Appraisal of Basic Infrastructure in Primary Schools in Ijebu-Ode, Nigeria

Chikodi D. Alaka[1]*, Nathaniel O. Ogunseye[2]

[1]Department of Architecture, Olabisi Onabanjo University, Ago-Iwoye, Nigeria
[2]Department of Urban and Regional Planning, Olabisi Onabanjo University, Ago-Iwoye, Nigeria

Correspondence*:
E-mail: chikodi.alaka@oouagoiwoeye.edu.ng

Article History:	Abstract
	This study appraises the availability and level of decay of basic infrastructure in primary schools within Ijebu-Ode, Ogun State, Nigeria. Using a method of stratified random sampling, twenty private and public primary schools were selected. Data were collected through structured questionnaires, interviews, and direct observations. The data were analyzed using descriptive and inferential statistics. The results showed that most private schools are well managed and equipped, unlike the public schools, which have a high degree of inadequate basic infrastructure. This implies that private schools were more proactive in infrastructure management, ensuring regular maintenance and better resource allocation**.** The result of the ANOVA test revealed significant differences between the basic infrastructure availability of and its level of decay between public and private primary schools. The study concludes that the state of infrastructure in public primary schools poses serious challenges to effective teaching and learning. It therefore recommends a proactive approach, particularly preventive maintenance through collaborative effort.

Keywords: *availability, basic infrastructure, decay, infrastructure management, public and private primary schools*

Introduction

Education is commonly acknowledged as one of the best ways to combat poverty and social inequality and provide the groundwork for long-term, sustainable national development (Domike & Odey, 2014). Primary education represents the basic stage of learning that requires sufficient funding, proper facilities, strict supervision, and effective management. The country's socioeconomic progress is greatly influenced by the quality of education provided to its citizens; therefore, sustainable national progress depends on the efficient management of elementary education (Ogbonnaya, 2020). According to Oni (2009) Primary education, which dates back to the 18th century, long before secondary schooling emerged, is the most traditional and long-standing type of formal education in Nigeria. Primary education is the first formal stage of learning for children between the ages of six and eleven. This stage lays the

groundwork for subsequent educational success or failure (Federal Government of Nigeria, 2006). Mande & Olaide (2023), stated that fundamental or primary education is essential to Africa's economic transition and sustainable progress. Therefore, it must be provided with the basic infrastructure.

Basic infrastructure is a cornerstone of effective learning in primary education. Achieving this requires active government involvement in the provision of physical infrastructure. A nation's public schools are important elements of public infrastructure. The overall standard of a city is partly influenced by the quality of its schools, just as the condition of schools often reflects the state of the surrounding city. Nonetheless, there is still a big disconnect between urban growth and educational planning that needs to be closed. Schools are primarily designed as centers of learning, and their physical structures safeguard the pupils' health and emotional security of both students and teachers from environmental hazards such as harsh weather and bodily injury (Yangambi, 2023). Therefore, it is necessary to provide these public primary schools with proper infrastructure and maintenance.

In developing countries, provision and maintenance of school infrastructure falls unevenly across actors such as state education authorities, local governments, school managers, and private operators (Taiwo, 2000). Each employs distinct infrastructure management approaches, which determine the sustainability of school infrastructure and its usability over time. However, in Nigeria, primary school, which receives the highest patronage and occupies a critical position, has remained an uninterestingly weak system for decades, resulting from poor administration, inadequate infrastructural development, and management (Agogbua et al., 2021). A mere survey of primary schools in Nigeria reveals a wide gap between most private and public primary schools regarding infrastructure. The expansion of private schools in Nigeria has reshaped educational infrastructure. Studies document that private schools often invest more in physical resources and preventive maintenance, whereas public schools rely on irregular, reactive maintenance driven by the government (Nkedishu & Onyeke, 2020). This trend affects equity in access to infrastructure and the management of school infrastructure. The state of facilities provision and management of the public primary school system speaks volumes about the degenerated condition of primary education in Nigeria. There are high levels of infrastructural decay in public primary schools as a result of poor facility management, thus making the general believe that only children of the poor and disadvantaged people in the society attend these public primary schools in the various Nigerian communities, of which those in Ogun State are not excluded.

