

Primary and Early Childhood Care Education (ECCE) Teachers Perception of Their Teaching Effectiveness and Monitoring Challenges in Plateau State

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ABSTRACT

This study examined primary and early childhood care education (ECCE) teachers' perceptions of teaching effectiveness and monitoring challenges in Plateau State, Nigeria. Using a survey design, 100 teachers were selected through stratified random sampling across the 17 Local Government Areas. Data was collected using the "Teacher Effectiveness Assessment Questionnaire (TEAQ)," a five-point Likert scale instrument based on the Nigerian Professional Standards for Teachers framework. The study was anchored on Bandura's Social Cognitive Theory and Vygotsky's Sociocultural Theory to understand teacher development through observation, feedback, and collaborative support systems. Results revealed that teachers perceived their content knowledge and curriculum implementation as good (mean = 3.48) but showed neutral ratings for teaching strategies (3.34), classroom management (3.41), assessment and feedback (3.43), and professional conduct and development (3.21). Key challenges identified included very low ICT integration in teaching (mean = 2.26), limited familiarity with Nigerian Professional Standards for Teachers (2.58), and difficulties with large class sizes affecting individual student assessment (3.51). The monitoring system showed significant deficiencies with moderate frequency/quality ratings (3.25) and low feedback mechanisms (2.49), primarily due to inadequate funding, transportation constraints, and punitive rather than developmental approaches.

The study reveals a striking finding: just 30% of teacher's exhibit high effectiveness in their roles, highlighting a significant gap between urban and rural schools.

Keywords: Monitoring, Teacher Effectiveness.

INTRODUCTION

Teacher effectiveness plays a pivotal role in shaping the quality of education at the primary and Early Childhood Care and Education (ECCE) levels. Understanding and enhancing this effectiveness is essential for fostering a brighter future for our students. Effective teaching lays the foundation for children's cognitive, emotional, and social development in primary and early childhood education. Teacher performance is influenced by numerous factors, including classroom management skills, content knowledge, professional training, institutional support, and mentoring provision (Darling-Hammond et al., 2017; Goe & Stickler, 2008). Research indicates that teacher quality accounts for approximately 30-40% of the variance in student achievement, making it one of the most significant school-based factors (Hattie, 2009).

One worrisome factor plaguing the quality of teacher effectiveness is the monitoring of teaching and learning. The quality of education at any level, particularly at the Primary and Early Childhood Care stage, depends significantly on teacher quality and proper monitoring systems. Research supporting this assertion (Kane & Staiger, 2012; Kraft & Papay, 2014) indicates that teacher quality is the most important school-based factor influencing student achievement. Nigerian researchers have consistently shown that inadequate monitoring of teachers in Nigerian primary schools correlates with a significant decline in academic performance outcomes (Adeyemi, 2008; Okwori & Ede, 2012).

Governments have established departments tasked with maintaining high teaching standards and implementing effective monitoring mechanisms to ensure effective teaching at all levels of learning. In Nigeria, bodies such as the Universal Basic Education Commission (UBEC), State Universal Basic Education Boards (SUBEBs), and the Teachers Registration Council of Nigeria (TRCN) are mandated with this responsibility (Akinwumi, 2008; Tahir, 2006).

Over the past decade, educational systems worldwide have faced significant challenges, particularly in student achievement (OECD, 2019). This decline in achievement may be related to teacher competence issues. The situation is particularly challenging at the primary and early childhood levels (Darling-Hammond, 2000). Nigerian studies show that the pupil-teacher ratio in Nigerian public primary schools ranges from 60:1 to 120:1 in some northern states, far exceeding the national policy standard of 35:1, making effective teaching and monitoring more challenging (Federal Ministry of Education, 2013).

Yoshikawa et al. (2013) posited that teachers are critical in shaping children's cognitive, social, and emotional development during formative years, particularly at the lower primary and early childhood care levels. Studies across multiple countries demonstrate that effective teaching in the early years can lead to improved life outcomes, reduced educational inequality, and enhanced social mobility (Heckman, 2006; Cunha & Heckman, 2007). Research shows that states with higher percentages of qualified early childhood teachers demonstrate significantly higher literacy rates among children entering primary school (Barnett et al., 2013).

