

Impact of Library Space Planning on the Management of Public Secondary Schools in Kaduna Metropolis, Kaduna State, Nigeria

ADEWALE, Zainab Ololade
Institute Library
Air Force Institute of Technology, Kaduna, Kaduna State.

ABSTRACT

The research investigated the influence of library space planning on the management of public secondary schools in Kaduna Metropolis, Kaduna State, Nigeria. The specific objective was to identify the impact of school library space planning on the management of public secondary schools in Kaduna Metropolis. Research questions and hypotheses were formulated in alignment with this objective. The target population for this study included 97 principals, 3,021 teachers, and 21 Quality Assurance Officers within the Kaduna Metropolis. The sample size comprised 333 respondents, consisting of 320 teachers, 10 principals, and 3 Quality Assurance Officers selected from the three Local Government Areas. The research utilized the instrument titled "School Plants Planning and Management of Public Secondary Schools Questionnaire (SPPMPSSQ)," with a reliability coefficient of 0.76. Data analysis employed descriptive statistics, and the Kruskal-Wallis test was used to evaluate the null hypotheses at a 0.05 level of significance. The findings of the study indicated that the school library significantly impacted the management of public secondary schools in Kaduna Metropolis. The study offered recommendations, including the suggestion that the Kaduna state government should ensure that library spaces are adequately planned to promote openness and easy access for students, teachers, and non-teaching personnel. Additionally, the libraries should be designed with colors that can withstand ambient weather pressures to fulfill the administrative requirements of the school plant.

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INTRODUCTION

Education is perceived as a catalyst for societal development and positive transformation. The primary objective of the teaching and learning process is to instigate desirable behavioral changes in learners through critical thinking. This process unfolds within an environment meticulously structured to facilitate learning. Schools are established to provide this conducive environment for teaching and learning, and their effectiveness hinges on several crucial factors. These factors encompass a well-designed curriculum, adequately trained teachers, a conducive learning environment, and essential teaching aids, among other elements.

It is widely acknowledged that the quality of education, as delivered by teachers, and the academic achievements of students are contingent upon various factors, with the school plant being paramount. Across all states in Nigeria, including Kaduna State, governments, private individuals, and organizations are increasingly involved in constructing schools to meet the growing demand for secondary education. Unfortunately, secondary school enrollment has surged without a corresponding plan for school plants, resulting in a significant strain on many secondary schools in Kaduna State.

Corresponding author: ADEWALE Zainab Ololade.
✉ ololadezainaba@gmail.com
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The term "school plant" encompasses the entire school premises, including the site, buildings, playgrounds, health clinics, and all forms of school equipment and facilities (Asiabaka, 2015). It is also referred to as the controlled environment that facilitates the teaching-learning process while ensuring the well-being of occupants. According to Oyesola (2007), a well-planned school plant is essential to satisfy educational goals, providing a secure and suitable place for both psychological and physical safety, thereby enhancing the quality and quantity of instruction.

The school plant extends beyond physical structures to include furnishings, materials, supplies, information technology devices, and various elements of the school grounds such as sports fields, playgrounds, and outdoor learning areas (Abdulkareem & Fasasi, 2012). Additionally, staff quarters, sickbays, dormitories, cafeterias, and other auxiliary service buildings contribute to the comprehensive concept of the school plant.

School plant availability and utilization encompass crucial aspects such as school location, instructional and administrative spaces, classroom facilities, and recreational facilities—all vital components in the teaching and learning process. The effectiveness of these spaces in promoting proper teaching and learning depends on their strategic location within the school environment. A well-planned school plant, considering location, structure, and facilities, encourages effective teaching and learning.

Ikpuor (2017) defines school plant as the sum total of the site, buildings, equipment, and all facilities of a school, creating a controlled environment that facilitates the teaching and learning process while ensuring the physical well-being of occupants. Udosen (2012) adds that the school plant includes both permanent and semi-permanent structures, means of transport, teaching equipment, and non-consumable materials that promote teaching and learning activities.

