency and foster a holistic educational experience. Well-planned school environments, maintained to high standards, encourage both student engagement and teacher productivity, creating a positive cycle of learning and development.

In essence, ensuring that public secondary schools are sufficiently equipped with physical facilities is vital for maximizing teacher effectiveness. Investments in infrastructure, instructional resources, and supportive learning spaces enable educators to perform at their best, ultimately leading to improved student outcomes and the advancement of education in the community.

Physical Facilities in Schools

Physical education plays a crucial role in the overall development of students. Recreational activities require proper facilities, such as outdoor fields for football, track and field events, and indoor spaces for activities like basketball, volleyball, table tennis, chess, and swimming.

Toilet

Facilities

Toilets are essential in schools, yet many public secondary schools have inadequate facilities due to years of neglect. Proper management of these facilities positively affects both teachers' and students' performance. Schools without functioning toilets often struggle to maintain a clean environment, which can influence students' personal

hygiene. Additionally, water supply is critical; toilets without water are unusable and pose significant challenges. Reliable water access also supports other school activities, keeping students on campus.

Electrical

Facilities

Electricity supports teaching and learning by powering fans, lighting, air conditioning, computers, and laboratory equipment. Availability of electricity enhances access to information, facilitates a conducive learning environment, and makes teachers' work easier. Schools lacking electricity face limitations in accessing educational resources, whereas functioning electrical systems contribute to educational growth and development.

Instructional

Materials

Instructional materials encompass all tools used to support learning, including textbooks, workbooks, diagrams, charts, tables, graphs, pamphlets, games, maps, films, and videos. Different subjects require specific resources; for example, language arts relies on literature and writing materials, while science subjects depend on lab experiments, graphs, and chemical reagents. Geography and history benefit from

maps, and visual media bring abstract concepts to life, enhancing understanding and retention. Where materials are unavailable, teachers are encouraged to improvise to facilitate effective teaching.

Transportation

School buses play a vital role in providing mobility for students and teachers, enabling visits to places of educational interest and ensuring access to and from school. Proper management of transportation ensures longevity and reliability, supporting the achievement of curriculum objectives.

Utilization of Physical Facilities and Teacher Effectiveness

The effective use of physical facilities in public secondary schools significantly impacts teacher performance. Strategic deployment of resources, careful organization of learning spaces, and integration of technology optimize the teaching-learning process. Resource utilization involves making full use of available services, ensuring that instructional materials are applied effectively to achieve educational objectives.

Effective resource management includes proper handling of equipment to avoid underuse or overuse, which can lead to breakdowns. When used appropriately, facilities enhance learning quality, encouraging observation, creativity, and practical skills in students. Teachers must be resourceful in utilizing available materials, particularly fragile or specialized equipment, to maximize their impact.

Purposeful utilization of facilities, including arranging classrooms, integrating technology, and creating specialized learning spaces, enhances teacher effectiveness. Encouraging student-centered learning allows learners to actively participate, fostering autonomy and deeper understanding.

Availability of Physical Facilities and Teacher Effectiveness

The presence of adequate facilities is fundamental to teacher effectiveness. A well-equipped school environment, including classrooms, laboratories, libraries, administrative offices, and

recreational spaces, provides teachers with the tools to engage students successfully.

Classrooms with proper seating, lighting, and ventilation create conducive learning environments. Laboratories enable hands-on learning and practical application of theoretical concepts, while libraries support independent study and research. Well-organized administrative offices streamline operations, allowing teachers to focus on instruction. Recreational areas enhance physical, social, and emotional development, complementing academic learning.

Empirical evidence demonstrates that schools with sufficient facilities experience higher teacher satisfaction, improved instructional quality, and reduced turnover. Thus, facility availability is integral to fostering effective teaching and overall educational success.

Utilization of Physical Facilities and Teacher Effectiveness

Effective use of school facilities begins with classroom organization, promoting engagement through flexible seating arrangements that accommodate diverse learning needs. Integrating technology such as

interactive boards, tablets, and educational software enriches instruction, enabling dynamic lessons, simulations, and virtual experiences.