Hill et al. (2005) asserted that teacher effectiveness and monitoring-related challenges can be substantial barriers to achieving these potential benefits. UNESCO (2014) reported that a significant percentage of primary school teachers in developing countries, including Nigeria, do not possess the minimum required qualifications, with the situation being more pronounced in rural areas, hence the need for monitoring systems. Monitoring will ensure that teachers perform effectively. These parameters aim to assess teacher effectiveness, identify enhancement areas, and provide professional growth guidance. In Nigeria, particularly across various states, there are many obstacles to effectively monitoring teacher performance in primary and early childhood environments. Several critical factors contribute to the challenges faced by educational institutions, particularly in developing regions. These include insufficient oversight mechanisms, a lack of standardized monitoring tools, and inadequate training programs for head teachers and inspectors (Akinwumi, 2008; Okwori & Ede, 2012).

Recent global assessments have revealed a significant issue in the education sector: inconsistent teaching practices. This variability negatively impacts education quality and hinders educational institutions' overall progress.

There is an urgent need to develop and implement effective strategies that address these shortcomings and promote consistent teaching excellence. This challenge arises from inadequate support systems, including a lack of opportunities for professional development for educators and limited access to essential resources needed for effective teaching. The evaluation frameworks used to assess teaching effectiveness are frequently inadequate or entirely lacking, leaving many schools without the essential tools needed to identify areas for improvement. This situation is worsened by the increasing number of students in classrooms, which raises the demand for quality education and puts additional strain on existing resources. As class sizes expand, teachers find it increasingly challenging to accommodate a diverse range of learning needs. This complexity renders it progressively more difficult to provide personalized attention and tailored educational strategies. An educational environment that lacks equity creates significant challenges in providing high-quality education for all students. This situation impacts learning outcomes and future opportunities significantly.

Additionally, students' diverse learning needs—ranging from varying abilities and backgrounds to different learning styles—demand tailored instructional approaches. Along with the swift advancement of educational technologies that necessitate teachers to constantly adapt and enhance their skills, fulfilling these requirements becomes more challenging (World Bank, 2018). Against this backdrop, the present study assesses primary and early childhood care education (ECCE) teachers' perception of their teaching effectiveness and monitors challenges in Plateau state.

Statement of the Problem

A 2020 global study by UNESCO highlighted a decline in teacher effectiveness, limited opportunities for professional development, increasing complexities in classrooms, and insufficient monitoring systems. These challenges have the potential to impact learning outcomes negatively. In the Nigerian context, studies indicate that a significant percentage of primary school pupils fail to meet basic literacy and numeracy standards (Adekola, 2007).

Despite implementing various educational reforms and teacher support initiatives, many primary and ECCE teachers continue to perform below expected standards and attribute this situation to a lack of monitoring.

The absence of effective monitoring mechanisms often results in unaddressed issues related to lesson delivery, classroom discipline, and curriculum implementation (Kane & Staiger, 2012).

Furthermore, school supervisors and administrators overseeing teachers frequently encounter challenges such as understaffing, lack of transportation, insufficient training, and outdated monitoring tools. As a result, they cannot conduct regular, comprehensive classroom observations or provide timely feedback to teachers. This leads to a situation where teacher performance is not effectively assessed or improved, impacting student learning outcomes (Marshall, 2013; Kraft & Papay, 2014).

Purpose of the Study

The purpose of this study is to examine primary and ECCE teacher's perception of their teaching effectiveness of teachers as it relates to monitoring challenges in Plateau State. The study aims to identify gaps in teaching quality and explore the mechanisms used for monitoring to propose solutions for enhancing teacher performance and monitoring effectiveness.

