

## Principals' Facilities Maintenance Measures and Administrative Effectiveness in Private Secondary Schools in Kwara State, Nigeria

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**ABSTRACT.** Maintaining physical infrastructure in private secondary schools is particularly critical because these institutions operate in a highly competitive environment where their reputation is tied to academic performance and the quality of their facilities. This study investigated the relationship between principals' facilities maintenance measures and administrative effectiveness in private secondary schools in Kwara State, Nigeria. The study was guided by two research questions and four research hypotheses. The descriptive survey of the correlational type was adopted for the study. The population of this study comprised 7,869 senior secondary school teachers. A sample of 250 teachers was selected using purposive and simple random sampling techniques. A researcher-designed instrument titled "Principals' Facilities Maintenance Measures and Administrative Effectiveness Questionnaire (PFMMAEQ) was utilised for data collection. The findings of this study revealed that principals in private secondary schools in Kwara State implement preventive, corrective, and emergency maintenance measures for their facilities. Similarly, the level of administrative effectiveness in private secondary schools in Kwara State is high. There is a significant relationship between principals' facilities maintenance measures and administrative effectiveness in private secondary schools in Kwara State. It was recommended that principals establish a comprehensive facilities maintenance framework that integrates preventive and emergency maintenance measures for consistent and effective management of school facilities. Principals should maintain a high level of administrative effectiveness by engaging in continuous professional development and fostering collaboration among school staff to enhance decision-making and operational efficiency.

**Keywords:** *Principals' Facilities Maintenance, Administrative Effectiveness, Facilities Maintenance*

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### INTRODUCTION

Administrative success is increasingly tied to facility upkeep in educational institutions, notably private secondary schools. School administration, education quality, and staff and student morale depend on the physical environment. Private secondary schools have distinct problems due to budgetary limits and stakeholder expectations. The quality of school facilities affects learning, image, and efficiency (Barrett et al., 2019). Therefore, maintaining these facilities is essential for the school's performance in competitive educational contexts. Facilities refer to the physical infrastructure available within a school, including classrooms, libraries, laboratories, ICT resources, sports grounds, and administrative offices. Basic amenities such as electricity, water and sanitation are also critical. Proper facility maintenance is vital for a good learning environment and effective

school operations (Badmus, 2023). The quality of these facilities typically determines which private secondary school parents choose, making their upkeep a practical need and a competitive advantage (Hanushek, 2010). Thus, the school's physical condition impacts its reputation and appeal to potential students and parents.

Administrative effectiveness is the capacity of school administrators to achieve educational objectives by efficiently managing human and material resources. Effective school administration involves planning, organising, directing, and controlling these resources to foster an environment conducive to learning and academic success (Badmus, 2023). In private secondary schools, where financial and operational pressures are higher, administrative effectiveness depends significantly on the quality and maintenance of school facilities. Poorly maintained facilities disrupt the learning process and can impede the school's daily operations, effectively undermining school administrators' efforts to manage the institution (Ogbuka, 2019). Facilities maintenance encompasses all activities aimed at keeping the physical infrastructure of a school functional and safe. These activities include repairs, renovations, and preventive measures to prolong school buildings' and equipment's life and usability. Conversely, neglecting maintenance can lead to deterioration, inefficiency and safety hazards, affecting teaching and learning. Poor maintenance practices often arise from financial constraints, a lack of proper planning, and a failure to appreciate the long-term benefits of preventive maintenance (Badmus, 2023). In private secondary schools, where financial resources are limited, maintenance projects are often postponed or ignored, leading to a decline in the overall quality of the school environment (Baker, 2021).

The educational landscape in Kwara State, Nigeria, has witnessed a growing demand for private secondary education due to the perceived inadequacies of public schools. As the number of private schools has increased, so too has the competition for student enrollment, making facility maintenance a critical factor in determining a school's success (Alabi & Saidu, 2021). Parents in Kwara State often view well-maintained facilities as indicative of the quality of education their children receive, making facility upkeep an essential element of school management (Abdullah, 2019). This has placed additional pressure on school administrators to allocate resources towards maintenance despite budgetary constraints. Research consistently shows a strong correlation between well-maintained school facilities and administrative effectiveness. Schools with well-maintained facilities tend to have higher student performance, greater staff motivation, and fewer interruptions in the learning process (Badmus, 2023; Otchere et al., 2019). Conversely, schools with poorly maintained facilities often experience declines in academic outcomes, increased dropout rates, and difficulties in attracting and retaining qualified staff. Poor facilities create an uncomfortable and sometimes unsafe learning environment, negatively affecting student engagement and teacher effectiveness (Ogbuka, 2019). The challenges of maintaining facilities in private secondary schools in Kwara State are multifaceted. Financial constraints are one of the primary barriers, as many private schools rely heavily on tuition fees for revenue. This dependence on limited financial resources means that school administrators must make difficult decisions about allocating funds, and maintenance projects often receive low priority (Alabi & Saidu, 2021). Consequently, the condition of the school facilities deteriorates over time, leading to higher repair costs and a negative impact on the school's operational effectiveness (Badmus, 2023).

Inadequate maintenance planning is another significant issue private schools in Kwara State face. Many school administrators lack formal training in facilities management and are often unaware of the importance of regular preventive maintenance (Ogbuka, 2019). This results in a reactive approach to maintenance, where repairs are only carried out when facilities have already deteriorated significantly. Such an approach is more costly in the long run, as neglect leads to more extensive and expensive repairs (Osborne et al., 2015). On the other hand, a proactive maintenance strategy would involve regular inspections and repairs to prevent major breakdowns and ensure the longevity of school facilities. Moreover, the lack of accountability and oversight in many private secondary schools exacerbates the problem of facilities maintenance. Sometimes, no designated staff member oversees maintenance activities, leading to neglect or substandard work. Without

clear accountability structures, it is difficult for school administrators to ensure that maintenance tasks are performed consistently and to a high standard (Kezar & Holcombe, 2017; Tschannen-Moran & Gareis, 2015). This lack of oversight can result in a cycle of deterioration, where facilities continue to decline, and the cost of repairs becomes progressively higher over time.

The impact of poor facility maintenance on administrative effectiveness is significant. When facilities are not adequately maintained, school administrators are forced to spend time and resources addressing maintenance issues, which detracts from their ability to focus on other essential administrative tasks (Ogbuka, 2019). For instance, if the electrical system of a school is faulty, the school administrator may need to devote time to coordinating repairs and finding temporary solutions, which can disrupt the learning process and lead to inefficiencies in school management. This diversion of attention away from strategic planning, curriculum development, and teacher training hampers the overall effectiveness of school administration (Badmus, 2023). In addition to affecting administrative tasks, poor maintenance can have serious consequences for the health and safety of the school community. Dilapidated buildings, malfunctioning electrical systems, and inadequate sanitation facilities can pose risks to students and staff, potentially leading to accidents and injuries (Mubita, 2018). School administrators have a responsibility to ensure the safety of their school environment, and failure to do so can result in legal liabilities and a loss of trust from parents and the wider community (Alabi & Saidu, 2021). Schools prioritising facility maintenance improve safety and enhance their reputation and ability to attract and retain students.

