

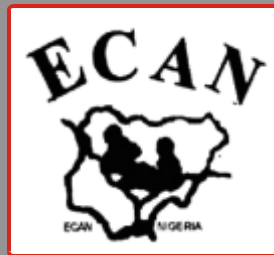


JOURNAL OF EARLY CHILDHOOD ASSOCIATION OF NIGERIA (JECAN)

VOLUME 14



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## EDITORIAL COMMENTS

JECAN is an official journal of the Early Childhood Association of Nigeria (ECAN) and presents Volume 14, (2025). All the articles that feature in this volume are those presented at the 15th National Conference of the Association, held at Lagos State University of Education (LASUED) in 2024. Mostly all the articles revolved around the theme of the Conference which was Scaling Up the Status of Early Childhood Care Development and Education in Nigeria: Stakeholders' Roles.

Article 1: This study examined how parenting styles affect preschoolers' socio-emotional skills in Shomolu LGA, Lagos State. Using a Correlational survey research design, this study targeted all Kindergarten preschoolers and their parents from public pre-primary schools in Shomolu LGA of Lagos State. The sample included 120 Kindergartens and their parents from 10 randomly chosen Shomolu LGA public pre-primary schools. Kimble (2014) and Saadu and Agbo (2022) were used to adapt a 20-item Parenting Styles Scale (PSS) and a 14-item Preschooler Socio-emotional Skills Assessment Scale (PSESAS) with 0.77 and 0.89 reliability coefficients, respectively. A 0.05 significance level was employed to test the hypotheses using Pearson Product Moment Correlation. The findings showed a significant negative relationship between authoritarian parenting style and preschooler socio-emotional skill, a significant negative relationship between permissive parenting style and preschooler socio-emotional skill, and a significant positive correlation between authoritative parenting style and preschooler socio-emotional skill. This study suggests that workshops and seminars should educate parents about parenting approaches that promote socio-emotional skills development in children inside and outside the school.

Article 2: The study was on parental counselling in guiding children towards career in Yenagoa Local Government Area of Bayelsa State. The study adopted the correlation research design. Six thousand two hundred and ninety-three (6,293 comprising 728 parents and 5,565 children) found in 60 Yanogoa Local Government area formed the population of the study. Out of the 6,293 subjects, 633 (comprising 557 children and 76 parents) formed the sample size for the study. Two instruments titled "Parental Counselling Questionnaire (PCQ)" and "Guiding children towards careers (GCC)" were used in the study. The instruments were validated by experts in the department of early childhood/primary Education, faculty of Education, University of Port Harcourt. Test-retest method was employed to obtain a reliability index of 0.71 for the PCQ and 0.68 for the GCC. Data analysis was done using Pearson Product Moment Correlation (PPMC). Result of the study revealed that parental counselling has significant relationship with children home learning ( $p=0.024<0.05$ ) and career communication ( $p=0.033<0.05$ ). On the other hand, there was no relationship between parental counselling and career decision ( $p=0.093>0.05$ ). Based on this, it was recommended among others that educators should encourage parents to participate in their child's career guiding, such as attending parent-teacher conferences, volunteering in the classroom, and helping with homework.

Article 3: This paper explored the potential benefits, challenges and considerations associated with introducing these advancements to young learners while proponents argue that technology and Artificial Intelligence (AI) can enhance cognitive development, creativity and problem –solving skills, skeptics raise concern about potential negative impacts on social interactions. Additionally, attention spans and ethical considerations were designed. Issues related to accessibility, equity and the role of educators in facilitating meaningful technology integration are crucial to address. The paper provided an overview of current research highlights, key areas for further investigation, emphasized the importance of thoughtful and responsible implementation strategies to maximize the potential of technology and AI in early year education.

Article 4: This study examined the leadership and administration of primary education policy in Nigeria, reflecting on developments since the 1970s. It examined the causes, reasons, and timing of the failures in the formulation and execution of education policy in the nation. This is a thematic and analytical analysis of literature about the nation's educational policy throughout both military and democratic administrations. It is based on the Elite idea. Nonetheless, educational advancement in Nigeria has been impeded by several issues. Included among them are overpopulation, delays in policy implementation, insufficient statistical data, corruption, instability within the education system, insecurity, and inadequate educational facilities.

Recommendations included the provision of all infrastructure necessary for accomplishing primary school goals and a comprehensive redesign of the teacher education curriculum.

Article 5: This study examines the strategies of engagement adopted by the Nigerian home in promoting learning among early years learners with cerebral palsy. It also investigates the prominent learning resources for children with cerebral palsy in Nigerian homes. Moreover, the challenges faced by the Nigerian home in the bid to make educational resources available for learners have been explored. This study adopts the thematic literature review using the secondary method of data collection. The interpretative philosophical view and deductive research approach were explored in this research. Data collection was done through the aid of Research Gate, Scopus, Science Direct, and Pub Med. The various sources of data collection include textbooks, peer-reviewed journals, educational websites, and academic articles. It was found that Nigerian homes engage in inclusive communication settings, play-learn activities, and smart technologies to meet the learning needs of children with cerebral palsy. Adaptive equipment and computer-based learning resources were the prominent learning resources for children with cerebral palsy in Nigerian homes. The challenges faced by the Nigerian home in the bid to make educational resources available for learners were inadequate awareness, poor funding, and discrimination. It was recommended that there should be an increase in government support and increase awareness of cerebral palsy in Nigerian society.

Article 6: The study examined the effects of educational cartoons on the learning outcomes of preschoolers in Lagos State. The study adopted the quasi-experimental research design. The population of the study consisted of all the nursery pupils in public nursery and primary schools in Yaba Metropolis. The sample of the study comprised 52 nursery two pupils in two intact nursery classes from two randomly selected public nursery and primary schools in the study area. 10-item instrument titled Preschoolers' Literacy Outcomes (PLO) was used to measure the pupils' learning outcome in literacy. The validity of the instrument was ensured by experts in English Education and test and measurement in the University of Lagos, Akoka. The instrument was trial tested with 10 randomly selected pupils from a private nursery school in Yaba. The Kuder-Richardson's formula (K-R 21) was used to determine the consistency of the items within the instrument. The PLO yielded a reliability index of 0.84, which is high enough and considered usable. Analytical techniques including frequency distribution tables, mean scores, and Analysis of Covariance (ANCOVA) were used to analyse the collected data. The findings of the study revealed that there is significant effect of educational cartoons on the learning outcomes of preschoolers in the treatment group. Hence, this study recommends that teachers should be encouraged to incorporate educational cartoons in teaching preschoolers to foster good academic performance. Parents should also be encouraged to expose their children to more of educational cartoons than other forms of cartoons. Government should also equip public schools with necessary resources to facilitate the use of educational cartoons.

Article 7: The study is a comparative one which evaluated balancing traditional and digital approaches to literacy pedagogy in early years classrooms in Eti-Osa Local Government Area of Lagos, Nigeria. A descriptive survey research design was used for the study. Three research questions were answered in the study. The sample size was one hundred preschool teachers who were sampled using a simple random sampling technique. Two research instruments titled "Questionnaire on Traditional and Digital Approaches in Teaching Literacy in Early Childhood Classroom (QTDATLECC)" and "Observation Schedule on Teachers' Perspectives of the Integration of Traditional and Digital Approaches to Literacy Pedagogy in Early Year Classrooms (OSTPITDALPEYC)" were used to collect data for the study. The data collected were analyzed using descriptive and inferential statistical tools. The results revealed that the extent to which teachers integrate both traditional and digital approaches in teaching literacy in early childhood classrooms is high; and the level of effectiveness of traditional literacy pedagogy methods, such as phonics instruction and storybook reading, in promoting early literacy skills among young children is high. The hypotheses showed that there was a significant difference between the current practices or approaches to literacy pedagogy being used by teachers and school type in early year classrooms in Lagos, Nigeria ( $df = 98$ ;  $t = .513$ ;  $p < 0.05$ ) However, there was no significant difference between traditional and digital approaches in teaching literacy in early childhood classroom in Lagos, Nigeria ( $df = 98$ ;  $t = -.506$ ;  $p > 0.05$ ). It was recommended, among others, that the federal government, in conjunction with the Lagos State Ministry of Education, should organize training on how to integrate digital tools with traditional

literacy methods and workshops on the latest literacy pedagogies to upskill preschool teachers.

Article 8: This study is designed to investigate the influence of Stakeholders awareness involvement on the choice of Early Childhood Education in Federal College of Education (Technical) Omoku, Rivers State. Three research questions were used to obtain the findings of the study. Descriptive research design was adopted for the study. The population of the study consisted of all 856 students in Federal College of Education (Technical) Omoku. Sample random sampling technique was used to select 5 five students from 30 departments making the sample size of 150 respondents. The instrument for data collection was a structured questionnaire titled Stakeholders Involvement and the Choice of Early Childhood Education in Federal College of Education, Omoku (SITCECEO) which was administered using descriptive statistic of mean and standard deviation. The findings of the study revealed that the stakeholders' awareness and involvements influence students' choice of studying Early Childhood Care and Education in Federal College of Education (Technical) Omoku, Rivers State. Therefore, it was recommended that government, parents and community be involved in the awareness of the programme thereby creating a standard and better objective.

All the articles in this volume have considered pertinent issues that could bring about Scaling Up the Status of Early Childhood Care Development and Education in Nigeria and also highlighting the roles of stakeholders in early childhood education to enforce, implement good status of early childhood care and development in Nigeria. To this end, the Editorial Board expects that all the readers of this volume will find the articles a good partner in their daily quest for further knowledge and also authentic and current literature which adds to academic prowess for further research activities among the academia and agency of early childhood development. It is also promoting that practitioners in the field of early childhood education will find this volume handy in the continuous running of the system.

**Florence Taiwo Ogunyemi, Ph. D**  
**Professor of Early Childhood Education**  
*Editor-in-Chief*

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# **The Critical Role of Government in Scaling Up Early Childhood Education in Nigeria**

**Being a Lead Paper Presented at the 15<sup>th</sup> Early Childhood Association of Nigeria (ECAN) Annual National Conference 2024**

**By**  
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**Faculty of Education**  
**University of Lagos**

## **Protocol**

Good morning, distinguished guests, esteemed colleagues, and fellow educators. It is an honor to be here today at this esteemed 15<sup>th</sup> National Conference (which coincides with the 30<sup>th</sup> Anniversary of Early Childhood Association of Nigeria, where we gather to share insights and discuss the future of education globally. I would like to extend my sincere gratitude to the esteemed executives and members of this great body of intellectuals at the state and the national levels, and to the conference organizers for the opportunity to present this paper on such a vital topic.

Allow me to acknowledge the presence of names of key figures, such as the Honorable Commissioner(s), the Royal Fathers, the Conference chair, dignitaries, and the founding mothers and fathers of the ECAN whose contributions to the field of education have been truly inspiring. To my fellow presenters and participants, thank you for your dedication to advancing education worldwide.

## **1.1 Introduction**

Early childhood education (ECE) is recognized globally as a critical foundation for lifelong learning and development. It encompasses the educational experiences and environments provided to children from birth to age eight, a period characterized by rapid cognitive, emotional, social, and physical growth. It is during these formative years that children develop the essential cognitive, social, emotional, and physical skills that will influence their future academic achievements and overall well-being. The importance of ECE cannot be overstated, as numerous studies have demonstrated its positive impact on children's academic performance, social skills, and long-term economic prospects (Heckman, 2011; UNESCO, 2015; Ige, 2023). In Nigeria, the significance of ECE cannot be overstated, especially given the country's large population of young children and the diverse challenges they face, such as poverty, malnutrition, and lack of access to quality education. Despite these known benefits, access to quality early childhood education remains limited in many parts of Nigeria, particularly in rural and underserved areas. This disparity underscores the need for the Nigerian government to play a more critical and proactive role in scaling up the status of ECE across the country and ensuring that every child has the opportunity to succeed.

Today, I will be discussing the critical role of government in scaling up early childhood education (ECE) in Nigeria, a subject of paramount importance for the future of our children and, indeed, our nation. As we delve into this topic, I will explore the historical context of government involvement in ECE, the current challenges, and the strategic pathways that the government must take to ensure that every Nigerian child has access to quality early childhood education.

## **1.2 Historical Evolution of Government Involvement in ECE in Nigeria**

The government's involvement in early childhood education in Nigeria has evolved over several decades, reflecting changing priorities and socio-political contexts. Before the colonial period, Nigerian children were primarily educated through informal, community-based systems that emphasized moral instruction, cultural transmission, and practical skills. These indigenous educational practices were deeply rooted in the cultural and religious values of different ethnic groups. However, the advent of colonialism in the late 19th century brought about significant changes to the educational landscape, as Christian missionaries introduced Western-style education, including early childhood programmes, in their mission schools (Fafunwa, 1974).

During the colonial era, the British colonial administration established a dual education system that prioritized

the education of the elite, with little emphasis on early childhood education. ECE was largely confined to mission schools, which catered to the children of the colonial elite and a small number of Africans who had converted to Christianity. These schools provided basic literacy and numeracy skills, along with religious instruction, but were not widely accessible to the majority of Nigerian children. It was not until the post-independence period that the Nigerian government began to take a more active role in the provision of early childhood education.

In the years following Nigeria's independence in 1960, the government recognized the need to expand access to education at all levels, including early childhood education. The 1969 National Curriculum Conference marked a significant milestone in this regard, as it highlighted the importance of ECE and recommended its inclusion in the national education system (Fafunwa, 1982). This led to the adoption of the National Policy on Education (NPE) in 1977, which formally acknowledged early childhood education as a critical component of the education system. The NPE emphasized the need for government, private sector, and community involvement in the establishment and management of pre-primary schools.

Despite these policy developments, the actual implementation of ECE programmes remained limited, primarily due to inadequate funding, a lack of trained teachers, and insufficient infrastructure. The government continued to rely heavily on private providers, including religious organizations and non-governmental organizations (NGOs), to deliver early childhood education services. This reliance on private providers led to significant disparities in access and quality, with urban and affluent areas benefiting more than rural and low-income communities.

In the early 2000s, the Nigerian government renewed its commitment to early childhood education through the Universal Basic Education (UBE) program, which was launched in 1999. The UBE program aimed to provide free and compulsory basic education to all Nigerian children, including one year of pre-primary education. The inclusion of pre-primary education in the UBE program was a significant step towards expanding access to ECE, as it mandated the establishment of pre-primary sections in all public primary schools (Federal Ministry of Education, 2004; Ige, 2023). However, the implementation of this mandate has been uneven, with many states struggling to establish and maintain pre-primary sections due to resource constraints and other challenges.

The National Policy on Integrated Early Childhood Development (IECD), introduced in 2007, further underscored the government's commitment to ECE. The adoption of the National Policy on Integrated Early Childhood Development in 2007 marked a significant milestone in the government's approach to ECE. This policy aimed to provide a holistic framework that combined education with health, nutrition, and psychosocial services for children under the age of five.

However, the policy's ambitious goals were hampered by systemic challenges, including inadequate funding, poor infrastructure, and insufficient coordination among the various government agencies responsible for implementing ECE programmes (Federal Ministry of Education, 2007; Ige, Omotuyole, & Sebili, 2020). As a result, while the government's involvement in ECE has expanded over the years, significant gaps remain in terms of both access and quality.

### **1.3 Comparative Analysis: Lessons from Other Countries**

To better understand the role that government can play in scaling up early childhood education in Nigeria, it is instructive to look at examples from other countries that have successfully implemented large-scale ECE programmes. Countries such as Finland, Singapore, and Brazil offer valuable insights into how government intervention can transform early childhood education.

#### **Finland**

In Finland, early childhood education is considered a critical component of the country's educational system. The Finnish government ensures that all children have access to high-quality ECE, regardless of their socio-economic background. This is achieved through substantial public funding, a well-trained workforce, and a curriculum that emphasizes play-based learning and child-centered pedagogies. The Finnish model demonstrates the importance of a strong government commitment to ECE, with policies that prioritize equity, inclusivity, and quality (Bennett, 2008).

#### **Singapore**

Similarly, Singapore has made significant strides in early childhood education through proactive government

intervention. The Singaporean government has implemented a comprehensive ECE framework that includes universal access to preschool education, rigorous teacher training programmes, and continuous assessment and improvement of ECE centers. The government's role in regulating and funding ECE in Singapore has been crucial in ensuring that children receive a well-rounded education that prepares them for the demands of formal schooling (Lim, 2017).

#### Brazil

In Brazil, the government's Bolsa Família program has been instrumental in expanding access to early childhood education, particularly for children from low-income families. The program provides financial incentives to families who enroll their children in preschool, thereby reducing barriers to access. Additionally, the Brazilian government has invested in training and professional development for ECE teachers, recognizing that a well-prepared workforce is essential for delivering quality education (Victora et al., 2011). The success of Brazil's ECE initiatives highlights the importance of targeted government policies that address both access and quality in early childhood education.

These examples from Finland, Singapore, and Brazil illustrate how government policies and investments can significantly impact the quality and accessibility of early childhood education. For Nigeria, adopting similar strategies—such as increasing public funding, enhancing teacher training, and implementing policies that promote equity and inclusivity—could be pivotal in scaling up ECE across the country.

### **1.4 Challenges in Scaling Up Early Childhood Education**

Despite the positive steps taken by the Nigerian government in recent decades, several challenges continue to impede the effective scaling up of early childhood education. The challenges faced by the Nigerian government in scaling up early childhood education are multifaceted and complex. These challenges include inadequate funding, a shortage of trained teachers, inconsistent policy implementation, poor infrastructure, and cultural barriers. Addressing these challenges is essential for achieving the goal of universal access to quality early childhood education.

#### **1.4.1 Inadequate Funding**

Inadequate funding remains one of the most significant challenges to scaling up early childhood education in Nigeria. The education sector, in general, is underfunded, with early childhood education receiving a disproportionately small share of the education budget. According to UNICEF (2017), Nigeria allocates less than 10% of its national budget to education, which is below the recommended 15-20% by the United Nations. Within this allocation, early childhood education competes with other education sectors, such as primary, secondary, and tertiary education, for limited resources. This lack of funding affects the ability of the government to build new pre-primary schools, provide adequate learning materials, and recruit and retain qualified teachers.

#### **1.4.2 Shortage of Trained Teachers**

The shortage of trained teachers is another critical challenge that hampers the expansion of ECE in Nigeria. Early childhood education requires specialized training and skills, as young children have unique developmental needs that differ from those of older children. However, many ECE teachers in Nigeria lack the necessary training and qualifications to effectively deliver quality education. The shortage of teacher training institutions that offer specialized ECE programmes exacerbates this problem. As a result, many pre-primary schools, especially in rural areas, rely on unqualified or under-qualified teachers, which undermine the quality of education provided to children (World Bank, 2020).

#### **1.4.3 Inconsistent Policy Implementation**

The implementation of ECE policies in Nigeria has been inconsistent, leading to disparities in access and quality across different regions and states. While the federal government has developed several policies aimed at promoting early childhood education, the responsibility for implementing these policies often falls on state and local governments. However, many states lack the resources, capacity, and political will to effectively implement ECE policies. This has resulted in significant variations in the availability and quality of ECE services, with some states making more progress than others. Additionally, corruption and bureaucratic inefficiencies have further hindered the effective implementation of ECE policies (Olanrewaju, 2019).



#### **1.4.4 Poor Infrastructure**

Many ECE centers in Nigeria operate in substandard conditions, with inadequate infrastructure that fails to meet the needs of young children. In many cases, pre-primary schools are housed in overcrowded and dilapidated buildings that lack basic amenities such as clean water, sanitation facilities, and safe playgrounds. The poor state of infrastructure not only affects the quality of education but also poses significant health and safety risks to children. The lack of appropriate learning environments also limits the ability of teachers to effectively engage and support children's development (Federal Ministry of Education, 2018).

#### **1.4.5 Cultural and Social Barriers**

Cultural and social factors also play a role in limiting access to early childhood education in Nigeria. In some communities, particularly in rural and northern regions, traditional beliefs and practices may discourage parents from enrolling their children in pre-primary education. For example, in some areas, there is a preference for early marriage and domestic work for girls, which can lead to lower enrollment rates for girls in ECE programmes. Additionally, the low level of awareness about the importance of early childhood education among some parents contributes to low enrollment rates. Addressing these cultural and social barriers requires targeted interventions that promote the value of ECE and engage communities in the process (Obanya, 2019).

#### **1.4.6 Developmentally Inappropriate Strategies**

Several developmentally inappropriate strategies have been implemented in Nigerian ECE program, exacerbating existing challenges. One notable example is the use of Eko Excel, a digital education platform designed primarily for primary education, at the ECE level. The program's content and pedagogical approach are not tailored to the developmental needs of young children, leading to ineffective learning experiences (Edozien, 2020).

The deployment of consultants to train ECE teachers has also been problematic. In some cases, these consultants lack expertise in early childhood education, providing inadequate or misleading training that does not address the specific needs of ECE settings. This issue is compounded by the imposition of uniform teaching methods, such as Montessori, without considering the diverse developmental needs and cultural contexts of Nigerian children (Akinrotimi & Olowe, 2016).