Planning is a critical aspect of school plant management, involving the decision-making process to determine future activities through a set

of outlined actions. Akpan (2011) describes planning as the process of examining the future, mapping out a course of action, and making decisions to achieve specific goals. UNESCO (2003) emphasizes that planning is a futuristic and goal-oriented process, involving systematic outlines of activities to meet development objectives within a country's possibilities and aspirations.

School plant planning is integral to overall educational planning, aiming to systematically and rationally provide educational facilities within an institution. According to Odunfowokan (2011), school plant planning encompasses instructional spaces, administrative spaces, circulation spaces, spaces for conveniences, and accessories. It involves developing a functional educational program, selecting a suitable site, architecturally expressing and constructing appropriate structures, and providing adequate resources for effective teaching and learning, all aligned with educational goals and objectives.

The term "management" entails a set of functions directed at efficiently and effectively utilizing resources to achieve organizational goals (Griffin, 2003). School plant management involves making decisions in building and utilizing a school plant according to need. It encompasses a range of ongoing activities, such as determining the need for school plants, planning educational programs, designing school facilities, constructing, and furnishing, operating, utilizing, and maintaining the school plant.

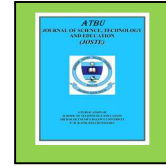
A library, as defined by the Oxford Advanced Learner's Dictionary, is a building or room that houses a collection of books, tapes, newspapers, etc., for people to read, study, or borrow. Awana (2005) expands this definition, highlighting the library as a place where materials are kept for reading and research. Conant, as cited in Awana (2005), describes the library as an expository of cultural past and a sustainer of intellectual activities, anticipating the future. Owoeye and Yara (2011) emphasize the library's essential role in the teaching-learning process, serving as a vital educational service.

Corresponding author: ADEWALE Zainab Ololade.

✉ ololadezainaba@gmail.com

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A school library is a specialized library that supports teaching, learning, and educational programming. School libraries play a crucial role in supporting students by providing resources to meet diverse needs and promoting reading and library use (Clarke, 1999). Adequate collections are vital, and school libraries have been shown to positively impact students' academic performance (Martin, 2000). Keith (2004) underscores the importance of a well-stocked library in achieving educational objectives, emphasizing that students and teachers need library resources for effective learning.

Leo (2016) conducted a study on the influence of library services on students' academic performance in Tanzania. The study aimed to identify schools with and without library services, compare academic performance in schools with and without libraries, and explore how students use library services to improve their academic performance. Keith (2004) further emphasizes the role of libraries in supporting teachers and students, noting that information is power, and access to information is indispensable for individual advancement and educational development.

In conclusion, education, school plant planning, management, and libraries are integral components of the educational system, each playing a crucial role in shaping the learning environment and contributing to the overall development of individuals and society.

STATEMENT OF THE PROBLEM

Secondary education in Kaduna State, Nigeria, is grappling with significant environmental challenges that impede the realization of educational objectives, with one prominent concern being the inadequacy of library space. A critical observation further highlights the absence of comprehensive school plant planning, a crucial element for the effective management of public secondary schools in the state. Stakeholders and educational administrators have brought to light the prevailing financial constraints faced by educational institutions across Nigeria, a predicament that hampers their ability to carry out essential educational activities. This financial

shortfall, in particular, has a direct impact on the availability and adequacy of library facilities, creating a deficiency that affects both teachers and students in their pursuit of an effective teaching and learning process.

The dearth of library space emerges as a critical impediment, hindering the educational landscape in Kaduna State. This scarcity not only restricts access to essential learning resources for students but also limits the avenues for teachers to engage in effective instructional strategies. Moreover, the absence of a robust school plant planning framework exacerbates the challenges faced by public secondary schools, leaving them without the necessary infrastructure to support an optimal teaching and learning environment.

