

EQUITY-FOCUSED RESOURCE ALLOCATION MODELS IN PUBLIC SCHOOLS

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Abstract

The study investigated the effectiveness of equity-focused resource allocation models in reducing educational disparities across diverse student populations in Nigerian public schools. The study was guided by four research questions and three hypotheses. A concurrent embedded mixedmethods design was adopted. The population of the study comprised 9,324 public secondary school stakeholders in six states across the six geopolitical zones of Nigeria. A stratified multistage sampling technique was used to draw 540 respondents, including school administrators, teachers, education board officials, and budget officers. The instruments for data collection were a structured questionnaire titled "Resource Allocation Equity Survey" (RAES), interview guides, and documentary analysis checklists. The instruments were face-validated by experts in education economics, policy, and evaluation. Reliability was established through a pilot test using Cronbach's alpha, yielding a coefficient of 0.88. Quantitative data were collected through questionnaire administration and analyzed using descriptive statistics (mean and standard deviation) and inferential statistics (t-tests and ANOVA). Qualitative data from interviews and case studies were analyzed thematically. Findings revealed that while Nigeria has adopted funding formulas intended to reduce disparities, their implementation suffers from inconsistencies and political interference. Disparities persist across geopolitical zones, urban-rural divides, and gender categories. The study concludes that existing models do not adequately serve equity objectives. It recommends a national realignment of funding formulas using equity weights,



transparency frameworks, and performance-based disbursements. The implications include the need for data-driven, context-sensitive planning in educational financing. One major limitation was the exclusion of private schools, and a suggestion for future research is to conduct a comparative analysis between public and private institutions using equity metrics.

Keywords: educational equity, resource allocation, funding formulas, public schools, Nigeria, disparities, case study

Introduction

Education is globally recognized as a fundamental human right and a powerful instrument for promoting social justice and economic advancement (UNESCO, 2021). However, in many developing countries, including Nigeria, the unequal allocation of educational resources perpetuates disparities among different student populations. Resource allocation models play a critical role in ensuring that educational inputs—such as qualified teachers, infrastructure, teaching materials, and operational funding—are distributed in a manner that compensates for disparities arising from geographic, economic, and social inequalities (Adebayo & Ogunlade, 2022). Despite the constitutional provisions in Nigeria that guarantee equal access to education, empirical data reveals stark inequities in per-pupil spending, school facilities, teacher-student ratios, and learning outcomes across regions and demographics (National Bureau of Statistics [NBS], 2022). For instance, the 2021 UBEC report shows that per-student expenditure in Lagos is more than three times higher than in Zamfara State, raising concerns about inter-regional equity in educational investment.

Equity-focused resource allocation refers to funding strategies that deliberately account for the differential needs of students and schools. Unlike equal distribution, which allocates the same amount per pupil regardless of context, equity models apply weighted funding formulas that prioritize disadvantaged groups, such as rural learners, students with disabilities, or learners from low socio-economic backgrounds (Ogbonna & Yusuf, 2021). Resource distribution strategies include vertical and horizontal equity approaches, needs-based formulas, decentralized budgeting, and performance-based funding. Each model has varying degrees of effectiveness, depending on governance structures, fiscal capacity, and implementation fidelity (Okebukola, 2023). Equity models in education are theoretically grounded in Rawls' Theory of Justice (Rawls, 1971, reinterpreted by Kuenzer, 2021), which prioritizes the needs of the least advantaged. The Capability Approach (Sen, 1999; Robeyns, 2020) also provides a philosophical underpinning for prioritizing funding based on potential educational outcomes, not just equal inputs.

The Nigerian educational system is highly decentralized, with different tiers of government responsible for resource disbursement. The Universal Basic Education Commission (UBEC)



allocates funds using a matching grant formula, while state governments are responsible for disbursement. This complexity often results in delays, leakages, and allocation inefficiencies.

The current study focuses on evaluating the effectiveness of these funding formulas in addressing educational disparities. The study area covers select public schools in the six geopolitical zones of Nigeria, allowing for a representative and comparative analysis. This is critical as the country pursues Sustainable Development Goal 4, which targets inclusive and equitable quality education for all by 2030 (UN, 2020).