Additionally, the creation of separate inclusive units within schools, rather than ensuring that all schools are inclusive, reflects a misunderstanding of the principles of inclusive education. Effective inclusion should be a fundamental aspect of all ECE program, not a separate initiative, to ensure that all children, regardless of their abilities or backgrounds, have equitable access to quality education (Okoli, 2017).

Addressing these challenges is essential for achieving the goal of universal access to quality early childhood education. Government intervention is crucial in addressing these challenges and scaling up the status of ECE in Nigeria. By focusing on policy formulation, funding, capacity building, and quality assurance, the government can play a pivotal role in transforming the ECE landscape in Nigeria.

### **1.5 Strategic Pathways for Government Intervention**

To effectively scale up early childhood education in Nigeria, the government must adopt a comprehensive and multifaceted approach that addresses the various challenges outlined above. The following strategies are recommended to enhance the government's role in promoting and expanding ECE.

- **Increased Investment in Early Childhood Education**

One of the most critical steps the government can take is to increase investment in early childhood education. This includes allocating a higher percentage of the national education budget to ECE and seeking additional funding from international donors, private sector partners, and non-governmental organizations. By increasing investment, the government can address the infrastructure deficit, provide adequate learning materials, and expand access to ECE across the country. Additionally, increased funding can support the establishment of more teacher training programmes, which are essential for improving the quality of early education (UNICEF, 2017).

- **Expansion of Teacher Training Programmes**

To address the shortage of qualified early childhood educators, the Nigerian government should prioritize the expansion of teacher training programmes that specialize in early childhood education. This can be achieved by increasing the number of teacher training colleges offering ECE certification programmes and integrating ECE

modules into the curriculum of existing teacher education programmes. Additionally, the government should consider providing incentives such as scholarships, grants, and improved working conditions to attract more individuals to the field of early childhood education. Continuing professional development (CPD) programmes should also be implemented to ensure that current teachers have access to the latest pedagogical practices and resources, thereby improving the quality of education delivered (Okon, 2015).

- **Strengthening Policy Implementation and Monitoring**

The Nigerian government needs to strengthen the implementation and monitoring of ECE policies at both the federal and state levels. This can be achieved by establishing clear guidelines and standards for ECE service delivery, ensuring that all pre-primary schools, whether public or private, meet minimum quality standards. The government should also improve coordination among different levels of government and relevant agencies to ensure consistent and effective policy implementation. Additionally, there should be regular monitoring and evaluation of ECE programmes to assess their effectiveness and identify areas for improvement. Transparency and accountability measures should also be strengthened to reduce corruption and inefficiencies that may hinder the implementation of ECE policies (Ajayi, 2021).

- **Enhancing Infrastructure and Learning Environments**

Improving the infrastructure and learning environments of ECE centers is crucial for ensuring that children have access to safe, healthy, and stimulating spaces for learning. The government should prioritize the construction and renovation of pre-primary school facilities, particularly in underserved and rural areas. This includes providing basic amenities such as clean water, sanitation facilities, and playgrounds, as well as ensuring that classrooms are adequately equipped with age-appropriate learning materials and resources. Public-private partnerships (PPPs) can also be explored as a means of mobilizing additional resources for infrastructure development (Federal Ministry of Education, 2018).

- **Community Engagement and Awareness Campaigns**

Raising awareness about the importance of early childhood education is essential for increasing enrollment and participation rates, particularly in regions where cultural and social barriers may exist. The government should implement community engagement programmes that involve parents, community leaders, and other stakeholders in the promotion of ECE. These programmes can include public awareness campaigns, workshops, and outreach activities that highlight the benefits of ECE for children's development and future success. Additionally, the government should work with community-based organizations (CBOs) and non-governmental organizations (NGOs) to develop culturally sensitive approaches to ECE that respect and incorporate local traditions and values (Obanya, 2019).

## **1.6 Recommendations**

Based on the challenges and strategies discussed, the following recommendations are proposed to enhance the government's role in scaling up the status of early childhood education in Nigeria:

- The government should increase the budgetary allocation for education, with a specific focus on early childhood education, to meet the minimum recommended allocation of 15-20% of the national budget.
- Efforts should be intensified to expand and improve teacher training programmes for ECE, ensuring that teachers are well-equipped with the necessary skills and knowledge to provide quality education. Incentives should be provided to attract and retain qualified ECE teachers.
- The government should develop clear and enforceable guidelines for the implementation of ECE policies and improve coordination between federal, state, and local governments. Regular monitoring and evaluation should be conducted to assess the effectiveness of ECE programmes.
- The government should invest in the construction and renovation of ECE centers, particularly in underserved areas, to ensure that children have access to safe and conducive learning environments. Public-private partnerships should be leveraged to mobilize additional resources.
- Efforts should be made to implement community engagement and awareness campaigns to promote the value of ECE, particularly in regions where cultural barriers may exist. Collaborative efforts with CBOs and NGOs should be encouraged to develop culturally relevant ECE programmes.
- The government should actively seek partnerships with the private sector, international organizations, and NGOs to support the development and expansion of ECE services. These partnerships can provide



additional funding, expertise, and resources to complement government efforts.

- There should be a periodic review and update ECE policies to reflect current best practices and emerging trends in early childhood education. This will ensure that policies remain relevant and effective in meeting the needs of young children.
- The government should promote inclusive education practices within ECE, ensuring that all children, including those with disabilities and from marginalized communities, have access to quality early childhood education.

### 1.7 Conclusion

The critical role of the government in scaling up the status of early childhood education in Nigeria cannot be overemphasized. As the custodian of national development, the government has the responsibility to ensure that every child, regardless of socio-economic background, has access to quality early childhood education. By increasing investment, expanding teacher training, strengthening policy implementation, improving infrastructure, and engaging communities, the government can make significant strides in enhancing the provision of ECE across the country. The successful scaling up of ECE in Nigeria will not only contribute to the development of well-rounded individuals but also to the overall socio-economic progress of the nation.

### 1.8 References

- Ajayi, K. (2021). Policy implementation challenges in Nigeria's early childhood education: A critical analysis. *Journal of Educational Research and Development*, 6(2), 123-134.
- Fafunwa, A. B. (1974). *History of education in Nigeria*. London: Allen and Unwin.
- Fafunwa, A. B. (1982). *The National Policy on Education: Its development and implementation*. Lagos: Nigerian Educational Research and Development Council (NERDC) Press.
- Federal Ministry of Education. (2004). *National Policy on Education*. Lagos: NERDC Press.
- Federal Ministry of Education. (2007). *National Policy on Integrated Early Childhood Development*. Abuja: FME.
- Federal Ministry of Education. (2018). *Annual education sector performance report*. Abuja: FME.
- Heckman, J. J. (2011). The economics of inequality: The value of early childhood education. *American Educator*, 35(1), 31-47.
- Ige, O.O. (2023). *Early Childhood Education: From Dimensions to Directions*. Lagos: Childworld Publishers.
- Ige, O.O., Omotuyole, C.O. & Sebili, O.T. (2020). Education For All (EFA): A focus on public primary schools' facilities, curriculum and teachers' professional development in Lagos and Ogun States, Nigeria. *KIU Journal of Humanities*, Kampala International University, 5(3), 298-297.
- Obanya, P. (2019). *Education and the challenge of nationhood: The Nigerian story*. Ibadan: University Press Plc.
- Okon, C. I. (2015). Teacher training and early childhood education in Nigeria: Prospects and challenges. *African Journal of Education*, 8(1), 45-57.
- Olanrewaju, G. A. (2019). Corruption and policy implementation in Nigeria's education sector: A case study of early childhood education. *International Journal of Educational Development*, 12(3), 89-102.
- UNESCO. (2015). *Education for all 2000-2015: Achievements and challenges*. Paris: UNESCO.
- UNICEF. (2017). *Early childhood development: A global priority*. New York: UNICEF.
- Victora, C. G., Adair, L., Fall, C., Hallal, P. C., Martorell, R., Richter, L., & Sachdev, H. S. (2011). Maternal and child undernutrition: Consequences for adult health and human capital. *The Lancet*, 371(9609), 340-357.
- World Bank. (2020). *Education in Sub-Saharan Africa: Early childhood education*. Washington, DC: World Bank Group.

# Exploring the Correlation between Parenting Styles and Socio-Emotional Skills of Preschoolers in Shomolu Local Government Area, Lagos State

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## Abstract

*Lack of parental, caregiver, sibling, and peer interaction delay preschoolers' socio-emotional development. This causes discontent, academic failure, and behavioural issues. This study examined how parenting styles affect preschoolers' socio-emotional skills in Shomolu LGA, Lagos State. Using a Correlational survey research design, this study targeted all Kindergarten preschoolers and their parents from public pre-primary schools in Shomolu LGA of Lagos State. The sample included 120 Kindergartens and their parents from 10 randomly chosen Shomolu LGA public pre-primary schools. Kimble (2014) and Saadu and Agbo (2022) were used to adapt a 20-item Parenting Styles Scale (PSS) and a 14-item Preschooler Socio-emotional Skills Assessment Scale (PSESAS) with 0.77 and 0.89 reliability coefficients, respectively. A 0.05 significance level was employed to test the hypotheses using Pearson Product Moment Correlation. The findings showed a significant negative relationship between authoritarian parenting style and preschooler socio-emotional skill, a significant negative relationship between permissive parenting style and preschooler socio-emotional skill, and a significant positive correlation between authoritative parenting style and preschooler socio-emotional skill. This study suggests that workshops and seminars should educate parents about parenting approaches that promote socio-emotional skills development in children inside and outside the school.*

**Keywords:** Authoritarian, Authoritative, Parenting style, Permissive, Preschool, Socio-emotional development

## Introduction

Socio-emotion refers to the distinctive pattern of thoughts and behaviours that make up a person's personality. It is also viewed as the distinctive patterns of behaviour, beliefs, and physical characteristics that individuals develop, which differ among individuals, groups, and societies. Given that human beings are inherently social creatures, it is highly probable that their personality, opinions, and conduct have a significant impact on or play a decisive role in determining their overall success and contentment in life. The personality of an individual is determined by factors such as their interpersonal relationships, level of self-control, and drive and perseverance throughout activities (Merita, 2013).

Shaffer and Gordon (2005) define parenting styles as the typical differences in parenting that serve as the means through which children acquire the societal norms from their parents. Husenits (2006) defined parenting styles as the beliefs, attitudes, and values of parents that influence the most effective ways of carrying out parenting. According to Stevens (2008), parenting style pertains to the manner in which parents provide direction, establish boundaries, and engage with their children. According to Woolfolk (2010), parenting styles are defined as the methods of engaging with and enforcing discipline onto children. Parents vary in their approaches to controlling and socialising their children, as well as the extent to which they employ these methods. Nevertheless, the primary function that parents fulfil is that of socialising, instructing, and directing their children (Shaffer & Gordon, 2005), thereby equipping them for independent lives as adults. Optimal socialisation facilitates the child's successful functioning as an adult, even in the absence of parents. Thus, it is plausible to anticipate the outcome of socialisation by studying child-rearing methods employing permissive, authoritarian, and authoritative parenting techniques (Husenits, 2006).

Socio-emotional skills encompass the cognitive and behavioural qualities that allow individuals, especially young children, to comprehend and regulate emotions, establish healthy connections with others, and exhibit

empathy and conscientious decision-making. These skills are fundamental in early life as they have a substantial impact on a child's capacity to engage with peers, negotiate social environments, and attain academic achievements. Denham *et. al.* (2019) state that socio-emotional skills in preschoolers encompass emotional control, awareness of society, and interpersonal interaction, all of which are essential for proper development. Acquiring these abilities at a young age is crucial as they have a significant role in one's overall welfare, encompassing improved mental well-being and academic achievements (Jones & Doolittle, 2017). Moreover, children who demonstrate robust socio-emotional abilities are more inclined to display prosocial behaviour and effectively adjust to the requirements of formal schooling (Raver, 2020). Thus, cultivating socio-emotional abilities during the preschool years is a crucial component of ECE.

Parenting styles pertain to the techniques and strategies employed by parents in the upbringing of their children, comprising issues such as communication, discipline, and emotional support. The impact of these techniques on children's development, especially their socio-emotional skills, is substantial. Baumrind's (1967) influential research classified parenting styles into four primary categories: authoritative, authoritarian, permissive, and neglectful. Authoritative parenting, which is defined as a combination of being highly responsive and having high expectations, is frequently linked to favourable socio-emotional results in children, such as the ability to regulate their own behaviour and being socially competent (Maccoby & Martin, 1983).

Authoritarian parenting, characterised by a focus on compliance and discipline with limited responsiveness, can result in problems such as anxiety and social isolation (Pinquart, 2017). Permissive parenting, characterised by a high level of attentiveness but a low level of demands, can lead to inadequate self-discipline and difficulties in social interactions (Smetana, 2017). Neglectful parenting, characterised by a lack of responsiveness and minimal expectations, is associated with the most unfavourable socio-emotional consequences, such as diminished self-esteem and challenges in establishing interpersonal connections (Muris *et. al.*, 2018).

For the purpose of this study, however, authoritarian, permissive, and authoritative parenting styles are considered.

Authoritarian parents exert excessive control over their children by imposing strict boundaries (Dolecki, 2012). They lack displays of affection and are insensitive to their children's appeals. Parents frequently anticipate their children to demonstrate behaviour that is not suitable for their age (Lichtman, 2011). An instance of this is when preschoolers are anticipated to remain silent for an extended duration. Additionally, they fail to take into account their preferences, competencies, and requirements of their children (Baumrind, 2008). Authoritarian parents typically disregard the significance of tenderness in childrearing (Lao, 2008), leading them to be excessively critical and prone to finding faults. These parents hardly appreciate their children for promptly finishing routine tasks or for attaining high marks. Furthermore, they fail to recognise or appreciate the efforts made by their children. Parents exercise authority over their children's activities and enforce strict regulations (Baumrind, 2008). This strict authority persists even after their children reach adulthood (Weiten, Dunn & Hammer, 2009). Consequently, a parenting approach that is authoritarian is characterised by being domineering (Moonie, 2005) and has severe negative effects. This approach hinders the child's self-esteem and hampers their ability to learn to the fullest extent (Dalpiaz, 2004).

Milevsky, Schlechter, Netter, and Keehn (2007) established that children's life happiness may diminish when they are brought up by fathers who exhibit authoritarian parenting styles. Furthermore, according to Leung, McBride-Chang, and Lai (2004), the presence of authority and the disciplinary approach in authoritarian parenting can lead to children experiencing unhappiness and dissatisfaction with their lives. Authoritarian parenting is believed to have a negative impact on the life satisfaction of children. Multiple studies have established a correlation between low self-esteem and authoritarian parenting in children (Martinez & Garcia, 2008; Milevsky *et. al.*, 2007). Patock-Peckham and Morgan-Lopez (2009) discovered that children who experience parental control are more likely to have low self-esteem, in contrast to children who get affection and warmth from their parents. It can be inferred that children who are raised by authoritarian parents may have a decline in their degree of self-esteem.

Joshi *et. al.* (2009) conducted a study examining the relationship between parenting style and depression in teenagers. The findings revealed that adolescents who resided with authoritarian parents experienced higher

levels of depression compared to those who lived with authoritative parents. Additional studies have also discovered a significant correlation between authoritarian parenting and despair (Milevsky *et al.*, 2007; Patock-Peckham & Morgan-Lopez, 2009). According to Thompson (2003), children between the ages of 5 and 10 who live in authoritarian families are currently experiencing depression. Collectively, these findings indicate that authoritarian parenting could be a contributing factor to depression in children.

Permissive parents foster psychological independence, demonstrate acceptance, and display lenient behavioural regulation (Baumrind, 2013; Baumrind *et al.*, 2010). Parents belonging to this category are supportive and impose little behavioural expectations on their child (Baumrind, 1966). Permissive parents strive to minimise the use of forceful or confrontational methods (Baumrind, 1989). Furthermore, permissive parents have been defined as indulgent and granting children the freedom to establish their own norms and make choices of their own (Maccoby & Martin, 1983). This parenting style has been associated with negative child outcomes, including decreased academic success (Baumrind, 1971), impaired impulse control (Maccoby & Martin, 1983), and less autonomy (Baumrind *et al.*, 2010).

Permissive parenting, which is defined by being highly responsive yet having relatively low expectations, has a multifaceted connection with the socio-emotional abilities of preschool-aged children. Permissive parents, although caring and communicative, may have challenges with their children's self-control and socialisation due to the absence of structure and limitations. Research indicates that children who are brought up by permissive parents may display elevated levels of emotional expressiveness but may encounter difficulties in exercising self-control and conforming to societal standards (Baumrind, 2013).

Permissive parenting is associated with higher levels of violence and weaker peer interactions in preschoolers, mostly because of the lack of regular discipline (Kuppens *et al.*, 2019). While these children may form deep emotional connections with their parents, they may encounter difficulties in structured settings such as school, where adherence to rules and self-control are crucial. Therefore, although permissive parenting might promote emotional affection, it may impede the acquisition of crucial socio-emotional skills essential for achieving long-term success.

Authoritative parenting methods grant children greater autonomy and accountability compared to authoritarian parents, while also promoting individuality and self-reliance within certain boundaries (Robbins, 2012). Their goal is to raise children that are confident, socially conscious, disciplined, and collaborative (Baumrind, 2008). The autonomy expected and required by authoritative parents is developmentally appropriate for the children's age (Sclafani, 2004). Despite expecting their children to be autonomous, some parents also impose limitations on their children's activities (Pardeck, 1998). Authoritative parents establish explicit expectations for their children's behaviour and diligently supervise their adherence to these rules (Bornstein & Zlotnick, 2009). Research conducted by Saadu and Agbo in 2022 has shown that authoritative parenting can reduce and impact children's indicators of depression.

Recent researchers, like Liem *et al.*, (2010 as quoted in Saadu & Agbo 2022), conducted a study to examine the potential correlation between authoritative parenting throughout childhood and the occurrence of depression in young adults four years later. The study findings confirmed the predictions that authoritative parenting during childhood is indeed associated with lower levels of depression symptoms in young adults (Liem *et al.*, 2010). Furthermore, Milevsky *et al.*, (2007) discovered that children who were raised by authoritative parents exhibited reduced levels of depression in comparison to children raised under different parenting styles, such as authoritarian parenting. Moreover, the practice of authoritative parenting diminishes the likelihood of children experiencing depression. Milevsky *et al.*, (2007) differentiated between the roles of mothers and fathers and examined their impact on the development of children. The researchers examined the patterns of mother and paternal parenting and their impact on children's well-being, including factors such as self-esteem, sadness, and life satisfaction.

The socio-emotional development of preschoolers is greatly impacted by parenting methods, which play a crucial role in developing their capacity to engage with others and regulate their emotions (Baumrind, 2013). The presence of several parenting ways in Shomolu LGA, Lagos State provides a chance to investigate the relationship between different styles and the socio-emotional skills of children. Studies have shown that authoritative parenting, which is a combination of warmth and structure, is linked to positive socio-emotional



development in children (Kuppens& Ceulemans, 2019). Nevertheless, the effects of permissive or authoritarian styles have not been thoroughly examined in this particular situation. From the aforementioned, this study focused on providing valuable insights into educational and parental practices.

### **Objectives of the study**

The following objectives guided this study:

- . To analyse the relationship between authoritarian parenting style and preschooler socio-emotional skills.
- To determine the relationship between permissive parenting style and preschooler socio-emotional skills.
- To examine the correlation between authoritative parenting style and preschooler socio-emotional skills.

### **Research Questions**

- What is the relationship between authoritarian parenting style and preschooler socio-emotional skills?
- What is the relationship between permissive parenting style and preschooler socio-emotional skills?
- What is the correlation between authoritative parenting style and preschooler socio-emotional skill?

### **Hypotheses**

The following hypotheses were tested in this study:

- H<sub>0</sub>1:** There is no significant relationship between authoritarian parenting style and preschooler socio-emotional skill
- H<sub>0</sub>2:** There is no significant relationship between permissive parenting style and preschooler socio-emotional skill.
- H<sub>0</sub>3:** There is no significant correlation between authoritative parenting style and preschooler socio-emotional skill.

### **Methodology**

Using a correlational survey research design, this study's population comprised all preschoolers in public pre-primary schools in Shomolu LGA of Lagos State and their parents. The sample for this study comprised 120 preschoolers and 120 parents with children in preschool. Multistage sampling procedure was employed for the study. In the first stage, the Stratified Sampling Technique was employed to separate the preschoolers and parents of preschoolers from the secondary and primary schools in the public schools, in Lagos, State. In the second stage, through the Purposive Sampling technique, the preschoolers and parents of preschoolers in Shomolu LGA were selected. Finally in the last stage, through the Simple Random Sampling Technique, 6 public preschools were randomly selected. 20 preschoolers and 20 parents of preschoolers were also randomly selected from each school. A 20-item Parenting Styles Scale (PSS) was adapted from Kimble (2014) and a 14-item Preschooler Socio-emotional Skills Assessment Scale (PSESAS) was adapted from Saadu and Agbo (2022) with 0.77 and 0.89 reliability coefficients, respectively. It is worth to mention that since the preschoolers may find it difficult to attempt PSESAS, their class teachers who regularly interact with the pupils assisted in responding to the scale for each pupil in the presence of at least one of the researchers. Pearson Correlation was used to test the formulated hypotheses at a 0.05 significance level. The data analysis was carried out with the use of Statistical Package for the Social Scientists (SPSS 21.0).