Educational stakeholders stress the urgent need for increased funding to address these challenges. The insufficiency of funds not only affects the expansion and enhancement of library spaces but also impedes the overall development of school infrastructure, including classrooms, laboratories, and other essential facilities. Consequently, the quality of education is compromised, hindering the ability of educators to deliver comprehensive and impactful lessons.

Efforts to mitigate these challenges necessitate a comprehensive approach, including strategic investments in school plant planning. A well-designed plan would address the specific needs of public secondary schools in Kaduna State, taking into account the shortage of library space and other critical infrastructure. This planning process should involve collaboration among education authorities, community stakeholders, and governmental bodies to ensure a holistic and sustainable solution.

In conclusion, the environmental challenges faced by secondary education in Kaduna State, particularly the insufficient library space and the absence of adequate school plant planning, underscore the pressing need for increased funding and comprehensive strategies. Addressing these challenges will not only improve the teaching and learning experience but also contribute to the overall development of a robust and effective educational system in the state.

Corresponding author: ADEWALE Zainab Ololade.

✉ ololadezainaba@gmail.com

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Objective of the Study

1. To examine the perceived impact of existing school library spaces on the overall management of public secondary schools in Kaduna Metropolis.

Research Question

1. What is the perceived impact of the existing school library spaces on the overall management of public secondary schools in Kaduna Metropolis?

Research Hypotheses

There is no significant difference in the opinion of respondents on the impact of School library on the management of public secondary schools in Kaduna Metropolis.

METHODOLOGY

The study employed a descriptive survey research design to investigate the impact of school library space planning on the management of public secondary schools. The target population included 97 principals, 3,021 teachers, and 21 Quality Assurance officers within the Kaduna Metropolis. The sample size, comprising 333 respondents (320 teachers, 10 principals, and 3 Quality Assurance officers), was

determined using the Research Advisors (2006) sample size table and selected through the hat and draw method of random sampling.

To gather primary data on stakeholders' opinions regarding various aspects of school plant planning, the study utilized the "School Plants Planning and Management of Public Secondary Schools Questionnaire (SPPMPSSQ)." The instrument's internal consistency was assessed using the Cronbach's Alpha method, yielding a reliability coefficient of 0.76. This value is deemed acceptable, as supported by Lee in Lavrakas (2008), indicating internal reliability at 0.7 and above.

Data collected through the questionnaire were analyzed using the Statistical Package for Social Sciences (SPSS). The analysis involved generating frequency counts, mean, and standard deviation. Additionally, non-parametric tests, specifically the Kruskal-Wallis test, were employed to test hypotheses and identify mean differences, with a significance level set at 0.05.

RESULTS

Do library space planning have impact on the management of public secondary school in Kaduna Metropolis?

Table 1: Impact of Library Space Planning on the Management of Public Secondary Schools in Kaduna Metropolis

SN	Item Statement	Respondents	SA	A	U	D	SD	Mean	SD	Remark
1.	Management of textbooks in the school library encourage students' further reading.	QAO	1	1	1	-	-	4.000	1.000	Positive
		Principals	1	7	1	-	1	3.700	1.059	
		Teachers	10	158	53	59	40	3.121	1.136	
2.	Libraries are well equip in public secondary schools in Kaduna State.	QAO	1	1	1	-	-	4.000	1.000	Positive
		Principals	3	4	3	-	-	3.000	0.816	
		Teachers	17	176	63	10	54	3.306	1.251	
3.	Internets in school Libraries have impact on the management of public secondary schools.	QAO	1	1	1	-	-	4.000	1.000	Positive
		Principals	-	7	1	-	2	3.300	1.251	
		Teachers	11	175	57	30	47	3.228	1.147	
4.	A well-planned library facility have impact on	QAO	1	1	1	-	-	4.000	1.000	Positive
		Principals	-	6	1	-	3	4.500	1.414	