Specialized learning areas, including maker spaces and collaborative zones, encourage creativity, critical thinking, and teamwork. Laboratories support experiential learning, while adaptable spaces enable differentiated instruction tailored to various student needs. Student-centered learning environments empower learners, fostering responsibility, motivation, and practical skill development. Outdoor and recreational spaces further enhance education by supporting physical activity and experiential learning opportunities.

School Size, Physical Facilities, and Teacher Effectiveness

School size influences the relationship between facilities and teacher performance. Larger schools require sufficient classrooms, laboratories, and specialized spaces to accommodate more students and diverse programs. Proper planning, resource allocation, and technology integration are essential to manage larger student

populations effectively. Maintaining an optimal teacher-student ratio ensures individual attention and effective instruction.

Smaller schools benefit from more personalized teacher-student interactions but may face resource limitations. Flexible, multi-purpose spaces and creative classroom layouts allow small schools to maximize facility usage. Stronger community engagement offers additional educational resources, enriching students' learning experiences.

Research indicates that smaller schools often report higher teacher satisfaction and stronger community bonds, while larger schools provide broader extracurricular and specialized opportunities. Overcrowded classrooms can negatively affect facility maintenance and teacher performance, highlighting the importance of tailored strategies based on school size.

Summary of Literature Reviewed

This chapter reviewed studies on the availability and utilization of physical facilities and their impact on teacher effectiveness. While

previous research highlights the positive correlation between facilities and teaching quality, gaps remain, particularly regarding studies in Edo South Senatorial District and the combined effect of facility availability and utilization on teacher performance. Teachers' effectiveness is closely tied to the quality of materials and environment they work with, and well-maintained facilities increase motivation and performance. This study aims to address these gaps and provide insights into optimizing educational resources and teacher effectiveness.

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 employed a descriptive survey approach using a correlational design. This type of survey examines two or more variables to determine the relationships among them. This design was deemed suitable because the research aimed to identify the extent to

which the independent variables—availability and use of physical educational facilities—were associated with the dependent variable, teachers’ job effectiveness in the Edo South Senatorial District of Edo State.

Population of the Study

The target population consisted of 138 principals and 1,476 teachers from 138 public senior secondary schools across seven local government areas in Edo South Senatorial District of Edo State.

Sample and Sampling Procedure

A total of 16 principals and 147 teachers were selected as the study sample. A proportionate sampling technique, representing 10% of the population, was applied to determine the sample size, as shown in

Table 1:

Local Government	No. of Senior Secondary Schools	No. of Sampled Schools	No. of Teachers	No. of Sampled Teachers
Egor	12	2	238	24
Ikpoba-Okha	20	2	382	38
Oredo	13	2	394	39
Orhionmwon	28	3	119	12
Ovia North East	29	3	171	17

Ovia South West	15	2	54	5
Uhunmwonde	21	2	118	12
Total	138	16	1,476	147

Research

Instruments

Data were collected using two structured questionnaires and a checklist. The questionnaires were titled “Utilization of Physical Facilities and Teachers’ Job Effectiveness (UPFTJE)” and “Teachers’ Job Effectiveness Questionnaire (TJPQ),” while the checklist was labeled “Availability of Physical Educational Facilities (APEF).” The questionnaires gathered participants’ opinions regarding the use of physical facilities and teachers’ effectiveness, while the checklist assessed facility availability.

The questionnaire was divided into two sections: Section A and Section B. Section A captured demographic data such as gender, school size, and location. Section B contained two subsections: the first had 12 items measuring facility availability, and the second included 25 items, with 10 items addressing facility utilization and 15 items assessing teachers’ effectiveness. Facility utilization was rated on a four-point scale from Very High (4) to Very Low (1), while

teachers' effectiveness was rated from Very High Extent (4) to Very Low Extent (1).

Validity of Instruments

Face validity of the instruments was confirmed by experts including the researcher's supervisor, an educational management specialist, and a statistician. Their recommendations and suggestions were incorporated into the final instruments.

Reliability of Instruments

The internal consistency method using Cronbach's alpha was employed to test reliability. The instruments were trialed on 20 teachers and 10 principals from schools outside the study sample. The results showed a reliability coefficient of 0.71 for facility utilization and 0.83 for teachers' job effectiveness, indicating that the instruments were reliable.