Corroborating the earlier findings by Dike (2000; 2002), Ajayi & Adeyemi (2011), Ogun State has not entirely been exculpated from this prevailing condition and the noticeable drop in student enrolment. A report published by the World Bank's African Regional Studies Program presents a pitiable picture of the conditions in African primary schools, including those in Nigeria. It drew attention to the point that most schools in Sub-Saharan Africa are characterized by poor learning environments, including damaged or uncompleted buildings, a shortage of furniture, overcrowded classrooms, limited instructional materials, and inadequately trained or unmotivated teachers (World Bank, 1998). These conditions point to deep-rooted issues closely linked to the deteriorating state of school facilities, which facility management must urgently address.

However, despite the acceptance of infrastructure as a major tool for learning, there is limited evidence on which infrastructural management strategy that is most effective in preserving school assets and enhancing educational performance, particularly at the primary level in Nigeria. This study, therefore, compares the infrastructure availability and level of decay between public and private primary schools in Ijebu-Ode, Nigeria. This will help educational managers at the Federal, State, and Local Government levels to adopt pragmatic facility management policy and investment choices to ensure the effective utilization and distribution of resources within the primary education sector. Though this study was limited to Ogun State, the findings would impact other parts of Nigeria to facilitate improved infrastructural delivery in the primary schools within Nigeria.

This study will pose the following questions: Are basic infrastructures available in public primary schools like private primary schools in Ijebu-Ode? (ii) What is the condition of available infrastructures in public primary schools in Ijebu-Ode compared to those within the private primary schools in Ijebu-Ode, Ogun State? (iii) Which facilities management strategy will be most effective for preserving infrastructure and reducing deterioration in Nigerian public primary schools?

Literature Review

Guthrie (2002) defines school infrastructure as all of the physical elements that support efficient teaching and learning in the school setting, including buildings, playgrounds, school farms, classrooms, labs, equipment, and other amenities. Similarly, Mbikpom (2000) describe school infrastructure as the material expression of the curriculum, as seen in the layout and arrangement of the school's buildings, facilities, equipment, and overall physical environment. These infrastructures, if not properly managed, will deteriorate. School infrastructure can be preserved through adopting an appropriate maintenance and management approach.

Facility management, a major tool in infrastructure management, refers to the coordinated process of maintaining, operating, and improving physical assets, buildings, and support services to ensure that they effectively serve the needs of the users and the organization (Facilities Management Association, 2002). Facility management goes beyond routine maintenance; it integrates strategic planning, financial management, operations, and sustainability practices. A well-managed facility system allows for effective resource allocation, minimizes breakdowns, ensures safety compliance, and provides a conducive learning environment (Ikediashi & Dubem, 2022).

Facility management techniques that are frequently researched includes: proactive, predictive, reactive, preventative, and outsourced or public-private partnership approaches. The most popular but ineffective facility management strategy is the reactive method. It involves fixing or replacing deteriorating infrastructure. Preventive maintenance is the scheduled and performed regularly to extend the life of assets and avoid malfunctions. Proactive incorporates sustainability, stakeholder involvement, and strategic planning into FM, whereas an outsourced or public-private partnership model entails hiring private companies or outside experts to manage public facilities (Facilities Management Association, 2002).

In many public schools in Nigeria, newly constructed buildings are often neglected once they are handed over for use, with little or no attention given to their upkeep, unlike in private schools, where monitoring and maintenance of such buildings are carried out proactively. Numerous public school buildings older than thirty years have never been renovated or upgraded before. Many public school facilities have become architecturally outdated and no longer support effective teaching and learning. This is so because repairs are typically done only after facilities have degraded or malfunctioned. However, the reverse is the case in private schools. Studies indicate that private schools tend to apply more structured infrastructure management practices, resulting in better physical learning environments (Nkedishu & Onyeke, 2020). Nonetheless, low-fee private schools may struggle with sustainability, showing that management approach and resource flow, not ownership alone, determine facility condition (Srivastava, 2013) However, proper maintenance of new buildings, renovation, and modernization of older ones in Nigerian public primary schools call for the input of both professional expertise and strong government commitment.