Schools with regular upkeep are more administratively effective. A well-maintained environment increases teaching and learning, boosting student performance and staff productivity (Akinnubi et al., 2024; Ohia, 2020). School administrators may focus on strategic management and educational results when buildings are in excellent shape rather than upkeep. More efficient and effective management boosts school achievement (Ogbuka, 2019). This study examines the association between principals' facility upkeep and administrative success in private secondary schools in Kwara State, Nigeria.

### **Statement of the Problem**

The importance of facility maintenance in schools cannot be overstated, as it directly impacts the effectiveness of school administration and the overall educational experience. In private secondary schools in Kwara State, Nigeria, maintaining physical infrastructure is particularly critical because these institutions operate in a highly competitive environment where their reputation is tied not only to academic performance but also to the quality of their facilities (Kamaldeen et al., 2021; Yangeve, 2019). Despite this, many private schools struggle to allocate adequate resources for the upkeep of essential infrastructure, leading to the gradual deterioration of buildings, classrooms, laboratories, and other vital facilities (Ogbuka, 2019). Poor maintenance practices in these schools may negatively affect the school's ability to meet its administrative goals, thereby reducing its overall effectiveness. Financial limitations result in inadequate allocation of funds towards preventive maintenance, with school administrators frequently prioritising short-term needs over long-term infrastructure management (Ogbuka, 2019). As a result, many schools adopt a reactive approach to maintenance, addressing facility issues only after they have significantly deteriorated, increasing the cost of repairs and disrupting the learning environment.

Furthermore, the lack of formal training in facilities management among school administrators in many private secondary schools exacerbates the problem. Inadequate knowledge and poor planning result in ineffective maintenance strategies, leaving facilities to fall into disrepair. This has led to situations where schools cannot provide safe, conducive environments for teaching and learning, thus undermining their administrative functions and overall effectiveness (Badmus, 2023). Therefore, the core problem addressed in this research is the insufficient maintenance of facilities in private secondary schools in Kwara State, which has contributed to a decline in administrative effectiveness. Schools' inability to adequately maintain their infrastructure has affected academic performance, posed safety risks and diminished their competitiveness in the education sector. To fill these gaps, this study explores the relationship between principals' facilities

maintenance measures and administrative effectiveness, providing insights into how improved maintenance practices can enhance the operational efficiency of private secondary schools in Kwara State.

### **Purpose of the Study**

The primary purpose of this study is to examine principals' facilities maintenance measures and administrative effectiveness in private secondary schools in Kwara State, Nigeria. The specific purpose is to

1. assess the principals' facilities maintenance measures adopted in private secondary schools in Kwara State
2. examine the level of administrative effectiveness in private secondary schools in Kwara State
3. examine the relationship between principals' facilities maintenance measures and administrative effectiveness in private secondary schools in Kwara State.
4. examine the relationship between principals' preventive maintenance measures and administrative effectiveness in private secondary schools in Kwara State

### **Research Questions**

1. What are the principals' facilities maintenance measures adopted in private secondary schools in Kwara State?
2. What is the level of administrative effectiveness in private secondary schools in Kwara State?

### **Research Hypotheses**

H<sub>01</sub>: There is no significant relationship between principals' facilities maintenance measures and administrative effectiveness in private secondary schools in Kwara State.

H<sub>02</sub>: There is no significant relationship between principals' preventive maintenance measures and administrative effectiveness in private secondary schools in Kwara State.

### **Literature Review**

#### **Concept of School Facilities Maintenance**

School facility maintenance is a crucial process in secondary schools that ensures the optimal condition of school buildings, equipment, and grounds for educational activities (Osibo, 2019). It is essential for the well-being of students, teachers, and staff and the effectiveness of administrative and instructional functions. Facilities in secondary schools typically include classrooms, laboratories, libraries, sports fields, administrative offices, restrooms and equipment such as desks, chairs, projectors, and computers. Maintaining these facilities requires a holistic approach that considers the different needs of each facility based on its usage, materials used in construction, and frequency of use (Hauashdh et al., 2022). One of the primary objectives of facility maintenance is to protect the health and safety of students, teachers and staff by addressing hazards such as loose floor tiles, faulty electrical wiring, and broken windows. Proper ventilation, air quality and sanitation are also critical for preventing the spread of illnesses. Clean restrooms, classrooms and dining areas contribute to students' overall well-being, resulting in better attendance and academic performance. A well-maintained school environment fosters a positive learning experience for students by providing the necessary resources and support for effective learning (Maba, 2022). Classrooms with adequate lighting, comfortable seating, and functional technology promote student engagement and concentration. Outdoor facilities, such as sports fields and playgrounds, encourage physical activity and play, which is essential for students' physical and mental development. One of the biggest challenges secondary schools face is insufficient funding for maintenance activities. Schools operate on tight budgets, with most funds allocated to instructional materials, salaries and administrative costs (Usman, 2016). This can lead to deferred maintenance, postponed repairs and increased reliance on corrective maintenance. Limited funding also affects the availability of maintenance staff and the ability to purchase necessary materials and equipment. Another challenge is the shortage of trained maintenance staff in secondary schools. Schools may have limited

personnel responsible for maintaining various facilities, leading to subpar results (Adeoye et al., 2024; Ajayi, 2024).

Additionally, maintenance staff may not receive adequate training or resources to perform their duties effectively. Effective facility maintenance requires careful planning and prioritisation of tasks based on the school's needs. Without a clear maintenance strategy, schools may struggle to allocate resources efficiently and address critical issues promptly.

School facilities maintenance in secondary schools is divided into preventive, corrective, and custodial services. Preventive maintenance involves regular inspection, servicing, and upkeep of equipment, structures, and systems to prevent potential failures or malfunctions before they occur (Stephens, 2010). It aims to create a safe, comfortable, and conducive learning environment for students and staff by reducing the risk of sudden breakdowns or costly repairs. Primary preventive maintenance in secondary schools includes building infrastructure, electrical and HVAC systems, plumbing and water systems, educational equipment, outdoor facilities and grounds, and custodial services. Building infrastructure includes regular checks on roofs, windows, doors and walls to identify signs of wear and tear or damage. Electrical systems involve regular inspection of wiring, circuit breakers, light fixtures, air conditioning units, and ventilation systems to prevent electrical hazards and ensure proper air quality and temperature regulation. Plumbing and water systems are crucial for maintaining hygiene and sanitation in schools. Regularly maintaining these systems includes checking for leaks, inspecting water pressure, and ensuring the proper functioning of pipes and drainage systems. Schools must also maintain water fountains, taps, and sewage systems to provide a safe and adequate drinking, cleaning, and sanitation water supply.