## Results

**Table 1: Preschoolers' Demographics**

Characteristics	Options	Frequency	Percent (%)
Gender	Male	64	53.3
	Female	56	46.7
	<b>Total</b>	<b>120</b>	<b>100.0</b>
Age	4-5 years	72	60.0
	6-7 years	48	40.0
	<b>Total</b>	<b>120</b>	<b>100.0</b>

*Source: Field Survey, 2024*

Table 1 indicates that most (53.3%) of the sampled preschoolers were male and the remaining 46.7% of them were female. Also, the majority (60.0%) of them were within the age bracket 4-5 years, while the remaining 40.0% of them were 6-7 years.

**Table 2: Parents' Demographics**

Characteristics	Options	Frequency	Percent (%)
Gender	Male	31	25.8
	Female	89	74.2
	<b>Total</b>	<b>120</b>	<b>100.0</b>
Age	20-30 years	22	18.3
	31-40years	78	65.0
	41-50 years	20	16.7
	<b>Total</b>	<b>120</b>	<b>100.0</b>
Tribe	Hausa	11	9.2
	Igbo	36	30.0
	Yoruba	73	60.8
	<b>Total</b>	<b>120</b>	<b>100.0</b>

*Source: Field Survey, 2024*

Table 2 shows that most (74.2%) of the sampled parents were female and the remaining 25.8% of them were

male; this indicates that mothers are more involved in their children's education than the fathers. 18.3% of them were within the age bracket 20-30 years, the majority (65.0%) of them were 31-40 years, while the remaining 16.7% of them were 41-50 years. Similarly, only 9.2% of the parents were from the Hausa tribe, 30.0% of them were Igbo, and the majority (60.8%) of them were Yoruba, this is understandable as Shomolu is a Yoruba populated area.

### Test of Hypotheses

**Hypothesis One:** There is no significant relationship between authoritarian parenting style and preschooler socio-emotional skill

**Table 3: Correlation Statistics**

Authoritarian Parenting Style		
Socio-emotional Skills	Pearson Correlation	-.751
	Sig. (2-tailed)	.014
	N	120

Table 3 shows  $r = -.751$ , indicating that an indirect and strong relationship exists between authoritarian parenting style and preschooler socio-emotional skill, while  $p = .014$  shows that the relationship between the two variables is significant. Hence, null hypothesis that states "there is no significant relationship between authoritarian parenting style and preschooler socio-emotional skill" is rejected, while its alternative that states "there is a significant negative relationship between authoritarian parenting style and preschooler socio-emotional skill" is accepted.

**Hypothesis Two:** There is no significant relationship between permissive parenting style and preschooler socio-emotional skill.

**Table 4: Correlation Statistics**

Permissive Parenting Style		
Socio-emotional Skills	Pearson Correlation	-.698
	Sig. (2-tailed)	.033
	N	120

Table 4 shows  $r = -.698$ , indicating an indirect and strong relationship between permissive parenting style and preschooler socio-emotional skill, while  $p = .033$  shows that the relationship between the two variables is significant. Hence, null hypothesis that states "there is no significant relationship between permissive parenting style and preschooler socio-emotional skill" is rejected, while its alternative that states "there is a significant negative relationship between permissive parenting style and preschooler socio-emotional skill" is accepted.

**Hypothesis Three:** There is no significant correlation between authoritative parenting style and preschooler socio-emotional skill.



**Table 5: Correlation Statistics**

Authoritative Parenting Style	
<b>Socio-emotional Skills</b>	Pearson Correlation
	- .805
	Sig. (2-tailed)
	.000
	N
	120

Table 5 shows  $r = -.805$ , indicating a direct and very strong correlation between authoritative parenting style and preschooler socio-emotional skill, while  $p = .000$  shows that the relationship between the two variables is significant. Hence, null hypothesis that states "there is no significant relationship between authoritative parenting style and preschooler socio-emotional skill" is rejected, while its alternative that states "there is a significant positive relationship between authoritative parenting style and preschooler socio-emotional skill" is accepted.

### Discussion of findings

This study found that a significant negative relationship exists between authoritarian parenting style and preschooler socio-emotional skill. This is in agreement with the claim that authoritarian parents typically disregard the significance of tenderness in childrearing (Lao, 2008), leading them to be excessively critical and prone to finding faults. These parents hardly appreciate their children for promptly finishing routine tasks or for attaining high marks. Furthermore, they fail to recognise or appreciate the efforts made by their children. Parents exercise authority over their children's activities and enforce strict regulations (Baumrind, 2008). This strict authority persists even after their children reach adulthood (Weiten, Dunn & Hammer, 2009). Consequently, a parenting approach that is authoritarian is characterised by being domineering (Moonie, 2005) and has severe negative effects. This approach hinders the child's self-esteem and hampers their ability to learn to the fullest extent (Dalpiaz, 2004).

The analysis of this study indicated a significant negative relationship between permissive parenting style and preschooler socio-emotional skill. This corroborates the argument that permissive parenting is associated with higher levels of violence and weaker peer interactions in preschoolers, mostly because of the lack of regular discipline (Kuppens *et al.*, 2019). While these children may form deep emotional connections with their parents, they may encounter difficulties in structured settings such as school, where adherence to rules and self-control are crucial. Therefore, although permissive parenting might promote emotional affection, it may impede the acquisition of crucial socio-emotional skills essential for achieving long-term success.

Also, the results of this study revealed a significant positive correlation between authoritative parenting style and preschooler socio-emotional skill. This is in tandem with the assertion that authoritative parenting methods grant children greater autonomy and accountability compared to authoritarian parents, while also promoting individuality and self-reliance within certain boundaries (Robbins, 2012). Their goal is to raise children that are confident, socially conscious, disciplined, and collaborative (Baumrind, 2008). The autonomy expected and required by authoritative parents is developmentally appropriate for the children's age (Sclafani, 2004). Despite expecting their children to be autonomous, some parents also impose limitations on their children's activities (Pardeck, 1998). Authoritative parents establish explicit expectations for their children's behaviour and diligently supervise their adherence to these rules (Bornstein & Zlotnick, 2009). Research conducted by Saadu and Agbo in 2022 has shown that authoritative parenting can reduce and impact children's indicators of depression.

### Conclusion

The findings of this study indicate that parenting styles have a substantial impact on the socio-emotional abilities of preschool-aged children. Both authoritarian and permissive parenting styles were found to have a strong

negative correlation with the socio-emotional development of preschoolers. This suggests that these approaches may impede emotional and social maturation. On the other hand, an authoritative parenting style showed a strong positive relationship with the growth of socio-emotional abilities. This indicates that a well-rounded strategy that combines structure, warmth, and responsiveness promotes superior socio-emotional outcomes in ECE children. These findings emphasise the significance of implementing an authoritative parenting style to facilitate the comprehensive growth and development of preschool-aged children.

### Recommendations

The findings of this study recommended that parents should avoid using authoritarian and permissive parenting styles, since being overly strict or overly indulgent may impede the development of healthy socio-emotional skills in children.

Researchers should arrange seminars and workshops to educate parents on the importance of parenting techniques that can enhance the socio-emotional abilities of children both in and out of school.

Parents should establish a conducive environment that facilitates the development of healthy socio-emotional skills in preschoolers. This would allow children to have the chance to effectively communicate, establish connections, engage, and articulate their perspectives with their parents.

Socio-emotional competence plays a crucial role in the development of children. In order to provide their children with ample care and affection, parents should adopt an authoritative parenting style, which involves setting clear directions, guidance, and objectives. This will facilitate the development of assertiveness, social responsibility, and cooperation among children in their interactions with peers and parents.

### References

- Baumrind, D. (1966). Effects of authoritative parental control on child behavior. *Child Development*, 37, 887-907. doi:10.2307/1126611
- Baumrind, D. (1967). Childcare practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs*, 75(1), 43-88.
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology*, 4, 1-103.
- Baumrind, D. (1989). Rearing competent children. In W. Damon (Ed.) *Child development today and tomorrow* (pp. 349-378). San Francisco: Jossey-Boss.
- Baumrind, D. (2008). Parental authority and its effects on children. *Parenting for Moral Growth* 1(2), 1-6.
- Baumrind, D. (2013). Authoritative parenting revisited: History and current status. In R. E. Larzelere, A. S. Morris, & A. W. Harrist (Eds.) *Authoritative parenting: Synthesizing nurturance and discipline for optimal child development* (pp. 11-34). Washington, DC: American Psychological Association Press. doi:10.1037/13948-002
- Baumrind, D., Larzelere, R. E., & Owens, E. B. (2010). Effects of preschool parents' power assertive patterns and practices on adolescent development. *Parenting: Science and Practice*, 10, 157-201. doi:10.1080/15295190903290790
- Bornstein, M. H. & Zlotnick, D. (2009). Parenting styles and their effect. In: *Social and emotional development in infancy and early childhood*. (1sted.). Edited by Benson, J.B. & Haith, M. M., San Diego, CA: Elsevier: 280-292.
- Dalpiaz, C. M. (2004). *Breaking free, starting overparenting in the aftermath of family violence*. Westport, CT: Greenwood.
- Denham, S. A., Bassett, H. H., & Zinsser, K. (2019). Early childhood teachers as socializers of young children's emotional competence. *Early Childhood Education Journal*, 47(3), 361-372.
- Dolecki, C. M. (2012). *The everything guides to borderline personality disorder: Professional, reassuring advice with the disorder and breaking the destructive cycle*. Avon, MA: FW Publications.

- Husenits, K. J. (2006). *Child-rearing in: Encyclopaedia of human development*. Edited by N. J. Salkind. London: Sage: 251-257.
- Jones, S. M., & Doolittle, E. J. (2017). Social and emotional learning: Introducing the issue. *The Future of Children*, 27(1), 3-11.
- Joshi, H. L., Sharma, M., & Mehra, R. K. (2009). Depression among adolescents: Role of self-efficacy and parenting style. *Journal of Psychology & Mental Health*, 16, 13- 17.
- Kuppens, S., & Ceulemans, E. (2019). Parenting Styles: A Closer Look at a Well-Known Concept. *Journal of Child and Family Studies*, 28(1), 168-181.
- Lao, J. (2008). Parenting literacy: What parents need to know. Available at URL: . Accessed on 30 February 2018.
- Leung, C. Y. W., McBride-Chang, C., & Lai, B. P. Y. (2004). Relations among maternal parenting style, academic competence, and life satisfaction in Chinese early adolescents. *The Journal of Early Adolescence*, 24(2), 113-143.
- Lichtman, L. J. (2011). A practical guide for raising a self-directed and caring child: An alternative to the tiger mother parenting style. Bloomington, IN: Universe.
- Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In P. H. Mussen (Ed.), *Handbook of child psychology* (Vol. 4, pp. 1-101). Wiley.
- Martinez, I. & Garcia, J. F. (2007). Parenting styles and adolescents' self-esteem in Brazil. *Psychological Reports*, 100, 731-745.
- Merita, S. (2013). The impact of preschool social-emotional development on the academic success of elementary school students. *Psychology*, 4(11), 787-791.
- Milevsky, A., Schlechter, M., Netter, S., & Keehn, D. (2007). Maternal and paternal parenting styles in adolescents: Associations with self-esteem, depression and life-satisfaction. *Journal of Children & Family Studies*, 16, 39-47.
- Milevsky, A., Schlechter, M., Netter, S., & Keehn, D. (2007). Maternal and paternal parenting styles in adolescents: Associations with self-esteem, depression and life-satisfaction. *Journal of Children & Family Studies*, 16, 39-47.
- Moonie, N. (ed.). (2005). *GCE as level help and social care double award (for AQA)*. Oxford: Heinemann Educational Publisher
- Muris, P., Meesters, C., & van den Berg, F. (2018). The influence of parenting styles on child behavior and health. *Journal of Health Psychology*, 23(10), 1340-1350.
- Pardeck, J. T. (1998). *Using books in clinical social work practice: A guide to bibliotherapy*. Binghamton, NY: Haworth Press.
- Patock-Peckham, Julie A., & Morgan-Lopez, Antonio A. (2009). Meditational links among parenting styles, perceptions of parental confidence, self-esteem, and depression alcohol-related problems in emerging adulthood. *Journal of Studies on Alcohol and Drugs*, 70, 215-226.
- Pinquart, M. (2017). Associations of parenting styles and dimensions with academic achievement in children and adolescents: A meta-analysis. *Educational Psychology Review*, 29(3), 475-493.
- Raver, C. C. (2020). Emotions matter: Making the case for the role of young children's emotional development for early school readiness. *Social Policy Report*, 16(3), 3-18.
- Robbins, H. (2012). *Everything parent's guide to raising a gifted child: All you need to meet your child's emotional, social and academic needs*. Avon, MA.: F+W Publishing.
- Saadu, U.T.& Agbo, E.A. (2022) Parenting styles correlate of preschooler's socio-emotional skills in Ilorin East LGAKwara State. *Al-Hikmah Journal of Educational Management and Counselling*, 4(1), 69-75

- Sclafani, J. D. (2004). *The educated parent - recent trends in raising children*. Westport, CT: Greenwood.
- Segrott, J., Rothwell, H., & Thomas, M. (2013). Creating safe places: An exploratory evaluation of school-based emotional support service. *Pastoral Care in Education*, 31(3), 211-228.
- Segrott, J., Rothwell, H., & Thomas, M. (2013). Creating safe places: An exploratory evaluation of school-based emotional support service. *Pastoral Care in Education*, 31(3), 211-228.
- Shaffer, S. M. & Gordon, L. P. (2005). *Why boys do not talk - and why it matters: A parent's survival guide to connecting with your teen*. New York: McGraw-Hill.
- Smetana, J. G. (2017). Current research on parenting styles, dimensions, and beliefs. *Current Opinion in Psychology*, 15, 19-25.
- Stevens, J. (2008). Parenting styles. *Parenting For Moral Growth*, 1 (2), 1-6.
- Thompson, R. A. (2003). The roots of school readiness in social and emotional development. Set for success: Building a strong foundation for school readiness based on the social-emotional development of young children. *Journal of Studies on Alcohol and Drugs*, 1(1), 8-29.
- Weiten, W., Dunn, D. & Hammer, E. Y. (2009). *Psychology applied to modern life: Adjustment in the 21st century*. (9thed.) Belmont, CA: Wadsworth, Cengage Learning.
- Woolfolk, A. (2010). *Educational Psychology*. (11thed.). Upper Saddle River: Pearson.

## Parental Counselling in Guiding Children towards Career in Yenagoa Local Government Area of Bayelsa State Nigeria

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### Abstract

*The study was on parental counselling in guiding children towards career in Yenagoa Local Government Area of Bayelsa State. The study adopted the correlation research design. Six thousand two hundred and ninety three (6,293 comprising 728 parents and 5,565 children) found in 60 Yenagoa Local Government area formed the population of the study. Out of the 6,293 subjects, 633 (comprising 557 children and 76 parents) formed the sample size for the study. Two instruments titled "Parental Counselling Questionnaire (PCQ)" and "Guiding children towards careers (GCC) were used in the study. The instruments were validated by experts in the department of early childhood/primary Education, faculty of Education, University of Port Harcourt. Test-retest method was employed to obtain a reliability index of 0.71 for the PCQ and 0.68 for the GCC. Data analysis was done using Pearson Product Moment Correlation (PPMC). Result of the study revealed that parental counselling has significant relationship with children home learning ( $p=0.024<0.05$ ) and career communication ( $p=0.033<0.05$ ). On the other hand, there was no relationship between parental counselling and career decision ( $p=0.093>0.05$ ). Based on this, it was recommended among others that educators should encourage parents to participate in their child's career guiding, such as attending parent-teacher conferences, volunteering in the classroom, and helping with homework.*

**Keywords:** Career guidance, Home Learning, Decision- Making, Communication.

### Introduction

Parents' presence in their children's life has a enormous significance in the sense that every child needs their parents in almost every aspect. Children need the care, protection and guidance of their parents. This care, protection and guidance includes counselling, career guidance can be seen as direction given to children of any age and at any point throughout their lives in order to assist them make, the right educational and career choice effectively. Career guidance helps young people to reflect on their interest and abilities. It is the advice and information about careers that help children decide a career and also teaches them how to pursue their chosen career with valuable information and resources (Watts & Fret, 2024).

UNESCO (2021) posits that effective career guidance helps to reach their potentials, become fairer, and efficient in the society. Career guiding highlights the importance of discerning young people's talent and maximizing human potentials. Career is made up of the combination of roles, experiences education and path ways you take to achieve your goals. Career guidance is the guidance given to individuals (including primary school pupils) to help them acquire the knowledge, information, skills and experience necessary to identify career options and narrow them down to make a good career choice, this career guiding results in their social, financial and emotional well-being throughout their life.

Parental counselling in career guidance of their children is valuable, considering the way in which parents influence their children. This parental counseling may mar or make their children's career decision in life. Parents' lay the foundation of career guidance in childhood Watson *et. al.*, (2015), Schutheisset. *al.*, (2002)



suggest that parents influence children's careers outcomes such as vocational aspiration and achievement; career decisiveness; and career exploration parents should listen actively to their children's interests, passions and strengths to help them identify the potential career path that align with their talents and values. Kgabo (2023) posits that children should be encouraged by their parents to explore different career options by providing them with opportunities to shadow professionals, attend career fairs and workshops and engage in internships.

Kgabo (2023), further asserts that parents must motivate and encourage their children to pursue education and training to help them achieve their goals, such as attending vocational school, provide guidance by offering information about various career paths that require education and training. Parents must provide emotional support by being there for their children during decision-making, offering encouragement and helping them cope with setbacks or failure. Parents may play a significant role in guiding their children towards choosing a successful and fulfilling career that align with strengths, interests and values.

Bysshe *et. al.*, (2002) state that parents' counselling in career guidance may helps children to reflect on their interests, ambitions, abilities, and qualifications. It may help them to understand the product market and education system and relate this on how children know about themselves.

Overall, parents' counselling in career guidance of their children helps to inform about the product market and about educational opportunities more accessible by organizing it, systematizing it, and making it available when and where we need it. In its contemporary forms, career guidance elicited upon a number of disciplines, like education, sociology, psychology and labour economics. Roy (2020) further mentioned that career guidance provides quality life planning education and proper career service which are classified without developmental needs of different stages of growth as follows:

- It helps to create good career decision making that go in line with their abilities, interest, and orientation, among others.
- It empowers children to make responsible and informatics guiding on their education, career goals and others aspects leading to a meaningful life.
- It helps learners in adapting and managing the transition of life from school to the workplace
- Parental counselling in career guidance prepares children for the actualization of life potentials through the pursuit of their personal and career goals.
- It will assist the children to understand their academic aspirations and develops positive attitude towards learning and works.
- It helps the children utilize the acquired knowledge, attitude and skills whenever necessary.
- Parental counselling in children's career guidance promotes academic growth and development
- Its, helps children to develop their own ability to solve problem and take decision
- Career guidance helps children to understand vocational maturity, vocational adjustments, and vocational choices, social and personal adjustment for better life.

Career guidance helps not only learners and teachers in an educational institution but it also helps the parents, administrators, planners and community members for doing well and be good in life.

The general features of career self-management skills like decision making, self support, motivation and quality instruction. Parental support in the education of their children extends beyond the school building. It seems that parental counselling is researched in the topic of domestic and foreign studies, there is still concern regarding parental counselling and what constitutes effective parental counselling in the education of their children. Epstein (2009) suggests that parental counselling in the education of children begins at home with the parents providing a safe and healthy environment, appropriate learning experiences, support and positive attitude about school. Several studies have shown that effective success of children involve parents counselling.

Epstein, (2009) reaffirms that parents should have a better understanding of effective parental counselling in promoting their children's career. Henderson and Mapp (2007) revealed that parental counselling has its effects on the educational process of their children over the years. Hill and Taylor (2004) assert that parental counselling in the school support of students' achievement could be achieved by increasing their social capital. Epstein (2009) identified a framework which contains six important factors with regards to parental counselling. This framework is based on findings from many studies of what factors are most effective with regards to children's education. Those six factors are parenting, communicating, volunteering, learning at home, decision-making and collaborating with the community.

Parenting involves all the activities that parents engage into raise happy, healthy children who become capable

learners. Unlike teachers, whose influence on children is relatively limited, parents maintain a life-long commitment to their children. Activities that support this type of counselling provide information to parents about their child's development, health, safety, or home condition that can support children's learning. It also includes parents' education and other courses or training for parents, family support programmes to assist families with health, nutrition and other services, home visit at transition points to elementary, middle and secondary school.

Communicating involves families and schools communicating and interacting with each other in multiple ways. Schools send home note and flyers about important events and activities, parents give teachers information about their child's health and educational history. A school website is an additional mode of communication with parents and families, including: conferences with every parent at least once a year, language translator to assist families as needed, regular schedule of useful notices, phone calls, newsletters and other communication.