Statement of the Problem

Equity in educational funding is critical for ensuring that all students, irrespective of their backgrounds, receive the support they need to achieve academic success. While Nigeria has adopted various allocation models, including matching grants and need-based resource allocation, disparities persist across rural-urban, regional, and gender lines. Ideally, public schools should receive funding proportional to their student population needs and infrastructural deficits. However, in reality, allocation is often influenced by political expediency, poor data management, and administrative inefficiencies. For instance, schools in remote areas continue to lack basic facilities despite years of government investment (UBEC, 2023). This mismatch between allocation policy and implementation outcomes raises a crucial question: To what extent are equity-focused funding formulas effective in reducing disparities in Nigeria's public schools?

Purpose of the Study

The purpose of this study is to evaluate the effectiveness of equity-focused resource allocation models in reducing educational disparities across diverse student populations in Nigerian public schools.

Specific Objectives:

- 1. To assess the level of disparity in resource allocation across selected public schools in Nigeria.
- 2. To examine the effectiveness of existing funding formulas in promoting equitable educational outcomes
- 3. To analyze stakeholder perceptions and experiences regarding resource distribution strategies.
- 4. To identify challenges affecting the implementation of equity-based resource allocation.
- 5. To propose policy recommendations for improving equity-focused funding models in Nigeria.

Research Questions

- 1. What is the extent of disparity in educational resource allocation across selected public schools in Nigeria?
- 2. How effective are existing funding formulas in achieving equitable educational outcomes?



- 3. What are the perceptions and experiences of stakeholders on the fairness of resource distribution strategies?
- 4. What challenges hinder the implementation of equity-focused resource allocation models?
- 5. What policy recommendations can enhance the effectiveness of funding formulas in public schools?

Hypotheses

H01: There is no significant difference in resource allocation disparities across geopolitical zones.

H02: Existing funding formulas do not significantly predict equitable educational outcomes.

H03: Stakeholder perceptions do not significantly influence implementation of equity-based allocation strategies.

Significance of the Study

Practical Significance: This study will benefit policymakers in the Ministry of Education, state education boards, and school administrators by providing empirical evidence for refining allocation models. Teachers and students in underserved regions will benefit from advocacy-driven improvements in resource access. NGOs and international donors working on education equity will gain insight into Nigeria's funding gaps and potential interventions.

Theoretical Significance: The study will contribute to the validation and adaptation of the Capability Approach and the Rawlsian Justice Framework in the context of public educational finance in Nigeria. Findings will enrich discourse on localized implementation of global equity frameworks.

Scope of the Study

Variables: Funding formulas, resource distribution, stakeholder perception, equity outcomes.

Population: Public secondary schools in six Nigerian states, representing each geopolitical zone.

Content Scope: The study covers funding policy, implementation practices, stakeholder feedback, and equity outcomes.

Geographical Scope: Six states (e.g., Lagos, Kaduna, Enugu, Bauchi, Rivers, and Benue). The states were selected for their diverse socio-economic and political structures to ensure representativeness.



Literature Review

This section reviews literature relevant to the investigation of equity-focused resource allocation models in public schools. The review is organized under the following major headings: Conceptual Framework, Theoretical Framework, Review of Empirical Studies, and Summary of Literature Review. Each section provides a scholarly foundation and contextual justification for the present study.

Conceptual Framework

Equity in Education: Equity in education refers to the principle of fairness in the distribution of educational resources, opportunities, and outcomes, particularly among learners from diverse socio-economic, regional, and cultural backgrounds. It recognizes that not all learners start from the same point and, therefore, differentiated support is required to achieve similar learning outcomes (OECD, 2022). Equity is distinct from equality, which implies sameness in distribution; equity accounts for individual and contextual disparities. In Nigeria, equity is central to the National Policy on Education, which aims to provide inclusive access to quality education regardless of location, gender, disability, or socio-economic status (Federal Ministry of Education, 2020). Despite this, many public schools in marginalized areas remain underfunded, with limited access to trained teachers, learning facilities, and support services.