Literature confirms that the infrastructure available in both public and private schools plays a significant role in the efficiency and effectiveness of teaching and learning of pupils, irrespective of ownership. It therefore behooves both the community and the nation at large to fight the menace of intellectual decadence at the cradle of education (the primary schools), especially the public primary schools, by re-evaluating the extent of provision, functionality, maintenance and management of their available infrastructure which can be achieved through adoption of appropriate facility management (FM) approach that will integrate technical maintenance, financial planning and good administration to sustain these schools.

Alexander & Brown (2006) compared FM strategies in South African schools and found that preventive approaches produced superior results to reactive ones. Similar findings in Nigerian tertiary institutions confirm that proactive management yields better maintenance outcomes when supported by proper budgeting and accountability mechanisms (Che-Ani & Ali, 2019). Facility management, therefore, ensures the functionality, comfort, and safety of school infrastructures.

Methodology

Study Area

Ijebu-Ode is a medium-sized city in Ogun State, southwestern Nigeria (Figure 1). The City lies approximately at Longitude 30º58′E and Latitude 60º47′N. With an estimated 72 square kilometers of territory, Ijebu-Ode is Ogun State's second-largest urban region after Abeokuta in terms of both population and degree of infrastructure development (Odufuwa, Odufuwa, Ediale & Oriola, 2012). The city has progressively grown to the point of integrating with neighboring settlements, such as Mobalufon, Erinlu, Molipa, Oke Owa, Iwesi, Igbeba, and Latogun, as a quickly growing metropolitan hub (Mabogunje & Kates 2004). According to the Ogun State Regional Plan, Ijebu-Ode's population was 124,313 in 1991 and 171,787 in 2005. As of 2005, the percentage of the city's urban population was approximately 91%. The projected population for Ijebu-Ode by 2025 was put at 350,000. The projected figure was about 25% greater than the National Population projection (Ogun State Government, 2008). The city is on a pleasant, rolling plain that rises from around 20 meters above sea level. Ijebu-Ode has a tropical climate with distinct wet and dry seasons, high annual rainfall, high temperatures, and high humidity (Odufuwa et al., 2012). Historically, Ogun State, of which Ijebu-Ode is a part, is among Nigeria's most educationally developed states due to the early impact of missionary work (Ogun State Government, 2008).
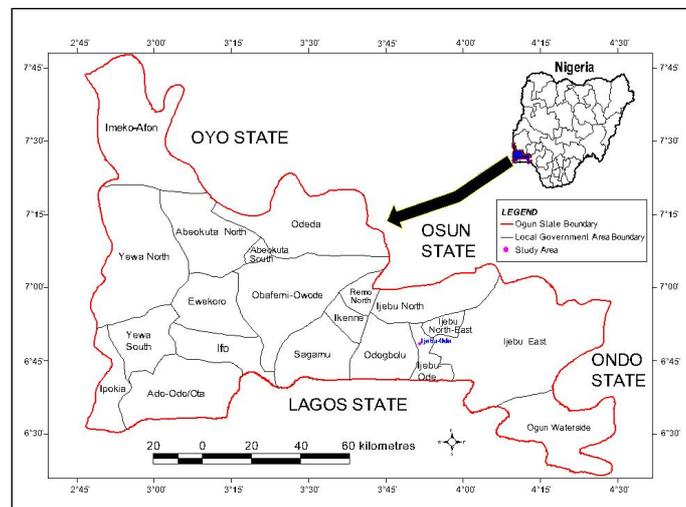

Figure 1. Map of Study Area
Source: Ogun State Government, 2008

Study Population

The study population consisted of teachers and Headmasters/Headmistresses of the selected public and private primary schools in Ijebu-Ode, Ogun State, Nigeria. The participants are important stakeholders whose insights would prove invaluable in achieving the study objectives.