Educational equipment includes regular inspection and servicing of computers, projectors, laboratory equipment and other technological devices. Preventing breakdowns or malfunctions in educational equipment ensures that instructional activities are not disrupted and that students can access resources for effective learning. Outdoor facilities, such as sports fields, playgrounds, parking lots and school gardens, also need regular inspections to identify potential hazards and ensure safety. Preventive maintenance in secondary schools is crucial for a safe and healthy learning environment. It helps identify and address potential dangers before they escalate, reducing the risk of accidents, injuries, and health issues. Regular HVAC maintenance, fire safety, and safe electrical systems contribute to a hygienic and secure learning environment. Despite initial investment, preventive maintenance helps schools avoid costly repairs and replacements, extending the lifespan of facilities and equipment. It also ensures smooth educational activities without disruptions caused by facility or equipment failures. Regular maintenance of school buildings, infrastructure, and equipment extends their useful life, protecting the investment in physical assets. It also contributes to secondary schools' overall aesthetic and environmental quality, creating a positive atmosphere for students, staff and visitors. Preventive maintenance practices focusing on energy efficiency and sustainability help reduce the school's ecological footprint while lowering utility costs.

### **Corrective Maintenance**

Corrective maintenance is a crucial aspect of secondary school facilities, involving repairing or restoring school facilities and equipment after failure, malfunction or damage (Abiodun et al., 2016). It is reactive, addressing issues that have already disrupted the normal functioning of the school environment. In secondary schools, corrective maintenance can involve many activities, from fixing broken windows and repairing electrical systems to addressing plumbing issues or malfunctioning air conditioning units (Earthman & Lemasters, 2013). It is essential to ensure that school facilities remain functional and that educational activities can continue with minimal disruption. Corrective maintenance can be classified into two major categories: immediate and deferred corrective maintenance. Immediate corrective maintenance is necessary when an issue poses a significant risk to the safety or functionality of the school and requires urgent attention (Nhlapo, 2009). This type of maintenance is typically performed when a failure disrupts essential school operations, such as a power outage, a leaking roof or a broken heating system in cold weather. Immediate corrective maintenance is crucial in addressing safety hazards, such as broken

windows or damaged playground equipment. Deferred corrective maintenance occurs when repairs are postponed due to budget constraints, lack of resources, or the perceived non-urgency of the problem (Barretiri, 2021). This type of maintenance typically involves less critical issues that do not pose an immediate risk to the safety or functionality of the school. While deferring maintenance may be a practical solution in some cases, it can lead to more significant problems in the long term, such as neglecting minor issues like small leaks, cracks in walls or malfunctioning equipment.

Corrective maintenance is vital in maintaining secondary school facilities' functionality, safety, and aesthetics, ensuring safety and cost management. By performing corrective maintenance when problems first arise, schools can avoid the need for more extensive repairs or replacements in the future, making it particularly important for schools operating on limited budgets.

### **Emergency Maintenance**

Emergency maintenance is the immediate and often urgent repair or restoration of school facilities due to unforeseen events or failures that threaten the safety, functionality or well-being of the school's occupants (Lindell, 2021; Radović, 2020). It is critical in secondary schools as it directly impacts providing a safe learning environment. A delay in addressing these emergencies can result in severe consequences, ranging from school closures to health and safety hazards for students, teachers and staff (Shah et al., 2020). Causes of emergency maintenance in secondary schools include structural failures, electrical failures, plumbing and water system failures, HVAC system failures, natural disasters and weather-related damage (Levitt, 2013). Structural failures, such as collapsing ceilings, broken windows, or damaged walls, can necessitate immediate maintenance to prevent injuries or further structural degradation. Electrical failures can be hazardous, posing the risk of electrocution, fires or power outages that disrupt educational activities. Emergency plumbing maintenance is necessary to restore water supply and drainage systems and ensure restrooms, drinking fountains, and other water-dependent facilities are operational. HVAC system failures are essential for maintaining a comfortable and healthy learning environment, particularly in extreme weather conditions.

Emergency maintenance plays a key role in minimising disruptions to academic activities caused by facility breakdowns (Gilbert & Thelma, 2024). Swift emergency maintenance allows the school to quickly return to normal operations, minimising any interruptions to the learning process. While emergency maintenance is reactive, it can contribute to the long-term preservation of school facilities by preventing minor issues from escalating into more significant, expensive problems. However, emergency maintenance poses several challenges to secondary schools, particularly regarding resource allocation, staff availability and planning. Schools often operate with limited maintenance budgets, and unexpected emergencies can strain these financial resources.

Additionally, schools usually have a limited number of in-house maintenance staff and those on hand may not have the expertise to handle complex emergency repairs, which can cause delays in repair and restoration efforts. School administrators may struggle to prioritise tasks, allocate resources, or communicate with maintenance staff effectively during an emergency without a clear plan. A lack of planning can prolong the time it takes to address critical issues, increasing the risk of further damage or disruption to school activities.

### **Administrative Effectiveness**

Administrative effectiveness in private secondary schools is the ability of the school administration to achieve desired educational outcomes through optimal use of available resources, efficient management of personnel and proper supervision and monitoring of teaching and non-teaching activities (Eunice, 2022; Umar, 2023). This concept is closely linked to leadership, strategic decision-making, and efficient resource utilisation. It encapsulates how well school administrators manage and execute their duties to improve the institution's overall performance. In private secondary schools, administrative effectiveness is especially crucial due to the competitive nature of the private education sector, which relies on tuition fees as their primary source of income. Therefore, administrative effectiveness involves strategically utilising available resources, particularly educational facilities, to ensure quality teaching, effective learning processes and overall

organisational success (Aithal & Maiya, 2023). Key components of administrative effectiveness in private secondary schools include the effective utilisation of facilities, supervision of facilities, and the availability of those facilities. These interrelated components determine how well the school administration can meet educational objectives. The administration must adopt a strategic approach to effectively utilise facilities, ensuring they are adequate and used optimally, allocating resources equally to all students, and regularly maintaining and updating facilities to meet current educational standards (Gayle et al., 2011).

Effective facility utilisation involves efficient space management, scheduling optimisation, layout design, and regular maintenance. Regular inspections, cleaning, and repairs help address minor issues before they become significant problems, extending the lifespan and avoiding disruptions to the learning process. Flexibility and adaptability are crucial for schools to respond to changing needs and circumstances. Administrators should be prepared to modify schedules, reallocate resources or repurpose spaces. Responding to student and staff feedback can provide valuable insights into facility usage and areas for improvement.

### **Supervision of Facilities**

Supervision of facilities is a crucial aspect of administrative effectiveness in private secondary schools. It involves overseeing and monitoring how facilities are used and maintained, contributing to the overall educational goals of the school (Adjei, 2021). This includes ensuring that facilities are used appropriately and in good condition for extended periods. Key practices in facility supervision include regular inspections, maintenance scheduling, resource allocation, staff training, and feedback mechanisms. Regular inspections help identify maintenance needs and ensure compliance with safety standards, covering all areas of the school, including classrooms, laboratories, libraries, restrooms, and recreational areas. Maintenance scheduling involves establishing a well-organised schedule that includes routine tasks such as cleaning, painting, and servicing equipment (Mishra & Pathak, 2012). Effective resource allocation ensures that critical maintenance needs are addressed without compromising other school operations areas. Staff training is essential for teachers and administrative staff to be aware of their role in maintaining the school environment. Feedback mechanisms allow students, staff, and parents to report facility-related issues and provide suggestions for improvements. Facility supervision is essential for creating a safe and productive learning environment. Regular supervision helps maintain facilities by health and safety regulations, reducing the risk of accidents and ensuring compliance with legal standards. By addressing minor issues before they become significant problems, administrators can extend the lifespan of facilities and avoid costly repairs or replacements.