Operational Definition: In this study, equity is defined as the degree to which public education funding and resources are distributed based on assessed needs, with the aim of reducing disparities in learning outcomes across diverse student populations.

Resource Allocation: Resource allocation refers to the process of distributing educational inputs such as financial capital, human resources, instructional materials, and infrastructure among schools or educational units. The objective of resource allocation is to optimize the use of scarce educational resources for maximum impact (Alabi & Egbokhare, 2021). Funding models typically used in Nigeria include per-pupil funding, formula-based allocations, matching grants from UBEC, and discretionary spending by state ministries. However, inefficiencies and lack of transparency have been identified in these mechanisms (World Bank, 2022).

Operational Definition: Resource allocation in this study refers to the strategic distribution of funds and educational resources by federal, state, and local governments to public schools, using needs-based or formula-based approaches.

Funding Formulas: A funding formula is a standardized method used to determine how much financial resource each school or educational unit should receive, based on factors such as enrollment size, location, student needs, and infrastructure status (Jimenez & Yilmaz, 2021). Common formula components include base allocation, need-based weights, equity weights, and performance incentives.



Operational Definition: In this study, funding formulas refer to codified mechanisms used by government agencies to allocate financial resources to public schools with emphasis on equity and efficiency.

Educational Disparities: Disparities in education are the differences in access, quality, and outcomes experienced by students from different demographic or geographic backgrounds. In Nigeria, disparities are prominent along rural-urban, gender, and regional lines. For example, northern states generally lag behind southern states in terms of school completion rates and basic literacy (UNICEF, 2023).

Operational Definition: Disparities refer to measurable gaps in educational resources and outcomes among student populations differentiated by location, gender, or socio-economic status.

Conceptual Schema and Verbal Description

Concepts:

Inputs: Funding Formulas, Stakeholder Perceptions

Processes: Resource Allocation Strategies

Outputs: Equity in Resource Distribution

Outcomes: Reduction in Educational Disparities

The schema illustrates the hypothesized relationship that equity-oriented funding formulas, mediated through effective allocation processes and influenced by stakeholder perceptions, will lead to more equitable distribution of educational resources and ultimately reduce disparities.

Theoretical Framework

This study is anchored on two major theories, namely, Rawls' Theory of Justice (Rawls, 1971; Kuenzer, 2021), and Capability Approach (Sen, 1999; Robeyns, 2020).

Rawls' Theory of Justice (Rawls, 1971; Kuenzer, 2021): Rawls postulates two principles of justice: (a) equal basic liberties for all, and (b) social and economic inequalities should be arranged to benefit the least advantaged (the "difference principle"). Applied to education, this theory implies that funding mechanisms should favor marginalized groups to ensure fairness in opportunity. In this context, Rawls' theory justifies the allocation of more resources to schools in underserved or disadvantaged areas as a means of rectifying structural inequities.

Capability Approach (Sen, 1999; Robeyns, 2020): The Capability Approach emphasizes that development should focus not only on resource distribution but also on enhancing individuals' freedoms and capabilities to achieve desired outcomes. In education, this translates to allocating



resources not merely based on equal distribution, but based on each learner's potential and contextual needs.

Schema for Theoretical Framework:

Inputs: Resource Allocation Policies

Moderators: Institutional Factors, Political Will

Processes: Stakeholder Engagement, Formula Application

Outcomes: Enhanced Capabilities, Justice in Learning Opportunities

The two theories are complementary in justifying equity-based funding. Rawls provides a normative framework (what should be done), while Sen focuses on capabilities (what individuals are enabled to do).

Review of Empirical Studies

Adebayo and Ogunlade (2022). Title: Analyzing Educational Funding and Access in Rural Nigeria. Design: Survey. Sample: 300 secondary school stakeholders in Kwara State. Findings: Resource allocation was heavily skewed in favor of urban schools. Rural schools lacked laboratories, qualified teachers, and digital infrastructure. Weaknesses: No comparative metric for equity; limited to one state. Gap Addressed: Present study uses multi-state comparative data and incorporates an equity index.

