

Educational Infrastructure, Access, and Learning Outcomes in Osogbo and Olorunda Local Government Areas of Osun State Nigeria

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ABSTRACT

Educational quality is shaped by infrastructure, teacher capacity, and access to learning resources. In Osun State, the adjoining LGAs of Osogbo and Olorunda Local Government Area present contrasting educational environments despite close proximity. This study comparatively assessed school distribution, infrastructural quality, teacher qualifications, WASH/ICT access, and five-year WAEC/NECO performance trends using a cross-sectional descriptive design. Forty-two schools were assessed through observation checklists and head-teacher interviews, alongside document review of examination reports (2019–2023). Findings show substantial disparities favouring Osogbo in classroom quality, laboratories, libraries, WASH facilities, ICT exposure, and proportion of qualified teachers. Examination pass rates (≥ 5 credits including English and Mathematics) were consistently higher in Osogbo with a persistent gap across years. The results demonstrate how peri-urban educational deprivation can exist within short geographic distances of urban advantage. Targeted policies—school renovation, rural teacher incentives, PPP-driven ICT access, and periodic infrastructure audits—are recommended to close the gap and promote equitable learning outcomes.

KEYWORDS

Educational inequality, infrastructure, teacher quality, Osogbo, Olorunda, learning outcomes

I. INTRODUCTION

Education underpins human capital, health, and productivity. Yet, within-state disparities persist where urban centers attract investment and talent while peri-urban communities rely on aging public infrastructure. This paper provides evidence for LGA-specific planning and equity-focused intervention between Osogbo and Olorunda.

Study Area Profile

A. Osogbo LGA



Figure 1. Osogbo, Osun State: Aerial view of city with spaces

B. Olorunda LGA



Figure 2. Osogbo is urban with dense public/private schools

Osogbo is urban with dense public/private schools and proximity to Osun State University. Olorunda is peri-urban/rural with aging public infrastructure and limited private provision.

II. LITERATURE REVIEW

Extensive evidence links facilities, teacher quality, WASH/ICT, and classroom environment to outcomes. Rural/peri-urban schools face shortages and weaker achievement; urban competition from private schools raises standards. Nigerian studies identify teacher distribution and infrastructure as decisive predictors of exam performance.

III. METHODOLOGY

1. Cross-sectional descriptive design
2. 42 schools (Osogbo = 24; Olorunda = 18)
3. Infrastructure checklist (classrooms, labs, libraries, WASH, ICT)
4. 30 head-teacher interviews

5. WAEC/NECO review (2019–2023)
6. Comparative descriptive analysis

IV. RESULTS

Table 1. Distribution of Public and Private Schools in Osogbo and Olorunda LGAs

LGA	Public Primary	Public Secondary	Private
Osogbo	18	12	35
Olorunda	22	10	6

Distribution of public and private schools showing Osogbo's private concentration and Olorunda's public dependence.

Table 2: Comparative Infrastructure Assessment Scores (Max = 100)

Facility	Osogbo	Olorunda
Classrooms	82	54
Laboratories	78	32
Libraries	74	28
WASH	80	40
ICT	69	18

Infrastructure disparities across key learning facilities.

Table 3: Teacher Qualification Profile

Qualification	Osogbo	Olorunda
B.Ed / B.Sc.Ed	68%	39%
NCE	22%	44%
Unqualified	10%	17%

Higher degree-qualified teacher presence in Osogbo.

Table 4: WAEC/NECO Pass Rate (≥ 5 Credits inc. Eng & Maths)

Year	Osogbo	Olorunda
2019	72%	41%
2020	75%	44%
2021	78%	46%
2022	80%	48%
2023	83%	52%

Persistent performance gap over five years.



Figure 4. Comparative Classroom and Laboratory Conditions



Figure 5. Visual comparison of learning environments between the LGAs.

V. DISCUSSION

A. Infrastructure Quality and Learning Environment (see Table 2; Figure 1)

Osogbo's superior classrooms, labs, libraries, and ventilation support concentration and practical learning. Olorunda's aging buildings and limited labs create structural barriers before instruction begins.

B. WASH Facilities, Student Health, and Attendance (see Table 2)

Better WASH in Osogbo supports attendance and dignity. Poor sanitation in Olorunda contributes to absenteeism and minor illnesses that reduce effective learning days.

C. ICT Exposure and Examination Readiness (see Table 2)

ICT presence in Osogbo enhances digital familiarity and access to learning aids. Near-absence in Olorunda widens readiness gaps for modern exam formats.

D. Teacher Qualification, Distribution, and Morale (see Table 3)

Qualified teachers cluster in Osogbo due to living conditions and opportunities, creating a talent drain from Olorunda.

E. Private School Presence and Competitive Spillover (see Table 1)

Private schools in Osogbo create performance pressure and ecosystem uplift; limited private presence in Olorunda reduces this effect.

F. Examination Performance Trends and Structural Advantage (see Table 4)

Persistent gaps reflect systemic advantages rather than student ability.

G. Urban Advantage vs Peri-Urban Educational Deprivation

Peri-urban deprivation can exist beside urban advantage when resource allocation favors visible centers.

H. Policy-Relevant Insights

Renovation, teacher incentives, PPP-ICT, and audits are direct, evidence-backed solutions.

I. Policy Implications

1. Priority renovation in Olorunda
2. Rural teacher incentive postings
3. PPP-enabled ICT labs
4. Annual infrastructure audits

VI. CONCLUSION

Geographic proximity does not ensure equal opportunity. LGA-specific investments are required to close gaps and improve outcomes.

REFERENCES

- [1] Akinbote, O. (2019). Challenges of rural education development in Nigeria. *Journal of Educational Planning and Administration*, 13(2), 45–58.
- [2] Adeyemi, T. O. (2020). Teacher quality and students' academic performance. *International Journal of Educational Research*, 8(1), 12–25.
- [3] Alabi, A. T. (2021). School infrastructure and achievement. *African Journal of Educational Studies*, 9(3), 77–91.
- [4] Federal Ministry of Education. (2021). National school census report. Abuja.
- [5] National Bureau of Statistics. (2022). Social statistics in Nigeria. Abuja.
- [6] Osun State Ministry of Education. (2023). Annual bulletin. Osogbo.
- [7] Owoeye, J. S., & Yara, P. O. (2018). School facilities and achievement. *Educational Research and Reviews*, 13(4), 120–127.
- [8] UNESCO. (2022). Global education monitoring report. Paris.
- [9] UNICEF Nigeria. (2021). Access to quality education. Abuja.
- [10] World Bank. (2021). Education quality in Sub-Saharan Africa. Washington, DC.
- [11] WAEC. (2019–2023). Chief examiners' reports. Lagos.
- [12] Ajayi, I. A., & Ayodele, J. B. (2017). Education inequality in Nigeria. *Journal of*

Sociology and Education in Africa, 15(2), 88–102.

[13] Adebayo, F. A. (2018). Teacher distribution and rural performance. Nigerian Journal of Educational Administration, 12(1), 33–47.

[14] Eze, T. I., & Nwosu, K. C. (2020). Classroom environment and performance. African Educational Research Journal, 8(2), 56–64.

[15] UNDP. (2020). Human development report. New York.