Sampling Frame and Sampling Technique

Schools were selected using a stratified random sampling approach, ensuring proportional representation of public and private institutions within the area. The sample consisted of forty primary schools equally divided between public and private categories to facilitate comparative analysis from a comprehensive list of schools within Ijebu-Ode. Within each selected school, the Headmasters/Headmistresses (HMs) and four teachers from each sampled school were randomly selected as the respondents. Notably, the cooperation of Headmasters/Headmistresses of the schools was sought, and they provided their staff lists from which four teachers were sampled. Simple random sampling and stratification at the school level are standard procedures for ensuring representativeness in quantitative surveys and enabling inferential tests such as analysis of variance (ANOVA) (Creswell, 2014; Guetterman, 2015). More importantly, the random sampling technique ensures the selection was not biased, as each teacher has an equal chance of being selected (Taherdoost, 2016).

Research Instrument and Data Analysis

A questionnaire survey on school infrastructure for primary education was designed, which consisted of two parts: background information of the respondents and a survey on the availability of basic amenities in public primary schools in Ijebu-Ode, Ogun State. Respondents assessed twelve (12) items by completing "Available in Good Condition", "Not Available", "Available but Inadequate", and "Available but in Bad Condition" in the space provided, and as applicable to each of the items in their schools. 195 out of 200 questionnaires distributed were returned. Because of the school's location, the questionnaire took seven weeks to administer.

The basic infrastructure surveyed in the schools includes: well-conducive classrooms, toilet facilities, computer sets, teaching aids, good water supply, well-equipped offices, good roads, good learning environment, power supply, tables and chairs for pupils, tables and chairs for teachers, sports/ recreation facilities, and a playing field.

The Statistical Package for Social Sciences (SPSS) IBM Statistics 22 was used to analyze the data. Descriptive statistics involves the use of a frequency distribution table. As a guide for the study, one-way ANOVA tests were formulated to test the developed hypotheses at a 0.05 level of significance. The two formulated hypotheses are as follows:

i. H_0: There is no significant difference between the availability of basic infrastructures in public and private primary schools in Ijebu-Ode, Ogun State.

ii. H_0: There is no significant difference in the level of decay of basic infrastructures in the public and private schools in Ijebu-Ode, Ogun State.

Result

The difference in the availability of basic infrastructure in selected public and private primary schools in Ijebu-Ode, Ogun State is shown in Table 1. The findings show that most public schools lack infrastructure, including water supplies and computer sets, as reported by 52.0% and 40% of respondents, respectively. However, respondents' claims of unavailability in private schools mainly relate to good roads, as confirmed by 30.2%.

Table 1. Difference in the Availability of Basic Infrastructure in Public and Private Primary Schools in Ijebu-Ode, Ogun State.

Infrastructure	Schools	Frequency Counts			
		AGC	NA	AI	ABC
Well-Conducive Classroom	Public	19 (9.7%)	07 (3.6%)	87 (44.6%)	82 (42.1%)
	Private	189(97%)	00 (0%)	02 (1%)	04(2%)
Toilet Facilities	Public	08 (4.1%)	21 (10.8%)	73 (37.4%)	93 (47.7%)
	Private	137(70.3%)	08 (4.1%)	39 (20%)	11 (5.6%)
Computer Sets	Public	1 (0.5%)	101(52%)	40 (20.5%)	53 (27.2%)
	Private	88 (45.1%)	47 (24.1%)	31 (15.9%)	29 (14.9%)
Teaching Aids	Public	81 (41.5%)	23 (11.8%)	76 (39%)	15 (7.7%)
	Private	107 (54.9%)	12 (6.2%)	67 (34.4%)	09 (4.6%)
Good Water Supply	Public	04 (2.1%)	79 (40.5%)	31 (15.9%)	81 (41.5%)
	Private	111 (56.9%)	05 (2.6%)	49 (25.1%)	30 (15.3%)
Well-Equipped Offices	Public	05 (2.6%)	23(11.8%)	88 (45.1%)	79 (40.5%)
	Private	181(92.8%)	00 (0%)	04 (2.1%)	10 (5.1%)
Good Roads	Public	59 (30.3%)	13 (6.7%)	12 (6.2%)	111 (56.9%)
	Private	71 (36.4%)	59 (30.2%)	33 (16.9%)	32 (16.4%)
Power Supply	Public	09 (4.6%)	44 (22.6%)	39 (20%)	103 (52.8%)