Jimenez and Yilmaz (2021). Title: Equity in Public School Financing: A Review of Sub-Saharan African Approaches. Design: Meta-analysis. Findings: Funding formulas with equity weights improved learning outcomes in Tanzania and Kenya. Weaknesses: No primary data from Nigeria; generalized analysis. Gap Addressed: This study generates Nigerian-based data and applies context-specific analysis.

Olatunji and Umeh (2023). Title: Stakeholder Perspectives on Education Financing in Nigeria. Design: Mixed-method. Sample: 120 education administrators across three states. Findings: Distrust and poor communication between federal and state actors undermined allocation effectiveness. Weaknesses: Did not examine actual disparities across student populations. Gap Addressed: Current study includes quantitative disparity analysis across regions and stakeholder categories.

Okebukola (2023). Title: Rethinking Resource Distribution in Nigerian Schools. Design: Case study. Findings: Allocation is hampered by poor data, political capture, and poor monitoring. Weaknesses: Case study limited to Lagos State. Gap Addressed: Present study incorporates diverse regions and quantifies impact on student equity.



Summary of Literature Review

Operational Definitions Reaffirmed: Equity is the fair distribution of educational inputs based on learner needs. Resource allocation refers to planned disbursement of school inputs using specific formulas.

Theories Anchored: Rawls' Theory of Justice supports redistribution to least advantaged. Sen's Capability Approach emphasizes contextual responsiveness in funding.

Empirical Studies Reviewed: 4: Highlighted disparities in existing funding practices; Identified weaknesses such as lack of national comparative data and absence of stakeholder analysis.

Gaps Identified: Most prior studies are state-specific, descriptive, or lack stakeholder analysis. The present study addresses these gaps by combining quantitative metrics and stakeholder perceptions across six Nigerian states.

Contribution of Current Study: Provides evidence-based evaluation of equity-focused funding formulas. Proposes data-driven strategies for improving funding distribution across public schools.

Methods

This study employed a concurrent embedded mixed-methods design, prioritizing quantitative data (questionnaires from 540 respondents) to statistically evaluate equity-focused funding in public secondary schools, while embedding qualitative data (interviews with 12 key informants and documentary analysis) to explore contextual experiences. The study spanned six Nigerian states, one from each geopolitical zone (Kaduna, Bauchi, Benue, Lagos, Enugu, Rivers), selected for diverse educational policies and disparities. The population included 9,324 public secondary school stakeholders (administrators, principals, teachers, budget/planning officers) across these states. A multi-stage stratified random sampling selected 90 respondents per state, representing each stakeholder group. Three instruments were used: the Resource Allocation Equity Survey (RAES) (a 4-point Likert scale questionnaire, pilot-tested with Cronbach's Alpha of 0.88), an Interview Guide for key informants, and a Documentary Checklist for budget reports (2020-2023). Instruments' validity was confirmed by expert review. Quantitative data were collected in-person by research assistants (92% response rate) and analyzed using descriptive statistics, independent t-tests, regression, and ANOVA (SPSS v.26, P < 0.05). Qualitative data from interviews (inperson/Zoom) and documents were analyzed via thematic content analysis using NVivo, triangulating findings with quantitative results.



Results

Research Question One:

What is the extent of disparity in educational resource allocation across selected public schools in Nigeria?

Table 1: Perceived Disparity in Resource Allocation Across Geopolitical Zones (N = 540)

Item	Statement	SA	\mathbf{A}	D	SD	Mean	Std.	Decision
							Dev	
1	Some schools receive significantly more funding than others.	278	198	45	19	3.37	0.71	Agree
2	Rural schools often lack adequate infrastructure compared to urban schools.	301	177	40	22	3.41	0.65	Agree
3	Female-focused schools receive less attention in funding.	204	207	95	34	3.08	0.79	Agree
4	Resource disparities affect student academic performance.	312	159	51	18	3.43	0.62	Agree
5	Regional disparities exist in budgetary allocations.	276	198	45	21	3.35	0.69	Agree

Interpretation:

All items had mean scores above 3.00, indicating that stakeholders perceive significant disparities in funding distribution across regions, with particular disadvantages for rural and female-focused schools. Standard deviations are relatively low, showing consistency in perceptions across respondents.

Hypothesis One:

There is no significant difference in resource allocation disparities across geopolitical zones.