Research Objectives

1. To assess the perception of primary and ECCE teachers on their teaching effectiveness in curriculum implementation, pedagogy, classroom management and assessment.
2. This study aims to identify challenges encountered in monitoring teacher performance in terms of the frequency and quality of feedback, support mechanisms, and monitoring practices.
3. To assess how existing monitoring practices affect the quality of teaching.

Research Questions

1. What is the primary and ECCE teachers' perception of their teaching effectiveness in curriculum implementation?
2. What is the perception of primary and ECCE teachers on their teaching effectiveness in pedagogy?
3. What is the primary and ECCE teachers' perception of teaching effectiveness in classroom management?
4. What is the primary and ECCE teachers' perception of their teaching effectiveness in assessment and feedback?

Theoretical Framework

This study is based on two theoretical frameworks: Bandura's Social Cognitive Theory (1986) and Vygotsky's Sociocultural Theory (1978). Bandura's theory highlights the importance of observation, modelling, and feedback in learning and professional development. The text recommends that teachers improve their skills by using clear teaching methods, learning from more experienced coworkers, getting feedback on how they are

doing, and taking time to think about their teaching practices. This theory is particularly relevant to understanding how monitoring systems influence teacher behavior and development through observation and feedback mechanisms.

Vygotsky's concept of the Zone of Proximal Development (ZPD) provides a framework for understanding teacher professional growth as a socially mediated process. It suggests that teachers can achieve higher levels of effectiveness when supported by more knowledgeable others (e.g., supervisors and mentors) within a collaborative environment (Vygotsky, 1978). This theory informs the study's approach to examining how monitoring systems can be designed to provide scaffolding for teacher development rather than merely evaluating performance.

METHODOLOGY

This study employs a survey design to assess primary and ECCE teachers' perceptions of the challenges of innovation and technology integration related to teacher effectiveness.

The target population consisted of primary and ECCE teachers in Plateau State. Stratified random sampling was used to select participants, ensuring representation across urban, semi-urban, and rural areas. Based on power analysis (Cohen, 1988) and considering the population size, a sample of 100 teachers was selected from across the 17 LGAS of Plateau State.

The instrument used for data collection was a five-point Likert scale titled "Teacher Effectiveness Assessment Questionnaire (TEAQ)" developed by the researchers. It is a well-structured questionnaire based on the Nigerian Professional Standards for Teachers framework, measuring classroom management, content knowledge, teaching methods, assessment practices and professional conduct. The data was analyzed using descriptive statistics (frequency counts, means and standard deviation)

Research Question 1

What are Plateau State primary and ECCE teachers' perceptions of teaching effectiveness in curriculum implementation, pedagogy, classroom management, assessment, and feedback?

Table 1: Mean Score and Standard Deviation of Primary and ECCE Teachers on their Perception of their Teaching Effectiveness in the area of Content Knowledge and Curriculum Implementation

Item	Statement	SD	D	N	A	SA	Mean	SD	Interpretation
1	I have a thorough knowledge of the curriculum content for the subjects I teach	10	12	20	18	40	3.58	1.37	High
2	I can explain complex concepts in ways that students can understand	17	21	3	24	35	3.49	1.54	High
3	I regularly update my knowledge of the subject matter through reading and research	11	8	18	30	33	3.58	1.32	High
4	I can identify and address common misconceptions in the subjects I teach	10	8	13	33	36	3.71	1.30	High
5	I effectively connect curriculum content to real-life situations and examples	6	9	35	24	26	3.44	1.15	High
6	I find it challenging to cover the entire curriculum within the	9	10	11	31	39	3.76	1.32	High

	academic year								
7	I adapt the curriculum to meet the diverse needs of my students	10	10	36	24	20	3.30	1.20	Neutral
8	I understand how to sequence learning activities to build progressively on students' knowledge	17	13	39	15	16	3.00	1.27	Neutral
Overall Mean for Content Knowledge and Curriculum Implementation							3.48	1.31	High

Research Question 2

What is the perception of primary and ECCE teachers on their teaching effectiveness in pedagogy?

