

## RESOURCE ADEQUACY AND SCHOOL EFFECTIVENESS: AN INVESTIGATION INTO PUBLIC SECONDARY SCHOOLS IN ONDO WEST LOCAL GOVERNMENT AREA OF ONDO STATE

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### Abstract

This study investigated the resource adequacy and school effectiveness in public secondary schools in Ondo West Local Government Area of Ondo State. Two research questions and two hypotheses were formulated to guide the study. Simple random sampling technique was used to select schools and respondents. Two hundred (200) respondents were used for the study using well developed questionnaire to obtain information from the respondents. The reliability of the instrument was obtained with test-retest approach using Pearson product moment correlation and the reliability coefficient was 0.86. The data collected from the questionnaire were analysed using descriptive and inferential statistics (frequency count, percentage, mean, t-test and correlational matrix). Findings revealed that the level of human resources in public secondary schools in Ondo West Local Government Area of Ondo State is low and the level of material resources in public secondary schools in Ondo West Local Government Area of Ondo State is moderate. There is a significant difference in resource adequacy between rural and urban schools in Ondo West Local Government Area of Ondo State. Also, educational resources adequacy has a significant relationship with public secondary schools' effectiveness. It was recommended that, government and other stakeholders should make available resources that are lacking in school. Also, school administrator should be trained in efficient resource management. Schools also should collaborate with community stakeholders and private organisations to supplement government efforts in resource provision.

**Keywords:** Educational, Resources, Adequacy, School, Effectiveness

### Introduction

Education plays a crucial role in the socio-economic development of any country. For this to be achieved, it is essential for governments to ensure that quality education is provided to citizens. The quality of education within a nation directly influences its social, economic, technological, and political viability. To achieve quality education in Nigeria, it is necessary for schools to operate effectively, which requires the adequate provision of educational resources. Recent studies emphasize that the sufficiency of educational resources—such as human, physical, material, and financial resources—greatly influences school effectiveness (Ado, Akinbobola & Ugbe, 2006; Akomolafe & Adesua, 2016). These resources motivate students and contribute significantly to achieving educational outcomes. According to Muhammed (2006), the lack of sufficient human, physical, and material resources in Nigerian schools is a major factor contributing to poor academic performance. Jonathan, Agwu and Anyanwa (2014) also argue that adequate resources, including human capital, time, finances, and materials, create a conducive environment for teaching and learning, ultimately

enhancing school effectiveness.

The shortage of materials such as textbooks, teaching aids, and laboratory equipment in Nigerian secondary schools continues to impede effective teaching and learning (Nwagwu, 2007), while Ajayi (2007) highlights the vital role that material resources play in enhancing learning experiences for both students and teachers. Okoroma (2006) and Akinbobola, Ado and Inyang (2006) further notes that the lack of adequate physical resources, including classrooms and laboratories, poses a significant barrier to the success of Nigerian secondary schools. According to Odigbo (2005), providing adequate physical resources is essential for meaningful teaching and improved academic performance. Aina (2000), and Akinbobola and Bada (2019) pointed out that the shortage of teachers is another major contributor to the high failure rates in public schools' Senior Secondary Certificate Examinations (SSCE).

McKenzie (2004) emphasized the importance of having qualified and sufficient teachers to facilitate effective learning, as their inadequacy may result in ineffective teaching. These observations suggest that adequate educational resources are critical for enhancing the overall effectiveness of schools. Educational resources, including human, material, financial, time, and physical resources, are fundamental for any school's operation. Usman (2016) defined educational resources as the assets available within the school environment to support teaching and learning. These resources encompass both tangible materials and intangible community resources. Ekundayo (2009) noted that, the success of any educational system, regardless of its level, depends on the adequacy of these resources. Odozi and Lucas (2019) found a significant relationship between educational resources and students' academic performance in Lagos State. Akande (2004) identified material resources such as textbooks, audiovisual aids, and educational technology as essential for effective teaching and learning.