Table 2: ANOVA Summary of Resource Allocation Disparities by Geopolitical Zone

Source of Variation	SS	df	MS	F	Sig. Level	Decision
Between Groups	27.52	5	5.50	4.62	0.001	Reject H₀
Within Groups	634.79	534	1.19			
Total	662.31	539				

Interpretation:

Since the calculated p-value (0.001) is less than 0.05, the null hypothesis is rejected. This indicates that there is a statistically significant difference in the perception of resource allocation disparities across the six geopolitical zones.



Research Question Two:

How effective are existing funding formulas in achieving equitable educational outcomes?

Table 3: Effectiveness of Current Funding Formulas in Promoting Equity (N = 540)

Item	Statement	SA	A	D	SD	Mean	Std.	Decision
							Dev	
6	UBEC matching grants help address	192	204	96	48	3.01	0.84	Agree
	local funding gaps.							
7	Current formulas include equity-	127	190	145	78	2.71	0.92	Disagree
	weighted factors (e.g., rurality).							
8	Funding formulas are often	265	189	57	29	3.28	0.72	Agree
	manipulated by political interests.							
9	Schools with high enrolment get	156	208	121	55	2.95	0.81	Agree
	proportionate allocations.							
10	Funding formulas align with	109	178	158	95	2.64	0.93	Disagree
	students' learning needs.							

Interpretation:

While some aspects of funding formulas are viewed positively (e.g., UBEC grants), others—particularly equity-weighted factors and alignment with learning needs—are viewed as ineffective. The mean scores reflect moderate effectiveness and stakeholder dissatisfaction with technical implementation.

Hypothesis Two:

Existing funding formulas do not significantly predict equitable educational outcomes.

Table 4: Regression Analysis Summary – Funding Formula Effectiveness and Equity Outcomes

Model	R	R ²	Adj. R²	Std. Eri	ror F	Sig.	Decision	
1	0.593	0.352	0.348	0.719	52.61	0.000	Reject Ho	
Coefficients:								
Predict	tor			В	Std. Error	t	Sig.	
(Consta	int)			1.20	0.15	8.00	0.000	
Funding	g Formula S	Score		0.65	0.09	7.25	0.000	

Interpretation:

The regression model shows that funding formula effectiveness significantly predicts equity in educational outcomes, with an R² of 0.352. The null hypothesis is rejected. Therefore, **effective** funding formulas contribute meaningfully to equity improvements in public schools.



Research Question Three:

What are the perceptions and experiences of stakeholders on the fairness of resource distribution strategies?

Table 5: Stakeholder Perceptions of Fairness in Resource Distribution (N = 540)

Item	Statement	SA	A	D	SD	Mean Std.	Decision
						Dev	
11	Distribution strategies consider	123	168	156	93	2.70 0.91	Disagree
	student socio-economic needs.						
12	Teachers in rural areas feel	98	112	195	135	2.40 0.98	Disagree
	supported by resource allocation.						
13	Equity considerations are	108	151	173	108	2.66 0 .93	Disagree
	communicated to stakeholders.						
14	Allocation decisions are transparent	91	125	182	142	2.46 0.97	Disagree
	and participatory.						
15	Funding priorities reflect field	105	134	180	121	2.58 0.91	Disagree
	realities.		K				

Interpretation:

Stakeholders expressed dissatisfaction with fairness, transparency, and relevance of resource distribution strategies. All items had means below 3.00, indicating negative perceptions and distrust toward current allocation systems.

Hypothesis Three:

Stakeholder perceptions do not significantly influence implementation of equity-based allocation strategies.

Table 6: Regression Summary - Stakeholder Perception and Implementation Effectiveness

Model	R	R ²	Adj. R ²	Std. Error	F	Sig.	Decision
1	0.478	0.228	0.224	0.683	26.34	0.000	Reject Ho

Interpretation:

Stakeholder perception significantly influences the effective implementation of equity-based funding. With an R^2 of 0.228 and p-value < 0.05, the null hypothesis is rejected.

Research Question Four:

What challenges hinder the implementation of equity-focused resource allocation models?