However, adequate supervision of facilities in private secondary schools faces several challenges. Many schools operate with constrained budgets, which can limit their ability to invest in regular maintenance and upgrades (Ajibolade & Oboh, 2017). Financial constraints may result in delayed repairs and inadequate facility management, leading to deteriorating conditions and potential safety hazards. A shortage of qualified staff responsible for facility management can also impede adequate supervision. Resistance from staff or students to new maintenance procedures or facility changes can hinder sufficient supervision. Overcoming this resistance requires effective communication and stakeholder involvement in decision-making processes.

### **Factors Influencing Administrative Effectiveness**

Various factors, including leadership and management skills, financial resources and budget management, staff competency and professional development, infrastructure and facilities, technology integration, student enrollment and demographics, community and parental involvement, policy and regulatory compliance, and organisational culture and climate influence administrative effectiveness in private secondary schools. Leadership and management skills are crucial for administrative effectiveness, as they enable school leaders to set a clear vision, make strategic decisions and motivate staff to achieve common goals (Amanchukwu et al., 2015; Attoh, 2024). Leadership styles, such as transformational or transactional leadership, can lead to higher staff commitment and student achievement (Cemaloğlu et al., 2012). Effective leaders must address

conflicts promptly and reasonably to maintain a harmonious working environment. Financial resources and budget management are significant factors influencing administrative effectiveness. Adequate funding allows schools to invest in infrastructure, educational materials, and staff development programs, all contributing to a better learning environment. Budget management requires transparency, accountability, and the ability to make informed financial decisions. Schools with well-managed budgets are better positioned to maintain and upgrade their facilities, provide professional development for staff, and support student programs (Nzoka & Orodho, 2014).

Staff competency and professional development are critical factors in administrative effectiveness. Competent teachers and staff contribute to high-quality education and effective administration. Investing in staff training improves teaching quality and boosts staff morale and retention. Schools with effective professional development programs tend to have more engaged and capable staff, positively influencing administrative effectiveness (Caliba, 2022; Day et al., 2016). Infrastructure and facilities are essential for administrative effectiveness. Proper maintenance and timely upgrades of facilities are necessary to prevent disruptions and ensure that the learning environment supports educational activities (Nhlapo, 2009). Administrators must also ensure that facilities are used efficiently and meet safety standards to protect students and staff. Technology integration increasingly influences administrative effectiveness, as it can enhance teaching and learning processes, streamline administrative tasks, and improve communication within the school community (Ajani & Dlomo, 2025; Obiora & Uche, 2024; Tigere, 2020). Schools that effectively address diverse student needs and provide targeted interventions tend to see improved academic outcomes and effectiveness. Community and parental involvement play a significant role in enhancing administrative effectiveness. Engaging parents and community members in school activities, decision-making processes, and support initiatives can lead to a more collaborative and supportive environment. Schools that actively involve parents and community stakeholders often experience better student outcomes and stronger support networks.

#### **Relationship between Facilities Maintenance and Administrative Effectiveness**

Facilities maintenance is a crucial aspect of administrative effectiveness, as it involves strategic planning, coordination, and execution of various tasks related to facility upkeep (Lebeau et al., 2024). Effective resource allocation is essential for efficiently managing school facilities, as it reflects the ability of school leaders to prioritize and manage limited resources judiciously (Amirize & Ololube, 2018). This includes setting aside a maintenance reserve fund for unexpected issues without disrupting the school's operations. Maintenance activities directly affect operational efficiency, as regular upkeep ensures that facilities function smoothly and minimize disruptions to the educational process. Adeyemi et al. (2024) argue that schools with effective maintenance programs experience fewer operational issues, leading to a more organized and efficient school environment. Implementing preventive maintenance schedules reduces the likelihood of significant disruptions and ensures that facilities are always in optimal working condition. The state of school facilities can significantly impact staff and student morale and maintained facilities contribute to a positive school culture in which staff and students feel valued and supported. A well-maintained environment fosters a sense of pride and belonging among students and staff, which can enhance motivation and overall performance. Conversely, poorly maintained facilities can lead to frustration and dissatisfaction, as outdated or broken facilities can affect the quality of teaching and learning, leading to decreased job satisfaction among teachers and reduced motivation among students.

Oredein and Opatunde's (2023) study explores the relationship between decision-making skills and administrative effectiveness of principals in public senior secondary schools in Oyo State, Nigeria. Principals play a crucial role in fostering effective teaching and learning environments, and their decision-making skills significantly impact the school's success. The research uses Henry Fayol's Management Theory and Fiedler's Contingency Theory of leadership. The results showed a high administrative effectiveness among principals in planning, coordinating, and supervising activities. However, areas for improvement were identified, such as resource provision, maintenance planning, and budget allocation. Autocratic leadership was prevalent (44.5%) among



principals, but a significant proportion used democratic and digital leadership styles. The study found a highly positive relationship between decision-making skills and administrative effectiveness, suggesting the need for principals to explore alternative decision-making skills that promote teamwork, collaboration, and shared decision-making.

Ayodele et al. (2015) examine the internal efficiency of private and public secondary schools in Ekiti State from 2005/2006 to 2007/2008. The results showed that private junior secondary schools had higher wastage rates than public secondary schools in Ekiti State, with a higher percentage of dropouts. Public schools had a 90% efficiency coefficient, while private secondary schools had a 73% efficiency rate. Both public and private secondary schools in Ekiti State were relatively internally efficient, but public schools were more efficient than private schools. The findings recommend that both schools improve in areas with high wastage rates, especially in private schools with higher wastage ratios, and work towards perfect internal efficiency. Olaniyan's 2021 study explores the impact of school management effectiveness on academic performance in seven private secondary schools in Ilorin metropolis. The study found that innovation, decision-making, supervision, and finance had regression coefficients for engagement and motivation, accuracy and alignment, depth of knowledge, and instructional quality design. Sub-themes from the qualitative analysis include student-oriented management, entrepreneurship skills, and computer-based teaching as tools that enhance academic performance. The study concludes that school management effectiveness and educational achievement are positively correlated. It recommends focusing on innovation to increase student test scores, encouraging participation in decision-making to increase job satisfaction and productivity and improving teaching competence and school system well-being. The National Policy on Education also recommends that private schools allocate 26% of the total budget for education promotion.

Amough's (2019) study investigates the maintenance of school facilities and principals' leadership styles in private secondary schools in the North Central States of Nigeria. The results showed a significant difference in mean ratings between principals and teachers regarding the maintenance of school facilities and principals' leadership styles. The study recommends a proper maintenance culture and suitable leadership styles to ensure all stakeholders are involved in the maintenance of school facilities. The findings suggest that effective leadership is crucial for promoting a positive school environment. Takwate (2018) examined the relationship between school facilities planning, allocative, and administrative efficiency and the academic performance of Senior Secondary School students in Adamawa State, Nigeria. The study found that efficient planning of school facilities was evident, but allocative and administrative efficiency were not. Students' academic performance in WAEC/SSCE May/June 2013 - 2015 was poor. The study also found a significant relationship between planning efficiency, allocation efficiency, and academic performance. The study recommends that government-adequate equipping of all Senior Secondary Schools in the state and frequent assessments of facilities to identify areas of need. This study provides insights into principal maintenance's impact on administrative processes, educational outcomes, operational efficiency, and service delivery. It emphasizes the need for integrating facility maintenance into the educational policy framework and the correlation between well-maintained school environments and effective administration.