Data Collection Procedure

Four research assistants distributed and collected the questionnaires over a four-week period. They were briefed on the purpose of the study, distribution, and collection processes. Completed

questionnaires were checked immediately upon retrieval to ensure completeness. All 16 principals and 147 teachers returned their questionnaires, achieving a 100% response rate.

Data

Analysis

Data were analyzed using frequency counts, percentages, mean (\bar{x}), standard deviation (SD), two-sample independent t-tests, and Fisher Z transformation. Descriptive statistics were used to answer the research questions, while inferential statistics tested the hypotheses. The t-tests evaluated differences between independent and dependent variables, while Fisher Z transformation assessed the influence of intervening variables, such as class size, on these relationships at a 0.05 significance level. For research questions, means equal to or above 2.5 were considered high, while means below 2.5 were considered low. For hypotheses, a p-value ≤ 0.05 led to rejection of the null hypothesis, and a p-value > 0.05 resulted in its retention. Critical z-values of ± 1.96 were also applied, where calculated z-values exceeding this threshold led to rejection of the null hypothesis, and values below it led to retention.

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 Edo South Senatorial district?

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 Edo South Senatorial district?

Table 3: Mean and standard deviation showing utilization of physical 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
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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 Edo South Senatorial district is low.

Research Question Three: What is the level of teachers’ effectiveness in public senior secondary schools in Edo South senatorial district?

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 2.40 while 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 Edo South Senatorial District 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 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 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 Edo South Senatorial district 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 Edo South Senatorial district 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 Edo South Senatorial district 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 Edo South Senatorial district based on size of school.

Hypothesis Three

There is no significant difference in the relationship between utilization of physical educational facilities and teacher's effectiveness in public senior secondary schools in Edo State based on size of school.

Table 7: Fisher Z statistic showing significant difference in the relationship between utilization of physical facilities and teacher effectiveness in public senior secondary schools in Edo South Senatorial district based on size of school

School Size	N	r	Zr	Z.Cal	Z.Tab	Decision
Below 500	7	0.09	0.09	0.27	1.96	Not Significant
Above 500	9	0.26	0.26			

The data analysis of Table 7 revealed significant difference in the relationship between utilization of physical educational facilities and teacher's effectiveness in public senior secondary schools in Edo State based on size of school. The Table showed that the correlation coefficient value of relationship between utilization of physical

educational facilities and teacher's effectiveness in school below 500 is 0.09 while that of school above 500 is 0.26. The Z-calculated value of 0.27 is less than the critical value of 1.96. Therefore, the null hypothesis was accepted. To this end, there is no significant difference in the relationship between utilization of physical educational facilities and teacher's effectiveness in public senior secondary schools in Edo State based on size of school.

Discussion of Findings

The findings for the first research question revealed that most of the schools involved in the study did not meet the standards set by the Federal Ministry of Education regarding the availability of physical educational facilities in public senior secondary schools in Edo South Senatorial District. Teachers in these schools often lacked access to essential resources such as computers, projectors, spacious classrooms, sufficient desks and chairs, well-equipped laboratories, properly ventilated classrooms, and stable electricity. This lack of infrastructure limits their ability to enhance teaching and support

effective learning. Overall, the availability of physical educational facilities in these schools was found to be very low.

Regarding the second research question, the study found that the utilization of physical educational facilities in public senior secondary schools in Edo South Senatorial District was also low. Limited use of these resources negatively impacts the achievement of educational objectives and undermines effective management in schools. While some teachers could operate computers at a basic level, they struggled to use software applications effectively, and e-mail communication for instructional purposes was infrequent and poorly managed. The low utilization of facilities appears to be closely linked to their inadequate availability, suggesting that resources can only be effectively used when they are present and accessible.

The findings for the third research question showed that teachers' job effectiveness in public secondary schools in Edo South Senatorial District was low. This indicates that teachers are not performing at their full potential, largely due to poor physical facilities and

substandard working conditions. A conducive and well-equipped environment allows teachers to deliver knowledge and skills more effectively, while inadequate facilities hinder performance. Investments in school infrastructure are therefore crucial, as the quality of education is closely tied to the working environment of teachers.

Analysis of the first hypothesis indicated a significant difference in the perception of physical educational facilities utilization between male and female teachers. This suggests that male and female teachers hold different views regarding the use of such facilities, reflecting variations in their experiences or attitudes toward resource utilization.