Human resources, particularly teachers, are vital to the smooth operation of the educational system (Usman, 2016). Teachers are central to the teaching-learning process, and adequate supply of qualified teachers is necessary for school effectiveness (Adegbemile, 2011; Zwalchir, 2008). Physical resources, such as well-equipped classrooms, laboratories, libraries, and essential facilities, are equally crucial (Osuji, 2016). Akomolafe and Adesua (2016) noted that, when physical facilities like classrooms, libraries, and laboratories are properly maintained, they enhance students' motivation and academic performance. Ademilua (2002) also argued that the lack of physical resources has been a major factor in poor academic performance in Ekiti State. Akinola (2013) described school effectiveness as the extent to which a school achieves its educational objectives, while Iyer (2011) stressed that consistent positive outcomes over time reflect the effectiveness of a school. Urban schools tend to be better equipped than rural schools, exacerbating educational inequalities. Akinsolu (2010) argued that such disparities often result in lower academic performance among students in rural areas

The effectiveness of a school is also measured by its discipline, school climate, teachers' performance, and student success in their final examinations (Cohen et al., 2009). Academic performance is often used as a key indicator of school effectiveness (Adeyemo, 2011; Henry, 2005). Therefore, adequate provision of educational resources is necessary to improve students' academic performance. Empirical research continues to demonstrate that the adequacy of educational resources is a fundamental determinant of schools' effectiveness. For example, Alade and Kolapo (2020) investigated the impact of resource availability on academic performance in secondary schools across Lagos State, Nigeria. Their study found that schools with sufficient teaching and learning materials outperformed their counterparts in standardized tests and exhibited higher student retention rates. Alade and Kolapo emphasized that adequate resources not only improve instructional delivery but

also foster a supportive learning environment, which is critical for achieving school objectives.

Similarly, Akinbobola (2015) and Adekunle and Salami (2022) explored the influence of school facilities on educational outcomes in Ondo State, Nigeria. Their research revealed that schools equipped with modern infrastructure, such as ICT centers, functional libraries, and well-maintained classrooms, consistently achieved better academic results. They concluded that the availability and effective utilization of these resources play a pivotal role in curriculum implementation and overall school success.

### **Statement of the Problem**

The quality of education in public secondary schools in Ondo West Local Government Area of Ondo State has been a subject of concern for various stakeholders, including educators, parents, policymakers, and students. Despite ongoing reforms and interventions in the education sector, many public schools in the area continue to struggle with inadequate resources, including infrastructure, teaching materials, and qualified personnel. This inadequacy has raised questions about the effectiveness of these schools in achieving their educational objectives and delivering quality education to students.

Resource adequacy is a critical determinant of school effectiveness, as it influences the quality of teaching, learning outcomes, and the overall educational experience. However, many public secondary schools in Ondo West LGA face challenges such as overcrowded classrooms, outdated instructional materials, insufficient laboratory facilities, and limited access to information and communication technology (ICT). Additionally, the lack of motivation among teachers, often attributed to delays in salary payments and inadequate professional development opportunities, further aggravates the issue.

The persistent resource gap raises concern about the ability of these schools to meet the demands of modern education, prepare students for competitive examinations, and equip them with the skills necessary for future success. Furthermore, the disparity in resource allocation between public and private schools contributes to widening inequalities in educational outcomes, leaving many students from public schools at a disadvantage. Given these challenges, it becomes imperative to investigate the adequacy of resources available in public secondary schools in Ondo West LGA and their impact on school effectiveness.

### **Objectives of the Study**

The main purpose of the study is to investigate resource adequacy and school effectiveness in public secondary schools in Ondo West Local Government Area of Ondo State

The objectives of the study are to:

- i. examine the relationship between resources adequacy and public secondary schools effectiveness in Ondo West Local Government Area of Ondo State
- ii. investigate the relationship between material resources adequacy and public secondary schools effectiveness in Ondo West Local Government Area of Ondo State
- iii. assess the relationship between human resources adequacy and public secondary schools effectiveness in Ondo West Local Government Area of Ondo State.