## **METHOD**

This study adopted a descriptive survey research design of the correlation type. Survey research is a methodological approach where a subset of a larger population, referred to as a sample, is studied to conclude the entire population through collecting and analyzing data from this sample (Babbie, 2021). The study's design explored some facts about facility maintenance as the correlation of administrative effectiveness in private secondary schools in Kwara State, Nigeria.

This study's population comprised all the Private Secondary School Teachers in Kwara State, Nigeria. Kwara State is home to a total of 249 Private Senior Secondary Schools. Kwara State has 7,869 Senior Secondary School Teachers (Nigeria Federal Ministry of Education, 2021).

A multi-stage sampling technique was adopted for this study. In the first stage, there are sixteen (16) LGA in Kwara State: Asa, Baruten, Edu, Ekiti, Ifelodun, Ilorin East, Ilorin South, Ilorin West, Irepodun, Isin, Kaiama, Moro, Offa, Oke Ero, Oyun and Pategi LGAs. Therefore, a simple random sampling technique selected five (5) LGA. The LGAs that were selected are Asa, Ilorin East, Ilorin South, Ilorin West and Moro LGAs. The second sampling stage entailed the selection of private secondary schools under each LGA from which the study population was selected. A purposive sampling technique was used to select five (5) private secondary schools under each LGA to ensure the sample reflects the diversity of private secondary schools in Kwara State, allowing for meaningful comparisons. In the third sampling stage, a simple random sampling technique was used to select ten (10) teachers from each of the selected private secondary schools. Therefore, the sample size of this study is 250 respondents.

A self-designed Questionnaire was used as an instrument for this study. The "Principals' Facilities Maintenance Practices and School Administrative Effectiveness Questionnaire (PFMPSAEQ)" questionnaire was categorically designed. The questionnaire consisted of two sections (A & B). Section A deals with the independent variables (Facilities Maintenance), while Section B deals with the dependent variables (Administrative Effectiveness) under the study. The measurable variables used include: SA: Strongly Agree = 4; A: Agree = 3; D: Disagree = 2 and SD: Strongly Disagree = 1

The study validated a questionnaire by distributing it to a supervisor and lecturers at Al-Hikmah University, Ilorin. They examined the questionnaire and research questions to determine its suitability and sufficiency. The questionnaire was then organised using the Likert format, employing a four-point Likert format. A pilot study was conducted to evaluate the instrument's reliability. Fifty questionnaires were administered to 10 teachers from five private secondary schools, randomly selected from Offa and Oyun LGAs. The Cronbach's Alpha technique assessed the instrument's internal consistency, with a coefficient alpha 0.98, indicating its reliability. The study highlights the importance of determining the validity of instruments and their reliability in educational settings.

The researcher administered the questionnaire via Google survey to the chosen sample for the study. The Google survey link was sent to the teachers in the sampled schools. After the administration of the instruments, the response was retrieved for data analysis with the aid of research assistants. The data gathered during the fieldwork was subjected to coding and subsequent analysis. The analysis was conducted using the Statistical Package for Social Science (SPSS). Statistical Mean was used to answer the research questions. The mean score above 2.50 is considered high, while the mean below 2.50 is considered low. The Pearson Product Moment Correlation Statistics (PPMC) was used to test the hypotheses at 0.05 significance level.

## RESULT AND DISCUSSION

### Result

**Research Question One:** What are the principal facilities maintenance measures usually adopted in private secondary schools in Kwara State?

**Table 1**

*Principals' facilities maintenance measures are usually adopted in private secondary schools in Kwara State.*

PFMM	Mean	Percentage (%)	Rank
Preventive maintenance measures	3.50	30	1
Corrective maintenance measures	3.00	24	2
Emergency maintenance measures	2.75	21	3
Destructive maintenance measures	18.4	16	4
Retentive maintenance measures	11.4	9	5

Table 1 above reveals principals' maintenance measures in private secondary schools in Kwara State. Table 1 shows that the aggregate mean score of all the questionnaire items was higher than 2.50. Therefore, it is interpreted that most respondents agreed that the most frequently used maintenance measures are preventive, corrective, and emergency. Meanwhile, the mean score of destructive and retentive measures is below 2.50, meaning that they are rarely used as ranked. Therefore, the study revealed that the maintenance measures for principals' facilities in private secondary schools in Kwara State usually include preventive, corrective, and emergency maintenance measures.

**Research Question Two:** What is the level of administrative effectiveness in private secondary schools in Kwara State, Nigeria?

**Table 2**

*The level of administrative effectiveness in private secondary schools in Kwara State, Nigeria*

ITEMS	SA	A	D	SD	X	Std. D	Remark
The available facilities in our school are effectively utilised during academic and non-academic activities.	39	169	32	10	3.01	.666	High
Classroom furniture, laboratory equipment, and other teaching aids adequately support learning.	47	156	33	14	2.94	.737	High
Teachers utilise the provided teaching and learning facilities to enhance students' academic performance.	55	169	17	9	3.08	.654	High
The usage of school facilities contributes to overall school effectiveness.	57	175	9	9	3.12	.629	High
Non-academic facilities (e.g., sports equipment, recreational areas) are well-utilised for student development.	30	178	33	9	2.92	.625	High
The school principal or designated personnel frequently supervises the use of school facilities to ensure they are in good condition.	50	157	34	9	2.99	.694	High
The school administration conducts regular checks to monitor the condition and effectiveness of school facilities.	39	155	47	9	2.90	.692	High
The principal supervises the maintenance of facilities (e.g., classrooms, laboratories, toilets) effectively.	39	157	45	9	2.90	.688	High
The school administration takes prompt action based on the findings from facility supervision reports.	47	158	35	10	2.97	.699	High
Teachers are encouraged to report facility issues or maintenance needs to the school administration.	39	168	34	9	2.95	.660	High
Essential teaching and learning facilities (e.g., classrooms, libraries, laboratories) are available in adequate quantity.	22	130	84	14	2.74	.721	High
The school has sufficient facilities to support the current student population.	33	109	85	23	2.61	.830	High
The school's sports and recreational facilities are adequate for students' needs.	30	118	80	22	2.62	.808	High

The availability of facilities such as laboratories and libraries contributes positively to students' academic outcomes.	44	164	33	9	2.97	.673	High
Maintenance services are readily available to ensure that school facilities remain functional.	37	134	66	13	2.78	.758	High

Table 2 above reveals the level of administrative effectiveness in private secondary schools in Kwara State, Nigeria. From Table 2, it was observed that the mean score of all the questionnaire items was higher than 2.50, and therefore, it was interpreted that most respondents agreed with the questionnaire items. Hence, the study revealed that the level of administrative effectiveness in private secondary schools in Kwara State is high.