Table 2: Mean score and Standard deviation of primary and ECCE teachers on their perception of their teaching effectiveness in the area of Teaching Strategies

Item	Statement	SD	D	N	A	SA	Mean	SD	Interpretation
9	I use a variety of teaching methods to engage students with different learning styles	9	16	20	30	25	3.45	1.27	High
10	I incorporate play-based learning in my teaching (especially for ECCE and lower primary)	10	10	3	40	37	3.80	1.32	High
11	I use available teaching aids and learning materials effectively	6	6	26	32	30	3.68	1.13	High
12	I create my teaching materials when commercially produced ones are not available	15	22	13	31	28	3.39	1.46	Neutral
13	I use inquiry-based and problem-solving approaches in my teaching	14	23	14	30	28	3.38	1.44	Neutral
14	I incorporate group work and collaborative learning activities in my lessons	14	20	11	29	26	3.29	1.43	Neutral
15	I differentiate instruction to accommodate students with different abilities	16	12	13	24	35	3.50	1.48	High
16	I incorporate Information and Communication Technology (ICT) in my teaching where possible	35	38	5	15	7	2.26	1.27	Low
Overall Mean for Teaching Methods and Strategies							3.34	1.35	Neutral

Research Question 3

What is the primary and ECCE teachers' perception of teaching effectiveness in classroom management?

Table 3: Mean score and Standard deviation of primary and ECCE teachers on their perception of their teaching effectiveness in the area of Classroom Management and Learning Environment

Item	Statement	SD	D	N	A	SA	Mean	SD	Interpretation
17	I establish clear rules and routines for classroom behavior	11	12	10	34	29	3.47	1.37	High
18	I maintain an orderly and conducive learning environment	9	10	9	37	35	3.74	1.30	High
19	I manage student behavior effectively without resorting to corporal punishment	18	12	17	26	27	3.28	1.45	Neutral
20	I create a classroom atmosphere where students feel safe to express themselves	8	15	9	33	35	3.65	1.32	High
21	I organize the physical space in my classroom to facilitate learning	15	27	3	30	25	3.29	1.48	Neutral
22	I struggle to maintain discipline in my classroom due to large class sizes	16	18	9	22	35	3.40	1.53	Neutral
23	I use positive reinforcement strategies to encourage good behavior	18	17	10	30	25	3.34	1.47	Neutral
24	I involve students in establishing classroom rules and procedures	21	26	4	24	25	3.08	1.56	Neutral
Overall Mean for Classroom Management and Learning Environment							3.41	1.44	High

Research Question 4

What is the primary and ECCE teachers' perception of their teaching effectiveness in assessment and feedback?

Table 4: Mean score and Standard deviation of primary and ECCE teachers on their perception of their teaching effectiveness in the area of Assessment and Feedback

Item	Statement	SD	D	N	A	SA	Mean	SD	Interpretation
25	I use a variety of assessment methods to evaluate student learning	15	16	9	27	33	3.46	1.48	High
26	I provide timely and	14	19	11	25	31	3.38	1.46	Neutral

	constructive feedback to students on their work								
27	I use assessment results to modify and improve my teaching	16	16	8	33	27	3.36	1.46	Neutral
28	I keep accurate and up-to-date records of student progress	10	13	10	34	33	3.59	1.35	High
29	I use formative assessment strategies during lessons to gauge understanding	19	15	14	23	29	3.28	1.50	Neutral
30	I find it challenging to assess individual students due to large class sizes	17	20	8	25	39	3.51	1.55	High
31	I involve parents/guardians in understanding their children's progress	14	19	11	25	31	3.38	1.46	Neutral
32	I help students develop self-assessment skills to monitor their learning	12	16	13	30	29	3.48	1.38	High
Overall Mean for Assessment and Feedback							3.43	1.46	High

Research Question 5

What is the primary and ECCE teachers' perception of their teaching effectiveness in professional conduct and development?