Volunteering applies to recruiting and organizing help and support from parents for school programmes and learners' activities. There are three basic ways that individuals volunteer in education. First, they may volunteer in the school or classroom by helping teachers and administrators as tutors or assistants. They may volunteer for the school; for instance, fund raising for an event or promoting a school in the community. They may volunteer as a member of an audience, attending school programmes or performances.

Volunteering includes: school/classroom volunteer programmes to help teachers, administrator, students and other parents, parent body or family centre for volunteer work, meetings and resources for family, annual postcard survey to identify all available talents, time and location of volunteers.

Learning at home pertains to providing ideas and information to parents about how they can best assist their children with homework and curricular – related decision and activities. Parents helping their children with homework or taking them to a museum are examples of this type of counselling. These activities produce a school-oriented family and encourage parents to interact with the school curriculum. Activities to encourage learning at home provides parents with information on what children are doing in the classroom and how to help to monitor and discuss school work at home, as well as family participation in setting learners goals each year and in planning for college work.

Decision-making refers to including parents in school decisions and to developing parent leader and representative. Parents participate in school decision-making when they become part of school governance committees or join organization, such as the parent/teacher's association. Other decision-making activities it includes taking on leadership role that involve disseminating information to other parents. Include active PTA or other parent organization advisory councils, or committee for parent leadership and participation, independent advocacy group to lobby for school reform and improvements, networks to link all family with parent representatives.

Collaborating with the community pertains to identifying and integrating community services and resource to support and strengthen school, learners, and their families. This includes information for the learners and community, health, cultural, recreation, social support and other programmes/services, information on community activities that link to learning skills and talents, including summer programmes for children.

### **Objectives of the study**

The general objectives of the study is to investigate how parental counselling in guidance children towards career in YENAGOA local government area in BAYELSA, STATE Nigeria. Specifically, the objectives of the study are to:

- Find out the relationship between learning at home with parents counselling and guiding children towards career in Yenagoa local government area of Bayelsa state.
- Determine the relationship between parental counselling in guiding children and decision making concerning their career in Yenagoa local government area of Bayelsa State.
- Ascertain the relationship between parental counselling and children career communication choice to Yenagoa local government area of Bayelsa State.

### **Research Questions**

The following research questions guided this study:

- What is the relationship between parental counselling and children leaning at home in Yenagoa local



government area of Bayelsa State?

- To what extent is the relationship between parental counselling and children career decision making in Yenagoa local government area of Bayelsa state?
- How does parental counselling relate to children career in communication in Yenagoa local government area of Bayelsa state?

### Hypotheses

The following hypotheses are tested based on the objectives of the study and research questions.

- H<sub>0</sub>1:** There is no significant relationship between parental counselling in learning at home and guiding children towards career in Yenagoa local government area of Bayelsa State.
- H<sub>0</sub>2:** Significant relationship does not exist between parental counselling and guiding children career in decision making in Yenagoa local government area of Bayelsa state.
- H<sub>0</sub>3:** Parental counselling does not significant relate in guiding children towards career communication in Yenagoa local government area of Bayelsa State.

### Methodology

The study adopted the correlation research design. Six thousand two hundred and ninety three (6,293 comprising 728 parents and 5,565 children) found in Yenagoa local government of Bayelsa state formed the population of the study. Out of the 6,293 subjects, 633 (comprising 557 children and 76 parents) formed the sample size for the study. This sample size represents 10% of the total population. Two instruments were used to elicit responses from the respondents. They were "Parental counselling and guiding children Career Questionnaire (PCQ)" and a 6-items checklist titled "guiding children career (GCC)". The PCQ contains 9 items divided into two sections A and B. Section A dealt with the demographic data of the respondents while section B contained 15 items (5 each) divided into 3 sub sections, measuring pupils learning at home with parents decision-making and communication. Also the PCQ was a 10 items responded to on a 4-point Likert scale which measured the level of children career guidance through parental counselling. The instruments were validated by experts in the department of early childhood/primary Education, faculty of Education, University of Port Harcourt. Test-retest method was employed to obtain a reliability indexes of 0.71 for the PCQ and 0.68 for the GCC out of the 9 item questionnaire administered, there was 100% retrieval, meaning that none got lost. The exercise lasted for 8 working days.

### Result

**Research Question One:** What is the relationship between parental counselling and children learning at home in Yenagoa Local Government area of Bayelsa State.

**Hypothesis One:** There is no significant relationship between parental counselling and children learning at home in Yenagoa Local Government area of Bayelsa state.

**Table 1:** Person Product Moment Correlation of relationship between is the relationship between parental counselling and children learning at home in Yenagoa Local Government area of Bayelsa State.

Variables	N	R	r <sup>2</sup>	Alpha	Sig	Result
Parental counsel.	633	0.468	0.210	0.05	0.024	Significant
Learning at Home	633					

The analysis in table 1 show that calculated r is 0.468. The r value shows that parental counselling has a positive relationship with pupil's learning at home in Yenagoa Local Government area of Bayelsa state meaning that as parents engage more in counselling more involved in home work of their children, there will be a corresponding

increase in children ability to learning at home in Yenagoa Local Government area of Bayelsa State. The  $r^2$  value is 0.210. This means that parental counselling account for 21% of children learning at home. Calculated sig value is 0.024. Since the sig value ( $0.024 < 0.05$ ) is less than the alpha of 0.05, the null hypothesis is rejected meaning that there is a significant relationship between parental counselling and children learning at home in Yenagoa Local Government area of Bayelsa State.

**Research Question Two:** What extent is the relationship between parental counseling and guiding children career in decision making in Yenagoa Local Government area of Bayelsa state.

**Hypothesis Two:** There is no significant relationship between parental counselling and career communication in Yenagoa local government area of Bayelsa state.

**Table 2:** Person Product Moment Correlation of relationship between parental counselling and children career decision in Yenagoa local government area of Bayelsa state.

Variables	N	R	$r^2$	Alpha	Sig	Result
Parental counsel.	633	0.157	0.022	0.05	0.093	Insignificant
Career Choice	633					

The analysis in table 2 show that calculated r is 0.157. The r value shows that parental counselling has a positive relationship with children career decision making in Yenagoa Local Government area of Bayelsa state. This mean that as parents get more involved in home work of their children, there will be a corresponding increase in children's ability to have good guiding career decision. The  $r^2$  value is 0.022. This means that parental counseling account for only 0.2% of children in career decision. Calculated sig value is 0.093. Since the sig value ( $0.093 > 0.05$ ) is greater than the alpha of 0.05, the null hypothesis is retained meaning that there is no significant relationship between parental counselling and children in career decision in Yenagoa local government area of Bayelsa state.

**Research Question Three:** To what extent does parental inv relate to children career communication in Yenagoa Local Government area of Bayelsa state?

**Hypothesis Three:** Parental counselling does not have any significant relationship with children career communication in Yenagoa Local government Area of Bayelsa state.

**Table 3:** Person Product Moment Correlation of relationship between parental counselling and children career communication in Yenagoa local government area of Bayelsa state.

Variables	N	R	$r^2$	Alpha	Sig	Result
Parental counsel	633	0.357	0.127	0.05	0.033	Insignificant
Career Comm.	633					

The analysis in table 3 show that calculated r is 0.357. The r value shows that parental counseling has a positive relationship with children career communication in Yenagoa Local Government area of Bayelsa state. This means that as parents get more involved in home work of their children, there will be a corresponding increase in children ability to communicate their career decision. The  $r^2$  value is 0.127. This means that parental counselling in learning for about 12.7% of children career communication. Calculated sig value is 0.033. Since the sig value ( $0.033 < 0.05$ ) is less than the alpha of 0.05, the null hypothesis is rejected meaning that parental involvement has

significant relationship with children career communication in Yenagoa Local government Area of Bayelsa state.

### Discussion of Findings

From findings one, it is revealed that there is significantly relationship between parental counselling and children ability to learn at home. This finding means that parental counselling has a direct impact on children learning outcomes. Also, when parents are engaged and supportive, children are more likely to learn effectively at home as parental counselling can enhance children motivation, understanding, and retention of academic material. This means that children whose parents are involved in their learning tend to perform better academically more compare to those whose parents do not get involved in their academic activities. This implies that parental counselling can help bridge the gap between home and school, creating a more cohesive learning environment. The finding of the study is expected by the researcher because as a teacher and mother she is aware of the impact of parental counselling on the progress of children. The findings of the study are in line with as reported earlier by Kgabo (2023) who reported significant impact of parents counselling and students' academic ability.

Research findings two revealed that there is no significantly relationship between parental counselling and children career decision. This means that parental counselling does not directly impact children career choices. It also means that children career decisions are influenced by other factors beyond parental counselling. Hence, parents' efforts to guide their children's career paths may not be as effective as previously thought. This could be so as children may be more influenced by other factors such as personal interests, teen influence etc. The finding of this study is somehow surprising to the researcher because she is aware that most time, parents do influence the career decision of the children. However, the study is in disagreement with that reported earlier by Epstein (2005) and Hul and Taylor (2004) who all reported significant relation between parent's engagement and children career guide.

Finally, finding five revealed that there is significantly relationship between parental counselling and children career communication. This means that parental counselling has a direct impact on students' ability to communicate their career goals and aspirations. It also means that parents play a significant role in shaping their children's career communication skills. In other words, children whose parents are involved in their education and career development tend to have better career communication skills compared to those whose parents are not much involved. The finding of the study is in line with the findings of Schutheisset'al (2002).

### Recommendations

Schools and educators should encourage parents to participate in their children education, such as attending parent-teacher conferences, volunteering in the classroom, and helping with homework.

- Teachers and counselors should provide parents with resources and support to help them address specific learning challenges their child may face, such as tutoring or counseling.
- Career guidance programs should be implemented in schools, providing children with resources and support to explore their interests and career options

### Conclusion

In conclusion, the findings highlight the significance of parental counselling in children educational outcomes. While parental counselling is positively related to children ability to learn and career communication skills, it has no significant impact on children career decisions. This suggests that parents play a crucial role in supporting their children's academic development and career communication, but children ultimately make their own career choices. To optimize parental counsellor's educators and policymakers should focus on:

### References

- Bysshe, S., Hughes, D. & Bowes, L. (2002). *The economic benefits of career guidance: A review of current evidence*. Centre for guidance studies: University of Derby.
- Epstein, J. (2003). *Creating school, family and community partnership*. In A.C.Ornstein, L.S. Behar – Horchstein, & E.F. Pajak (Eds.), contemporary issue in curriculum. (3<sup>rd</sup>ed) (pp. 354-373). Boston, MA: Allyn and Bacon.
- Esptein, J.O. (2009). *In school, family, and community partnership: Your handbook for action* (3<sup>rd</sup> ed.) USA: Corwin press.

- Sanders, M.G. & Sheldon, S.B. (2009). *Principals matter: A guide to school, family, and community partnerships*. Corwin: A SAGE company.
- Sheldon, S.B. (2009). *In school, family and community partnership: your handbook for action* (3<sup>rd</sup> ed.). USA: Corwin press.
- Henderson, A, & Mapp, K.L. (2022). *A new wave of evidence the impact of school, family, and community connections on student achievement*. Annual synthesis. Austin, TX: National Center for family and Community Connections with Schools, Southwest Educational Development Laboratory.
- Hill, N.E. & Taylor, D.C. (2004). Parental school involvement and children's academic achievement: Pragmatics and issues. *Current Directions in Psychological Science*, 13 (4), 161-164.

# Philosophical tools for Scaling Up Early Childhood Education in Nigeria: The Role of Stakeholders

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## **Abstract**

*This paper examines the philosophical underpinnings crucial for scaling up Early Childhood Education in Nigeria, emphasizing the interconnected roles of various stakeholders. Recognizing the limitations of a purely economic or infrastructural approach, the paper argues for a robust philosophical framework grounded in constructivist and progressivist principles. This approach positions children as active agents in their learning, emphasizing play-based pedagogy, individualized learning experiences, and the social construction of knowledge.*

*The paper analyzes the critical roles of key stakeholders such as policy makers, Educators, parents and communities in this endeavour:*

*By embracing a constructivist and progressivist philosophy and fostering active collaboration among stakeholders, Nigeria can create a thriving ECE ecosystem that nurtures the cognitive, social, and emotional development of its youngest citizens, laying a strong foundation for a brighter future.*

## **Introduction**

Early childhood education (ECE) represents a critical foundation in human development, encompassing the formal and informal learning experiences the child receives in the formative years from birth to age eight. This critical period lays the foundation for lifelong learning, behaviour, and health. It is characterized by rapid brain development and the acquisition of fundamental cognitive, social, and emotional skills that shape the child's lifelong trajectory. The field of ECE has evolved significantly over the past century, transitioning from basic childcare approaches and custodial care to sophisticated educational paradigms informed by developmental psychology, neuroscience, and pedagogical research. It is in line with this that Nigeria, in accordance with the Jomtien Declaration of Education for all (EFA), is committed to making available qualitative and comprehensive early childhood education and care for all children.

Evidences have confirmed that good ECE is one of the greatest investments that a nation can make for their children, that is, an education that can promote a strong learning foundation for children in later years (Engle et al., 2011, Nores & Barnett, 2010). United Nations (2019) affirms that ECE is one of the strongest determinants of the child's school readiness in both high-income and low-income countries. Consequently, efforts are being geared towards providing and promoting quality education for children at all levels through several policies that are put in place.

Implementation of these policies are ensured by those who have stake in the organisation. Educational stakeholders are all direct and indirect participants in an educational system, including policy makers and members of the public, who have vested interest in its functioning and outcomes (Adebayo, 2013). Recently, it was established that educational provision is the responsibility of all stakeholders (Kufi, 2013; Takyi et al., 2013), and that stakeholders could play substantial roles in influencing the attainment of education quality by promoting the need for educational effectiveness. The National Policy on Education guaranteed stakeholders participation with a view to eliminating overlaps, and to sustain and achieve synergy among diverse stakeholder groups (FGN 2013).

In the same vein, the philosophical underpinnings of ECE have similarly progressed, moving from views of children being seen as miniature adults and as such no special need was accorded to them to being seen as passive recipients of knowledge and to further recognise them as active participants in their own learning (Keelay, 2007). This shift has profound implications for educational practice, policy, and the roles of various stakeholders in the ECE ecosystem. Contemporary philosophical perspectives in ECE emphasize the importance of play-based learning, child-centred approaches, and the integration of diverse cultural contexts in early learning environments. The Nigerian government in response to this call inaugurated the Universal Basic Education (UBE) in order to allow every child to have access to basic education.



The importance of scaling up efforts in ECE cannot be overstated. Report has it that globally, access to early childhood education (ECE) has been expanding rapidly with the most dramatic increases occurring in low- and middle-income countries however, the Nigerian statistics says otherwise. In view of the report from the International Centre for investigative report (ICIR 2023) which states that one out of three children in Nigeria is out of school with about 10.2 million children at the primary school level and only one in three children aged 36-39 months having access to Early Child Care Development Centre (ECCDE).

Despite widespread acknowledgment of ECE's benefits, access to quality programmes remains uneven across socioeconomic groups and geographic regions of Nigeria. Scaling up may involve not only expanding access but also enhancing the quality of ECE programs. This includes improving teacher training, developing evidence-based curricula, and creating supportive learning environments. It is to this end that this paper aims at examining the interplay between philosophical perspectives, stakeholders roles, and practical implementation strategies that will foster the scaling up of early childhood Education in Nigeria.

### **Early Childhood Education in Nigeria**

Historically, Nigeria gained her independence in 1960, and efforts to restructure and empower the educational system has been quite challenging. However, the educational reforms in Nigeria dated back to pre-independence in 1955 when the then Western Regional Government of Nigeria put in place the structure of compulsory Universal Primary Education scheme (UPE) that made primary education free for all children in the region (Edho, 2009). At this stage, many formal and organized preschools and child care centres were established in order to enable working mothers keep their children in safe places while they went to work (Odigie, 2016). The government was not involved with the management and running of this level of Education hence, the administration of pre-primary education continued in the hands of private proprietors until 1969 when a curriculum conference was held. At the end of the conference, the committee advocated a head-start programme for toddlers and children and nursery and kindergarten schools were to cater for the needs of children between the ages of three and five years.

The preschool programme was to allow for the smooth transition of the child from home to school as well as prepare the child for primary level of education. The preschool programme was also meant to provide custodial care for children of working-class parents. The conference recommended that private proprietors should manage the affairs of such schools. In the 1970s, there was the urgent need for government to make more definite policies on the preparatory roles of pre-school institutions. In response to this, the federal government, in its first major National Policy on Education, in 1981, had a full section on pre primary education. In that section, pre-primary education was referred to as, "the education given in an educational institution to children aged three to five years plus, prior to their entering the primary school. Also stipulated in the National Policy on Education (2013), the purpose of pre-school education as follows:

- Effect a smooth transition from the home to the school
- Preparing the child for the primary level of education
- Providing adequate care and supervision for the children while their parents are at work, (on the farms, in the markets, offices etc)
- Inculcating social norms Inculcating in the child the spirit of enquiry and creativity through the exploration of nature, and the local environment, playing with toys, artistic and musical activities etc
- Teaching co-operation and team spirit
- Teaching the rudiments of numbers, letters, colours, shapes, forms, etc, through play, and
- Teaching good habits, especially good health habits.

To fully achieve the above goals, the Nigerian government has specified in the National Policy on Education (2013) and through the UBE scheme that it would:

- Set and monitor minimum standard for ECCDE centres
- Develop and disseminate curriculum materials such as the Integrated Early Child Care Development (IECD) Policy, National Minimum Standard for the establishment of Early Child Care Education Centres, IECD Curriculum, IECD implementation Guidelines and all other materials that will enhance the implementation of ECCDE
- Encourage both community and private efforts in the establishment of ECCDE centres based on set standards.

- Make provision in teacher education programmes for specialization in early childcare and education and for retraining of teachers.
- Ensure that the curriculum of teacher education is oriented towards play-way method
- Ensure that ECCDE Centres adopt the following caregiver infant ratio: (i) Crèche shall be 1:10; (ii) Nursery 1:25
- Develop suitable ECCDE curriculum for nationwide implementation
- Supervise and control quality of ECCDE centres
- Make provision for the production and effective utilization of learning and instructional materials in adequate numbers, and
- Ensure that the medium of instruction is principally the mother tongue or the language of the immediate community, and to this end will:  
Develop the orthography of more Nigerian languages and Produce textbooks, supplementary readers and other instructional materials in Nigerian languages.

### **To what extent has the government ensured the implementation of the above?**

Studies have shown that there is a huge gap between policy and implementation (Abdulrahman, 2018, Salami, 2016). Although, access to ECCDE provisions has improved in recent years through collaborative efforts of the Government and NGOs, ensuring enough access and quality education has been a major obstacle. Children from disadvantaged and marginalised areas are mostly affected by inadequate services and provisions.

In a bid to attend to these issues, the federal government, in collaboration with UNICEF, produced a national curriculum for the education of children in 2004 to cover children of ages 0-5 years plus. Subsequently, in 2013, in a bid to ensure minimum standard for ECCDE centres, a one-year Pre-Primary School curriculum was also produced. This curriculum was to serve as a guide for implementing the compulsory one-year pre-primary education. This was a milestone achieved by the government in a bid to provide free preschool education for Nigerian children. Prior to then, the provision of preschool education rested in the hands of private individuals and organisations (FGN, 1998).

In line with the above, several policy documents were provided to guide the implementation of ECE in Nigeria and they included the National Policy on Education (NERDC, 1977, 1981, 1998, 2004, 2013), the National Minimum Standard for Early Child Care Centres in Nigeria (NERDC, 2007), the National Policy for Integrated Early Childhood Development in Nigeria (NERDC, 2017) and the guidelines for Implementing National Policy on Integrated Early Childhood Development in Nigeria (FME, 2013).

In the same vein, by 2007, the National Minimum Standard for Early Child Care Centres in Nigeria (NMSECCC) was produced by Nigerian Educational Research and Development Council (NERDC) in collaboration with United Nation Children's Fund (UNICEF). The document justifies the need to set minimum standards. It further outlines the objectives, the strategies to be adopted, and the prescribed minimum standards to be upheld. It was an all encompassing document which highlighted the roles of supervision, healthcare services to be provided, stakeholders involvement and roles, human resources etc.

In 2004 the Nigerian government made provision for a one-year pre-primary education programme in the public primary schools. The Idea Early Childhood Development (IECD) commenced with the review of the curriculum for preschool education for ages 0 to 5 years to incorporate other key factors that will promote the holistic development of the child. Other factors incorporated into the curriculum included issues of provision of water, environmental sanitation, health, food, safety, protection as well as nutrition.

In the same year, the National Policy for Integrated Early Childhood Development in Nigeria (NPIECD) was also developed and produced by NERDC. This document confirms the deprivation, denial of child rights that the Nigerian child suffers and therefore included in the document, the justification for the policy, the policy's goal and objectives, the policy target and outcomes, the planning and development of interventions, national and state IECD co-ordinating committees, stakeholders' roles and responsibilities, the desirable practices for family, neighbourhood and media, implementation strategies and finally, the financial responsibilities and financial projections. All these aimed at improving care and support that should be given to the growing child in order to give a good head start in life.

