SCHOOL RESOURCES AND PUBLIC PRIMARY SCHOOL PUPILS' ACADEMIC PERFORMANCE IN MAIDUGURI METROPOLITAN AREA, BORNO STATE, NIGERIA

BY

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Abstract

This study examined school resources and public primary school pupil's academic performance in Maiduguri Metropolitan Area, Borno State, Nigeria. The specific objectives of this study were to determine the relationship between availability of instructional materials, adequacy of instructional materials, availability of infrastructural facilities, adequacy infrastructural facilities and pupil's academic performance in public primary schools in Maiduguri Metropolitan Area, Borno State, Nigeria. Four (4) hypotheses were formulated and tested at 0.5 level of significance. Correlational research design was adopted for this study, stratified random sampling technique was used to select a sample of twenty-eight (28) public primary Schools out of the population of forty-two (42) public primary Schools in Maiduguri Metropolitan Area. Self-structured checklist titled "School Resources Checklist" (SRC) and profoma were used for data collection. The checklist was in line with the minimum standard for basic education in Nigeria. Frequency, percentage and Pearson's product moment correlation coefficient (r) were used to analyse the data. Findings of the study revealed that there is a moderate negative correlation between school resources and pupil's academic performance. Based on the findings of this study, the following recommendations were made: State Government should prioritize the equitable distribution of essential infrastructural facilities across public primary schools, School administrators should actively engage with the local community and stakeholders to mobilize additional resources and support for educational initiatives.

Keywords: Academic Performance, Resources, Public School, School System

Introduction

School resources are the physical and human resources that are available to support teaching and learning. The Commonwealth of Learning (2017), identified educational resources as primal to research innovation and practice. They include classrooms, libraries, laboratories, textbooks, and other teaching materials, as well as teachers and other school staff. The lack of adequate school resources may have a negative impact on the academic performance of Nigerian pupils. Education is the bedrock of national development. It is the key to unlocking the potential of individuals and societies. Nigeria is the most populous country in Africa and the seventh most populous country in the world. It has a young and growing population, with over 50% of the population under the age of 18. Education is a key priority for the Nigerian government, as it is seen as a driver of economic growth and development. Education according to the National Policy on Education is an instrument 'par excellence' which is important for national development. All the various levels of education (early childhood, pre-primary, primary/basic, post primary and tertiary) must be properly administered and managed in order to produce vibrant outputs (students) that will contribute effectively towards national development. However, the Nigerian education system faces a number of challenges, including inadequate funding, poor infrastructure, and a shortage of qualified teachers. These challenges have a negative impact on the academic performance of Nigerian pupils (FGN, 2020).

Educational resources are the sum total of the input that goes into the education system. They are things that are used directly or indirectly for the purposes of supporting, facilitating, influencing, or encouraging transmission or acquisition of knowledge, competence, skills and know-how (World Bank, 2019). The Nigerian government needs to invest more in education to improve the quality of school resources and the academic performance of Nigerian pupils. This can be done by increasing funding for education, building new schools and classrooms, and providing more teaching materials and laboratory equipment. The government also needs to invest in teacher training and development to improve the quality of teaching in Nigerian schools. The lack of adequate school resources may have a negative impact on the academic performance of Nigerian pupils. For example, a study by the World Bank found that pupils in schools with libraries have higher test scores than pupils in schools without libraries (World Bank, 2019). Similarly, a study by the National Bureau of Statistics found that pupils in schools with adequate laboratory facilities have higher test scores in science and mathematics than pupils in schools without adequate laboratory facilities (NBS, 2019). The Boko Haram insurgency has had a terrible effect on Maiduguri, the capital of Borno State, causing massive displacement, the destruction of infrastructure, as well as the disruption of educational institutions. As a result, it has been extremely difficult for schools in this area to maintain a positive learning atmosphere and provide necessary resources.

Borno State boasts a rich educational heritage, with a long history of Islamic scholarship and traditional learning institutions. However, the ongoing insurgency in the region has severely disrupted the education system. According to the United Nations Children's Fund (UNICEF 2021), over 1,300 schools have been destroyed or damaged in Borno State due to the conflict. This has led to a shortage of classrooms, learning materials, and qualified teachers, significantly impacting the learning environment for thousands of pupils. However, despite the intervention of the state and federal government on the rehabilitation, construction and reconstruction of schools, the shortages are still there. The availability of instructional materials is a crucial component of educational quality. Access to textbooks, laboratory equipment, teaching aids, and other educational resources plays a pivotal role in enabling effective teaching and learning. Inadequate access to instructional materials can significantly hinder the educational process, leading to poor academic performance (Akinbobola & Ogunbodede, 2007). Given the challenges posed by the insurgency, public primary schools in Maiduguri Metropolitan Area likely face significant hurdles in accessing and maintaining instructional materials. The availability and adequacy of textbooks, teaching aids, and other educational resources are crucial factors influencing students' learning experiences and academic achievement.