### **Research Questions**

The following research questions were raised to guide the study:

1. What is the level of human resources in public secondary schools in Ondo West Local Government Area of Ondo State?
2. What is the level of material resources in public secondary schools in Ondo West Local Government Area of Ondo State?

### Hypotheses

The following research hypotheses were formulated to guide the study:

H01: There is no significant difference in resource adequacy between rural and urban schools in Ondo West Local Government Area of Ondo State

H02: Resource adequacy has no significant relationship with public secondary schools' effectiveness in Ondo West Local Government Area of Ondo State.

### Methodology

The study adopted descriptive survey research design. The population of this study consisted all senior secondary school students of Ondo West Local Government Area, Ondo State, Nigeria. Five public secondary schools were selected through simple random technique. Twenty (20) teachers each was chosen from five randomly selected secondary schools in Ondo West Local Government of Ondo State.

The research instrument used for collection of data was a self- constructed questionnaire. The questionnaire was divided into 2 Sections, Section A and B, Section A consisted of information on bio-data of the respondents while the Section B was divided into parts with items from each part addressing the stated research questions. A 4 –point Likert type rating scale of Strongly Agree (SA)=4, Agree (A)=3, Disagree (D)=2 and strongly Disagree (SD)=1 was used. Each of the respondents picked the items as applicable. The research instrument was validated using face and content validity with the help of two (2) experts in the test, measurement and evaluation. The reliability of the instrument was obtained with test-retest approach using Pearson Product Moment Correlation and the reliability coefficient was 0.86. The researcher took permission from the principals and through them, got in touch with the teachers in the schools for the administration of the questionnaire. The data collected were analysed using frequency count, percentage, mean, t-test and Correlation matrix.

### Results

#### Demographic Analysis

**Table 1: Table showing gender of respondents**

Gender	Frequency	%
Male	90	45%
Female	110	55%
Total	200	100%

Table 1 above shows the sex of the respondents, as shown above, 45% of the total respondents were male while the remaining were 55% were female respondents.

**Table 2: Table showing school location of respondents**

School Location	Frequency	%
Urban	160	80%

Rural	40	20%
<b>Total</b>	<b>200</b>	<b>100%</b>

Table 2 above shows the school location of the respondents, as shown above, 80% of the total respondents were in urban schools while the remaining 20% were in rural schools.

**Research Question 1:** What is the level of human resources in public secondary schools in Ondo West Local Government Area of Ondo State?

**Table 3: The level of human resources in public secondary schools**

S/N	Level of Awareness	SA	A	D	SD	Mean	Remark
1	The current level of human resources in your school is sufficient to support effective teaching and learning	38 (19.0)	26 (13.0)	60 (30.0)	76 (38.0)	2.13	Accepted
2	Teachers regularly provided with opportunities for professional development or training	43 (41.5)	20 (25.0)	83 (21.5)	54 (12.0)	2.26	Accepted
3	Our school is sufficiently supplied with teachers as per the curriculum based establishment of the school	44 (22.0)	43 (21.5)	46 (23.0)	67 (33.5)	2.54	Accepted
4	There are sufficient specialized teachers for science, mathematics, English language and ICT subjects	31 (15.5)	36 (18.0)	70 (35.0)	63 (31.5)	2.18	Accepted
5	Teachers in your school have adequate years of teaching experience	80 (40.0)	46 (23.0)	45 (22.5)	29 (14.5)	2.89	Accepted