Corresponding author: ADEWALE Zainab Olojede.
✉ ololadezainaba@gmail.com
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	the management of public secondary schools.	Teachers	46	141	79	48	6	4.040	1.114	
5.	Library Operating hours in public secondary schools have impact on the management of schools.	QAO	1	2	-	-	-	4.333	0.577	
		Principals	5	5	-	-	-	3.000	0.527	Positive
		Teachers	21	142	57	63	37	3.146	1.161	
6.	Management of Librarians assist students on how learning materials in the school are used.	QAO	1	2	-	-	-	4.333	0.577	
		Principals	-	6	2	1	1	3.300	1.059	Positive
		Teachers	6	133	59	89	33	2.968	1.088	
7.	Every school building should have a separate wing for library and reading room.	QAO	1	1	-	1	-	3.666	1.527	
		Principals	-	5	4	-	1	3.300	0.948	Positive
		Teachers	6	147	96	43	28	3.187	0.993	
8.	Libraries should be centrally located so that it may be easily accessible to all students.	QAO	1	-	2	-	-	3.666	1.154	
		Principals	-	6	1	-	3	3.000	1.414	Positive
		Teachers	9	198	81	5	27	3.490	0.919	
9.	Management of school library media centre encourage students' reading habit	QAO	1	1	-	-	1	3.333	2.081	
		Principals	-	7	1	-	2	3.300	1.251	Positive
		Teachers	5	164	91	28	32	3.256	0.999	
10.	Well-kept Libraries have impact on the management of schools.	QAO	1	1	1	-	-	4.000	1.000	
		Principals	2	3	3	-	2	3.300	1.418	Positive
		Teachers	26	118	101	24	51	3.137	1.179	
Response Mean = 3.53									1.10	

Table 1. Show that library space planning had impact on the management of public secondary school in Kaduna Metropolis. The table showed the average response mean of 3.53 which is higher than the standard mean of 3.0. By implication, item number 4 on the table which states that "a well-planned library facility have impact on the management of public secondary schools" attracted the highest mean response of

4.000, 4.500 and 4.040 by Quality Assurance Officials, Principals and Teachers respectively. Details revealed that 1 quality assurance official strongly agreed, 1 agreed and 1 stayed undecided on the statement, 6 principals agreed, 1 stayed undecided and strongly disagreed on the statement, while 46 teachers strongly agreed, 141 agreed, 79 stayed undecided, 48 disagreed, and 6 strongly disagreed on the statement.

Corresponding author: ADEWALE Zainab Oloolade.

✉ ololadezainaba@gmail.com

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Table 2: Summary of Kruskal-Wallis H test on the Impact of School Library Planning on the Management of Public Secondary Schools in Kaduna Metropolis

Group	N	Mean Rank	Chi-square (χ^2)	df	α	P-value	Decision
QAO	3	84.63					
Principal	10	168.00	192.048	2	0.05	.003	Rejected
Teacher	320	155.50					

Table 2. Revealed that “School library planning had significant impact on the management of public secondary schools in Kaduna Metropolis. The table showed the group chi-square (χ^2) of 192.048 with p-value of .003 at 2 degrees of freedom. Since the p-value (.003) was lesser than the alpha level (0.05), the hypothesis which says that there is no significant difference in the opinion of respondents on the impact of School library planning on the management of public secondary schools in Kaduna Metropolis was rejected. This implies that the hypothesis is statistically significant”

DISCUSSION OF FINDINGS

The study's findings revealed that the planning of library spaces has a significant impact on the management of public secondary schools in Kaduna Metropolis. This suggests that a well-planned library facility can positively influence the overall management of public secondary schools. Consequently, the hypothesis proposing that there is no significant difference in the opinions of respondents regarding the impact of school library planning on the management of public secondary schools in Kaduna Metropolis was rejected. This rejection indicates that the hypothesis holds statistical significance.

This outcome aligns with the findings of Leo (2016), who observed that students in secondary schools with well-planned libraries and ample learning materials tend to outperform their counterparts in schools lacking such facilities. The presence of well-equipped libraries not only fosters positive learning habits but also strengthens students' study skills, leading to improved academic performance.