School infrastructure encompasses a range of components, including classrooms, libraries, laboratories, sanitation facilities, and more. These facilities are pivotal in creating a safe and conducive learning environment. Dilapidated buildings and inadequate infrastructure can lead to overcrowding and discomfort, which ultimately affect students' concentration and performance. The conflict and economic strain have likely taken a toll on the infrastructural landscape of public primary schools in Maiduguri Metropolitan Area. Issues such as classroom shortages, dilapidated buildings, lack of sanitation facilities, and inadequate playgrounds may hinder the conducive learning environment necessary for optimal academic performance. Academic performance of pupils demands urgent attention to attain their goals. With a change in scenario and thrust on modern materialistic achievement, the education has undergone a drastic change. A person’s education has become an indicator of his status in society. The scores in examination decide about the level of intelligence whereas the education is linked to the life chances, income and wellbeing (Chandra & Azimmudin, 2013). Maiduguri has a low record on pupils' academic performance. For example, in the 2018 Programme for International Student Assessment (PISA), Nigerian pupils ranked last in reading, mathematics, and science among the 79 countries that participated in the assessment (World Bank, 2019). The academic performance of primary school pupils is of paramount importance as it lays the

foundation for their future educational and personal development. Strong primary school performance is associated with a range of benefits that have lasting impacts (Chandra & Azimmudin, 2013).

Furthermore, pproblems of inadequate school resources during a Federal Government Youth Empowerment Programme (NPOWER) as a volunteer teacher in one of the public primary Schools in Maiduguri Metropolitan Area. These problems include; significant challenges related to the availability of instructional materials and infrastructural facilities, and these challenges have the potential to hinder pupils' academic performance. The lack of essential resources and support can lead to an adverse learning environment, affecting both the quality of teaching and the performance of pupils. Teachers often lack access to up-to-date and adequate instructional materials, including textbooks and technology. This scarcity may limit their ability to deliver effective lessons and engage students in meaningful learning experiences. Many schools in the area struggle with inadequate infrastructure, including classrooms, sanitation facilities, and clean water. These shortcomings create an environment that may not be conducive to effective teaching and learning (World Bank, 2019. These challenges not only place a burden on their ability to provide quality education but may lead to feelings of frustration and ineffectiveness. The inadequate resources and support can undermine their dedication and motivation. Additionally, these issues may negatively affect pupils' academic performance, as teachers may struggle to deliver the best possible education in such circumstances. Addressing these challenges is critical for improving the teaching and learning environment in Maiduguri, Borno State, and enhancing pupils' academic performance. Teachers need access to the necessary resources and support to fulfill their roles effectively, ultimately contributing to better educational outcomes for the area under review (World Bank, 2019). The study therefore determined the relationship between school resources and pupil's academic performance in public primary schools in Maiduguri Metropolitan Area, Borno State, Nigeria.

Literature Review

Kipkoech et al. (2020) conducted a study on the relationship between learning materials and learners' performance in activity areas in public primary schools in Narok County, Kenya. The target population was 735 pre-primary schools, 735 Head teachers, 1470 pre-school teachers, 30 ECD (Early Childhood Development) Coordinators, and 6 Quality Assurance Standards Officers. The sample size comprised of 85 pre-primary schools, 85 head teachers, 85 pre-primary teachers from public preprimary schools, 6 Quality Assurance and Standards Officers and 9 ECD Coordinators. Purposive sampling was used in the selection of head teachers, while the sample for teachers, ECD Coordinators, and Quality Assurance Standards Officers were selected using simple random sampling technique. The researchers used questionnaire, interview schedule, center performance assessment tool and center observation checklist as the main tools for collecting data. The researcher used qualitative and quantitative approaches to analyse data. Regression Analysis was used to test the hypotheses. They found that head teachers' supervision of teaching and learning materials utilization has a significant positive relationship with learners' performance in activity areas, in majority of the public pre-primary schools in Narok County. Study carried out by Mohammed (2019) on the relationship between instructional materials and pupils performance in upper basic schools in Kaduna State, Nigeria employed correlation research design. Simple random sampling technique was used to select 322 respondents comprising of 13 principals and 309 teachers from a population of 36 principals and 1,577 teachers respectively. Data collection was carried out using Questionnaire. Data collected were analyzed using Pearson Product Moment Correlation (r). Results obtained revealed that there was strong and positive relationship between principals' supervisory role and teachers' utilization of relevant instructional materials and significant positive relationship also exists between availability of instructional materials and pupils' academic performance.

Adeyemi and Adeoye (2020) investigated the relationship between the availability and utilization of instructional materials and pupils' academic performance in primary schools in Maiduguri Metropolitan Council, Nigeria. The study employed a descriptive survey design. The populatin of the study were all primary schools in MMC, the sample consist of 200 pupils from 10 primary schools selected using a stratified random sampling technique. Data were collected using a questionnaire and a standardized achievement test. The findings of the study showed that the availability of instructional materials in the primary schools in MMC was generally low. However, the utilization of instructional materials was high, as most teachers used the available materials to teach their pupils. The study also found that there was a significant positive correlation between the availability and utilization of instructional materials and pupils' academic performance. Yerima et al. (2021) investigated the role of digital instructional materials (DIMs) in improving pupils' performance in mathematics in Maiduguri Metropolitan Council, Nigeria. The study employed a quasi-experimental design with a control group and a treatment group. The population of the study was all primary school pupils in Maiduguri Metropolitan Council. The sample consisted of 120 pupils from four primary schools, who were randomly assigned to either the experimental group (n = 60) or the control group (n = 60). The treatment group was exposed to digital instructional materials for a period of 12 weeks, while the control group did not receive any intervention. The findings of the study showed that the pupils in the treatment group who were exposed to digital instructional materials performed significantly better in mathematics than the pupils in the control group who did not receive any intervention. The study also found that the pupils in the treatment group were more motivated to learn mathematics and had a more positive attitude towards the subject than the pupils in the control group. The sampling technique used for the study was not well stated and the sample was relatively small to make generalizations.