Table 7: Challenges to Implementation of Equity-Focused Models (N = 540)

Item	Statement	SA	A	D	SD	Mean	Std.	Decision
							Dev	
16	Political interference affects equitable disbursement.	287	176	51	26	3.35	0.73	Agree
17	Poor data systems undermine needs assessment.	292	181	46	21	3.38	0.69	Agree
18	Budget delays affect school operations.	276	192	50	22	3.35	0.71	Agree
19	Lack of training limits equitable fund utilization.	263	183	64	30	3.26	0.77	Agree
20	No monitoring and feedback mechanism exists.	278	187	49	26	3.30	0.74	Agree

Interpretation:

All items scored above 3.00, indicating high consensus on key challenges such as political interference, data limitations, and poor implementation capacity.

Qualitative Triangulation:

Key themes from interview responses confirmed the above findings:

Political Capture: "Funds are often redirected by local elites before reaching schools."

Data Gaps: "We don't have accurate school data to base decisions on—allocations are often guesses."

Training Needs: "Many principals don't know how to manage or advocate for equitable resources."

Conclusion

Findings indicate that while funding formulas exist, disparities persist due to implementation gaps, weak data infrastructure, and inadequate stakeholder involvement. Stakeholders perceive distribution strategies as unfair, and these perceptions significantly affect implementation outcomes.



Discussion of Findings

Research Question One and Hypothesis One:

Extent of Resource Allocation Disparities Across Public Schools

The study found substantial disparities in educational resource distribution across Nigeria's geopolitical zones. Respondents affirmed that urban schools and those in wealthier states consistently receive better funding and resources. Hypothesis testing using ANOVA showed a statistically significant difference (p < 0.05) in perceptions of disparity across zones. These findings align with Adebayo and Ogunlade (2022), who reported unequal school funding in rural Kwara State. They also corroborate Jimenez and Yilmaz (2021), who emphasized that funding equity remains a critical concern in Sub-Saharan Africa. The results also reinforce the application of Rawls' Theory of Justice, which asserts that the least advantaged should receive greater support to achieve fairness.

Research Question Two and Hypothesis Two:

Effectiveness of Funding Formulas in Promoting Equity

Quantitative findings indicated moderate effectiveness of current funding formulas. While UBEC grants were positively perceived, most respondents disagreed that existing formulas include equity-weighted considerations or align with students' contextual learning needs. Regression analysis showed that funding formula effectiveness significantly predicted equitable educational outcomes ($R^2 = 0.352$, p < 0.05). The result agrees with findings by Jimenez and Yilmaz (2021), who documented the positive impact of equity-weighted funding in Kenya. However, it contrasts with Okebukola (2023), who emphasized the technical failure of existing Nigerian allocation mechanisms. The findings also reflect Sen's Capability Approach, underscoring that resource allocation should empower learners according to their specific capabilities and environments.

Research Question Three and Hypothesis Three:

Stakeholders' Perception and Fairness of Distribution

Most stakeholders expressed dissatisfaction with the fairness and transparency of current distribution strategies. All measured items had mean values below 3.00. Regression analysis revealed that stakeholder perceptions significantly influence the implementation of equity-focused models ($R^2 = 0.228$, p < 0.05). This is supported by Olatunji and Umeh (2023), who found that stakeholders' distrust of funding mechanisms undermined equitable policy implementation. The finding validates that participatory planning and trust-building are essential in improving the effectiveness of resource distribution models.



Research Question Four:

Challenges Hindering Equity-Focused Allocation

Respondents identified key barriers: political interference, unreliable data systems, budget delays, lack of capacity, and absence of feedback systems. All items scored above a 3.00 mean, indicating strong consensus. These challenges mirror those outlined by the World Bank (2022), which emphasized the influence of political capture and poor data management on Nigerian education finance. The study's findings also echo those of Okebukola (2023), who observed that ineffective monitoring and capacity limitations stall equity implementation.

Conclusion

This study has shown that resource allocation disparities persist across Nigeria's public schools due to ineffective funding formulas, political interference, and lack of transparency. Despite policy intentions, funding does not always target the most disadvantaged schools or learners. Stakeholder perception plays a significant role in implementation success. Therefore, equity-focused resource allocation must go beyond formulas to include participatory processes, strong data systems, and capacity building.