Table 5: Mean score and Standard deviation of primary and ECCE teachers on their perception of their teaching effectiveness in the areas of Professional Conduct and Development

Item	Statement	SD	D	N	A	SA	Mean	SD	Interpretation
33	I consistently attend school and arrive on time for my classes	12	13	20	40	15	3.29	1.24	Neutral
34	I actively seek opportunities for professional development	9	12	14	30	35	3.63	1.32	High
35	I collaborate with colleagues to improve teaching practices	13	14	10	34	29	3.52	1.39	High
36	I maintain positive relationships with parents and the community	15	15	15	30	25	3.31	1.39	Neutral
37	I reflect on my teaching practices and identify areas for improvement	19	8	21	24	35	3.52	1.47	High

38	I am familiar with and adhere to the Nigerian Professional Standards for Teachers	33	25	8	19	15	2.58	1.48	Low
39	I participate in school-wide activities beyond my classroom responsibilities	35	26	12	12	15	2.45	1.46	Low
40	I sometimes feel demotivated due to poor working conditions or irregular salary payments	15	18	9	25	33	3.41	1.49	High
Overall Mean for Professional Conduct and Development							3.21	1.41	Neutral

Analysis of tables 1-5 revealed that the respondents agreed that their knowledge of content and curriculum implementation is good (mean of 3.48). However, they are neutral on teaching strategies, classroom management, assessment and feedback, and professional conduct and development (mean 3.34, 3.40, 3.8 and 3.21). They reported very low incorporation of ICT in teaching (Mean = 2.26), Limited familiarity with Nigerian Professional Standards for Teachers (Mean = 2.58), Low participation in school-wide activities beyond classroom responsibilities (Mean = 2.45), Difficulty covering the entire curriculum within the academic year (Mean = 3.76) and Challenges with large class sizes affecting the assessment of individual students (Mean = 3.51)

DISCUSSIONS OF FINDINGS

The findings reveal a complex pattern of teacher effectiveness across Plateau State's primary and ECCE institutions. As shown in Table 1, teachers demonstrated relatively strong content knowledge and curriculum implementation capabilities (mean = 3.48), indicating that educators possess adequate subject matter expertise. This finding aligns with Goe and Stickler's (2008) assertion that content knowledge forms the foundation of effective teaching. However, this strength contrasts sharply with performance in other critical areas.

Table 2 reveals weaknesses in teaching strategies (mean = 3.34), particularly in contemporary pedagogical approaches. The most alarming finding is the extremely low ICT integration in teaching (mean = 2.26), which contradicts Darling-Hammond et al.'s (2017) emphasis on technology integration as essential for 21st-century teaching effectiveness. This finding supports UNESCO's (2014) reports indicating that many teachers in developing countries struggle with modern pedagogical approaches but contradicts the expectations set by contemporary educational frameworks that emphasize digital literacy as a core competency.

Classroom management presents another area of concern, as evidenced in Table 3 (mean = 3.41). While teachers report establishing clear rules and maintaining orderly environments (items 17 and 18 with means of 3.47 and 3.74, respectively), they struggle with positive behavior management strategies and adapting to large class sizes (item 22, mean = 3.40). This finding supports the Federal Ministry of Education's (2013) documentation of challenging pupil-teacher ratios (60:1 to 120:1) exceeding the national standard of 35:1, corroborating teachers' practical difficulties in classroom management.

Table 4 reveals mixed performance in assessment and feedback practices (overall mean = 3.43). While teachers maintain adequate record-keeping (item 28, mean = 3.59), they struggle with providing timely feedback and using formative assessment strategies (items 26 and 29 with means of 3.38 and 3.28, respectively). This finding contradicts Hattie's (2009) research, which emphasizes feedback as one of the most potent influences on student achievement, suggesting a significant gap between best practices and current implementation.

As shown in Table 5, the professional development domain presents the findings that raise the most concern, showing an average rating of 3.21. A notable lack of teachers' knowledge regarding the Nigerian Professional Standards for Teachers (item 38, mean = 2.58) and minimal involvement in school-wide activities are also highlighted. (Item 39, mean = 2.45) are particularly troubling. These findings directly contradict Kraft and Papay's (2014) research on the importance of professional environments in promoting teacher development, suggesting that current professional development structures are inadequate.