In view of all the efforts made by the government in ensuring that the Nigerian child receives access to quality education, how has the government fared in bringing theory to practice? This is a major focus of this section.



According to Ekpo et al., (2016) in a survey carried out on the implementation of ECE Curriculum in Owerri, Imo State, it was discovered that the use of the curriculum was minimal, that is it was not adequately implemented. In the same vein, Adejobi, Omoare and Oyediran (2017), in their comparative assessment of the implementation of ECE Curriculum in public and private schools in Ogun State observed the availability of the Old Curriculum and low implementation in all the schools covered. Salami (2016) in his study on the extent of implementation of government policies about ECE in public schools in Nigeria, observed the following:

- The centres had no curriculum that guided their activities. Most of the time, the teachers either borrowed from the nearest private school (the curriculum used by the private schools is foreign based) or relied on the experience of the teachers to decide what to teach
- About 75% of the public schools in southwest part of Nigeria did not have any of the policy documents. Therefore, the teachers were not aware of the policies guiding the implementation of ECE in the country
- The only resources in the learning centres were chairs and tables for the children and caregivers, and chalkboard. Learning resources were either not supplied at all or grossly inadequate. Those that were supplied were kept out of reach of children in the name of protection from being getting spoilt.
- About 70% of the centres visited had a single teacher working with the children. There were situations in which a teacher was meant to teach the children and one other primary class at the same time.
- The learning environment was generally unattractive and lacks both indoor and outdoor playing materials. There were playing grounds for the children but none of the centres had play materials; the playgrounds were not well-kept and safe for the children.

The above submissions have revealed that as much as the government and relevant organs desire progress of the educational system, there is a great gap in the area of theory and implementation. The success of policies and goals can only be realised through its implementation. The process of adequate monitoring to ensure and enforce implementation is a major gap.

In the light of this, the next section will engage in interrogating the fundamental assumptions raised and attempting to actualise the goals using the ideologies of great Educational philosophers.

### **Philosophical Basis of Early Childhood Education**

The numerous schools of thought in philosophy cannot be exhausted in this paper, however philosophy has been a foundation upon which other disciplines emanated from. It is an indispensable tool for understanding other disciplines. Several concepts and its relation to other disciplines has been teased out of philosophy and it has brought about systematic study of ideas and issues and by implication allows individuals to perceive relationships among diverse fields of study.

Philosophy has been established to relate to all subjects such as mathematics, history, religion and even early childhood education. Man's quest advanced philosophy. In classical study, philosophy was traditionally divided into three principal parts which are natural philosophy, moral philosophy (Ethics) and metaphysics philosophy (logic).

The Natural philosophy birthed the various natural sciences like physics, chemistry, biology, astronomy etc while Metaphysics birthed logic and Moral philosophy birthed social science of which is Early childhood Education.

All disciplines in social sciences have their root in philosophy. Studies in Philosophy focuses on the meaning of ideas as well as coherence and relations to other ideas. It employs critical attitude to develop human knowledge and establishes principles of rational beliefs in human beings. Philosophy opens the mind of education practitioners to allow neutrality and subject their beliefs and knowledge for further critical examination.

Early childhood education has its basis in philosophy. Educational thinkers from time immemorial have underscored the importance of basic education not only as an indispensable prerequisite for subsequent and further education but also as a necessary requirement for engendering social justice and cohesion. Plato, who lived between 427 and 347 BC was about the first to see the need and importance of the early stage of the child's development as being fundamental to his all-round growth. He advocated first stage of education, nursery schools for children between the ages of three to six years. His focus was on physical education, music, and basic intellectual training to develop a well-rounded character and in order to achieve this end, he thinks basic education should be universal (for all and sundry), it should be free and compulsory and controlled by the

government. He recommended the use of play method in teaching the child at this stage. Plato was the first to divide education of the child into stages. Plato's quest to build an holistic child, stressed the need to instil courage and self-discipline in the child. This, to him, can be achieved by exposing the child to pleasure and pain through stories of great men in the society who impacted their world positively, as early as three years of life. In trying to emphasise the importance of early years, he affirmed that the beginning of any task is an important part, especially for any creature that is young and tender. It is at this pre-school stage that the child as a learner is best moulded. This prepares him for latter education (Mkpa, 1999).

Froebel (1782-1852), devoted most of his life to early childhood education. He begins from the premise that the child is an individual entity, hence educators should not apply a universal method of education to all children. He submitted that through activities of learning, the interest and abilities of the child would naturally unfold. Froebel's philosophic thought is derived from the flower metaphor and it is from this that he coined the word, 'kindergarten' which means "the children's garden", another name for pre-school. In this analogy, the growing child is compared to a growing, (flowering) plant. According to him, the child's innate tendencies, natural talents begin to unfold. Similarly, the child's teacher represents the gardener, while nature fertilizes and facilitates growth and development. These stages through which children pass could be successful or hindered, depending on the expertise of the teacher in tending the child. The duty of helping the child to bud lies with every significant adult around. The child maximises his potentials through the role of play.

Idealists philosophers believe that children are the purest expression of divinely inspired nature (Johnson, 2014). They are innocent and in that organic unity with themselves and the universe which most adults have lost as a result of their interaction with their world. To this end, the child's talent and knowledge should be applied more meaningfully to boost his moral imagination. Moral discipline is very fundamental to the idealist theory of early childhood learning because it is assumed that the child operates a universal mind. Such is supported by Odigie (2016) who concurs that discipline is aimed at developing positive behaviours and attitudes in the child through early learning. This would help the child act in accordance with societal norms and values as he grows. In view of this, the idealist's curriculum for early childhood education is based on the premise that the whole concept and practice of education should first be seen as a symbolic activity. Within the context of epistemology, symbols are not mere tools of learning, but rather, instrument of the mind. Consequently, the idealists would argue that symbols as a medium of learning and expression is quite crucial to helping the young learner acquire knowledge. For one thing, the use of symbols in pre-school teaching creates a suitable pedagogical environment. It is also suggested that the classroom, as the environment where symbols are expressed, explained and visualized, should be made more meaningful to the child. Consequently, all that takes place in a typical nursery class should constitute an environment rich in symbols. This, they urge, can be achieved through the use of colourful pictures, diagrams, toys and other learning materials. These would help to stimulate the thoughts and feelings of the pre-schooler.

Rousseau, an Existentialist philosopher who lived between 1712 and 1778, imparted significantly the world of pedagogy. He came up with notion that education should consist less in precept than practice. Education should be child centred, focusing on the needs of the child. He broke the stages of education into 4 with infancy between 0-5 years and boyhood between 6-12. Every child has inherent unique characteristic features. His ideology stands on the pedestal that every child has his intrinsic worth and by implication, the child is not a miniature adult, rather, he is a being with characteristic traits that are unique to children, a being of inherent worth and dignity for the present rather than for the future.

An ideal Rousseau's classroom teacher should be one who harmonizes his secret educational strategy with the natural conditions of a child's growth. He provides relevant and favourable experiences to the right conditioning of the pupil's behaviour and his preparation for life. An analysis of Rousseau's works on early childhood education and its implication for contemporary day pre-school learning reveals that the nature of education is natural. He believes that the child is a naturally good person who needs care and compassion. However, this belief was quite in opposition to the prevailing Christian belief of his time. The child at this time was perceived as one born with the "sin of Adam".

According to Mkpa (1999), Rousseau recognized that:

- Education is more than what takes place in the formal school or classroom. The whole environment of the child is a resource for learning, and there are agencies of learning other than what the teacher's life itself teaches.

- The readiness of the child for new items of learning has to be watched, and no new learning task should be presented to him, until he demonstrates that he is ready. The deciding factor is his eagerness for new learning.
- The child is not a miniature adult and so should not be treated as such nor should his education consist mainly of preparation for adult life which could only destroy all the joy and the excitement of learning in the child.
- Each child is a unique individual and should be studied and understood as such.
- The teacher should cultivate affection for his pupils; he should deeply respect their individual nature, and, in general should be a sympathetic guide and adviser.

### **The role of Stakeholders in the application of Philosophical tools in Scaling up ECE**

Scaling up early childhood education requires a robust philosophical foundation that guides its implementation and ensures its effectiveness. Constructivism, with its emphasis on active learning, individualized experiences, and the social construction of knowledge, offers a powerful framework for this endeavor. Crucially, a constructivist approach recognizes the interconnected roles of various stakeholders in creating a thriving ECE ecosystem.

#### **Stakeholders and Their Roles in a Constructivist ECE Approach:**

- **Children:** At the heart of constructivism are the children themselves, recognized as active agents in their learning. Scaling up ECE through this lens means prioritizing children's interests, curiosity, and individual learning styles. (Designing learning experiences together with children, 2012) emphasizes the importance of designing learning experiences *with* children, giving them a voice in shaping their education.
- **Educators:** In a constructivist approach, educators transition from dispensers of information to facilitators of learning. Their role involves creating stimulating environments, posing thought-provoking questions, and guiding children to construct their own understanding through exploration and interaction. (MyEssayDoc: Design an Exemplary Early Childhood Environment, 2022) suggests incorporating elements into the learning environment that reflect the natural beauty of the surroundings, encouraging children to connect with and learn from their environment.
- **Parents and Families:** Constructivism recognizes the crucial role of families as children's first teachers. Scaling up ECE requires strong partnerships with families, involving them in their child's learning journey, valuing their cultural perspectives, and providing opportunities for shared learning experiences. (MyEssayDoc: Design an Exemplary Early Childhood Environment, 2022) also highlights the importance of involving families in the design of the learning space, recognizing their unique insights and needs.
- **Communities:** Constructivism emphasizes the social nature of learning. Scaling up ECE necessitates collaboration with communities to create enriching learning opportunities beyond the classroom walls. This includes partnerships with museums, libraries, community centers, and local experts who can contribute to children's holistic development.
- **Policy-makers:** Creating a supportive ecosystem for constructivist ECE requires policy-makers to prioritize funding for teacher training, developmentally appropriate assessments, and resources that support active, inquiry-based learning environments. (Meeting the Needs of Early Childhood Professionals, 2023) points to the need for professional development opportunities for educators, equipping them with the skills to implement constructivist principles effectively.

#### **Challenges and Opportunities:**

- **Shifting Mindsets:** Embracing a constructivist approach requires a shift from traditional, teacher-centred models of education. This necessitates ongoing professional development for educators and open communication with families and policy-makers.
- **Assessment and Evaluation:** Measuring the success of constructivist ECE requires moving beyond standardized tests to embrace authentic assessments that capture children's skills, knowledge, and dispositions as learners.

- **Equity and Access:** Scaling up constructivist ECE must prioritize equitable access for all children, ensuring that resources and opportunities are available regardless of socioeconomic background or geographic location.

### **Progressivism as a Philosophical Tool in Scaling Up Early Childhood Education: The Crucial Role of Stakeholders**

Scaling up early childhood education effectively and equitably requires a collaborative approach, bringing together various stakeholders who play a crucial role in shaping the landscape of early learning. Progressivism, with its emphasis on democratic principles, community involvement, and the holistic development of the child, provides a valuable framework for understanding and leveraging the contributions of these stakeholders.

#### **Key Stakeholders and Their Roles:**

- **Educators:** As frontline implementers of ECE, educators are central to translating progressive ideals into practice. Their understanding of child development, commitment to play-based learning, and ability to create inclusive environments are paramount. (Luff & Webster, 2014) emphasizes the importance of participatory approaches in ECE, advocating for educators' voices to be heard and their expertise valued in decision-making processes.
- **Parents and Families:** Recognizing the vital role of families in a child's development, progressivism encourages active parent engagement in ECE. This includes open communication, shared decision-making, and opportunities for families to contribute their unique perspectives and cultural capital. (Kinkead-Clark, 2017) highlights the diverse perspectives of stakeholders, including parents, on the influence of external factors on ECE, emphasizing the need for inclusive dialogue.
- **Communities:** Progressivism views education as a shared responsibility between schools and communities. Scaling up ECE requires partnerships with local organizations, businesses, and community leaders to provide resources, create enriching learning experiences, and ensure that programs are responsive to local needs. (Saguil, 2021) discusses the concept of "child leadership" within a progressive framework, suggesting that preparing children for active participation in a democratic society necessitates collaboration between schools and communities.
- **Policy-makers:** Creating a supportive ecosystem for scaled-up ECE requires policy-makers to prioritize early learning through adequate funding, developmentally appropriate standards, and policies that promote equitable access for all children. (Policy 1 - Quality Pre-K | 3 Practices and 3 Policies, 2018) provides an example of policy recommendations advocating for high-quality pre-K, highlighting the role of policy-makers in shaping the ECE landscape.
- **Researchers:** Evidence-based decision-making is crucial for effective scaling up. Researchers contribute by studying the impact of different ECE approaches, identifying best practices, and informing policy and practice with data-driven insights.

#### **Fostering Collaboration and Shared Vision:**

- **Open Dialogue and Communication:** Creating platforms for regular communication and collaboration among stakeholders is essential for building consensus, addressing concerns, and ensuring that everyone's voice is heard.
- **Professional Development and Training:** Equipping educators, administrators, and policy-makers with the knowledge and skills to implement progressive principles in ECE is crucial for successful scaling up.
- **Community Engagement and Outreach:** Actively involving families and communities in the design, implementation, and evaluation of ECE programs fosters a sense of ownership and shared responsibility.

### **Conclusion**

Scaling up Early Childhood Education in Nigeria is not merely a logistical challenge of making policies and training more teachers; it demands a fundamental shift in our understanding of early learning and the roles various stakeholders must play. This paper has argued for the adoption of a robust philosophical framework grounded in constructivist and progressivist principles, recognizing children as active agents in their learning journey.



By embracing these theories, there is a paradigm shift, that is moving away from rote memorization and standardized testing towards a system that values exploration, creativity, and the social construction of knowledge. This requires a concerted effort from all stakeholders: policymakers enacting supportive legislation and ensuring equitable resource allocation; educators embracing their roles as facilitators of learning; parents and families actively engaging in their children's education; and communities providing enriching experiences beyond the classroom.

The task is undeniably complex, requiring a sustained commitment to collaboration, innovation, and ongoing dialogue. However, the potential rewards are immeasurable. By investing in children and providing them with a strong foundation in early childhood education, there is a hope of brighter future for Nigeria, one characterized by critical thinking, creativity, and a lifelong love of learning.

## References

- Abdulrahman, Y. M. (2018). The gap in the policy and practice of Early Childhood Care Development and Education (ECCDE): Universal Basic Education (UBE) component in Nigeria. *International Journal of Latest Research in Humanities and Social Sciences*, 1,(3),
- Adebayo, F.A. (2013). Stakeholders perception of teacher's integrity in elementary schools in Nigeria, *Literacy Information and Computer Education Journal*, 4(4), 1123-1127.
- Adejobi, A.O., Omoare, A. M., & Oyediran, W. O. (2017). Comparative assessment of implementation of the early childhood education curriculum in public and private schools in rural areas of Ogun State, Nigeria. *International Journal of Education, Learning and Development*, 5(8), 44-54.
- Edho, O. G. (2009). The challenges affecting the implementation of the universal basic education (UBE) in Delta State, Nigeria. *Journal Social Science*, 20(3), 183-187.
- Engle, P.L, Fernald, L.C.H., Alderman, H., Behrman, J., O'Gara, C., Yousafzai, A., Cabral deMello, M., Hidrobo, M., Ulkuer, N., Ertem, I. , Iltus, S., and the Global Development Steering group. (2011). Strategies for reducing inequalities and improving developmental outcomes for young children in low-income and middle-income countries. *The Lancet*, 37, 1339-1353.
- Freeman, R. E., & McVea, J. (2001). A stakeholder approach to strategic management
- Kufi, E.F. (2013). The role of different stakeholders in Ethiopia in the improvement of educational quality, *International Journal of Research Studies in Education*, 2(1), 11-24.
- Mkpa, M.A. (1999). *Infants and intellectual development*. Owerri: Ziltaprinting Press.
- Nores, M., & Barnett, W. S. (2010). Benefits of early childhood interventions across the world:(Under Investing in the very young. *Economics of Education Review*, 29(2), 271–282.
- Odigie, V.O. (2016). *A philosophical approach to Early Childhood and Primary Education*. Port Harcourt: Harvey Publications Coy.
- Resnick, L. B., & Glaser, R. (2016). *Knowing, learning, and instruction: Essays in honour of Robert Glaser*. Routledge.
- Salami, A.I. (2016). Nigerian Early Childhood Education Policies and Practices for sustainability. *European Journal of Research and Reflection in Educational Sciences*, 4(5), 7185
- Takyi, H., Emmanuel, K.A., & Yussif, K.A. (2013). The level of stakeholder's participation in the district education strategic planning towards quality basic education: The case of salaga town council of Ghana, *International Journal of Humanities and Social Science*, 3(14), 95-102.
- Keeley, B. (2007). *Human capital. How what you know shapes your life*. Paris: OECD Publishing.
- United Nations. (2019). *The Sustainable Development Goals Report 2017*. New York: United Nations.



## **Fostering Technology and Artificial Intelligence in Early Years**

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### **Abstract**

*The integration of technology and artificial intelligence in early year's education has become a subject of increasing concentration and debate. This paper explored the potential benefits, challenges and considerations associated with introducing these advancements to young learners while proponents argue that technology and Artificial Intelligence (AI) can enhance cognitive development, creativity and problem-solving skills, skeptics raise concern about potential negative impacts on social interactions. Additionally, attention spans and ethical considerations were designed. Issues related to accessibility, equity and the role of educators in facilitating meaningful technology integration are crucial to address. The paper provided an overview of current research highlights, key areas for further investigation, emphasized the importance of thoughtful and responsible implementation strategies to maximize the potential of technology and AI in early year education.*

**Keywords:** Artificial Intelligence, Technology, Children, Early years, and Education.

### **Introduction**

The term "early years" describes a child's life from birth to about age eight. Establishing the foundation for physical, cognitive, social, and emotional development requires this developmental stage. In addition to parental care and guidance during infancy and toddlerhood, it frequently incorporates early childhood education, such as preschool and kindergarten. A child's total development is greatly influenced by their early years. Several studies underscore the importance of this time frame, highlighting how early events mold the structure of the brain and impact subsequent learning, behavior, and health outcomes. Meloy, Gardner, and Darling-Hammond (2020), Harvard University's Centre on the Developing Child (2021), and the National Scientific Council on the Developing Child (2007).

Early childhood development is greatly aided by technology and artificial intelligence (AI), which offers individualized educational experiences, interactive learning resources, and access to a variety of developmental opportunities. These technologies also encourage creativity and problem-solving abilities. They may also adjust to different learning styles and speeds, providing individualized support for every child's needs. Nonetheless, to sustain development, it is essential to provide balanced use and supervision. Even though AI is good, useful technology are essential to early childhood education, Nigeria's early childhood system still lacks integration. Therefore, in order to promote technology and artificial intelligence in Nigerian early childhood education, the study raised awareness and sensitization.

### **The importance of introducing artificial intelligence and technology to young children.**

Incorporating technology and artificial intelligence (AI) into early childhood education has several advantages, including the creation of individualized learning opportunities. According to Park (2020), this can improve learning effectiveness and engagement. With interactive tools like coding applications, digital art platforms, and narrative software, technology may help young children develop their creativity. According to Hirsh-Pasek, Goinkoss, Berk, and Singer (2019), these platforms promote experimentation and discovery. Through the presentation of real-world problems and the safe experimentation with solutions, AI-based educational games and simulations can foster critical thinking and problem-solving abilities in kids (Ozcelick& Yildirim, 2020).

Additionally, technology makes a wealth of information accessible, enabling kids to pursue a wide range of interests and subjects. Platforms for education driven by AI can produce relevant content that encourages self-directed inquiry and learning (Feng, Wong, &Hossan, 2019). According to Couse and Chen (2010), exposing kids to technology at a young age helps them develop critical skills like digital literacy and technological proficiency, which are becoming more and more important in today's workforce. By providing accessibility

capabilities like text-to-speech, speech recognition, and captioning, technology can accommodate a range of learning needs and skills, guaranteeing that all kids can engage and learn efficiently (Bouck, 2019).

According to Flanigan and Babchuck (2019), technology makes it easier for parents and teachers to communicate, giving them information on their children's development and allowing for cooperative participation in their educational journey.

### **The significance of the early years**

#### **Cognitive Development**

Cognitive growth is rapid during the early years. When brain growth is at its fastest, during the first few years of life, more than a million new synaptic connections form in the brain per second (Centre National Scientific Council on the Developing Child, 2007). According to Shonkoff and Phillips (2000), these early linkages lay the groundwork for later cognitive abilities including memory, problem-solving, and language acquisition.

#### **Development of Emotions and Social Skills**

Emotional and social development also heavily depends on the early years. A sense of security and self-worth are fostered by a secure attachment to caregivers at this time, and these qualities are critical for positive social interactions in later life (Bowlby, 1988). A child's early experiences and connections can have a big influence on how well they can control their emotions and form healthy relationships (National Scientific Council on the Developing Child, 2004).