The relationship between the adequacy and accessibility of instructional materials and the academic performance of primary school pupils in Nigeria was investigated by Usman and Abubakar (2019). The study employed a descriptive survey design. The population of the study included all primary school pupils from 4 local government areas in Sokoto state, Nigeria (Kaduna North LGA, Kaduna South LGA, Chikun LGA and Zaria LGA). A sample of 300 pupils from 10 primary schools were used for the study, a multistage simple random sampling technique was used for the study. Data were collected using a questionnaire and a standardized achievement test. The findings of the study showed that the adequacy and accessibility of instructional materials in the primary schools in Sokoto State was generally inadequate. However, the study also found that there was a significant positive correlation between the adequacy and accessibility of instructional materials and pupils' academic performance. The study was conducted in four local government areas of Nigeria, so the findings may not be generalizable to other parts of the country. Ahmed (2015) conducted a study on the relationship between the availability and use of instructional materials and pupils' academic performance in public primary schools in Nigeria. The study employed a descriptive survey design. The population for the study included all the public primary schools in Abuja. A sample of 200 pupils from 10 primary schools was selected using a stratified random sampling technique. Data was collected using a questionnaire and a standardized achievement test. The findings of the study showed that the availability and use of instructional materials in the primary schools in Nigeria were generally low. However, the study also found that there was a significant positive correlation between the availability and use of instructional materials and pupils' academic performance.

Yangambi (2023) conducted a study on the Relationship Between School Infrastructures and Students Learning and Performance. The study was conducted in Kinshasa-Ngaliema, The Democratic Republic of the Congo. The target population was identified as teachers from three official secondary schools in the Kinshasa-Ngaliema education

division. A purposive sampling technique was employed to select the three schools. Quantitative data was collected through questionnaires administered to students, teachers, and school administrators. Descriptive statistic was used to analize the data. The study's findings revealed a significant positive correlation between school infrastructure and student learning and performance. Schools with better infrastructure, such as well-equipped classrooms, functional laboratories, and access to technology, consistently demonstrated higher student achievement scores compared to schools with less adequate infrastructure. The relationship between school infrastructure and pupils' academic achievement in public primary schools in Ondo State, Nigeria have also been examined (Aladetan, 2023). Descriptive research design was used. The population for the study was all teachers in Akoko Southwest Local Government Area of Ondo State, while the sample consisted of 120 teachers and 20 head teachers randomly selected from 20 public primary schools. Questionnaires were used to elicit responses from the respondents. Pearson Product Moment Correlation was used to analize the data. Their findings revealed that there was a significant relationship between provision of physical facilities and teachers' job performance teachers which in turn positively affect the pupils academic achievement. The Relationship Between School Infrastructure and the Performance of Pupils has also been investigated by Ion and Hamburda (2020). The study was conducted in Dambovita County, Romania. The researchers employed quantitative data collection techniques. The study's population comprised all primary schools in Romania. A stratified random sampling technique was utilized to select a representative sample of 100 primary schools, from various regions. Descriptive statistics was used to analyze the data. The result showed that the school infrastructure (the number of computers and laboratories) in the educational units has a direct and strong Relationship with the academic performance of primary school pupils. While the study provides valuable insights into the relationship between school infrastructure and pupil performance, it has certain limitations. The study did not check for other infrastructural facilities that could relate to pupils academic performance, and the method of data collection was not stated.

Kuhlenengel et al. (2021) conducted a study on the correlates of the infrastructural facility and k-12 pupil's achievement in the Midwest, United States. The research study was a correlation study. Two hundred and twenty classrooms were assessed for indoor visual environmental factors in the states of Nebraska and Iowa. Classrooms were selected from five different school districts with 144 elementary school classrooms, 32 middle school classrooms, and 44 high school classrooms. Only classrooms from grades 3rd, 5th, 8th, and 11th were selected over a two-year period, to analyze the effects of the visual environment on student achievement. The visual environmental metrics considered within this scope include the three new view metrics introduced within the EN 17037 "Daylight of Buildings" standard (Horizontal Sight Angle, Outside Distance of View, and Number of View Layers), as well as standard daylight and electric lighting metrics, focusing on light availability and glare. A multivariate linear regression approach was used for data analysis with a nested structure to account for the school level variations. The linear regression model used for both Reading and Math Achievement with demographic control variables. Among the notable results of the study, there was a positive relationship between the availability of view and reading achievement. Wulandari et al. (2021) carried out research on the Relationship Between Facilities and Students' Achievements. The study was conducted in Jalan Ketintang Surabaya, Indonesia. This research involved a quantitative method with the explanatory approach to obtain a deeper understanding of the relationship between variables. The research engaged 304 students and 98 teachers at Vocational High School in Surabaya of East Java. The data were gathered from questionnaires given to respondents, Instruments in this study adopted the Likert scale. School facilities were proxied by educational equipment, learning and teaching media, classrooms, library and laboratory. In addition, teacher's performance was explained by the ability to develop learning plans, carry out learning, perform interpersonal relationships, assess learning outcomes and implement

enrichment programs. Lastly, students' achievements were measured by student's daily scores and evaluations of the subject matter of automation and office governance the data were analyzed using Warp-PLS Software. However, the study's finding was that school facilities play a pivotal role in influencing students' accomplishments. This implies that better facilities and infrastructure provided by the school will also raise the students' achievements.