	Private	21 (10.8%)	21 (10.8%)	71 (36.4%)	82 (42.1%)
Table and Chairs for Pupils	Public	70 (35.9%)	11 (5.6%)	75 (38.5%)	39 (20%)
	Private	170 (87.1%)	01 (0.5%)	12(6.2%)	12 (6.2%)
Table and Chairs for Teachers	Public	71 (36.4%)	10 (5.1%)	73 (37.4%)	42 (21.5%)
	Private	159 (82%)	07 (3.5%)	19 (9.5%)	10 (5.1%)
Sport/ recreation Facilities	Public	09 (4.6%)	23 (11.8%)	73 (37.4%)	90 (46.2%)
	Private	97 (49.7%)	25 (12.8%)	43 (22%)	30 (15%)
Playing Field	Public	10 (5.1%)	22 (11.3%)	74 (37.9%)	89 (45.6%)
	Private	99 (51%)	23 (12%)	43 (22%)	30 (15%)

AGC – Available in Good Condition, NA- Not Available, AI- Available but Inadequate, ABC- Available but in Bad Condition
Source: Authors' Field survey, 2024

Regarding the inadequacy of available infrastructure, the results showed that public schools fall short of adequate infrastructure compared to private schools. The level of inadequacy is significant in public schools for infrastructure such as well-equipped offices (45.1%), well conducive classrooms (44.6%), teaching aids (39.0%), tables and chairs for pupils (38.5%), playing field (37.9%), tables and chairs for teachers (37.4%), and sports/recreation facilities (37.4%). On the other hand, in private schools, the inadequacies in infrastructure are significant for power supply (36.4%) and teaching aids (34.4%).

For the infrastructure available but rated to be in poor condition, the results showed that the majority of the affected schools were public ones. This is corroborated with greater proportion of respondents reporting that infrastructure such as good roads (56.9%), power supply (52.8%), toilet facilities (47.7%), sports/recreation facilities (46.2%), playing field (45.6%), well conducive classrooms (42.1%), good water supply (41.5%), and well-equipped offices (40.5%). However, in private schools, the infrastructure considered to be in poor condition includes power supply (42.1%), possibly roads (16.4%), water supply (15.3%), and playing fields (15.0%).

In private schools, respondents stated that infrastructures comprising well-conducive classrooms, well-equipped offices, tables and chairs for pupils, tables and chairs for teachers, toilet facilities, water supply, and teaching aids were considered available and in good condition by 97.0%, 92.8%, 87.1%, 82.0%, 70.3%, 56.9% and 54.9%, respectively. Conversely, in public schools, the proportion of respondents who considered the infrastructure available but in good condition was insignificant except in cases of teaching aids (41.5%), tables and chairs for teachers (36.4%), tables and chairs for pupils (35.9%), and good roads (30.3%).

Hypothesis I: (Tested at 0.05 levels of significance): The results in Table 1 were used to test this hypothesis. The findings of the Analysis of Variance (ANOVA) performed to ascertain whether there is a significant difference in the infrastructure availability between public and private elementary schools in Ijebu-Ode, Ogun State, are shown in Table 2.