CONCLUSION

In conclusion, the findings of this study underscore the crucial role that library space planning plays in influencing the management of public secondary schools in Kaduna Metropolis. The observed impact implies that a meticulously planned library facility has the potential to significantly enhance the overall management of these educational institutions.

The rejection of the hypothesis asserting no significant difference in respondents' opinions regarding the impact of school library planning on school management signifies a statistically significant relationship. This result reinforces the importance of thoughtful library space planning in contributing to the effective administration of public secondary schools.

The study's outcomes resonate with prior research, particularly Leo's (2016) findings, which highlight the positive correlation between well-planned libraries, ample learning materials, and enhanced academic performance. The presence of well-equipped libraries not only fosters conducive learning habits but also strengthens students' study skills, ultimately contributing to improved educational outcomes.

In light of these findings, it is evident that prioritizing and investing in comprehensive library space planning is essential for promoting a conducive learning environment and bolstering the overall management of public secondary schools. This research contributes valuable insights that should inform educational policymakers, administrators, and stakeholders in Kaduna State as they work towards improving the quality and effectiveness of secondary education in the region.

Corresponding author: ADEWALE Zainab Olofade.

✉ ololadezainaba@gmail.com

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RECOMMENDATIONS

Based on the findings of the study, the following recommendations are offered to enhance the effectiveness of school library space planning and the overall management of public secondary schools in Kaduna Metropolis:

1. **Comprehensive School Library Space Planning:** Education authorities and school administrators should prioritize and engage in comprehensive school library space planning. This process should involve assessing the current status of library spaces, identifying deficiencies, and formulating strategic plans to address these shortcomings. A well-thought-out library space plan should consider factors such as size, layout, accessibility, and the incorporation of modern educational technology.
2. **Increased Funding for Educational Infrastructure:** Recognizing the critical role of library facilities in effective education, there should be increased financial allocations to education in Kaduna State. Adequate funding is necessary to implement the proposed library space plans, ensuring that public secondary schools have well-equipped libraries with up-to-date learning resources.
3. **Professional Development for Librarians:** Librarians play a pivotal role in managing library spaces and supporting the teaching and learning process. Therefore, there should be targeted professional development programs for librarians to enhance their skills in library management, information technology, and resource procurement. This will contribute to creating dynamic and responsive library spaces.
4. **Stakeholder Involvement:** Engage various stakeholders, including educators, students, parents, and community members, in the library

- space planning process. Gathering input from these stakeholders will ensure that the library spaces meet the diverse needs of the school community and are aligned with educational goals.
5. **Regular Maintenance and Upkeep:** Implement a routine maintenance schedule for library facilities to ensure that the spaces remain conducive for learning. This includes regular checks on infrastructure, the availability of learning materials, and the functionality of technology within the library.
 6. **Collaboration with Government and NGOs:** Foster collaboration between educational institutions and government agencies or non-governmental organizations (NGOs) focused on education. This collaboration can result in additional resources, expertise, and support for school library space planning initiatives.
 7. **Research and Monitoring:** Conduct periodic research and monitoring to assess the impact of the implemented library space plans. This ongoing evaluation will provide valuable insights into the effectiveness of the changes made and identify areas for continuous improvement.
 8. **Incorporate 21st Century Learning Spaces:** Consider incorporating 21st-century learning concepts in library space planning, emphasizing flexible and collaborative spaces that cater to various learning styles. This may include the integration of digital resources, interactive technologies, and spaces for collaborative projects.

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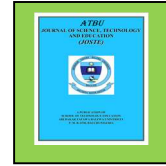
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Corresponding author: ADEWALE Zainab Olojede.

✉ ololadezainaba@gmail.com

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Corresponding author: ADEWALE Zainab Oloolade.

✉ ololadezainaba@gmail.com

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