**H<sub>01</sub>: There is no significant relationship between principals' facilities maintenance measures and administrative effectiveness in private secondary schools in Kwara State.**

**Table 3**

*Summary of Pearson Product Moment Correlation between Principals' Facilities Maintenance Measures and Administrative Effectiveness in Private Secondary Schools in Kwara State*

Variables	N	Mean	SD	Df	r-cal	Sig.	Remark
<b>Principals' Facilities Maintenance</b>	250	42.93	9.003		0.803	0.001	S
<b>Administrative Effectiveness</b>	250	43.34	8.901	248			

The result in Table 3 showed that the r-cal is 0.803, and the p-value of 0.001 is lesser than the 0.05 significance level. Therefore, the null hypothesis, which stated that "there is no significant relationship between principals' facilities maintenance measures and administrative effectiveness in private secondary schools in Kwara State", is hereby rejected. This implies a significant relationship between principals' facilities maintenance measures and administrative effectiveness in private secondary schools in Kwara State.

**H<sub>02</sub>: There is no significant relationship between principals' preventive maintenance measures and administrative effectiveness in private secondary schools in Kwara State.**

**Table 4**

*Summary of Pearson Product Moment Correlation between Principals' Preventive Maintenance Measures and Administrative Effectiveness in Private Secondary Schools in Kwara State*

Variables	N	Mean	SD	Df	r-cal	Sig.	Remark
<b>Principals' Preventive Maintenance</b>	250	14.68	2.932		0.786	0.001	S
<b>Administrative Effectiveness</b>	250	43.34	8.901	248			

The result in Table 4 reveals that r-cal is 0.786, and the p-value of 0.001 is lesser than the 0.05 significance level. Therefore, the null hypothesis, which stated that "there is no significant relationship between principals' preventive maintenance measures and administrative effectiveness in private secondary schools in Kwara State", is hereby rejected. This implies a significant relationship between principals' preventive maintenance measures and administrative effectiveness in private secondary schools in Kwara State.

## Discussion

The study revealed that the maintenance measures for principal facilities in private secondary schools in Kwara State include preventive, corrective, and emergency maintenance. This finding is consistent with several research. For instance, according to Amanchukwu and Ololube (2015), preventive maintenance is essential in educational institutions as it ensures continuous use of facilities, thereby supporting uninterrupted teaching and learning processes. Similarly, a study by Blessing et al. (2015) found that corrective maintenance is prevalent in schools with limited budgets,

where facilities are only repaired when they break down. However, the reliance on corrective maintenance can lead to increased costs and disruptions. The study also aligns with the survey by Waryoba and Mung'ong'o (2023), who noted that schools with robust maintenance frameworks are better equipped to handle emergencies. They emphasise that prompt responses to emergencies are critical in maintaining administrative effectiveness and minimising disruptions to learning. In contrast, some studies highlight challenges in implementing preventive maintenance. Ogunbayo et al. (2023) found that while preventive maintenance is desirable, limited financial resources often hinder its effective execution in public schools. However, private schools may have more flexibility in resource allocation, enabling them to implement such strategies more effectively. Also, Alshahrani et al. (2024) and Mojela (2013) argue that over-reliance on corrective maintenance indicates poor planning and can compromise the learning environment. The findings of this study suggest that private secondary schools in Kwara State balance corrective maintenance with preventive strategies, thereby minimising its negative impact on administrative effectiveness.

The study revealed that the level of administrative effectiveness in private secondary schools in Kwara State is high. The findings are consistent with studies that link adequate facilities management to improved administrative outcomes. Otchere et al. (2019) found that schools with well-maintained facilities reported higher levels of teacher satisfaction, student performance, and overall organisational efficiency. This correlation is explained by the fact that well-maintained facilities create an enabling environment for teaching and learning, enhancing the school community's overall productivity. Additionally, Alamu et al. (202) emphasise that administrative effectiveness is not only about resource management but also involves strategic planning, decision-making, and stakeholder engagement. Their study on private schools in Lagos State found that effective facility maintenance was a significant predictor of administrative success, as it contributed to a positive school culture and improved stakeholder confidence. While the findings indicate a high level of administrative effectiveness in private schools in Kwara State, other studies have reported varying outcomes in different regions. Ajikobi (2022) found that public schools often struggle with administrative effectiveness due to inadequate funding and poor maintenance practices. This contrast highlights the potential advantages of private schools, which usually have more autonomy and resources to implement effective maintenance strategies. However, some researchers caution against overgeneralising the relationship between facility maintenance and administrative effectiveness. Ajibola (2019) argue that other factors, such as leadership style, teacher motivation, and community support, also play crucial roles in determining administrative outcomes. Therefore, while facility maintenance is essential, it should be considered alongside other contextual factors.

The study revealed a significant relationship between principals' facilities maintenance measures and administrative effectiveness in private secondary schools in Kwara State. The finding corroborates global research trends. Ogundu (2022) states that well-maintained facilities reduce operational disruptions, leading to better administrative outcomes. Effective facilities management enhances the working environment, improves staff morale, and supports strategic decision-making. Moreover, schools that invest in comprehensive maintenance programs often report fewer instances of equipment failure and emergency repairs, which frees up administrative time and resources for instructional leadership (Honig, 2012). This relationship emphasises the strategic role of facilities management in achieving broader educational goals. The study revealed a significant relationship between principals' preventive maintenance measures and administrative effectiveness in private secondary schools in Kwara State. Schools that adopt preventive strategies are better positioned to manage their resources efficiently, leading to smoother administrative processes.

## **CONCLUSION**

This study highlights the critical relationship between principal's facilities maintenance measures and administrative effectiveness in private secondary schools in Kwara State, Nigeria. It revealed that high levels of principals' facilities maintenance, including preventive, corrective, and

emergency maintenance, significantly enhance administrative efficiency. This finding aligns with global research emphasising that well-maintained facilities create a conducive environment for learning and efficient school management. Preventive maintenance, which focuses on regular upkeep to avoid future breakdowns, was particularly significant in supporting long-term administrative success. Corrective and emergency maintenance, though reactive, also contribute to smooth operations when implemented effectively. These insights underscore the need for strategic maintenance planning and adequate resource allocation to sustain educational outcomes. A balanced approach that integrates all forms of maintenance is essential for schools to achieve optimal administrative effectiveness. Also, policymakers, school administrators, and stakeholders must prioritise consistent funding, staff training, and community involvement to ensure sustained maintenance and support effective school leadership. These efforts ultimately enhance the quality of education and student achievement in private secondary schools across Kwara State. Based on the findings, the following recommendations were made:

1. Principals should establish a comprehensive facilities maintenance framework that integrates preventive, corrective, and emergency maintenance measures for consistent and effective management of school facilities.
2. Principals should maintain a high level of administrative effectiveness by engaging in continuous professional development and fostering collaboration among school staff to enhance decision-making and operational efficiency.
3. Schools should prioritise facility maintenance as a core component of their administrative strategy, ensuring adequate resources and policies are in place to support this initiative.
4. Schools should create an emergency maintenance fund and response plan to handle urgent facility-related issues quickly, ensuring minimal disruption to academic and administrative activities.