Table 2. Analysis of Variance of Availability of Infrastructures in Public and Private Primary Schools

Source of Variation	*SS*	*Df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0.777752	1	0.777752	13.36438	0.000657	4.051749
Within Groups	2.677012	46	0.058196			

Source: Authors' Field Survey

The result shows that the calculated F_{tab}-value (F_{tab} = 13.364) is greater than the critical F-value (F_{crit} = 4.0517) at a 0.05 level of significance. Also, the p-value (0.000657) is less than 0.05, indicating that the observed difference is statistically significant. This implies that public and private primary schools in the study area differ significantly in providing basic facilities. Hence, the null hypothesis (H_0) is rejected. Suggesting that the variation observed in infrastructural provision across the selected schools cannot be attributed to chance.

Hypothesis II: (tested at 0.05 levels of significance): This hypothesis was tested based on the results presented in Table 1. The analysis of variance of the level of decay of these basic infrastructures in both school categories is presented in Table 3.

The analysis of variance's findings in Tables 1 and 3 show that the F_{tab} value is 2.257304, while the $F_{critical}$ value is 1.993239, and the P-value is 0.026514 at a 0.05 alpha level with a total degree of freedom (df) of 47.

Since the F_{tab} value is greater than the $F_{critical}$ value, the degree of basic infrastructure decay for basic education in the Ayedaade Local Government Area of Osun State, Nigeria, Alimi (2012) noted a similar circumstance. He reported that the land area for development in public and private primary schools in Ijebu-Ode, Ogun State, differs significantly; hence, the null hypothesis II (2H0) is rejected.

Table 3. Analysis of Variance of Level of Decay of Infrastructures in Public and Private Primary Schools in Ijebu-Ode.

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.815989	23	0.035478	2.257304	0.026514	1.993239
Within Groups	0.377205	24	0.015717			
Total	1.193194	47				

Source: Authors' Field Survey, 2024

Discussions

The study found that Ijebu-Ode's private primary schools generally have more basic infrastructures than public ones. Public primary schools showed significant shortcomings in classroom conditions, toilet facilities, computer sets, and water supply. Most public schools visited do not have conducive classrooms for pupils. Going by the report of Ajayi & Adeyemi (2011) & EAC (2016), for instructors to function effectively, the required educational infrastructure should consist of appropriate learning environments and classrooms that can hold between thirty and forty students apiece. Building designs must consider local environmental conditions and natural risks while ensuring the safety of staff and students. There is also a need to enhance access to electricity and internet connectivity in schools. In assessing the suitability of school facilities for basic education in the Ayedaade Local Government Area of Osun State, Nigeria, Alimi (2012) noted a similar circumstance. He reported that the land area for development purposes was adequate, but classrooms, sports and recreation equipment, toilet facilities, and portable water were inadequate and in poor condition.

Generally, over 50% of public schools visited reported having poor or inadequate access to many of these facilities, while most private schools have these facilities and were in good condition. This shows a large infrastructure gap and poor facilities management, which may affect academic performance and instruction quality. This outcome supports Nwabueze's (1993) assertion that the level and caliber of education obtained in public schools were insufficient and unacceptable. Due to their reliance on government-led funding, it was also noted that most public school buildings are typically in poor condition due to improper management and maintenance. A similar trend was reported by Uzoh (2013), Obese (2023), Moses & Umar (2024).

Strategies for Effective Infrastructure Management in Public Primary Schools

The findings of this study identified a set of practical strategies that can help to improve FM systems in public primary schools. These strategies combine field evidence from Ijebu-Ode primary schools with best practices identified in the literature. From the interview responses, 80% of the participants recommended that the government use proactive and preventative maintenance strategies to maintain the fundamental infrastructure in public primary schools. This includes scheduled inspection and routine maintenance by the education managers at the federal, state, and local levels to minimize deterioration and extend facility lifespan. The findings corroborate Che-Ani & Ali's (2019) assertion that a preventative maintenance program significantly slows infrastructure deterioration. Similarly,

Ikediashi & Dubem (2022) showed that organized facility management techniques enhance service quality and physical asset longevity.