The findings related to the third hypothesis revealed no significant difference in the relationship between the use of physical educational facilities and teacher effectiveness based on school size. This suggests that teachers' perspectives on how the availability and use of facilities affect job performance were similar, regardless of whether the school was large or small. In essence, both male and female teachers agreed that teacher effectiveness depends largely on the physical resources

provided by school management and government. The study further indicated that teachers are likely to demonstrate high levels of effectiveness in utilizing physical facilities, irrespective of school size, possibly because they share similar understanding of how these resources contribute to effective teaching.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This study explored how the availability and use of physical educational facilities influence teachers' effectiveness in public senior secondary schools within Edo South Senatorial District. The research was guided by six key questions:

1. What is the extent of availability of physical educational facilities in public senior secondary schools in Edo South

Senatorial District?

2. To what degree are these facilities utilized by schools in the district?
3. What is the level of teachers' effectiveness in these schools?
4. Is there a difference in teachers' effectiveness between male and female teachers based on utilization of physical facilities?
5. Does the relationship between facility availability and teacher effectiveness vary according to school size?
6. Does the relationship between facility utilization and teacher effectiveness differ based on school size?

The first three questions were addressed directly, while questions four to six were tested as hypotheses at a 0.05 significance level:

- There was no significant difference in teacher effectiveness between male and female teachers regarding utilization of physical educational facilities.
- No significant difference was observed in the relationship between facility availability and teacher effectiveness based on school size.

- No significant difference was found in the relationship between facility utilization and teacher effectiveness based on school size.

A descriptive survey design with a correlational approach was employed. The study population consisted of 138 principals and 1,476 teachers across 138 public senior secondary schools in seven local government areas. A 10% proportionate sample was selected, comprising 16 principals and 147 teachers. Data were collected using a structured questionnaire titled “Availability and Utilization of Physical Educational Facilities on Teachers’ Job Effectiveness (AUPEFTJE)” and a checklist called “Availability of Physical Educational Facilities (APEF).” The questionnaire assessed respondents’ opinions on facility utilization and teachers’ job performance, while the checklist measured facility availability.

The research instruments were validated by the researcher’s supervisor, an expert in Educational Management, and a statistician from Educational Evaluation and Counselling Psychology. Reliability was determined using the Cronbach alpha method, with the

questionnaire pre-tested on 20 teachers and 10 principals outside the study sample, yielding coefficients of 0.88 for facility utilization and 0.83 for teacher performance. Data were analyzed using percentages, means, standard deviation, independent t-tests, and Fisher Z statistics in SPSS.

Findings revealed that both the availability and use of physical educational facilities were generally low. Key results include:

- Most schools did not meet the standards for physical facilities as recommended by educational authorities.
- Utilization of available physical facilities was low.
- Teachers' overall effectiveness in the schools studied was low.
- A significant difference existed between male and female teachers in facility utilization and effectiveness.
- School size did not significantly affect the relationship between facility availability and teacher effectiveness.
- School size did not significantly influence the relationship between facility utilization and teacher effectiveness.

Conclusion

The study concluded that the limited availability and poor utilization of physical educational facilities negatively affected teachers' effectiveness in Edo South Senatorial District. In other words, for teachers to perform their duties efficiently and deliver knowledge effectively, schools must ensure both the presence and proper use of essential facilities. This underscores the principle that the quality of education in a nation is closely linked to the quality of its teachers and the resources available to them.

Recommendations

Based on the findings, the following recommendations were proposed:

1. Government and non-governmental organizations should collaborate to procure essential physical educational facilities to enhance teachers' performance.
2. Regular training and workshops should be conducted to equip teachers with skills for effective utilization of these facilities, promoting efficient teaching and learning.
3. School management should maintain a conducive and

supportive working environment, as this motivates teachers to perform optimally, contributing to overall school development.

4. Adequate funding should be provided for acquiring educational facilities, and policies should ensure that both male and female teachers utilize them effectively to improve job performance.

Suggestions for Further Research

Future studies could examine:

- The impact of school facility availability on the quality of education in senior secondary schools in Edo South Senatorial District.
- Management of business studies facilities, equipment, and supplies in Nigerian secondary schools, exploring associated challenges.
- The relationship between physical facility utilization and teachers' job performance in secondary schools within Edo South Senatorial District.

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