## REFERENCES

- Abdullah, A. (2019). *Influence of Pre-school Education Quality on Children's Socio-emotional Developmental Skill in Dutsin-Ma Local Government Area of Katsina State, Nigeria* (Master's thesis, Kwara State University (Nigeria)).
- Abiodun, T. S., Olayemi, A. A., & Joseph, O. O. (2016). Lack of maintenance culture in Nigeria: the bane of national development. *Civil and Environmental Research*, 8(8), 23-30.
- Adeoye, M. A., Shogbesan, Y. O., Jolaoye, J. D., & Jimoh, A. H. (2024). Building a Better Future: Strategical Approaches in Tackling Poor Maintenance in Nigerian Public Secondary Schools. *Mimbar Ilmu*, 29(1), 9-16.
- Adeyemi, M. O., Odeh, R. C., & Agbulu, C. A. (2024). Influence of principals' social events and educational services fundraising strategies utilisation on the management of public secondary schools in Oyo state, Nigeria. *International Journal of Global Affairs, Research and Development*, 2(1), 30-59.
- Adjei, V. B. (2021). *Effectiveness of School Supervision in Public and Private Basic Schools in the Okaikoi North Municipality In the Accra Metropolis* (Doctoral dissertation, University of Cape Coast).
- Aithal, P. S., & Maiya, A. K. (2023). Development of a New Conceptual Model for Improvement of the Quality Services of Higher Education Institutions in Academic, Administrative, and Research Areas. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 8(4), 260-308.
- Ajani, O. A., & Dlomo, S. (2025). Enhancing School Administration in Rural South African Schools: Challenges and Opportunities-Using the Scooping Review Method. *Research in Social Sciences and Technology*, 10(1), 332-354.

- Ajayi, O. S. (2024). Comparative Analysis of Pupils' Academic Achievements in Public and Private Schools in Ekiti State. *International Journal of Quantitative and Qualitative Research Methods*, 12(1), 1-23.
- Ajibola, K. S. (2019). *Human Resource Management Practices and Employee Engagement in Manufacturing Firms in Nigeria* (Doctoral dissertation, JKUAT-COHRED).
- Ajibolade, S. O., & Oboh, C. S. (2017). A critical examination of government budgeting and public funds management in Nigeria. *International Journal of Public Leadership*, 13(4), 218-242.
- Ajikobi, F. M. (2022). *Primary School Teachers' and Parents' Awareness of Pupils' Mental Health in Ilorin West Local Government Area of Kwara State* (Master's thesis, Kwara State University (Nigeria)).
- Akinnubi, O. P., Ajape, R. O., & Adeoye, M. A. (2024). The Influence of School Climate and Goal Achievement Structure in Nigerian Public Schools. *International Journal of Universal Education*, 2(1), 61-69.
- Alabi, J. A., & Saidu, A. (2021). Historical Development of Private Secondary Schools in Kwara State, Nigeria From 1999 To 2019. *Journal of Lexicography and Terminology* 5(2), 59-79.
- Alamu, O. I., Hassan, A. O., Asa, K. J., & Odunayo, H. A. (2024). Addressing Infrastructure Deficits through Public-Private Partnership Funding of Public Projects in Nigeria: A Review. *TWIST*, 19(3), 130-138.
- Al-Hamad, N., Oladapo, O. J., Afolabi, J. O. A., & Olatundun, F. (2023). Enhancing educational outcomes through strategic human resources (hr) initiatives: Emphasising faculty development, diversity, and leadership excellence. *Education*, 1-11.
- Alshahrani, B. T., Pileggi, S. F., & Karimi, F. (2024). A Social Perspective on AI in the Higher Education System: A Semi-Systematic Literature Review. *Electronics*, 13(8), 1572.
- Amanchukwu, R. N., & Ololube, N. P. (2015). Managing school plant for effective service delivery in public secondary schools in Rivers State of Nigeria. *Human Resource Management Research*, 5(4), 95-102.
- Amanchukwu, R. N., Stanley, G. J., & Ololube, N. P. (2015). A review of leadership theories, principles and styles and their relevance to educational management. *Management*, 5(1), 6-14.
- Amirize, M., & Ololube, N. P. (2018). Principals fund management strategies for effective administration of public secondary schools. *International Journal of Scientific Research in Education*, 11(3), 545-576.
- Amough, C. K. (2019). Assessment of private sector participation in the maintenance of school facilities and principal's leadership styles in private secondary schools in the north-central states of Nigeria. *African Education Indices* 11(1), 1-15.
- Attoh, S. U. (2024). The Impact of School Administrators on Teaching and Learning as Strategies for Effective Leadership: A Case Study of Jema'a Lgea. *International Journal of Technology Innovation and Management (IJTIM)*, 4(1), 83-93.
- Ayodele, J. B., Adaralegbe, A., & Adeleke, F. F. (2015). Internal efficiency of public and private junior secondary schools in Ekiti State. *Mediterranean journal of social sciences*, 6(5), 1-14.
- Badmus, A. A. (2023). *Influence of School Facilities on Teachers' Effectiveness in Secondary Schools in Ilorin Metropolis* (Master's thesis, Kwara State University (Nigeria)).
- Baker, B. D. (2021). *Educational inequality and school finance: Why money matters for America's students*. Harvard Education Press.
- Bamidele, E. O. (2024). Learning environment and academic performance of students in Ekiti state. *African Journal of Educational Management, Teaching and Entrepreneurship Studies*, 13(2).
- Barretiri, L. G. (2021). *Hospital Operations Management—A Lean Healthcare Approach to Improve Medical Imaging Management Processes of a Portuguese Public Hospital* (Master's thesis, Universidade do Minho (Portugal)).
- Barrett, P., Treves, A., Shmis, T., Ambasz, D. & Ustinova, M. (2019). The impact of school infrastructure on learning: A synthesis of the evidence. International development in focus. World Bank