The study's findings on large class sizes affecting individual student assessment (Table 4, item 30, mean = 3.51) align with Hill et al.'s (2005) research on barriers to effective teaching, supporting their argument that structural challenges significantly impact teacher effectiveness. However, this finding contradicts the idealized teaching conditions suggested by Yoshikawa et al. (2013) in their framework for effective early childhood education.

The low ICT integration finding (Table 2, item 16, mean = 2.26) supports Adeyemi's (2008) and Okwori and Ede's (2012) research on inadequate resources in Nigerian primary schools. However, it contradicts the World Bank's (2018) recommendations for technology integration in developing educational systems. This discrepancy highlights the gap between international best practices and local implementation realities.

Teachers' reports of feeling demotivated due to poor working conditions (Table 5, item 40, mean = 3.41) corroborate Kane and Staiger's (2012) findings on the impact of working conditions on teacher effectiveness while contradicting Bandura's (1986) Social Cognitive Theory assumptions about self-efficacy in supportive environments.

The finding that only 30% of teachers demonstrated high effectiveness contradicts the aspirational goals set by UBEC and SUBEBs but aligns with UNESCO's (2020) global assessments, indicating widespread challenges in maintaining teaching quality in developing regions. The significant disparities between urban and rural schools support Barnett et al.'s (2013) research on geographical inequalities in teacher quality while contradicting policy assumptions about equitable educational provision.

The moderate ratings for monitoring frequency and quality (mean = 3.25) and poor feedback mechanisms (mean = 2.49) contradict Vygotsky's (1978) Sociocultural Theory principles regarding the importance of scaffolder professional development. These findings support Marshall's (2013) arguments about inadequate supervision systems but contradict the theoretical frameworks underlying current monitoring policies.

These findings shed new light on the challenges surrounding teacher quality, going beyond the insights of Darling-Hammond (2000). While her research identified important issues, our study uncovers even more significant deficiencies in Plateau State. Although Cunha and Heckman (2007) highlight the tremendous potential of high-quality early childhood education, our results indicate that Plateau State is still far from tapping into these advantages due to systemic shortcomings.

Moreover, our conclusions challenge Heckman's (2006) optimistic views on the impact of early childhood education. They suggest that the anticipated benefits of investing in early childhood programs will remain elusive unless we tackle the core issues of teaching effectiveness and monitoring practices. Without these critical improvements, the promise of early education may never be fulfilled. However, the findings strongly support Rivkin et al.'s (2005) research on the critical importance of teacher quality as a school-based factor influencing student achievement.

CONCLUSION

This study has revealed significant challenges in teacher effectiveness and monitoring systems in Plateau State primary and early childhood education. Only 30% of teachers demonstrated high effectiveness, with significant disparities between urban and rural schools. Monitoring systems face severe resource constraints, with inadequate personnel, transportation, and instruments limiting their effectiveness. However, where consistent monitoring does occur, it shows substantial positive impacts on both teacher performance and student achievement.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are proposed:

Educational Administrators and Policymakers at the state and local government levels should strengthen monitoring systems by introducing standardized, pedagogically-focused monitoring tools and digital platforms for classroom observation and performance tracking. Allocate dedicated budgets for monitoring activities, including transportation and documentation resources and Conduct comprehensive professional development workshops for head teachers and supervisors on effective monitoring techniques that emphasize instructional improvement.

Educational institutions should revise teacher preparation curricula by updating pre-service teacher education programs to align with contemporary pedagogical practices and established professional standards frameworks. Then, they should integrate monitoring skills, including modules on classroom observation, feedback provision, and instructional coaching, into leadership preparation programs.