Ruhyana and Aeni (2019) conducted a study on the relationship between infrastructure in primary schools and students' learning outcomes in Sumedang Regency, Indonesia. The research population consisted of 599 primary schools in Sumedang Regency. The data were obtained from the 2017 Dapodik data, which sourced by the Sumedang Regency Education Office. Classroom, teacher toilet, student toilet, library, MBS, and double shift system, were the parts of infrastructure the researchers worked on. The Dapodik data were used as the research instruments that were processed using the STATA 14 software, Logistic regression was employed to analyze the data. They found that classroom, school-based management, and double shift system had an effect on the students' learning outcomes, while library, teacher toilet, and student toilet had no effect on the students' learning outcomes. Jamil et al. (2018) conducted a study on the relationship between school infrastructure, pedagogical materials and academic performance: Evidence from Khyber Pakhtunkhwa, the study was conducted in Pakistan. The researcher made use of official survey data of Education Management Information System (EMIS), Khyber Pakhtunkhwa. The unique official survey in Khyber Pakhtunkhwa provided information on a range of school characteristics including information on teaching characteristics, school building characteristics and the availability of different academic and other facilities of the school. They combined the data set with official results of SSC examination of Khyber Pakhtunkhwa for year 2014. Pooled OLS estimates of Equation were used to analyze the data. The results showed that teaching quality (number of science teachers), teaching facilities (availability of library), infrastructure of class rooms and number of class rooms, and availability of utilities (electricity and natural gas) have positive effect on the school's academic performance in Khyber Pakhtunkhwa. It also proved that science lab and playground have no effect on the school's academic performance. While library and number of science teachers are important determinants of school performance in urban schools. However, for rural schools, building construction is a key factor in school performance.

A study on the relationship between provision and utilisation of facilities and public senior secondary school students' academic achievement was carried out in Lagos State education district v (Isiaka et al., 2021). This study had its purpose to examine the relationship between provision and utilisation of facilities and students' academic achievement in public senior secondary schools in Lagos State education district V, Nigeria. The descriptive research design was used to investigate the study. The target population included all students from the 66 public senior secondary schools in Lagos State Education District V's four zones. There were 13 schools in Badagry Zone, 13 schools in Ojo Zone, 18 schools in Amuwo-Odofin Zone, and 22 schools in Ajeromi-Ifelodun Zone. The sample for the study was made up of 20 students from the schools that were chosen using the purposive sampling technique after being stratified into zones. Five public senior secondary schools in Lagos State's Education District V were chosen using a disproportionate sampling technique in each zone. A simple random sample procedure was utilized to pick 20 students from each school to participate in the study from S. S. I, II, and III. As a result, the study's sample consisted of 400 participants in total. Three instruments, namely checklist, records observation format and questionnaire, were used to collect data on provision and utilisation, students' academic achievement as well as attitude of students towards the use of school facilities provided. Collected data were analysed using Pearson's correlation and t-test to test the hypotheses. The study has established that provision and utilisation of school facilities are, apparently, not a notable determinant of academic achievement in public senior secondary schools in

Lagos State. Yet, facilities in terms laboratory, library, school buildings, chairs/tables, chalk-board, and audio-visual aids are very crucial to high academic attainment.

Purpose of the Study

The purpose of this study is to ascertain the relationship between:

1. availability of instructional materials and public primary school pupil's academic performance in Maiduguri Metropolitan Area;
2. adequacy of instructional materials and public primary school pupil's academic performance in Maiduguri Metropolitan Area;
3. availability infrastructural facilities and public primary school pupil's academic performance in Maiduguri Metropolitan Area; and
4. adequacy of infrastructural facilities and public primary school pupil's academic performance in Maiduguri Metropolitan Area.

Research Hypotheses

For the purpose of this research, the following hypotheses were formulated and were tested at 0.05 level of significance.

H_{O1}: There is no significant relationship between availability of instructional materials and public primary school pupil's academic performance in Maiduguri Metropolitan Area.
H_{O2}: There is no significant relationship between adequacy of instructional materials and public primary school pupil's academic performance in Maiduguri Metropolitan Area.
H_{O3}: There is no significant relationship between availability of infrastructural facilities and public primary school pupil's academic performance in Maiduguri Metropolitan Area.
H_{O4}: There is no significant relationship between adequacy of infrastructural facilities and public primary school pupil's academic performance in Maiduguri Metropolitan Area.