#### **Health and Well-being**

Early life events can have a lasting impact on one's physical health and general well-being. According to Felitti, Anda, Nordenberg, Williamson, Spitz, Edwards, and Marks (1998), adverse early life events including abuse or neglect can result in mental health disorders, chronic health difficulties, and a shortened lifespan. On the other hand, favorable health outcomes and a lower risk of chronic diseases are associated with favorable early experiences, such as a supportive environment and sufficient nutrition (Shonkoff, Boyce, & McEwen, 2012, Oduntan, 2010).

#### **Educational Outcomes**

During early childhood, the groundwork for lifelong learning is laid. Excellent early childhood education programmes have been demonstrated to enhance academic performance, school preparedness, and even long-term educational attainment (Heckman, 2011). Early education has a lasting effect, as seen by the higher likelihood of improved academic performance and graduation for children who attend high-quality preschool programmes (Reynolds, Temple, Robertson, & Mann, 2001).

#### **Impact on the Economy**

There are substantial financial returns on investments made in early childhood development. James Heckman, the Nobel winner, has shown that early interventions can improve adult output and reduce the need for remedial schooling, resulting in a good return on investment (Heckman, 2006).

Early childhood programmes may result in lower social costs and higher economic production, which makes them a prudent social investment (2004) National Scientific Council on the Developing Child. The significance of early childhood education, especially from birth to age five, is well acknowledged and backed by a substantial amount of research. The basis for lifetime learning and wellbeing is laid during these critical years for cognitive, social, emotional, and physical development.

Early childhood is when the brain develops the fastest; by the age of five, up to 90% of a child's brain structure has been created. Neural connections are formed at this time at a startling rate, greatly impacted by the child's experiences and surroundings.

Children who are exposed to language early on—through talking, reading, and singing—have been demonstrated to improve their vocabulary and language abilities, which are essential for success in school later on. According to Di Liberto, Attaheri, Santisani, Reily, Nichoiedlbha, Rocha, Brusini, and Gosami (2023), children who get regular reading instruction are more likely to acquire excellent reading abilities, which are fundamental for learning in all subject areas.

Children who receive early education benefit from improved resilience and emotional control. Children learn to control their emotions and form safe attachments through responsive interactions with caregivers, both of which are critical for mental and social well-being. In 2023, Conkbayir; Chang, Negi, Samphel, & Won (2024).

### **Research –Based Methods for Early Education**

**Early Learning Supported by Research Learning through Play:** Play-based learning is a very successful strategy in early childhood education, according to research. It encourages the development of cognitive, social, and emotional skills through entertaining and instructive activities.

**Parental Involvement:** It is essential that parents and other caregivers participate in early learning. Better results in terms of children's growth and academic achievement are frequently observed in programmes that incorporate parental engagement. Barr and Lucas (2021)

**Early Education Programme Quality:** The caliber of early childhood education initiatives has a big influence on results. A number of important factors influence how effective these programmes are, including content, learning environment, class size, and teacher qualities. 2020's (National Association for the Education of Young Children, 2020)

### **Early Childhood Education and Technology: A Comprehensive Review**

There is a lot of discussion and study surrounding the use of technology in early childhood education. It is essential for educators, parents, and legislators to comprehend how technology affects young children's cognitive, social, and emotional development. Drawing from a wealth of research, this review explores the many facets of early childhood education and technology to offer a thorough summary.

**Improving Education via Interactive Media** Interactive media, such instructional games and applications, can greatly improve young children's cognitive development. According to research, technology can help children develop their critical thinking, problem-solving, and early reading skills when utilized properly.

In contrast to children who used traditional books, children who used digital storybooks showed better emergent literacy skills, according to a study by Neumann (2014).

### **The function of screen Time**

The type and quantity of screen time are important considerations, even when technology can be helpful. Children between the ages of two and five should only spend an hour a day on screens, with an emphasis on high-quality content, according to the American Academy of Pediatrics (2016). Delays in language development, sleep issues, and attention issues have all been related to excessive screen use.

### **Development of Social and Emotional Skills**

#### **Digital Platforms for Social Interaction**

Video calls and other digital platforms that promote social engagement can be useful in preserving social ties, especially when in-person interactions are scarce. According to research, video conferencing with well-known people can help young children develop their language skills and strengthen their social ties. In 2023, Berk, Golinkoff, and Hirish-Pasek; in 2022, Berbe, Agarwal, and Peters

### **Emotional Control and Technology Utilization**

Technology use may also affect one's ability to control their emotions. While some digital tools can help people learn how to recognize emotions and cope with them, excessive use of them—especially of non-interactive media—can lead to emotional and behavioural problems. According to Vandewater, Bickham, and Lee (2006), children who watched more television were more likely to act aggressively and have shorter attention spans.

### **Practices in Education**

#### **Technology Integration in Early Childhood Education**

It takes careful preparation and execution to include technology into early childhood education. Teachers must make sure that technology enhances rather than replaces conventional teaching strategies. Technology should be utilized as a tool to promote learning objectives, according to the National Association for the Education of Young Children (2012), which highlights the need of developmentally appropriate activities.

### **Support and Training for Teachers**

Training and support for teachers are also essential for the successful use of technology in early childhood education. Teachers who receive professional development in the use of educational technology are more likely to successfully incorporate it into their classes, according to research by Blackwell, Lauricella, and Wartella (2014).

### **Health-Related Issues**

#### **Effects on Physical Health**

Long-term usage of technology can affect young children's physical health. Concerns include things like eye strain, bad posture, and decreased physical activity. In order to support healthy development, the World Health Organization (2019) advises children ages one to four to engage in physical activity for at least three hours each day.

### **Sleep Interruptions**

Young children's sleep cycles might be disturbed by screen time, particularly right before bed. The hormone that controls sleep, melatonin, may be disrupted by the blue light that screens emit. Hale and Guan (2015) discovered a strong correlation between children's screen usage and lower sleep duration.

### **Equity and Access**

#### **Digital Divide**

Not all socioeconomic classes have equal access to technology. Low-income children frequently lack access to high-quality digital tools, which can make educational disparities worse. To guarantee that every youngster benefits from technology breakthroughs, it is imperative to address the digital divide.

### **Design Inclusive Technology**

All children, including those with impairments, should be able to use technology in an inclusive manner. Children with a range of requirements can benefit from features like interactive elements, voice descriptions, and text size adjustments in digital content.

There are benefits and drawbacks to incorporating technology into early childhood education. Technology can improve social, emotional, and cognitive growth when used properly.

Nonetheless, it is essential to maintain a balance in screen time, guarantee fair access, and assist teachers with appropriate training. **Maximizing** the positive effects of technology while minimizing any potential negative effects requires constant research and careful application.

### **Challenges and concerns of fostering technology and AI in Early years**

Technology is appropriate, but it also has drawbacks. In contrast, Berson & Berson (2019) view children's data privacy as a major concern because AI systems may collect and store personal information without proper consent or security measures in place. Hutton Dudley, Hurwitz Karly, and Dewitt Holland (2020) claim that excessive screen time can have negative effects on young children's development, including language delays, decreased attention span, and poor sleep quality.

Preventing biases and prejudice requires that early childhood education tools and technology be developed and utilized ethically (Yellad, 2019). According to Brookings, there is a chance that children from lower-income families won't have equal access to technology and artificial intelligence tools, which would exacerbate already-existing educational disparities.

Furthermore, a reliance on AI and technology may impede children's ability to think critically, solve problems, and be creative (Papadakos, Bertone & Christodoulou, 2019).

Not all AI-powered platforms or educational applications are made equal, so it's important to make sure the material is age-appropriate, supported by research, and in line with learning objectives. The requirement for sufficient training and continuous assistance for educators to successfully incorporate technology and artificial intelligence into early childhood education is another significant issue that the International Society for Technology in Education has addressed (Plowman, MC Pake & Stephen 2012). A multidisciplinary strategy combining educators, legislators, engineers, and families is necessary to address these issues and guarantee that



AI and technology are utilized in an ethical and responsible manner to promote children's learning and development throughout their years.

### **Techniques for promoting AI and technology in the early years.**

Learning is improved when young children are engaged in play-based activities that include technology and AI principles. Curiosity and investigation can be encouraged by resources such as interactive applications, instructive games, and programmable robots (Bers, 2018). Additionally, incorporating STEM ideas into early childhood education promotes experimentation, critical thinking, and problem-solving through robotics, coding, and fundamental engineering concepts (Clements & Sarama, 2018). Giving teachers chances for professional development to improve their knowledge of technology and artificial intelligence in early childhood enables them to assist integrating digital tools into the curriculum and creating engaging learning experiences (NAYEC, 2012).

Research has demonstrated that parents should be informed about the advantages of introducing technology and artificial intelligence (AI) to young children, as well as tools for fostering learning at home (Takeuchi & Stevens, 2011). Parents should be encouraged to participate in activities that foster their children's computational thinking and digital literacy. Talking with educators and kids about ethical issues related to technology and AI, such as privacy, online safety, and responsible tool usage, is another crucial part of promoting technology in the early years (NAYEC 2012). By providing devices, internet connectivity, and customized materials, it is also necessary to guarantee that all children, regardless of background or ability, may access technology and AI resources (Bers, 2018).

Collaborative endeavors may equally boost technology. Encourage cooperation and teamwork through technology and AI-related initiatives like cooperative coding exercises, robotics contests, or multimedia presentations (Clements & Sarama, 2018). It is necessary to establish assessment evaluation. Children's comprehension of technology and AI ideas should be evaluated using age-appropriate techniques, such as observation, recording, and reflection on their use of digital tools (NAYEC 2012).

### **Best practices of fostering technology and AI in Early years**

The best ways to promote AI and technology in early **childhood**

In order to make play-based learning activities interesting and fun, integrate technology and artificial intelligence. Educational applications such as "Sago Mini," for instance, provide interactive experiences that help children learn fundamental ideas via play (Sago Mini).

Give young children age-appropriate electronic tools, such as programmable robots, to facilitate hands-on activities. A physical programming device called "Cubetto" teaches kids as early as three years old about coding fundamentals.

Use AI and technology to improve learning results in the early childhood curriculum. Interactive games are available through tools like "OSMO" that enhance courses like reading and numeracy.

Children should be encouraged to use AI and technology as creative tools. Through digital narrative and character development, apps such as "Toca Boca" enable kids to explore their imagination (Toca Boca). To protect kids' general wellbeing, strike a balance between screen time and other activities. Guidelines for screen time based on age are provided by the American Academy of Pediatrics, which emphasizes the value of moderation.

Inform parents about the advantages and disadvantages of AI and technology on young children's development. Encourage them to be involved in their kids' technology use and offer advice on how to choose age-appropriate material.

Discuss ideas like algorithms and biases with kids to help them learn how to critically assess technology and AI technologies. With the help of the programming language "Scratch Jr," young children may make their own interactive stories and games that promote computational thinking.

Discuss ethical issues like online safety and digital citizenship that are related to technology and artificial intelligence. Common sense education is a resource that provides lesson plans and tools for teaching young children digital literacy abilities.

Teachers and caregivers may successfully support the constructive integration of technology and AI in the early years by putting these best practices into practice, laying a solid basis for the learning and development of young children. Ethical issues and duties are crucial while promoting technology and AI in the early years.



According to Jones Issross, S. Canion Clough, and MC Andrew (2020), it is crucial to put children's welfare first and make sure that technology improves their educational experiences without endangering their privacy or safety. By using existing relevant experience, such as putting strong parental controls in place (Smith, 2021) and encouraging digital literacy through material that is age-appropriate and in line with ethical guidelines (Garcia & Johnson, 2023), these concerns may be successfully navigated.

Technology integration in early childhood education may be made more responsible and moral by encouraging open contact with parents and teachers to discuss issues and get their opinions (Robinson & Patel, 2024).

## Conclusion

Technology and artificial intelligence (AI) are essential to education, cognitive development, and providing children with individualized learning experiences. They support dynamic learning settings, flexible curricula, and customized feedback to satisfy each student's requirements, encouraging creativity and critical thinking abilities from an early age. Furthermore, AI-powered solutions may help teachers evaluate students' development and pinpoint areas for growth, thereby raising the standard of instruction. Additionally, exposing kids to technology and artificial intelligence at a young age gives them the tools they need to succeed in the increasingly digital world they will live in. There is a lot of promise for improving learning experiences in early childhood education via the use of AI and evolving technologies. It highlights a few upcoming possibilities.

AI can provide individualized learning experiences by adjusting instructional content to each child's unique requirements and learning style.

Therefore, the following is a clear call to action for all parties involved: educators, parents, and policymakers: Encourage research on the effects of technology on early childhood development, give educators professional development on tech integration, include age-appropriate tech tools into early education curricula, and guarantee that all children have fair access to digital resources.

In addition, stakeholders should investigate innovative tech solutions specifically designed for early childhood education, work with tech companies to create child-friendly and privacy-conscious products, advocate for policies that promote responsible tech integration in early education, and encourage interdisciplinary collaboration among stakeholders to advance tech in early childhood education. They should also develop guidelines for responsible tech use in early childhood settings, engage parents in conversations about tech use, and provide resources for at-home learning.

## References

- American Academy of Pediatrics. (2016). Media and young minds. *Pediatrics*, 138(5), e20162591.
- American Academy. (2016). *Best practices for fostering technology and AI in early years*. American Academy.
- Blackwell, C. K., Lauricella, A. R., & Wartella, E. (2014). Factors influencing digital technology use in early childhood education. *Computers & Education*, 77, 82–90.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. Basic Books.
- Campbell, F. A., Pungello, E. P., Burchinal, M., Kainz, K., Pan, Y., Wasik, B. H., Sparling, J. J., & Ramey, C. T. (2012). Early childhood education: Long-term effects of early childhood programs on cognitive and school outcomes. *Developmental Psychology*, 48(4), 945–957.
- Center on the Developing Child. (2007). *The science of early childhood development*. Harvard University.
- Clement, J., & Sarma, N. (2018). Challenges of fostering technology and AI in early years. *Early Childhood Education Journal*, 46(6), 637–645.
- Denham, S. A. (2006). Social-emotional competence as support for school readiness: What is it and how do we assess it? *Early Education and Development*, 17(1), 57–89.
- Epstein, J. L. (2001). *School, family, and community partnerships: Preparing educators and improving schools*. Westview Press.
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. *American Journal of Preventive Medicine*, 14(4), 245–258.
- Gallahue, D. L., & Ozmun, J. C. (2006). *Understanding motor development: Infants, children, adolescents, adults* (6th ed.). McGraw-Hill.
- Garcia, M., & Johnson, K. (2023). Evaluating and updating content: Ethical guidelines for early childhood AI. *Journal of Early Childhood Technology*, 15(2), 123–135.

- Hale, L., & Guan, S. (2015). Screen time and sleep among school-aged children and adolescents: A systematic literature review. *Sleep Medicine Reviews*, 21, 50–58.
- Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experience of young American children*. Paul H. Brookes Publishing.
- Heckman, J. J. (2006). Skill formation and the economics of investing in disadvantaged children. *Science*, 312(5782), 1900–1902.
- Heckman, J. J. (2011). The economics of inequality: The value of early childhood education. *American Educator*, 35(1), 31–35.
- Heckman, J. J., Karapakula, G., & Moktan, S. (2020). Intergenerational and intragenerational externalities of the Perry Preschool Project. *National Bureau of Economic Research*.
- Hirsh-Pasek, K., Golinkoff, R. M., Berk, L. E., & Singer, D. G. (2009). *A mandate for playful learning in preschool: Presenting the evidence*. Oxford University Press.
- Hirsh-Pasek, K., Golinkoff, R. M., & Berk, L. E. (2022). The power of interactive media for children's learning: A review and roadmap. *Developmental Review*, 64, 101014.
- Hutton, J. S., Dudley, J., DeWitt, T., & Horowitz-Kraus, T. (2020). Screen-based media use and brain structural differences in young children. *Scientific Reports*, 10(1), 1–10.
- Hutton, J. S., Horowitz-Kraus, T., Mendelsohn, A. L., DeWitt, T., & Holland, S. K. (2015). Home reading environment and brain activation in preschool children listening to stories. *Pediatrics*, 136(3), 466–478.
- Jones, A., Smith, B., & Taylor, C. (2020). Ethical considerations in early childhood technology use. *Journal of Early Childhood Research*, 18(3), 245–259.
- Meloy, B., Gardner, M., & Darling-Hammond, L. (2020). *Untangling the evidence on preschool effectiveness: Insights for policymakers*. Learning Policy Institute.
- National Association for the Education of Young Children. (2012). Technology and interactive media as tools in early childhood programs serving children from birth through age 8. *NAEYC*.
- National Scientific Council on the Developing Child. (2004). *Children's emotional development is built into the architecture of their brains*. Harvard University.
- National Scientific Council on the Developing Child. (2007). *The timing and quality of early experiences combine to shape brain architecture*. Harvard University.
- National Scientific Council on the Developing Child. (2020). *Connecting the brain to the rest of the body: Early childhood development and lifelong health are deeply intertwined*. Center on the Developing Child.
- Neumann, M. M. (2014). An examination of touch screen tablets and emergent literacy in Australian pre-school children. *Australian Journal of Education*, 58(2), 109–122.
- Oduntan, F. M. (2010). *Assessment of stakeholders' awareness and implementation of aspects of Education for All Goal in South West, Nigeria* (Unpublished doctoral dissertation). University of Ibadan.
- Papadakos, Y., Bertone, S., & Christodoulou, D. (2019). Challenges and concerns of fostering technology and AI in early years. *Journal of Early Childhood Research*, 17(4), 456–470.
- Parsons, S., & Cobb, S. (2014). Reflections on the role of the 'users': Challenges in a multi-disciplinary context of learner-centred design for children on the autism spectrum. *International Journal of Research & Method in Education*, 37(4), 421–441.
- Pianta, R. C., Barnett, W. S., Burchinal, M., & Thornburg, K. R. (2009). The effects of preschool education: What we know, how public policy is or is not aligned with the evidence base, and what we need to know. *Psychological Science in the Public Interest*, 10(2), 49–88.
- Plowman, L., McPake, J., & Stephen, C. (2012). Extending opportunities for learning: The role of digital media in early education. *Early Years*, 32(1), 17–30.
- Reynolds, A. J., Temple, J. A., Robertson, D. L., & Mann, E. A. (2001). Long-term effects of an early childhood intervention on educational achievement and juvenile arrest: A 15-year follow-up of low-income children in public schools. *JAMA*, 285(18), 2339–2346.
- Rideout, V. J., & Katz, V. S. (2016). *Opportunity for all? Technology and learning in lower-income families*. Joan Ganz Cooney Center at Sesame Workshop.
- Roseberry, S., Hirsh-Pasek, K., & Golinkoff, R. M. (2014). Skype me! Socially contingent interactions help toddlers learn language. *Child Development*, 85(3), 956–970.
- Shonkoff, J. P., & Phillips, D. A. (2000). *From neurons to neighborhoods: The science of early childhood development*. National Academies Press.

- Shonkoff, J. P., Boyce, W. T., & McEwen, B. S. (2012). Neuroscience, molecular biology, and the childhood roots of health disparities: Building a new framework for health promotion and disease prevention. *JAMA*, 301(21), 2252–2259.
- Smith, J. (2021). Implementing parental controls: Best practices for early childhood tech. *Journal of Child and Family Studies*, 30(5), 1123–1135.
- Thompson, R. A. (2001). Attachment and emotional regulation. *Social Development*, 10(1), 34–52.
- UNICEF & The Lego Foundation. (2023). *Early years technology and AI*. UNICEF.
- Vandewater, E. A., Bickham, D. S., & Lee, J. H. (2006). Time well spent? Relating television use to children's free-time activities. *Pediatrics*, 117(2), e181–e191.
- World Health Organization. (2019). *Guidelines on physical activity, sedentary behaviour, and sleep for children under 5 years of age*. WHO.
- World Health Organization. (2020). *Improving early childhood development: WHO guideline*.
- Yelland, N. (2019). Challenges and concerns of fostering technology and AI in early years. *Australian Educational Researcher*, 46(1), 1–15.
- Zeng, S., Benner, A. D., & Wang, Y. (2020). Parenting stress, resilience, and early child behavior problems in Chinese immigrant families. *Journal of Family Psychology*, 34(5), 567–577.