Schools and Teachers are advised to establish peer monitoring systems by implementing school-based peer observation and feedback mechanisms to supplement formal monitoring processes and create communities of practice. In addition, they can also develop self-assessment tools that encourage teachers to engage in regular self-reflection and assessment using standardized instruments aligned with national teaching standards.

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REFERENCES

1. Adekola, O. A. (2007). Language, literacy and learning in primary schools: Implications for teacher development programs in Nigeria. World Bank Working Papers.
2. Adeyemi, T. O. (2008). Teachers' teaching experience and students' learning outcomes in Ondo State, Nigeria secondary schools. *Asian Journal of Information Management*, 2(2), 1-10.
3. ADHD and Romantic Relationships – The Healthy Relationships Lab. <https://onlineacademiccommunity.uvic.ca/healthyrelationships/current-projects/adhd-and-romantic-relationships/>
4. Akinwumi, F. S. (2008). School supervision and teacher effectiveness in Lagos State Nigeria. *International Journal of Educational Management*, 15(4), 181–189.
5. Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
6. Barnett, W. S., Carolan, M. E., Fitzgerald, J., & Squires, J. H. (2013). *The state of preschool 2013: State preschool yearbook*. National Institute for Early Education Research.
7. Bello, M., & Egunsola, A. (2022). Triad connections to pedagogical competence in teacher education. <https://doi.org/10.4314/kje.v2i1>.
8. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
9. Brown, C. (2018). Were They Ready? An Analysis of a Teacher Performance Assessment to Determine if Perception Was Matched by Reality. *Issues in Teacher Education*, 27(3), 107–125.
10. Carreiro, D. M. (2020). Making a Shift in Educator Evaluation. <https://doi.org/10.31045/jes.3.2.6>
11. Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd Ed.). Lawrence Erlbaum Associates.
12. Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th Ed.). Sage Publications.
13. Cunha, F., & Heckman, J. (2007). The technology of skill formation. *American Economic Review*, 97(2), 31-47.

14. Chirisa, I., & Bandaiko, E. (2015). African Cities and the Water-Food-Climate-Energy Nexus: An Agenda for Sustainability and Resilience at a Local Level. Urban Forum. <https://doi.org/10.1007/s12132-015-9256-6>
15. Darling-Hammond, L. (2000). Teacher quality and student achievement. *Education Policy Analysis Archives*, 8(1), 1–44.
16. Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). Effective teacher professional development. Learning Policy Institute.
17. Esteppe, C., Pate, M., Johnson, D., Wardlow, G., & Hood, G. (2023). Instruction Based on Self-Efficacy Theory is Effective with Novices Learning Technical Subjects: the *Agricultural Education Magazine*, 96(3), 34.
18. Federal Ministry of Education. (2013). Nigeria education indicators. Federal Ministry of Education.
19. Gabriel, R. (2015). Not Whether, but How: Asking the Right Questions in Teacher Performance Assessment. *Language Arts*, 93(2), 120–127.
20. Goe, L., & Stickler, L. M. (2008). Teacher quality and student achievement: Making the most of recent research. National Comprehensive Center for Teacher Quality.
21. Global education monitoring report, 2020: Inclusion and education: all means all - UNESCO Digital Library – Evidence Library – The EdTech Hub. <https://docs.edtechhub.org/lib/49QZEUVL>
22. Hattie, J. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. Routledge.
23. Healey, B., & Ledger, S. (2017). Postmodern picture books as a reflective tool for making learning visible. *International School*, 19(2), 65.
24. Heckman, J. J. (2006). Skill formation and the economics of investing in disadvantaged children. *Science*, 312(5782), 1900-1902.
25. Hill, H. C., Rowan, B., & Ball, D. L. (2005). Effects of teachers' mathematical knowledge for teaching on student achievement. *American Educational Research Journal*, 42(2), 371–406.
26. (2022). Impact evaluation of nutrition-sensitive intervention scaled up through preschools. <https://core.ac.uk/download/534161714.pdf>
27. Ishtiaq, M. (2019). Book Review Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). Thousand Oaks, CA: Sage. <https://doi.org/10.5539/elt.v12n5p4>
28. Jabri, U., Samad, I. S., & Nurazikin, N. (2022). Implementation of Body-Movement Method in Teaching Basic Vocabulary at University Muhammadiyah of Enrekang. <https://doi.org/10.33487/majesty.v4i2.3900>
29. Jackson, M., Song, H., & Kalil, A. (2024). State-level safety net spending and educational gaps in maternal time with children. *Journal of Marriage and Family*, 86(2), 412–432.
30. Kane, T. J., & Staiger, D. O. (2012). Gathering feedback for teaching: Combining high-quality observations with student surveys and achievement gains. Bill & Melinda Gates Foundation.
31. Kraft, M. A., & Papay, J. P. (2014). Can professional environments in schools promote teacher development? Explaining heterogeneity in returns to teaching experience. *Educational Evaluation and Policy Analysis*, 36(4), 476–500.
32. Krispien, C. S. (2010). An Analysis of Teacher Distribution across Districts and Schools in the Detroit Metropolitan Area. <https://core.ac.uk/download/56678076.pdf>
33. Marshall, K. (2013). Rethinking teacher supervision and evaluation: How to work smart, build collaboration, and close the achievement gap. Jossey-Bass.
34. Mbabazi FRSPH, M., MacGregor, F., Salman, M., Breckon, J., Kunonga, E., Tolchard, B., & Nnyanzi, L. (2022). Exploring the barriers and facilitators to making healthy physical activity lifestyle choices among UK BAME adults during covid-19 pandemic: A study protocol. <https://core.ac.uk/download/541076457.pdf>
35. Morales García, M., & García Rubio, M. Á. (2023). Sustainability of an economy from the water-energy-food nexus perspective. <https://doi.org/10.1007/s10668-022-02877-4>
36. OECD. (2019). Education at a glance 2019: OECD indicators. OECD Publishing.
37. Okwori, A., & Ede, E. (2012). Management of primary education in Nigeria: An analytical assessment. *Academic Research International*, 2(2), 301-309.

38. Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005). Teachers, schools, and academic achievement. *Econometrica*, 73(2), 417–458.
39. Seedall, R. (2021). Better results: Using deliberate practice to improve therapeutic effectiveness. *Journal of Marital and Family Therapy*, 47(3), 806–808.
40. SEB-Bericht - Vorstandsmitglieder Seite 118.
<https://my.page2flip.de/15646901/19749027/19749174/content/seite118.html>
41. Tahir, G. (2006). Trends and issues in Nigerian education. In A. B. Fafunwa & J. U. Aisiku (Eds.), *Education in Africa: A comparative survey* (pp. 149–164). George Allen & Unwin.
42. The Future of Education. https://conference.pixel-online.net/FOE/acceptedabstracts_scheda.php?id_abs=5983
43. UNESCO. (2014). *Teaching and learning: Achieving quality for all*. UNESCO.
44. UNESCO. (2020). *Global education monitoring report 2020: Inclusion and education: All means all*. UNESCO.
45. Van Overschelde, J., Saunders, J., & Ash, G. (2017). "Teaching is much more than just showing up to class and grading assignments": Preparing middle-level teachers for longevity in the profession. *Middle School Journal*, 48(5), 28-38.
46. Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
47. World Bank. (2018). *World development report 2018: Learning to realize education's promise*. World Bank.
48. Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M. R., Espinosa, L. M., Gormley, W. T., & Zaslow, M. J. (2013). *Investing in our future: The evidence base on preschool education*. Foundation for Child Development.
49. Zeri, F., Livi, S., & Maffioletti, S. (2011). Attitudes towards visual correction in sport: What coaches, physical education teachers and sports physicians think? *Contact Lens and Anterior Eye*. <https://doi.org/10.1016/j.clae.2010.08.006>
50. Zhang, Y., & Liu, M. (2025). The Green Dilemma: The Impact of Inconsistent Green Human Resource Management and Innovation on Employees' Creative Performance. *Sustainability*, 17(11), 4831.