- Blessing, O., Richard, J., & Emmanuel, A. (2015). Assessment of building maintenance management practices of higher education institutions in Niger State, Nigeria. *Journal of design and built environment*, 15(2).
- Caliba, I. (2022). Self-efficacy, working conditions, school-based management practices and performance of teachers. *Psychology and Education: A Multidisciplinary Journal*, 1(2), 107-125.
- Cemaloğlu, N., Sezgin, F., & Kılınç, A. Ç. (2012). Examining the relationships between school principals' transformational and transactional leadership styles and teachers' organisational commitment. *The Online Journal of New Horizons in Education*, 2(2), 53-64.
- Day, C., Gu, Q., & Sammons, P. (2016). The impact of leadership on student outcomes: How successful school leaders use transformational and instructional strategies to make a difference. *Educational Administration Quarterly*, 52(2), 221-258.
- Earthman, G. I., & Lemasters, L. K. (2013). *School Maintenance and Renovation: Administrator Policies, Practices, & Economics*. DEStech Publications, Inc.
- Eunice, O. B. (2022). Factors Influencing Effective Administration of Public Senior Secondary Schools in Rivers State. *Journal of Education and Society*, 12(3), 3191-3199.
- Gayle, D. J., Tewarie, B., & White Jr, A. Q. (2011). *Governance in the Twenty-first-century university: Approaches to effective leadership and strategic management: ASHE-ERIC Higher Education Report* (Vol. 14). John Wiley & Sons.
- Gilbert, M. M., & Thelma, C. C. (2024). An assessment of the effectiveness of the preventive maintenance policy in enhancing quality assurance in education provision: A case of selected primary schools in Chibombo District, Zambia. *World Journal of Advanced Research and Reviews*, 21(1), 1788-1797.
- Hanushek, E. A. (2010). *Making schools work: Improving performance and controlling costs*. Brookings Institution Press.
- Hauashdh, A., Jailani, J., & Rahman, I. A. (2022). Strategic approaches towards achieving sustainable and effective building maintenance practices in maintenance-managed buildings: A combination of expert interviews and a literature review. *Journal of Building Engineering*, 45, 103490.
- Honig, M. I. (2012). District central office leadership as teaching: How central office administrators support principals' development as instructional leaders. *Educational Administration Quarterly*, 48(4), 733-774.
- Kamaldeen, O. S., Abdulrafiu, A., Abdulrauf, B. I., Adaramaja, S. M., & Jibrin, I. (2021). Comparative Analysis of Physical Facilities Management in Public and Private Secondary Schools in Ilorin West Local Government, Kwara State. *International Journal of Educational Management*, 19(1).
- Kezar, A. J., & Holcombe, E. M. (2017). Shared leadership in higher education. *Washington, DC: American Council on Education*, 1-36.
- Lebea, M. J., Agumba, J. N., & Adebowale, O. J. (2024). Critical success factors in the maintenance strategies of public healthcare facilities. *International Journal of Building Pathology and Adaptation*, 42(7), 55-75.
- Levitt, J. D. (2013). *Facilities management: managing maintenance for buildings and facilities*. Momentum Press.
- Lindell, M. K. (2021). Emergency Management: Evacuations. In *Encyclopedia of Security and Emergency Management* (pp. 272-286). Cham: Springer International Publishing.
- Maba, W. (2022). Essential Healthy School Environment Standards to Maintain Conducive Learning Atmosphere. *International Journal of Social Science*, 2(1), 1211-1216.
- Mishra, R. C., & Pathak, K. (2012). *Maintenance engineering and management*. PHI Learning Pvt. Ltd.
- Mojela, T. W. (2013). *Assessment of the effectiveness of public schools infrastructure maintenance system in the Gauteng province*. University of Johannesburg (South Africa).
- Mubita, K. (2018). *Developing a localised school safety and health manual for Sefula secondary school in Western Zambia* (Doctoral dissertation, The University of Zambia).



- Nhlapo, V. A. (2009). *A whole-school approach to facilities maintenance* (Doctoral dissertation, North-West University, Vaal Triangle Campus).
- Nzoka, J. T., & Orodho, J. A. (2014). School management and students' academic performance: How effective are strategies being employed by school managers in secondary schools in Embu North District, Embu County, Kenya. *International Journal of Humanities and Social Science*, 4(9), 86-99.
- Obiora, A. V., & Uche, A. O. (2024). Adopting information and communication technologies for effective school leadership in Nigeria. *Social Science Research*, 10(2).
- Ogbuka, L. U. (2019). *Physical facilities and quality education in secondary schools in Aba North Local Government Area of Abia State* (Doctoral Dissertation, Nnamdi Azikiwe University, Awka).
- Ogunbayo, B. F., Aigbavboa, C., & Thwala, W. (2023). *A maintenance management framework for municipal buildings in developing economies*. Routledge.
- Ogundahunsi, D. S., Gasu, M. B., Adedotun, S. B., Olayode, O., Ojo, A. O., & Olayode, C. (2024). Assessment of Educational Facilities in Osogobo Metropolis Nigeria. *CSID Journal of Infrastructure Development*, 7(1).
- Ogundu, J. (2022). Engineering and operations management education as the anchor to building, operating, managing, maintaining and sustaining good infrastructures, facilities and amenities in Nigerian universities. In *3rd African International Conference on Industrial Engineering and Operations Management, Nsukka, Nigeria* 2(5), 1-19.
- Ohia, A. N. (2020). School plant maintenance: The role of public secondary school principals. *Journal of Education in Developing Areas*, 27(1), 274-281.
- Olaniyan, F. A. (2021). *School Management Effectiveness and Academic Performance of Selected Private Second Schools in Ilorin Metropolis* (Master's thesis, Kwara State University (Nigeria)).
- Oluwatoyin, I. M. O. (2014). Maintenance Strategies and Condition of Public Secondary School Buildings in Ado-Odo/Ota Local Government Area Ogun State, Nigeria. *Covenant University: PhD Thesis in Architecture*.
- Oredein, A. O., & Opatunde, A. F. (2023). Decision-making Skills and Public Senior Secondary Schools Principals' Administrative Effectiveness in Oyo State, Nigeria. *Asian Research Journal of Arts & Social Sciences*, 20(4), 32-44.
- Osborne, S. P., Radnor, Z., Kinder, T., & Vidal, I. (2015). The SERVICE framework: A public-service-dominant approach to sustainable public services. *British journal of management*, 26(3), 424-438.
- Osibo, L. (2019). *A study of school facilities maintenance among basic schools in the Cape Coast metropolis* (Doctoral dissertation, University of Cape Coast).
- Otchere, S. N., Afari, J. B., & Kudawe, C. (2019). Examining the relationship between school facilities and the learning environment: A case study of Oda Senior High School. *Journal of Education and Practice*, 10(26), 21-26.
- Radović, V. (2020). Emergency Management/Response. *Climate Action*, 391-404.
- Shah, A. A., Gong, Z., Pal, I., Sun, R., Ullah, W., & Wani, G. F. (2020). Disaster risk management insight on school emergency preparedness—a case study of Khyber Pakhtunkhwa, Pakistan. *International Journal of Disaster Risk Reduction*, 51, 101805.
- Stephens, M. P. (2010). *Productivity and reliability-based maintenance management*. Purdue University Press.
- Takwate, K. T. (2018). Planning, allocative and administrative efficiency of school facilities management as correlates of academic performance of senior secondary school students in Adamawa State, Nigeria. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 1(3), 114-125.
- Tigere, M. T. (2020). Perceptions of school management teams on information and communication technology integration in township and rural secondary schools in KwaZulu-Natal. *University of South Africa*.

- Tschannen-Moran, M., & Gareis, C. R. (2015). Faculty trust in the principal: An essential ingredient in high-performing schools. *Journal of Educational Administration*, 53(1), 66-92.
- Umar, U. H. (2023). *Influence of Human Resource Management Practices on Teachers' Effectiveness in Secondary Schools in Edu Local Government Area, Kwara State* (Master's thesis, Kwara State University (Nigeria)).
- Usman, Y. D. (2016). Educational Resources: An Integral Component for Effective School Administration in Nigeria. *Online Submission*, 6(13), 27-37.
- Waryoba, K. A. M., & Mung'ong'o, H. (2023). Enhancing Fire Emergency Response Readiness in Butiama District Secondary Schools in Tanzania: An in-depth Investigation. *Asian Journal of Education and Social Studies*, 48(4), 129-141.
- Yangeve, M. (2019). *A comparative assessment of facilities provision in public and private secondary schools in North-central, Nigeria* (Doctoral dissertation, Benue State University, Makurdi).