# Problems of Leadership and Administration of Primary Education Policies in Nigeria from 1970s to 2024

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## Abstract

*The quality and performance of students graduating from elementary school have raised concerns among parents, businesses, educational institutions, and society as large. Who has the responsibility: the educational administrators, the students, the political leaders or appointees, or society at large? This report examined the leadership and administration of primary education policy in Nigeria, reflecting on developments since the 1970s. It examined the causes, reasons, and timing of the failures in the formulation and execution of education policy in the nation. This is a thematic and analytical analysis of literature about the nation's educational policy throughout both military and democratic administrations. It is based on the Elite idea. Nonetheless, educational advancement in Nigeria has been impeded by several issues. Included among them are overpopulation, delays in policy implementation, insufficient statistical data, corruption, instability within the education system, insecurity, and inadequate educational facilities. Recommendations included the provision of all infrastructure necessary for accomplishing primary school goals and a comprehensive redesign of the teacher education curriculum.*

**Keywords:** Problem, Leadership, Administration, Primary Education and Policies

## Introduction

Basic education in Nigeria, formerly known as primary education (FRN, 2013), has significantly evolved since the establishment of the first primary school by missionaries in 1842. In the 1800s, the British colonial government integrated into the educational administration by formulating policies, one of which established a partnership between the state and the church in the 1920s. This collaboration facilitated the government's promotion of education to cultivate literate and clerical personnel for continued exploitation, while the church produced lay readers, catechists, teachers, and literate individuals for commercial enterprises (Kwaghboet. *al.*, 2021). Prior to the 1842 ordinances, the Christina missionaries mostly controlled the school curriculum, determining the goals, syllabi, and pedagogical techniques. These constituted the educational ideology of the era for exploitation and evangelisation. The elementary education provided aimed to provide individuals with the skills to read, write, and do basic mathematics, along with instruction in religion. Since its origin, elementary education in Nigeria has seen significant transformations, particularly after independence when education became liberalised throughout the regions (Bello, 2008). The first decade after independence was characterised by military coups and counter coups, with regional governance and oversight of education. Subsequently, the nation saw the need for a national educational philosophy pertinent to its growth and infused with indigenous content (Ezegwu, 2023). Debie in Ella (2020) observed that this perceived need resulted in a national curriculum meeting convened in Lagos from September 8 to 12, 1969. The conference examined nine major areas within Nigeria's education system with the following primary goals;

- Formulation of national philosophy of education;
- outline the aim of primary education (now lower and middle basic);
- state the goals of secondary education;



- outline the goal of tertiary education;
- Stating the function of teacher education
- Summarising the purposes of technical education and science;
- Summarising the position of women's education;
- Providing education for living;
- Establishing control of public education

The conference's proposals prompted the Federal Government to engage in education at all levels after the conclusion of the civil war in 1970. According to Olumuyiwa et. al., (2014), the government's policy focus at that time was on curriculum development, centralisation of school control and management, the formulation and introduction of a National Policy on Education, and the provision of Universal Primary Education for all Nigerian children of school age. Educational policy is described as a planned framework that delineates the objectives, principles, and practices of the educational system. Chapman (2006) said that the policies implemented by an educational system are fundamentally determined by the governing authority. Beginning in 1970, the ruling military administration saw the need of implementing an educational system that would fulfil the nation's aspiration for a unified, robust, and self-sufficient society (FRN, 2013).

In light of the damage wrought by the civil war, the unification of education policy was seen sensible and essential for the necessary reconciliation, rebuilding, and unity at that time (Ezegwu, 2023). In June 1973, the Federal Ministry of Education convened a seminar on education, presided over by Chief Simon O. Adebo, which gathered education specialists from all regions of the country to follow the recommendations of the 1969 conference (Ella, 2020). The seminar was attended by representatives from Christianity and Islam, interested foreign agencies, and private individuals focused on the advancement of national educational goals.

The problem in the education system was evident, since the Universal Primary Education (UPE) initiative failed in the Eastern area, and little evidence of Western educational reform was seen in the Northern region. The persistent inadequacy of educational directives and policies has resulted in less than complete implementation, and Nigerian leaders, particularly the military in the 1960s, appeared ill-equipped to rectify the colonial legacy affecting our educational system—encompassing curriculum, philosophy, administration, and infrastructural development. Nwanekezie (2022) said that Nigeria's educational institutions need devoted, visionary, and strategic leadership. Residual effects of the failure persist throughout the nation, as seen by the unanticipated alterations in leadership and policy within the education system. The educational appointees, school administrators, teachers, and students have a profound need for leaders who are constructive, supportive, and actively involved in advancing the goals and philosophy of our educational system (Alimi, 2013), which is focused on education pertinent to the nation's growth.

## **Research Questions**

This study will be guided by question related to how, why and when problems of leaderships started as far as primary education is concerned in Nigeria from the 1970s to present. Actually, the decay of social cohesion and the need for national unity kick started subsequent educational reforms. The review ascertained the following:

- How leaders in the education sector selected within the period under review?
- Why did the leader in the education sector failed to institute education relevant to the nation
- When did the problem associated with indigenous leaders in education start?

## **Theoretical Basis of Pareto Vilfredo**

The study is grounded in the elite theory posited by Pareto Vilfredo, Mills Wright, Mosca Gaetano, and Michels



Robert, which asserts that public policy embodies the values and preferences of the elite (ruling class, governing elites, dominant class, and powerful elite) rather than the demands of the populace (Ella, 2020). The idea comprises many propositions by distinct advocates highlighting how a minority in society exerts considerable influence and rules the majority. The theories assert that individuals are perpetually dominated by elites, characterised by the existence of power elites who use powerful figures, the distinction between the ruling and the ruled, and the need of oligarchy as dictated by the iron law. Yetkin (2008) defined elites as individuals who consolidate power and knowledge via institutions that include military, political, and economic players. They are constituents of the political class or governing elites who exert influence on governmental decisions. Educational policies are not formed by the populace; the sentiments and contributions of the public are disregarded. The elites formulate policies, while administrators and other public officials implement the decisions made by the elites. For instance, ministers of education, education commissioners, directors, and chairpersons of national and state education bodies.

### **Administering Education in Nigeria: The Post-Independence Experience**

Education administration is described as the methodical organisation of people and material resources, together with educational programs, to attain educational goals (Nwankwoala, 2016). Prior to 1960, the findings of the Phelps-Stokes Commission highlighted the disparity between the policies and practices of colonial authorities and the educational expectations of Nigerians. Education at that time was mostly theoretical, aimed only at equipping Nigerians for white-collar employment, despite the nation's abundance of natural riches intended for the collective benefit of its populace. Fewer than 10 years post-independence, the impetus, while regionally driven, intensified to develop an educational system that would fulfil the nation's aspiration for cohesive, robust, and self-sufficient societal members (Amopho, 2020). The Northern, Western, and Eastern regions followed a separatist approach in their education programs. The Universal Primary Education (UPE) initiative in the Western area, established in 1955, is recognised for its significant success. The hallmark of success was a comprehensive training program for educators, the growth of teacher training facilities, and the building of new, well-equipped classroom blocks. This was accompanied by a substantial turnout of students for enrolment in elementary schools.

In response to the progress of the Western area, the Eastern regional administration initiated the Universal Primary Education (UPE) in 1957. Despite the program's large scale and substantial financial investment required for its continuation, it had only limited success, lasting around two years. Fafunwa (1982) indicated that the financial burdens of construction were assumed by local administrations, who often struggled to fulfil the monetary demands of the initiative. The program saw a significant enrolment turnout, which may have contributed to its rapid demise, since the numbers exceeded the expectations of the governing authorities. The failure was attributed to inadequate preparation by the school officials. In the Northern region, Western education had not been firmly established; nonetheless, Islamic/Koranic schools were dispersed across the area. The Northern region lagged in Western education, resulting in less or no evidence of its accomplishment in that area. In several regions of Nigeria, the civil war that started in 1967 hindered educational advancement despite the existence of policies. The awareness for an appropriate curriculum for Nigerians persisted, culminating in a National Curriculum Conference in Lagos from September 8th to 12th, 1969, aimed at evaluating the existing curriculum and establishing new national educational objectives for Nigeria (NTI, 2000; Okoroma, 2006). The conference convened Nigerians from diverse backgrounds to develop a curriculum that is more relevant to Nigerian society. The communiqué was not an educational policy; rather, it resulted in the establishment of the first nationwide Policy on Education in 1977, after a nationwide conference convened by the National Educational Research and Development Council (NERDC) in 1973, headed by Chief S.O. Adebo. The National Policy on Education was founded on five principal objectives of Nigeria.

- A free and democratic society;
- a just and egalitarian society;
- a unified, powerful and self-reliant country;

- a vast and dynamic economy;
- a land full of chances for all people.

Since the inception of the inaugural National Policy on Education in 1977, Nigeria has released multiple editions of the policy: the second edition in 1981, the third in 1988, the fourth in 2004, the fifth in 2007, and the sixth in 2013 (Ezeyi, *et. al.*, 2022). It is noteworthy that the fourth edition resulted from innovations and modifications in the third edition, while the sixth edition emerged from inventions and alterations in the fifth edition. The inaugural edition of 1977 introduced the 6-3-3-4 educational system, which remained in effect until 1999, when the universal basic education initiative was inaugurated by Gen. Olusegun Obasanjo in Sokoto Caliphate; it was subsequently enacted as the UBE Act in 2004. The Federal Republic of Nigeria (2004) in its fourth National Policy on Education said that basic education should consist of a 9-year length, including 6 years of primary education and 3 years of junior secondary school, and that it shall be mandatory.

The FRN (2004) defined the objectives of elementary education (the first six years of schooling), including:

- To teach permanent literacy and numeracy and capacity to communicate effectively;
- To create a strong framework for scientific and critical thinking;
- To offer civic education as a platform for successful involvement in and contribution to the life of the society
- To shape the character and foster moral behaviour and sound attitude in the kid
- To enable in the child the capacity to fit the evolving surroundings.
- To provide the kid chances to acquire manipulative abilities that will help them to operate properly in the society within the boundaries of their potential.
- To provide the kid fundamental skills for continued educational development including trade and handicap preparation for the local crafts.

The policy outlined provisions for the curriculum, ancillary educational services, pedagogical approaches, classroom environment, gender-related issues, methods of summative assessment, and the utilisation of contemporary ICT tools, among others. The policy stance of elementary education is extensive. To attain these objectives, educational leaders must be focused, motivated, and tenacious in their pursuit of dispersed leadership. Despite the attractiveness of these objectives, leaders at various levels must approach them with unwavering seriousness.

In acknowledgement of the challenges posed by population growth to educational service delivery and the integration of emerging technologies in education, the sixth edition of the National Policy on Education established new guidelines for teacher education and training, modes of study, and curriculum. (Ezeyiet. *al.*, 2022). It thus included many current developments, including;

- To the removal of the monitoring order on open and remote learning by government
- To revitalisation and expression of the National Mathematics Centre (NMC) c. Teacher Registration Council (TRC) formation
- To introduce Information and Communication Technology (ICT) into the school system,
- Prescription of French Language in the primary and secondary school curriculum as a second official language and
- Integration of basic education in the program of school, to ensure equal opportunity and implementation of UBE.

All of these provisions have implications for primary education administration.

## Leadership in Education

Leadership encompasses individuals and simultaneously represents a method of directing others towards the achievement of certain goals. Leadership serves as both the glue and catalyst that unites individuals—followers and citizens of a certain group, movement, organisation, or nation—and stimulates their drive to attain both personal and collective goals (Anazode *et. al.*, 2015). It is a process that includes influence (Organisation for Economic Cooperation & Development, OECD, 2021). Yukl (2002) defined leadership as a social process in which one individual (or group) intentionally influences others (or groups) to organise activities and relationships within a group or organisation. In summary, the following attributes are ascribed to a leader.

- Motivate people to reach specified objectives;
- inspire them to do so.
- Guide others as well as the job
- Show dedication to a plan of activity or course of study;
- have up-to-date knowledge; use authority in line;
- exhibit great degree of self-control; perceive issues holistically
- When needed, assign power (Nwanekezie, 2022).

The preamble of the National Policy on Education consistently describes education in Nigeria as an instrument "par excellence" for facilitating national development. Its significance is in the capacity to economically, socially, politically, technologically, and otherwise reshape society via the transformation of people. Okorosaye-Orubite (2019) defined education as a societal construct, tailored to address the distinct requirements of society at each given moment. The ultimate objective of education is societal transformation, although it may also confer certain advantages to individuals who possess it, while most members of society remain unaware of these benefits. According to Adiele (2020), the substantial role of education necessitates dedicated leadership to manage the extensive administrative tasks required. Within several tiers of the leadership hierarchy, there are entities that oversee educational matters in Nigeria, including the House Committee on Education in the Senate, the House of Representatives, and the individual State Houses of Assembly. The ministers and commissioners of education are present. Additional agencies and organisations with educational responsibilities include the National Educational Research and Development Council (NERDC), National Teachers Institute (NTI), National University Commission (NUC), National Commission for Colleges of Education (NCCE), West African Examination Council (WAEC), and Joint Admissions and Matriculation Board (JAMB), among others (Duru, 2011). Okwori and Amenger (2014) delineated the framework of the Universal Basic Education as follows;

Each of the leadership cadres, agencies, commissions and committees from the top to the bottom were charged with specific set of responsibilities to education and primary education in particular, for the common good of Nigerians.

## A Critical Review of Educational Policy, Implementation and Administration from 1970.

Nigeria's educational programs before to and shortly after independence remained aligned with the objectives and aspirations of the colonial authority. The primary characteristic of the first decade post-independence was the decentralisation of education, allowing regional administrations to create educational programs for their constituents, alongside the pervasive civil conflict. Aromolaran *et. al.*, (2017) asserted that the principal basic education policy initiated by the Nigerian government, specifically the military administration following the conclusion of the civil war in 1970, was the Universal Primary Education (UPE) scheme, which was regarded as

successful in the western region and was anticipated to unify the education system. During a national curriculum meeting in 1969, the 6-3-3-4 educational system was presented, along with the national philosophy of education and objectives for elementary education, among other topics discussed (Ella, 2020). Nevertheless, the 1973 seminar accepted certain proposals or recommendations from the conference, yet none were implemented under the General Murtala Mohammed administration.

The evolution of the educational landscape during this period transformed the colonial orientation of the Nigerian educational system, fostering national consciousness and self-reliance. Education was pivotal in the Federal Government's efforts for reconciliation, reconstruction, and unification as it assumed control of mission schools, perceiving education as a significant governmental undertaking rather than a private enterprise (Truang, 2018). In 1976, the government issued a decree for the regulation of education, including its provision and management. Olumuyiwa *et. al.*, (2014) observed that the government demonstrated leadership in curriculum creation by establishing the Comparative Education Study and Adaptation Centre at the University of Lagos. In 1977, the military authority under General Murtala Mohammed published the first white paper on the national education strategy, having taken into account the recommendations from the 1973 seminar. Each successive regime from General Yakubu Gowon's administration contributed to Nigeria's development of its educational philosophy.

The governmental transition may have impeded the expeditious execution of policies, proposals, and directives; however, General Obasanjo persisted with the policy initiatives of his predecessors. The administration established a seven-member implementation committee to convert the education policy into a functional blueprint and devise programs for its execution, among other objectives. The school system has transitioned from a 6-5-2-3 structure to a 6-3-3-4 framework (Ella, 2020).

By 1976, the Universal Primary Education (UPE) had been initiated, and the 1979 constitution was under progress, thus facilitating more opportunities for private school ownership. This resulted in the issue of accessing good education in the nation, as noted by Omede *et. al.*, (2019). Ella (2020) lamentably stated that it is disappointing that the UPE scheme, part of the foremost national education policy, failed to fulfil its objectives, goals, and aspirations despite the presence of the implementation committee. Greater part of the reasons for its failure can be blamed on the top/executive level of policy administration. It is often said that the dead fish always start to decay from the head; and this has been the major problem of the Nigeria educational system or policy administration. Experts account have revealed that the UPE scheme suffered population explosion in the country, poor planning and implementation, inadequate supervision, inadequacy of resources including professional teachers and infrastructure/facilities, lack of reliable data (Aromolaran *et. al.*, 2017; Odo & Belloh, 2023).

Ossai and Nwalado (2016) affirmed that the UPE scheme nationwide experienced problems of under-estimation of about 30 percent the turn-up number of children enrolment, acute shortage of classroom space or overcrowded classroom, shortage of teacher and equipment. The 1977 National Policy on Education officially specified that the teacher-pupils ratio be 1:40, however the classrooms were overcrowded and this condition has lasted in several elementary schools until now. Teacher-pupils ratio was 1:86 due to shortage of classroom space. Basic condition of employment and working conditions for teachers were satisfactory. The shortage of instructors has led some students at teacher training institutes withdrawing to enter the workforce while still in training. These were serious indications of poor planning which may have arisen from inadequate or lack of reliable data. Daniel-Kalio (2018) noted that it was a sad remark that the scheme ended as a failed one in September, 1981.

The 6-3-3-4 educational system was not implemented until the regime of General Ibrahim Babangida in the late 1980s. The Alhaji Shedu Aliyu Shagari government, which inherited the foundational National Policy on Education and the 1979 Constitution, was brief, since it was supplanted by General Muhammadu Buhari in 1983. The 1979 constitution designated education in the concurrent list, granting authority to both Federal Ministers and state Commissioners, along with statutory bodies known as commissions, while local governments, through Educational Secretaries, manage primary education. Contrary to constitutional



stipulations, there exists imbalance in educational access and elevated costs of higher education in the nation. To ensure consistency in the execution of the national education strategy throughout the three tiers of government—federal, state, and local—the federal government employs its appointees at different levels, in accordance with criteria tailored to local requirements (requirements, 2014). The Joint Consultative Committee on Education (JCCE) is an appointed group that includes the Federal and State Directors of Education, Chief Executives of educational statutory entities, and Directors of University Institutes of Education. The selection to these positions is dictated by the ruling administration, resulting in significant volatility within the education system (Aromolaran *et. al.*, 2017). This is exacerbated by the issue of inadequate implementation processes, in which input from the current policy execution is distorted.

According to Tuang (2018), the national policy on education first developed in 1977 has been severally revised in 1981, 1998, 2004 and 2014 to make it relevant to the development needs of the country. Yet the problems of teacher-pupils ratio reflecting over population, lack of monitoring, supervision and evaluation system, politicization of education and poor state of education infrastructure in primary education persist. The military administrations that lasted more than a decade and half did not help matters as technocrats appointed into offices for administering education were not given free hand to operate. The failing standard of primary education as well as the UPE scheme brought about the introduction of the Universal Basic Education (UBE) scheme by Chief Olusegun Obasanjo on 30th September, 1999 at Sokoto State (Ossai & Nwalodo, 2016; Ella, 2020). The UBE plan is likewise experiencing a fair portion of the troubles that impacted the UPE program. Ella (2020) therefore posed a hyperbolic question that if the adoption of UBE plan is the answer to Nigeria's educational challenges, why the many stakeholders/appointees of the government have demonstrated great incompetence to its logical execution. They all lack the political will to reform the system because of the fraudulent methods in their selection

**Methodology:** The study is a thematic and critical review of literature on leadership and its associated problems in administering educational policies at the primary education level. It adopted a qualitative approach to tracing the primary education from 1970-date.

**Results:** Primary education Nigeria has suffered policy summersault on account of change of government. There has been an observed trend of not having a square hole and sometimes lack of political will.

Time trend	Regime	Educational policy framework	Challenges
1971-1983	General Yakubu Gowon, General Murtala Muhammed & General Olusegun Obasanjo	Seminar for National philosophy of education Takeover of mission schools Formation of first national policy on education First indigenous constitution Launch of the universal primary education (UPE) Proposal for 6-3-3-4 system of education	Over population Crowded classroom Lack of proper statistics Lack of evaluation system Non-implementation of education system
	Alhaji shehu Aliyu Shagan	Provision of the national policy on education Implementing the 1979 constitution	Lack of educational infrastructures



1984-1999	General Mohammedu Buhari; General Ibrahim Babangida; General Sani Abacha ; General Abdusellami Abukakar; Chief Olusegun Obasanjo	Revision of the National Policy on Education Drafting of the 1999 constitution Launch of the universal basic education	Failure of UPE Over population Corruption Poor financing
2000-2024	Chief Olusegun Obasanjo, Alhaji Musa Yaradua/Dr. Goodluck Jonathan; President Mohammadu Buhari; Chief Ahmed Tinubu	Signing of UBE Act	Corruption Poor financing Over population Lack of political will Instability etc

**Table 1: Government regimes and educational policies showing their challenges**

Actually, the problems facing the primary level of education are multifarious. Some of them include;

- **Corruption in the Education System:** Corruption is the scourge afflicting every industry in Nigeria. This has been characterised as the exploitation of delegated authority for personal benefit. Corruption leads to the misallocation of funds intended for education, the recruitment of unsuitable individuals to positions, and the usurpation of excessive authority by individuals who use their political connections to combat those who want to expose them.
- **Discontinuity of educational initiatives by succeeding administrations/political leaders:** Education, the foundation of development, is compromised for political interests, since new administrations often prioritise their intentions for the populace above the advancement of education. Education has been politicised, resulting in new authorities in the education sector, such as ministers, commissioners, and education secretary, altering the policies of previous governments. These often lead to the squander of public resources that might have been allocated to other societal needs.
- **Gradual pace of curriculum transformation and innovation:** Nigeria exhibits a sluggish adoption of contemporary advancements in education. It is disheartening to recognise that a significant percentage of our educated populace cannot compete well on an international scale, with the exception of a select few with exceptional talent. Public primary educational institutions are the most adversely affected, since many kids in primary/basic six struggle with reading and have a lack of competency in numeracy abilities. This also impacts the quality of secondary school certificate holders and graduates from our universities. The technology used for educating 21st-century learners is deficient in our institutions.
- **Role conflict in policies/school management:** Nigerian policies and supporting laws, Acts, or Decrees have loopholes that facilitate evasion by political leaders in the administration of education at the lower and middle basic levels. Basic education, which is assumed to be a federal initiative, lacks substantial oversight from state and local governments, particularly in instances when anticipated funding is absent. Conflicts arise among federal, state, and local governments on their duties in the administration of public schools.