Another major strategy is for the government to dedicate and ring-fence maintenance funding, as a lack of dedicated maintenance budgets affects effective FM in Nigerian schools. The study recommends that education authorities allocate ring-fenced funds for maintenance activities.This validates the study by Nkedishu & Onyeke (2020), who point out that consistent funding is necessary to maintain infrastructure in public schools.

Local/community participation was also identified as one of the strategies of FM in public primary schools, as one of the interviewees stated that it can partially offset funding constraints experienced by these public primary schools. The study supports integrating Parents-Teachers Associations in FM implementation. Public schools with active Parents-Teacher Committees involvement in maintenance and modest local budgeting could alleviate the level of decay of their infrastructures. Also, the involvement of alumni of the school will help in the provision of certain infrastructure in the school. This suggests hybrid FM solutions may be viable where state funding is constrained. Alexander & Brown (2006) confirm that localized FM systems promote shared responsibility and reduce dependence on central government interventions. Additionally, public schools should adopt Public–Private Partnerships and outsourced maintenance models, which will ensure technical competence, cost-effectiveness, and long-term sustainability. Finally, introducing performance-based monitoring by education authorities at all levels, such as quarterly facility audits and infrastructure scorecards, will improve accountability and track FM effectiveness over time.

Conclusion

The study concludes that infrastructural facilities in most public primary schools remain inadequate, and the limited ones available are poorly maintained and ineffectively managed, unlike private primary schools in Ijebu-Ode, Ogun State, Nigeria. The study noted that government-led systems exhibit higher infrastructure decay due to irregular funding and poor maintenance planning, and that the facility management approach, not ownership type, determines infrastructure condition in Ijebu-Ode **primary** schools.

Therefore, it is recommended that public schools develop preventative and outsourced facilities management measures similar to those successfully implemented in private schools. Also, parents' involvement in providing basic infrastructure should be encouraged. Furthermore, basic education should get greater support from the government at all levels, particularly in the physical infrastructure. This can be achieved by judiciously spending all funds allocated through the Education Tax Fund (ETF), Universal Basic Education (UBE), and World Bank-Assisted Programmes. The government should ensure that contractors complete their jobs before full payment. Subsequent studies should investigate the comparative effectiveness of various facility management frameworks within public school systems.

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References

Agogbua, V. U., Amobi, B. A., & Anaeji, A. V. (2021). Primary education administration in Nigeria: Challenges and strategies for improvement. *International Journal of Research and Scientific Innovation, 8(7*), 101–105. doi.org/10.51244/IJRSI.2021.87 12

Ajayi, K., & Adeyemi, M. (2011). Universal basic education (UBE) policy implementation in facilities provision: Ogun State as a case study. *International Journal of New Trends in Education and Their Implications, 2*(2), 34–38.

Alexander, K., & Brown, M. (2006). *Community-based facilities*. Emerald Group Publishing Limited, 24(7/8), 250–268. doi.org/10.1108/026327706106

Alimi, O. S. (2012). Appraisal of school plant adequacy for primary education in Ayedaade local government area of Osun State, Nigeria. *Asian Journal of Social Sciences and Humanities, 1*(4), 206–211.

Che-Ani, A. I., & Ali, R. (2019). Facilitymanagement demand theory: Impact of proactive maintenance on corrective maintenance. *Journal of Facilities Management, 17*(4), 344–355. doi.org/10.1108/JFM-09-2018-0057

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.)*. Thousand Oaks, CA: SAGE Publications.

Dike, V. (2000). The universal basic education programme: Educating the educators in Nigeria. Retrieved February 14, 2015,

Dike, V. (2002). The state of education in Nigeria and the health of the nation. The Guardian Online. Retrieved from http://www.afbis.com

Domike, G. C., & Odey, E. O. (2014). An evaluation of the major implementation problems of the primary schools curriculum in Cross River State, Nigeria. *American Journal of Educational Research, 2*(6), 397–401.