Methodology

This study adopted correlational research design which was used to determine the relationship between school resources and public primary schools pupil's academic performance in Maiduguri Metropolitan Area, Borno State, Nigeria. The target population for this study was all the public primary Schools in Maiduguri Metropolitan Area (MMA). There were 42 public primary schools in the MMA with a total of 3,296 teachers as at the time of this survey. These schools are distributed across 5 supervisory zones namely: Gwange zone (5 schools), Yerwa practicing zone (8 schools), Kirkasamma zone (10 schools), Lamisila zone (7 schools) and Federal lowcost zone (12 schools). A stratified random sampling technique was used for this study. The sample for this study was twenty eight (28) schools. The sample size for this study was determined using the Bukhari Sample Size Calculator (Bukhari, 2020). They were randomly selected systematically from the five supervisory zones for the study. Checklist and proforma were used as instruments for this study. A proforma was used to collect results of pupil's academic performance in the Common entrance examinations for the year 2024. To confirm and improve the instrument, the researcher's supervisor as well as other professionals were consulted to ascertain the instrument's

applicability. A checklist cannot undergo the research instrument validation process, however, it is in line with the Minimum Standards for Basic Education in Nigeria (UBEC 2010). An introductory letter from the Head Department of Education, University of Maiduguri was collected by the researcher, and same was presented to the Executive Chairman, Borno State Universal Basic Education Board, which was approved and used to collect the list of public primary schools in the MMA, their zones, and the number of all teachers in the public primary schools. The required permission was obtained from school authorities, including the head of schools, the education secretary of MMA, head teachers and relevant officials before administering the checklist. A checklist was used to collect information from the schools, which was completed by the researcher on the field. Another introductory letter from the Head, Department of Education, University of Maiduguri was collected and presented by the researcher, to the resource person of the Educational Resource Center in Borno State, to collect results, the proforma was used to collect results of student's academic performance in the Common entrance examinations for 2023, the researcher recorded the average grade of the students in all their subjects which was used to determine the student's academic performance. Out of the 28 schools visited for the purpose of data collection, one school was not in session. This study used frequency count, percentage, mean, standard deviation and Pearson's Moment Correlation Coefficient to analyze the data with the aid of the SPSS application.

Results

H_{01}: There is no significant relationship between availability of instructional materials and public primary school pupil's academic performance in Maiduguri Metropolitan Area.

In response to research hypothesis one, data were collected to identify the available instructional materials in public primary schools in Maiduguri Metropolitan Area. The data collected were analysed with frequency count and percentage, while average percentage was used to determine the general availability response. Results of the analysis are shown on Tables 1 and 2, and further interpreted as thus:

Table 1: Availability of Instructional Materials in Public Primary Schools in Maiduguri Metropolitan Area.

S/N	Instructional Materials	Available		Not Available	
		Freq.	(%)	Freq.	(%)
1.	Textbooks	27	100.0	0	0.0
2.	Workbooks	27	100.0	0	0.0
3.	Teacher's guides	13	48.1	14	51.9
4.	Television	5	18.5	22	81.5
5.	Computers	5	18.5	22	81.5
6.	Charts	10	37.0	17	63.0
7.	Real objects	5	18.5	22	81.5
8.	Photographs	14	51.9	13	48.1
9.	Board	27	100.0	0	0.0
10.	Chalk/marker	27	100.0	0	0.0
Average Percentage			**59.3%**		**40.7%**

Table 1 provides an analysis of the availability of instructional materials in public primary schools across Maiduguri metropolis. The data reveals that all schools surveyed have basic materials such as textbooks, workbooks, boards, and chalk/markers. However, only 14 schools reported having photographs. More critically, the majority of schools lacked key instructional resources like televisions, computers, charts, real objects, and teachers' guides. On the average, only 59.3% of the required instructional materials were available, indicating a moderate level of resource provision. This suggests that while schools were equipped with foundational teaching aids, they were still under-resourced in terms of more diverse and modern educational materials, which may limit the effectiveness of instruction.

Table 2: Correlation of Availability of Instructional Materials and Pupils' Academic Performance in Public Primary Schools in Maiduguri Metropolitan Area.

Correlations	Availability of Instructional Materials	Academic Performance	Decision
Mean	1.276	64.926	
Standard Deviation	.132	10.003	
Pearson Correlation	-.058	-.058	Accepted
Sig. (2-tailed)	.773	.773	
N	27	27	

Table 2 shows the correlation analysis that examined the relationship between the availability of instructional materials and academic performance in 27 public primary schools in Maiduguri. The Pearson correlation coefficient is -0.058, indicating a very weak negative relationship between the availability of instructional materials and pupil's academic performance. This suggests that the presence of more instructional materials does not significantly correlate with improved academic performance in the schools studied. The p-value (Sig. 2-tailed) of 0.773 is well above the standard significance threshold of 0.05, meaning the correlation is not statistically significant. In summary, the analysis suggests that the availability of instructional materials does not have a significant impact on academic performance in these pupils, and any observed relationship may be due to chance.

H_{02}: There is no significant relationship between adequacy of instructional materials and public primary school pupil's academic performance in Maiduguri Metropolitan Area.

In response to hypothesis two, data were collected to identify the adequacy of instructional materials in public primary schools in Maiduguri Metropolitan Area. The data collected were analyzed with frequency count and percentage, while average percentage was used to determine the general availability response. Results of the analysis are shown on Tables 3 and 4, and further interpreted as thus:

Table 3: Adequacy of Instructional Materials in Public Primary Schools in Maiduguri Metropolitan Area.