**Weighted Average = 2.40; Benchmark =2.50**

Table 3 shows the level of human resources in public secondary schools. The table shows that 32.0% of the respondents agreed that the current level of human resources in their schools is sufficient to support effective teaching and learning (2.96). Also, majority of the respondents (66.5%) agreed that teachers regularly provided with opportunities for professional development or training (2.54). The table also shows that, some of the respondents (43.5%) agreed that their schools are sufficiently supplied with teachers as per the curriculum based establishment of the school (2.54). The table also shows that 33.5% of the respondents agreed that there are sufficient specialized teachers for science, mathematics, English language and ICT subjects (2.18). Also, most respondents (63%) agreed that teachers in their schools have adequate years of teaching experience (2.89). Since the weighted average of 2.40 as shown in Table 1 is lower than the benchmark of 2.50, it can be concluded that, the level of human resources in public secondary schools in Ondo West Local Government Area of Ondo State is low.

### Research Question 2

What is the level of material resources in public secondary schools in Ondo West Local Government Area of Ondo State?

**Table 4: The level of material resources in public secondary schools**

S/N	Level of material resources	SA	A	D	SD	Mean	Remark
1	Your school has adequate	61	57	65	17	2.81	Accepted

	classroom space for all students	(30.5)	(28.5)	(32.9)	8.50)		
2	Does your school have a functioning computer laboratory for ICT training	32 (16.0)	16 (8.0)	91 (45.5)	61 (30.5)	2.10	Accepted
3	Your school has a functioning library with adequate reading materials	83 (41.5)	64 (32)	38 (19)	15 (7.5)	3.08	Accepted
4	Classrooms in your school are equipped with functional desks and chairs for students	90 (45)	83 (41.5)	18 (9.0)	9 (4.5)	3.27	Accepted

**Weighted Average = 2.40; Benchmark =2.50**

Table 4 shows the the level of material resources in public secondary schools in Ondo West Local Government Area of Ondo State. The table shows that school has adequate classroom space for all students (2.81); however, a very few respondents (24.0%) agreed that schools have a functioning computer laboratory for ICT training (3.08); majority of the respondents agreed that schools have a functioning library with adequate reading materials (3.08); and that Classrooms in your school are equipped with functional desks and chairs for students (3.27). Meanwhile, since the weighted average as shown in Table 4 is 2.81 which is greater than the benchmark of 2.50, it can be concluded that, the level of materials resources in public secondary schools in Ondo West Local Government Area of Ondo State is moderate.

### Hypotheses Testing

**H01:** There is no significant difference in resource adequacy between rural and urban schools in Ondo West Local Government Area of Ondo State

**Table 5: t-test showing difference in resource adequacy between rural and urban schools**

Variables	N	Mean	sd	df	t-cal	t-critical	Remark
Urban	160	2.21	1.08	198	2.07	1.96	Accepted
Rural	40	2.29	1.05				

The information in Table 5 shows difference in resource adequacy between rural and urban schools in Ondo West Local Government Area of Ondo State. The table shows a significant difference between the two groups on resource adequacy ( $df = 198$ ;  $t = 2.07$ ;  $p < 0.05$ ). Thus, hypothesis one was rejected. Hence, there is a significant difference in resource adequacy between rural and urban schools in Ondo West Local Government Area of Ondo State.

**H02:** Resource adequacy has no significant relationship with public secondary schools' effectiveness in Ondo West Local Government Area of Ondo State.

**Table 6:** Correlation matrix showing the relationship between educational resources adequacy and school effectiveness

Variables	Mean	S.D	Educational resources	School effectiveness
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Educational resources	12.05	1.894	1.000	0.648**
School effectiveness	7.25	.840	.648**	1.000

\*\*Correlation is significant at 0.01(2-tailed)

Table 6 revealed the relationship between relationship between educational resources adequacy and school effectiveness; educational resources adequacy positively and significantly correlated with school effectiveness ( $r = 0.648$ ,  $p < 0.01$ ). This implies that educational resources adequacy has a significant relationship with public secondary schools' effectiveness.