EAC. (2016). Infrastructure. Retrieved March 19, 2016, from https://educateachild.org/explore/barriers-to education/infrastructure

Facilities Management Association (2002). *Operational guidance note: Benchmarking and performance measurement*. London: Facilities Management Association (FMA).

Federal Government of Nigeria. (2006). *National Policy on Education (Revised)*. Lagos: NERDC Press.

Guetterman, T. C. (2015). Descriptions of sampling practices within five approaches to qualitative research in education and the health sciences. *Forum: Qualitative Social Research*, 16(2), Article 25. doi.org/10.17169/fqs-16.2.2290

Guthrie, J. W. (2002). *Encyclopedia of Education*. New York: Macmillan Press.

Ikediashi, D. I., & Dubem, I. (2022). Facilities management, strategic roles and services quality performance in Nigeria's banking sector. *Journal of Engineering Design and Technology, 22*(5), 1–25. doi.org/10.1108/JEDT-06-2022-0313

Mabogunje, A. L., & Kates, R. W. (2004). Sustainable development in Ijebu-Ode, Nigeria: The role of social capital, participation, and science and technology. Center for International Development, 102.

Mande, S., & Olaide, K. T. (2023). Education: A tool for economic growth and development in Africa. In Economics, higher education and sustainable development in 21st century Africa (pp. 249–267).

Mbikpom, O. (2000). Educational administration and planning. Calabar: University of Calabar.

Moses, O. J., & Umar, A. (2024). Educational infrastructure and its impact on academic performance in Nigerian schools. *Iconic Research and Journal, 8*(6), 497–502.

Nkedishu, V. C., & Onyeke, E. C. (2020). Funding patterns and financial management practices in public and private secondary schools, Delta State, Nigeria. *International Journal of Research in Education, Humanities and Commerce, 5*(1), 178-190.

Nwabueze, B. (1993). What to do about literacy in our country and failing standard in primary and secondary schools. *Paper presented at a meeting with the State Commissioners for Education*.

Obesa, E. L. (2023). The quality of educational development in Nigeria. International *Journal of Educational Research, 12*(2), 1–3.

Odufuwa, B. A., Odufuwa, B. O., Ediale, O. M., & Oriola, A. O. (2012). Household participation in waste disposal and management in Ijebu-Ode, Nigeria. *Journal of Human Ecology: Interdisciplinary Journal of Man and Environment, 40*(3), 247–254.

Ogbonnaya, E. A. (2020). Education as a key to national development in Nigeria. *International Journal of Research and Innovation in Social Sciences, 4*(7), 796–803.

Ogun State Government (2008). *Ogun State Regional Plan (2005-2025) Final Report*. Lagos: CPMS Limited.

Oni, J. O. (2009). Management of primary education in Nigeria: Trends, constraints and solutions. *Medwell Journal of the Social Sciences, 4*(3), 286–290.

Srivastava, P. (2013). Low-fee private schooling: Aggravating equity or mitigating disadvantage? In Symposium Books Oxford (pp. 7–36).

Taherdoost, H. (2016). Sampling methods in research methodology: How to choose a sampling technique for research. *International Journal of Academic Research in Management (IJARM),* 5(2), 18-27. hal-02546796

Taiwo, B. M. (2000). Maintenance of school infrastructure for effective academic performance. *Paper presented at the Nigerian Association of Educational Administration and Planning Annual National Conference, University of Ilorin, Nigeria, 1–12.*

Uzoh, A. B. (2013). Improving critical infrastructure for sustainable development in Nigeria towards the realization of vision 20:20. *International Journal of Economic Development Research and Investment, 4*(2), 30–38.

World Bank Report (1998). Education combats poverty in Guinea. *Daily Times* Tuesday, January 13, Pp. 11.

Yangambi, M. (2023). Impact of school infrastructures on students' learning and performance: Case of three public schools in a developing country. *Scientific Research Publishing, 14*(4), 788–809.