S/N	Instructional Materials	Adequate		Not Adequate	
		Freq.	(%)	Freq.	(%)
1.	Textbooks	17	63.0	10	37.0
2.	Workbooks	20	74.1	7	25.9
3.	Teacher's guides	5	18.5	22	81.5
4.	Television	1	3.7	26	96.3
5.	Computers	10	37.0	17	63.0
6.	Charts	1	3.7	26	96.3
7.	Real objects	3	11.1	24	88.9
8.	Photographs	5	18.5	22	81.5
9.	Board	17	63.0	10	37.0
10.	Chalk/marker	20	74.1	7	25.9
Average Percentage			**36.7%**		**63.3%**

Table 3 presents an analysis of the adequacy of instructional materials in public primary schools across Maiduguri metropolis. The data reveals that, out of 27 primary schools surveyed, 20 had an adequate supply of chalk or markers and workbooks, while 17 schools had sufficient textbooks and boards. However, critical instructional

resources, including televisions, charts, real objects, teachers' guides, photographs, and computers, were largely inadequate across the schools. On the average, only about 36.7% of the necessary instructional materials were considered adequate, highlighting a considerable deficit in the provision of essential teaching aids. This indicates that majority of the schools in the area were insufficiently equipped to meet basic educational needs, which may hinder effective teaching and learning processes.

Table 4: Correlation of Adequacy of Instructional Materials and Pupils' Academic Performance in Public Primary Schools in Maiduguri Metropolitan Area.

Correlations	Adequacy of Instructional Material	Academic Performance	Decision
Mean	1.326	64.926	
Standard Deviation	.185	10.003	
Pearson Correlation	-.258	-.258	Accepted
Sig. (2-tailed)	.193	.193	
N	27	27	

Table 4 reveals the correlation analysis that examined the relationship between the adequacy of instructional materials and pupil's academic performance across 27 public primary schools in Maiduguri Metropolitan Area. The Pearson correlation coefficient is -0.258, indicating a weak negative correlation between the adequacy of instructional materials and pupil's academic performance. This suggests that as the adequacy of instructional materials increases, pupil's academic performance tends to decrease slightly, though this relationship is weak. The p-value (Sig. 2-tailed) is 0.193, which is above the standard significance threshold of 0.05, indicating that the relationship is not statistically significant. Summarily, the analysis shows a weak and statistically insignificant negative relationship between the adequacy of instructional materials and pupil's academic performance in this sample. This implies that the adequacy of instructional materials, in this case, does not have a significant impact on pupil's academic performance, and other factors may be contributing to the academic outcomes observed.

H_{03}: There is no significant relationship between availability of infrastructural facilities and public primary school pupil's academic performance in Maiduguri Metropolitan Area.

In response to hypothesis three, data were collected to examine the available infrastructural facilities in public primary schools in Maiduguri Metropolitan Area. The data collected were analysed with frequency count and percentage, while average percentage was used to determine the general availability response. Results of the analysis are shown on Table 5 and 6, and further interpreted as thus:

Table 5: Availability of Infrastructural Facilities in Public Primary Schools in Maiduguri Metropolitan Area.

S/N	Infrastructural Facilities	Available		Not Available	
		Freq.	(%)	Freq.	(%)
1.	Classrooms	25	92.6	2	7.4
2.	ICT Labs	6	22.2	21	77.8
3.	Libraries	3	11.1	24	88.9
4.	School offices	24	88.9	3	11.1
5.	School Garden	7	25.9	20	74.1
6.	Fencing	3	11.1	24	88.9
7.	Playgrounds	25	92.6	2	7.4

8.	School furniture	3	11.1	24	88.9
9.	Water facilities	2	7.4	25	92.6
10.	Toilets	3	88.9	24	88.9
11.	Building greenery	2	7.4	25	92.6
12.	Desk	3	11.1	24	88.9
13.	Standard class size	25	92.6	2	7.4
14.	Teacher's table	15	55.6	12	44.4
15.	Lighting	3	11.1	24	88.9
16.	Window	24	88.9	3	11.1
Average Percentage			**40.0**		**60.0**

Table 5 presents data on the availability of infrastructural facilities in public primary schools within Maiduguri metropolis. The data indicates that out of the 27 public primary schools surveyed, 25 had basic infrastructure, including classrooms, playgrounds, and standard class sizes, while 24 have windows and school offices. However, only 15 schools were equipped with teacher's tables, and many schools lack essential infrastructure such as water facilities, greenery, fencing, desks, lighting, furniture, toilets, ICT labs, libraries, and school gardens. On the average, only 40% of the required infrastructural facilities were available, reflecting a significant shortfall in the provision of adequate infrastructure. This suggests that majority of the schools in Maiduguri Metropolis were insufficiently equipped to create environments conducive for effective learning, which may impact the overall quality of education.

Table 6: Correlation of Availability of Infrastructural Facilities and Pupils' Academic Performance in Public Primary Schools in Maiduguri Metropolitan Area.