## Discussion

The result in Table 3 revealed that the level of human resources in public secondary schools in Ondo West Local Government Area of Ondo State is low. Educational resources significantly influence teacher effectiveness by providing the tools, materials, and environment necessary for high-quality teaching. Teacher effectiveness, which refers to the ability of teachers to foster significant learning gains in students, depends largely on access to adequate and relevant resources. This finding corroborates that of Akinsolu (2010), that the availability of resources such as textbooks, teaching aids, laboratories, and ICT tools enhances teachers' capacity to deliver engaging and comprehensive lessons. These resources not only support the curriculum but also empower teachers to adopt diverse instructional strategies that address the varying needs of learners.

Findings in Table 4 revealed that the level of material resources in public secondary schools in Ondo West Local Government Area of Ondo State is moderate. The finding is in line with Ajayi and Ogunyemi (2011) who found that schools with well-maintained physical environments, such as proper lighting, ventilation, and sanitation facilities, demonstrated higher levels of teacher and student satisfaction, leading to better overall performance. The researchers emphasized that the physical condition of schools not only impacts academic achievement but also promotes a sense of safety and well-being, which is crucial for achieving educational objectives. This reinforces the need for sustained investment in physical infrastructure to ensure the effective functioning of schools.

Finding in Table 5 revealed that there is a significant difference in resource adequacy between rural and urban schools in Ondo West Local Government Area of Ondo State. This shows that there is uneven distribution of resources in secondary schools Ondo West Local Government Area of Ondo State. Urban schools tend to be better equipped than rural schools, exacerbating educational inequalities. Akinsolu (2010) argued that such disparities often result in lower academic performance among students in rural areas.

It was revealed in Table 6 that educational resources adequacy has a significant relationship with public secondary schools' effectiveness. This shows that, the adequacy of educational resources is a fundamental determinant of schools' effectiveness. The finding agreed with Alade and Kolapo (2020) who found that, schools with sufficient teaching and learning materials outperformed their counterparts in standardized tests and exhibited higher student retention rates. Alade and Kolapo also emphasized that adequate resources not only improve instructional delivery but also foster a supportive learning environment, which is critical for achieving school objectives.

## Conclusion

Based on the findings of the study, it is therefore concluded that, the level of human resources in public secondary schools in Ondo West Local Government Area of Ondo State is low. It was also found that the level of material resources in public secondary schools in Ondo West Local

Government Area of Ondo State is moderate. Finding also revealed that there is a significant difference in resource adequacy between rural and urban schools in Ondo West Local Government Area of Ondo State. Also, educational resources adequacy has a significant relationship with public secondary schools' effectiveness

### **Recommendations**

Based on the findings of the study, the following recommendations are made:

The government and education stakeholders should prioritize the recruitment and retention of qualified teachers and support staff in public secondary schools in Ondo West Local Government Area. This includes providing incentives, professional development opportunities, and improved working conditions to attract and retain skilled personnel, especially in rural schools where human resource levels are particularly low.

Efforts should be made to upgrade and expand existing facilities, such as textbooks, teaching aids, laboratory equipment, and ICT tools. Adequate funding and timely distribution of these materials should be ensured to bridge the gap between the current state and the optimal requirements for effective teaching and learning.

Targeted interventions should be implemented to reduce disparities in resource adequacy between rural and urban schools. This could involve allocating additional resources, building infrastructure, and deploying experienced teachers to underserved rural schools. Monitoring mechanisms should also be established to ensure equitable distribution and utilization of resources.

To leverage the positive relationship between resource adequacy and school effectiveness, school administrators should be trained in efficient resource management. Additionally, the government should establish policies to ensure sustained investment in educational resources, with periodic assessments to evaluate the adequacy and impact of resources on school performance.

Schools should collaborate with community stakeholders and private organizations to supplement government efforts in resource provision. Partnerships can support the development of infrastructure, supply of materials, and sponsorship of training programs for teachers, fostering a collective approach to enhancing school effectiveness.

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