Contributions to Knowledge

- 1. The study provides empirical evidence on geographic disparities in Nigerian school funding using both perception data and statistical validation.
- 2. It introduces a Nigerian-specific evaluation model combining stakeholder perception and equity indices.
- 3. The study demonstrates the predictive role of stakeholder engagement in the successful implementation of funding reforms.
- 4. It enriches the application of Rawls' and Sen's theories to African education finance research.
- 5. It offers policy-relevant insights into regionalized and equity-driven educational funding models.

Educational Implications of the Findings

- 1. **Policy Formulation:** The findings imply that equity-based funding requires not just technical formulas but participatory and transparent policy environments.
- 2. **Capacity Building:** Training of school heads and administrators is essential for interpreting and applying equitable allocation tools.
- 3. Data Systems: Improved school-level data is crucial for needs-based planning and monitoring.
- 4. **Monitoring Mechanisms:** Stakeholder-involved feedback loops can enhance trust and effective resource utilization.



5. **Inclusive Governance:** Empowering local education boards in funding decisions may mitigate political influence.

Recommendations

- 2. **Revise Funding Formulas:** Include variables such as rurality, female enrolment, infrastructure deficit, and socio-economic vulnerability to increase equity sensitivity.
- 3. **Improve Data Infrastructure:** Establish an Education Resource Allocation Dashboard with real-time school-level data.
- 4. **Strengthen Stakeholder Involvement:** Regular consultation with school heads, parents, and local authorities on resource allocation.
- 5. Legislate Equity Oversight Mechanisms: Create equity-focused audit bodies at federal and state levels to monitor allocation processes.
- 6. **Build Implementation Capacity:** Provide training for principals, budget officers, and planners on equity-based budgeting.

References

- Adebayo, T., & Ogunlade, R. (2022). Educational Funding and Access in Rural Nigeria: An Empirical Analysis. Journal of African Development Studies, 17(1), 45–60.
- Alabi, T. O., & Egbokhare, F. O. (2021). Resource Allocation and Utilization in Nigeria's Basic Education Sector. Nigerian Journal of Educational Management, 29(2), 112–130.
- Federal Ministry of Education. (2020). *National Policy on Education* (6th ed.). Abuja: NERDC.
- Jimenez, E., & Yilmaz, S. (2021). *Equity in Public School Financing in Africa*. World Bank Policy Paper Series, 2021/09.
- Kuenzer, C. (2021). Revisiting Rawls in Education: Justice and the Least Advantaged. Journal of Moral Education, 50(1), 88–102.
- OECD. (2022). Education at a Glance 2022: OECD Indicators. Paris: OECD Publishing.
- Ogbonna, C. N., & Yusuf, H. O. (2021). Equity in education funding and resource allocation: A panacea for sustainable development in Nigeria. *International Journal of Research and Innovation in Social Science (IJRISS)*, 5(10), 456–465.
- Okebukola, P. (2023). *Rethinking Educational Resource Distribution in Nigeria*. Lagos: Sterling Education Publishers.
- Olatunji, A., & Umeh, C. (2023). *Stakeholder Perception and Education Financing in Nigeria*. African Educational Research Review, 15(3), 99–117.



- Rawls, J. (1971). A theory of justice. Belknap Press of Harvard University Press.
- Robeyns, I. (2020). The capability approach. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Fall 2020 ed.). Metaphysics Research Lab, Stanford University.
- Robeyns, I. (2020). *The Capability Approach: A Theoretical Survey*. Journal of Human Development and Capabilities, 21(1), 1–15.
- Sen, A. (1999). Development as freedom. Oxford University Press.
- UN. (2020). The Sustainable Development Goals Report 2020. United Nations.
- UNESCO. (2021). Reimagining our futures together: A new social contract for education. UNESCO Publishing.
- UNICEF. (2023). Education Disparities in Nigeria: Annual Situation Analysis. Abuja: UNICEF Nigeria Office.
- World Bank. (2022). Education Public Expenditure Review: Nigeria. Washington, DC: World Bank Publications.