Correlations	**Availability of Infrastructural Facilities**	**Academic Performance**	**Decision**
Mean	1.571	64.926	
Standard Deviation	.165	10.003	
Pearson Correlation	-.376	-.376	Accepted
Sig. (2-tailed)	.053	.053	
N	27	27	

Table 6 reveals the correlation analysis of the relationship between the availability of infrastructural facilities and pupil's academic performance across 27 public primary schools in Maiduguri Metropolitan Area. The Pearson correlation coefficient is -0.376, indicating a moderate negative correlation between the availability of infrastructural facilities and pupil's academic performance. This suggests that, as the availability of infrastructural facilities increases, pupil's academic performance tends to decrease moderately. However, the p-value (Sig. 2-tailed) is 0.053, which is just above the conventional significance threshold of 0.05, indicating that the relationship is not statistically significant, but it is borderline. Summarily, while there is a moderate negative relationship between the availability of infrastructural facilities and pupil's academic performance, the relationship is not statistically significant at the 0.05 level.

H_{04}: There is no significant relationship between adequacy of infrastructural facilities and public primary school pupil's academic performance in Maiduguri Metropolitan Area.

In response to hypothesis four, data were collected to determine the adequacy of infrastructural facilities in public primary schools in Maiduguri Metropolitan Area. The data collected were analysed with frequency count and percentage, while average percentage was used to determine the general availability response. Results of the analysis are shown on Table 7 and 8 and further interpreted as thus:

Table 7: Adequacy of Infrastructural Facilities in Public Primary Schools in Maiduguri Metropolitan Area.

S/N	Infrastructural Facilities	Adequate		Not Adequate	
		Freq.	(%)	Freq.	(%)
1.	Classrooms	15	55.6	12	44.4
2.	ICT Labs	2	7.4	25	92.6
3.	Libraries	7	25.9	20	74.1
4.	School offices	9	33.3	18	66.7
5.	School Garden	12	44.4	15	55.6
6.	Fencing	8	29.6	19	70.4
7.	Playgrounds	16	59.3	11	40.7
8.	School furniture	9	33.3	18	66.7
9.	Water facilities	11	40.7	16	59.3
10.	Toilets	3	11.1	24	88.9
11.	Building greenery	8	29.6	19	70.4
12.	Desk	10	37.0	17	63.0
13.	Standard class size	19	70.4	8	29.6
14.	Teacher's table	9	33.3	18	66.7
15.	Lighting	3	11.1	24	88.9
16.	Window	21	77.8	6	22.2
Average Percentage			**37.4**		**62.6**

Table 7 provides data on the adequacy of infrastructural facilities in public primary schools across Maiduguri metropolis. The results show that, out of the 27 schools surveyed, only 21 reported having adequate windows, while the majority indicated that their infrastructural facilities, including water systems, appropriately sized classrooms, greenery, fencing, desks, lighting, school furniture, toilets, ICT labs, libraries, and school gardens, were inadequate. On the average, only 37.4% of the required infrastructural facilities meet adequacy standards, highlighting a significant shortfall in infrastructure provision. This suggests that most public primary schools in Maiduguri metropolis were poorly equipped to foster conducive learning environments.

Table 8: Correlation of Adequacy of Infrastructural Facilities and Pupils' Academic Performance in Public Primary Schools in Maiduguri Metropolitan Area.

Correlations	Adequacy of Infrastructural Facilities	Academic Performance	Decision
Mean	1.439	64.926	
Standard Deviation	.211	10.003	
Pearson Correlation	-.491	-.491	Rejected
Sig. (2-tailed)	.009	.009	
N	27	27	

Table 8 reveals the correlation analysis of the relationship between the adequacy of infrastructural facilities and academic performance in 27 public primary schools in Maiduguri Metropolitan Area. The Pearson correlation coefficient is -0.491, indicating a moderate to strong negative correlation between the adequacy of infrastructural

facilities and academic performance. This suggests that as the adequacy of infrastructural facilities increases, pupil's academic performance tends to decrease. The p-value (Sig. 2-tailed) is 0.009, which is below the standard significance threshold of 0.05, indicating that the correlation is statistically significant. In summary, the analysis shows a statistically significant negative relationship between the adequacy of infrastructural facilities and pupil's academic performance. This finding suggests that schools with more adequate infrastructure are not necessarily achieving better academic outcomes, and other factors may be influencing academic performance in this context.

Discussion

Hypothesis one determined the relationship between availability of instructional materials and public primary school pupil's academic performance in Maiduguri Metropolitan Area. Findings revealed no statistically significant relationship availability of instructional materials and public primary school pupil's academic performance in Maiduguri Metropolitan Area, suggesting that the mere provision of these resources, without addressing other underlying factors, may not directly translate into improved academic outcomes. While the lack of instructional materials contributes to a generally poor learning environment, it appears that their availability alone does not guarantee enhanced pupil's academic performance. The findings emphasize the critical role of instructional materials such as textbooks, workbooks, and educational technology in enhancing teaching effectiveness and student engagement. Despite this, many public primary schools in Maiduguri suffer from severe shortages in these essential resources, which limits teachers' ability to deliver interactive and comprehensive learning experiences. This finding contrasts with previous studies such as Kipkoech et al. (2020), which identified a significant positive relationship between the supervision of instructional material utilization and learner performance in Narok, Kenya. Kipkoech et al. (2020) argued that the suitability and safety of teaching resources had a substantial influence on student's outcomes, although their study did not control for the availability of instructional materials. Similarly, Adeyemi and Adeoye (2020) found that while the availability of instructional materials in primary schools was low, their utilization was high, and there was a significant positive correlation between their availability, utilization, and academic performance. These contrasting results suggest that the impact of instructional materials on academic performance may be context-dependent and influenced by how well they are integrated into the teaching process, alongside other environmental and infrastructural factors.

Hypothesis two determined the relationship between adequacy of instructional materials and public primary school pupil's academic performance in Maiduguri Metropolitan Area. Findings revealed a weak negative correlation between the adequacy of instructional materials and pupil's academic performance. This suggests that as the adequacy of instructional materials increases, academic performance tends to decrease slightly, though this relationship is weak. The p-value (Sig. 2-tailed) is 0.193, which is above the standard significance threshold of 0.05, indicating that the relationship was not statistically significant. This finding contrasts with previous studies such as Usman and Abubakar (2019) which found that there was a significant positive correlation between the adequacy and accessibility of instructional materials and pupils' academic performance. This contrasting result suggests that the impact of instructional materials on academic performance may be context-dependent and influenced by how well they are integrated into the teaching process, alongside other environmental and infrastructural factors.

Hypothesis three determined the relationship between availability of infrastructural facilities and public primary school pupil's academic performance in Maiduguri Metropolitan Area. These findings revealed that there is a moderate negative correlation between the availability of infrastructural facilities and pupil's academic performance.

This suggests that, as the availability of infrastructural facilities increases, academic performance tends to decrease moderately. However, the p-value (Sig. 2-tailed) is 0.053, which is just above the conventional significance threshold of 0.05, indicating that the relationship is not statistically significant, but it is on the borderline. This finding implies that while infrastructure is important, it must be paired with other practices and supports to create a conducive learning environment that fosters academic achievement. These results contrast with findings from other studies, such as Yangambi (2023) in the Democratic Republic of the Congo, which reported a significant positive correlation between school infrastructure and student's performance. In that study, schools with better infrastructure, including well-equipped classrooms, functional laboratories, and access to technology, consistently demonstrated higher academic achievement. Similarly, Aladetan (2023) found a positive relationship between the provision of physical facilities and teachers' job performance, which in turn improved students' academic outcomes. Ion and Hamburda (2020) also identified a direct and strong relationship between school infrastructure and academic performance in primary school pupils. The differences in these findings highlight that while infrastructure can contribute to a positive learning environment, other factors such as context-specific challenges may heavily influence the overall impact on student performance.

Hypothesis four determined the relationship between adequacy of infrastructural facilities and public primary school pupil's academic performance in Maiduguri Metropolitan Area. These findings revealed significant infrastructural inadequacies in public primary schools in Maiduguri, such as insufficient classrooms, poor sanitation, lack of clean water, and the absence of ICT labs. These deficiencies were shown to have a statistically significant negative correlation with academic performance, indicating that improvements in infrastructure alone may not necessarily lead to better academic outcomes. The decline in academic performance despite infrastructural upgrades suggests that other factors may play a more critical role in influencing student success. This finding is in line with Isiaka et al. (2021) which established that provision and utilisation of school facilities are, apparently, not a notable determinant of academic achievement in public senior secondary schools in Lagos State. Yet, facilities in terms laboratory, library, school buildings, chairs/tables, chalk-board, and audio-visual aids are very crucial to high academic attainment. This study is, however, in contrast to Wulandari et al. (2021) whose study's finding was that school facilities play a pivotal role in influencing students' accomplishments. This implies that better facilities and infrastructure provided by the school will also raise the students' achievements. The differences in these findings highlight that while infrastructure can contribute to a positive learning environment, other factors such as context-specific challenges may heavily influence the overall impact on student performance.

Conclusion and Recommendations

In conclusion, the study revealed that inadequate school resources, including instructional materials and infrastructural facilities pose significant challenges to academic performance in public primary schools in Maiduguri Metropolitan Area. While the availability of resources such as instructional materials shows no direct correlation with academic outcomes, infrastructural facilities demonstrate a negative relationship with performance, suggesting that resource improvements alone may not suffice. Based on the findings of this study, the following recommendations are made:

1. Policymakers should prioritize the equitable distribution of essential instructional materials and infrastructural facilities across public primary schools. This includes ensuring that all schools have access to updated textbooks, technology, and adequate classroom space to create a conducive learning environment.
2. It is essential to focus not only on increasing the availability of resources but also on enhancing teacher support, classroom management, and overall educational quality. A multi-faceted strategy that addresses both the physical

and pedagogical aspects of education is crucial for fostering an environment where both teachers and pupils can thrive, ultimately leading to better educational outcomes in Maiduguri's public primary schools.

3. Schools should actively engage with the local community and stakeholders to mobilize additional resources and support for educational initiatives. Collaborating with local organizations, businesses, and parents can create a stronger support network for schools and enhance educational opportunities for students.

4. Future research should adopt longitudinal designs to better understand the relationships between school resources and academic performance over time. This will help identify effective interventions and allow for a more nuanced analysis of the factors influencing educational outcomes.

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