The absence of accurate data for planning purposes is a significant impediment to effective planning in Nigeria, contributing to failures in education policy due to insufficient records of teachers, students, facilities, or funding. It is important to acknowledge that corruption thrives under these circumstances. Numerous occurrences transpire inside schools that are unobserved by education secretaries, commissioners, and ministers of education.

- **Inadequate teacher welfare:** Educators, as professionals pivotal in shaping presidents, governors, local government chairpersons, ministers, commissioners, education secretaries, and heads of government agencies and parastatals, ought to receive substantial remuneration and generous allowances to support their housing, transportation, healthcare, and sustenance. Regrettably, it is disheartening to acknowledge that they rank among the lowest compensated individuals in both public and private s In

some schools, essential infrastructure such as chairs, tables, and stationery is not supplied to support their operations.

- Insufficient educational institutions to handle population growth: Undoubtedly, Nigeria's population is escalating at a geometric rate, and there is a lack of efficient birth control measures in the nation. An increasing number of children are eligible for formal basic education each year, although the establishment of schools does not correspond proportionately. The outcomes are congested classrooms in which little or no learning occurs. It is a possible incubator for juvenile misbehaviour, aberrant behaviours, and violence, among other issues.

## Conclusion

The implementation of primary education policies in Nigeria has evolved through various developmental phases, including the colonial era, the early post-independence period, and the era of coordinated national efforts to harness education for national development. Since 1970, elementary education has functioned under various designations and leadership, transitioning from military to democratic management. Either the policies are inadequately formulated, or they are not executed and assessed, beginning with the first national policy on education. Numerous issues have arisen from leadership due to overpopulation, corruption, inadequate statistical data for planning, insufficient educational infrastructure, and insecurity.

## Recommendations

Based on the foregoing discourse, it can be recommended that:

- Corrupt leaders in the education sector at different levels should answer for their inability to meet obligations, including the non-implementation of educational policies, in line with the relevant laws of the nation.
- The present administration has to ensure that leaders and appointees in the education sector have all the resources, including infrastructure for education.
- Educational institutions have to change their curriculum for teacher preparation so that they may properly prepare teachers for national development.
- Candidates having degrees in education such NCE, B.Ed., and PGDE should form the foundation of appointments of educational leaders.

## References

- Adiele, E. E (2020). *Educational leadership and policy: Theory and practice*. Pearl Publishers
- Alimi, O. S. (2013). Observed leadership behavior of primary school head-teachers in Osun, State, Nigeria. *Asian Journal of Management Sciences and Education*, 2(2), 192-197
- Amopho, G.R (2020). Educational Administration and assessment reforms in Nigeria: Challenges and prospect. *International Journal of Institutional Leadership, Policy and Management*, 2(1), 117-134
- Anazodo, R.O, Igbokwe-Ibeto, C. J & Nkiah, B.C (2015). Leadership, corruption and governance in Nigeria: Issues and categorical imperatives. *African Research Review*, 9(2)41-58
- Aromolaran, A. B., Adeleke, S. J. Ismaila, M. A & Adeyemo, E.A (2017). Sociological exploration and management of primary education in Nigeria: Implications on attainment of its objectives. *International Journal of Research in Humanities and Socio Studies*, 4(9), 29-36
- Bello, U. G. (2008). Educational reforms in Nigeria: successive years of inconsistencies and confusion. <http://www.gemji.com>
- Chapman, C. M. (2006). *Impact of federal government on schools*: Ofsted Publisher
- Daniel-Kalio, B. (2018). Historical analysis of educational policies in Nigeria: Trends and implication. *International Journal of Scientific Research in Education*, 11(2), 247-264
- Duru, V. N (2011). *Curriculum studies: concepts, development and implementation*: Alvan Global Publications
- Ella, J. R. (2020). Nigeria's educational policy in a democratic setting: An appraisal. *International Journal of Operational Research in Management, Social Sciences and Education*, 6(1), 151-186
- Ezegwu, C. Okoye, D & Wantchekon, L. (2023). *Impacts of political breaks on education policies, access and quality in Nigeria (1970-2003)*. Research on improving systems of education; Political Economy Project.

- Ezeyi, V. N. Ene, N. N. S & Nwosu, R.Y (2022). Chapter 5: National policy on education in Nigeria. <https://www.eprints.gouni.edu.ng>
- Fafunwa, A. B. (1982). *History of Nigerian higher education*. Macmillan Nigeria Publishers
- Federal Ministry of Education (2013). Guidelines for implementing national policy on integrated early childhood development in Nigeria. Abuja, Nigeria. Federal Ministry of Education.
- Federal Republic of Nigeria (2013). *National policy on education*: NERDC
- Jomtien Declaration (1990). World Declaration on education for all: Meeting basic learning needs: <http://www.Files.eric.ed.gov/fulltext/ED370207.pdf>
- Kwaghbo, T.M, Bua, F.T&Ikpat, T.V. (2021). Politics and the educational development of Nigeria. *BSUJEM*, 3(1), 1-10
- NEEDS (2014). Needs assessment in the Nigerian education sector. International organization for organization, Abuja, Nigeria
- NTI (2000). *Lecture module on education*, National Teachers Institute, Kaduna
- Nwanekezie, S.I (2022). Strategic leadership: A key to educational success in Nigeria: *International Journal of Institutional Leadership, Policy and Management*, 4(1), 39-62
- Nwankwoala, H. N. L (2016). Fundamental facts in educational administration and supervision. *Harey Publication*
- Odo, R.C & Belloh, A. M (2023). Leadership challenges in Nigeria Schools: *Modern Journal of Socials Sciences and Humanities*, 17, 138-155
- OECD (2021). *Public sector leadership for the 21<sup>st</sup> century*, OECD, Paris
- Ogunode, N.J, Wema, P & Dilmurod, A (2020) Educational administration in Nigeria: Challenges and the ways forward. *European Journal of Molecular and Clinical Medicine*, 7(3) 470-484
- Okoroma, N. S. (2006). Educational policies and problems of implementation in Nigeria. *Australian Journal of Adult Learning*, 46(2), 244-263
- Okorosaye-Orubite, A. K. (2019). Education in Nigeria. In Y.M Abdulrahman & F.G Paulley (Eds) *Education and development in Nigeria* (pp 54-64)
- Okwori, S. A & Amenger, H. S (2014). Primary education in Nigeria: Problems and Prospects. *Journal of Teacher Perspective*, 8(4), 15-26
- Olumuyima, O.S, Akinkuowo, F. O & Kareem, T.S (2014). Educational policy formulation and analysis: challenges and coping strategies. *Benin Journal of Educational Studies*, 23(1) 34-45
- Omede, A. A, Odoh, F. B & Ibrahim, J. E. (2019). The impact of Nigeria's democratic leadership on educational policies and values: A case for sustainable national development. *European Journal of Business and Management Research*, 4(6), 1-5
- Ossai, A. G & Nwalado, E.N (2016). Management of primary education in Nigeria: A critical review. *Journal of Assertiveness*.
- Truang, O.B (2018). *Evaluation of Leadership as a tool for education reforms in Nigeria*. Unpublished Doctorate Degree Thesis, Nasarawa State University.
- UNDP (2011). *Nigerian human development report 2010/2011*. Millennium Edition, UNDP
- Yetkin, D (2008). *Elites, power sources and democracy*. Unpublished Master's Degree Dissertation, Sabanci University
- Yulk, G. A (2002). *Leadership in organization*, Prentice-Hall, Saddle River, New. Jersey

## The Nigerian Home and Children With Cerebral Palsy: A Thematic Literature Review

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### Abstract

*Cerebral palsy is a special need that is not well pronounced on the pages of academic databases in Nigeria compared to developed countries like The United Kingdom and the United States of America. This study examines the strategies of engagement adopted by the Nigerian home in promoting learning among early years learners with cerebral palsy. It also investigates the prominent learning resources for children with cerebral palsy in Nigerian homes. Moreover, the challenges faced by the Nigerian home in the bid to make educational resources available for learners have been explored. This study adopts the thematic literature review using the secondary method of data collection. The interpretative philosophical view and deductive research approach were explored in this research. Data collection was done through the aid of Research Gate, Scopus, Science Direct, and Pub Med. The various sources of data collection include textbooks, peer-reviewed journals, educational websites, and academic articles. It was found that Nigerian homes engage in inclusive communication settings, play-learn activities, and smart technologies to meet the learning needs of children with cerebral palsy. Adaptive equipment and computer-based learning resources were the prominent learning resources for children with cerebral palsy in Nigerian homes. The challenges faced by the Nigerian home in the bid to make educational resources available for learners were inadequate awareness, poor funding, and discrimination. It was recommended that there should be an increase in government support and increase awareness of cerebral palsy in Nigerian society.*

**Keywords:** Home, Children, Cerebral Palsy, Nigeria

### Introduction

Pedagogical activities are complex not because of the dynamic of training involved but the need for teachers to be open-minded in the process of doing their jobs (Drechsler *et al.*, 2020). In most cases, when teachers work with children with special needs, it is expected that they are passionate, professional, and particular about the changing needs of learners (Obaka, 2017). That said, while different studies such as Obaka (2017); Drechsler *et al.* (2020); and Oluyimide and Adeleke (2020) have focused mainly on the education of children with special needs in school, the present study is keen on how the home perceive children with special needs, the dynamics and complexities of working with the children. On this note, and as a way of streaming this study to a concise direction, the focus is on children with cerebral palsy. Although the researcher would have considered engaging children with other forms of special needs, the subject of cerebral palsy and home involvement seems to be relatively under-researched in Nigeria.

Cerebral palsy is one of the leading special needs in the world that limits the ability of learners to stand right, walk effectively, and carry out physical activities like their peers. According to the works of Donald *et al.*, (2014), cerebral palsy is a physical disability that often occurs in people in their childhood based on social or medical factors. It was added that children sometimes suffer from cerebral palsy due to the kind of experiences that their mothers had during pregnancy- this includes food quality, circumstances surrounding birth, and after-birth realities (Donald, Samia, Kakooza, & Bearden, 2014). According to a more recent report, the Centers for Disease Control and Prevention in 2024 asserted that 4 out of every 1000 live births tend to have cerebral palsy. In the same vein, 10% of children between the ages of 3 and 8 tend to have cerebral palsy (CDC, 2024). These statistics show that the prevalence of cerebral palsy among children globally is relatively high. Hence, discussing cerebral palsy is not out of context, and the quality of attention that children get in the Nigerian home.



According to the findings of McIntyre *et. al.*, (2022), the experience of cerebral palsy among children is high among children from developing countries based on the effects of poverty. Some of the leading countries around the world with the highest rate of children with cerebral palsy include Moldova, Bangladesh, China, India, Nigeria, and Uganda (McIntyre *et. al.*, 2022). In addition to this, poverty is prevailing as a major cause of cerebral palsy among children. More so, some mothers do not have access to quality care experiences and viable hospital settings before, during, and after birth. For instance, the poverty rate in Nigeria as of the year 2024 is 40.7% (World Bank, 2024). It has also been found that Nigeria recently overtook India in extreme poverty ranking (Adebayo, 2024). This is with the fact that there exists a nexus between poverty and the prevalence of cerebral palsy among children. It is therefore not a bad idea to consider Nigeria as the scope of the present study. Since Nigeria is on the list of countries with a prevailing rate of children with cerebral palsy, there is a need to examine the roles of Nigerian homes in meeting the evolving needs of this study.

### **Conceptualization and Issues with Cerebral Palsy**

It has been argued that children with special needs are not disabled but they are children who have disabilities. These children are special because they have areas of need that require special attention (Oluyimide & Adeleke, 2020). Regardless of the myriads of needs that these children have, they are not less of humans- they are unique, talented, and have all that it takes to rule the world just like children without disabilities (Oluyimide & Adeyemi, 2023). That said, scanning through different forms of special needs that children might have, the present study investigates deeply into children with cerebral palsy.

According to the research by Donald *et. al.*, (2014), cerebral palsy is a form of special needs that reduces the ability of children to engage their physical skills effectively; skills such as writing (fine motor) and sporting activities (gross motor) among others. In other words, cerebral palsy is a physical disability that affects the day-to-day activities of people. Cerebral palsy has also been seen as a type of neurological disorder that affects infancy and children which limits their ability to move from one end to the other (Richards & Malouin, 2013). This does not stop with difficulties in movement but also affects the ability of children to carry out academic activities such as writing, sitting comfortably in the classroom, and even reading effectively (Vitrikas, Dalton, & Breish, 2020). By implication, when children have cerebral palsy, their school activities are negatively affected with an effect on their academic and social performance (Aduful *et. al.*, 2023).

One of the major issues with cerebral palsy is the management. It has been found according to Tseng *et al.* (2018), in a study that was done in Taiwan that parents were not adequately informed and aware of cerebral palsy. This, in a way, reduces the extent to which parents engage in early intervention in working with children with cerebral palsy (Tseng, Lee, Chou, Sheu, & Lee, 2018). In another study that was conducted in Sweden, most of the children with cerebral palsy in the study areas were due to the effect of malnutrition that their mothers experienced during pregnancy (Himmelmänn & Uvebrant, 2014). This is a similar reality in the Nigerian home as some selected mothers in Benin (from low income-homes) do not have adequate awareness of cerebral palsy (Sogbossi, Houekpetodji, Kpadonou, & Bleyenheuft, 2022). On this note, aside from poverty in homes, poor awareness is another challenging factor that can deteriorate the need for attention of children with cerebral palsy. As this study unfolds, more findings will be unveiled based on the Nigerian context.

### **Types of Cerebral Palsy and Their Implications for Early Years Learning**

The different types of cerebral palsy are presented in this section which include spastic, ataxic, athetoid (dyskinetic), hypotonic, and mixed cerebral palsy. They have also been found to have direct and indirect implications for learning among children. These are systematically presented as follows.

#### ***Spastic Cerebral Palsy***

This is the most prominent type of cerebral palsy in the world with a prevalence rate of 77% (Ali, Bhat, Ahmed, & Ahmed, 2022). When children have spastic cerebral palsy, some of the experiences that they have include spasticity movements, feeling jerky, and increased muscle tone. A leading factor that causes spastic cerebral palsy is when children experience motor cortex damage in the brain (Abate *et. al.*, 2024). The motor cortex is an area of the brain that is in control of voluntary movement (Patel, Neelakantan, Pandher, & Merrick, 2020). Hence, when children have spastic cerebral palsy, they have issues with physical coordination and effective communication processes in school and at home (Bottcher, 2010). Their parents and teachers have the job of



making sure that the children feel comfortable and provided with flexible learning environment for effective learning opportunities.

### ***Ataxic Cerebral Palsy***

This is another type of cerebral palsy that is not very common among children globally, it is - about 2.4% prevalence (National Institute of Neurological Disorders and Stroke, 2024). It is caused by the inability of children to have access to ataxic (voluntary movements) which leads to movement imbalance. Here, when the cerebellum (a part of the brain that ensures balance control and motor movement regulation) of children is damaged, they tend to experience ataxic cerebral palsy (Khan *et. al.*, 2024). Most of the children in this category experience different symptoms such as shakiness, spreading feet apart when walking, poor coordination, and speech difficulties (Yoo, Ahn, & Park, 2021). By inference, the academic and social activities of this kind of children are affected based on the fact that they do not have access to effective fine and motor skills control.

### ***Athetoid Cerebral Palsy***

When children are diagnosed with athetoid cerebral palsy, they tend to experience a combination of two types of cerebral palsies (choreoathetosis and dystonic). This is the case when children experience loosened muscles (hypotonia) and stiffened muscles (hypertonia) as this leads to the fluctuation of the muscle coordination (Li & Arya, 2024). Also, children who have athetoid cerebral palsy could have experienced both brain basal ganglia and cerebellum damage at the same time according to Haberfehlner *et. al.*, (2020). The brain's basal ganglia are a part of the brain that is in charge of a cluster of nuclei that aid motor control and support effective cognitive activities (Haberfehlner *e.t al.*, 2020). Some of the symptoms that are exhibited by children who have athetoid cerebral palsy include problems with posture, feeding issues, rigid or stiff body, and floppiness in the limbs (Patel *et. al.*, 2020). This means that when children experience this kind of cerebral palsy, they find it difficult to jump, walk, and also express their fine and gross motor skills effectively.

### ***Hypotonic Cerebral Palsy***

Hypotonic also known as atonic cerebral palsy is not very common among children with a prevalence rate of about 2.6% (Levy *et. al.*, 2020). Children who have hypotonic cerebral palsy experience floppy muscles which make them often experience loss of strength (Moawad, 2024). Such a child also has delays with their developmental milestones such as crawling, standing, and walking muscles (Khan *et. al.*, 2024). They tend to experience delays in their movement compared to other children with other forms of cerebral palsy. Some of the common symptoms that children with atonic cerebral palsy include flexible joints and ligaments, loose muscles, lack of head control, and poor balance and stability (Moawad, 2024). In all of these, these children largely have difficulty with communication or language. So, they often have issues with learning languages, words, and sentences in school. Some of them also experience learning barriers which can include emotional, social, and intellectual.

### **What Makes a Nigerian Home?**

In this study, the concept of the Nigerian home is hinged on the different people that are available in the home environment to meet the changing needs of learning. Some of these stakeholders include parents, family members, siblings, and relatives. According to the findings of Daniel, Okefenam, Ugorji, Agbasi, Onyido, Odoh, Fakorede, and Egbujo (2021), it was asserted that it is not enough for parents alone to be involved in the care of children without the assistance of other relatives and family members. Although the home is majorly made up of parents, other key players such as relatives and society members should not be taken out of the picture when it comes to working with children who have special needs (Daniel *et. al.*, 2021). A good way to describe a typical Nigerian home is a communal environment that embraces cultural practices, collective education, and traditional development practices among their children. It has been added that African homes are full of cultures and traditions- however, they tend to lack awareness about health, western education, and issues concerning special needs (Kandel & Merrick, 2007). As this study unveils, it will be asserted if the findings of Kandel and Merrick (2007); and Daniel *et al.* (2021) are viable in tune with this current research or not.

### **Theoretical Framework**

This study is premised on the social learning theory of Bandura (1965), which is keen on key tenets such as

observation, imitation, and modeling. According to Albert Bandura, children should not be exempted from learning because of their needs, expectations, and talent (Kılınç, Yıldız, & Harmanci, 2018). Learning is an opportunity that every child has regardless of their differences (Collie & Martin, 2019). This is because the human environment has been designed to naturally give room for learning processes and activities. For instance, in the process of observation, children learn to see what others in their environment are doing (Bandura, 1965). In this stance, when educational stakeholder engages in negative or positive attitudes, the younger ones will do the same. This is one of the main challenges with the dynamic of working with children with special needs as they tend to be faced with labeling and name-calling (Werkhoven, Anderson, & Robeyns, 2022). Moreover, when children are labeled negatively and bullied because of their needs, there is little or nothing that can be done to help them learn according to the findings of Franz, Richter, Lenhard, Marx, Stein, and Ratz (2022). With this, the present study adopts the social learning theory as a way of determining strategies of engagement adopted by the Nigerian home in promoting learning among early years learners with cerebral palsy (Franz *et al.*, 2023). In the same vein, the extent to which Nigerian parents make themselves available for children with cerebral palsy will be investigated in this study. All these are done to determine the quality of the learning environment that children have access to at home and the issues that are faced in a bid to make this environment effective in meeting the changing needs of children with cerebral palsy.

### **Statement of the Problem**

Though cerebral palsy has been considered a form of impairment, it is not meant to limit the skills, talents, and potential of children. More so, it has been found that children with special needs such as cerebral palsy are faced with rejection which leads to low self-esteem (Omole, Adegoke, Omole, & Adeyemi, 2018). The present study examines the quality of care that children with special needs get from their parents, relatives, and the larger society. While children with cerebral palsy tend to have experienced brain injury, the present research hinges on the exploration of children's learning and the strategies that are engaged in the home when working with these children (Atuh, Otti-Agha, Eneje, Ezema, Okonkwo and Ogbaronya, 2019). In addition to this, children with cerebral palsy do not have the needed attention that they require in public, and they lack social support (Atuh *et al.*, 2019). The assertion of Atuh *et al.* (2019) will be investigated based on the Nigerian experience using the secondary method of data collection in this study. A study that was carried out in the Northern part of Nigeria showed that children with cerebral palsy are used for arms as they beg in the streets (Bodang & Amwe, 2017). Since the ongoing study focuses on the Nigerian reality using a thematic literature review, the findings cut across different states in Nigeria with a focus on children with cerebral palsy and the home.

### **Aim and Objectives of the Study**

The main aim of this study is to investigate the nexus between the Nigerian home and the learning effectiveness of children with cerebral palsy. To this end, the specific objectives of the study are to:

- examine the strategies of engagement adopted by the Nigerian home in promoting learning among early-year learners with cerebral palsy;
- investigate the prominent learning resources for children with cerebral palsy in Nigerian homes; and
- ascertain the challenges faced by the Nigerian home in the bid to make educational resources available for learners.

### **Research Questions**

The main question that is asked in this study is:

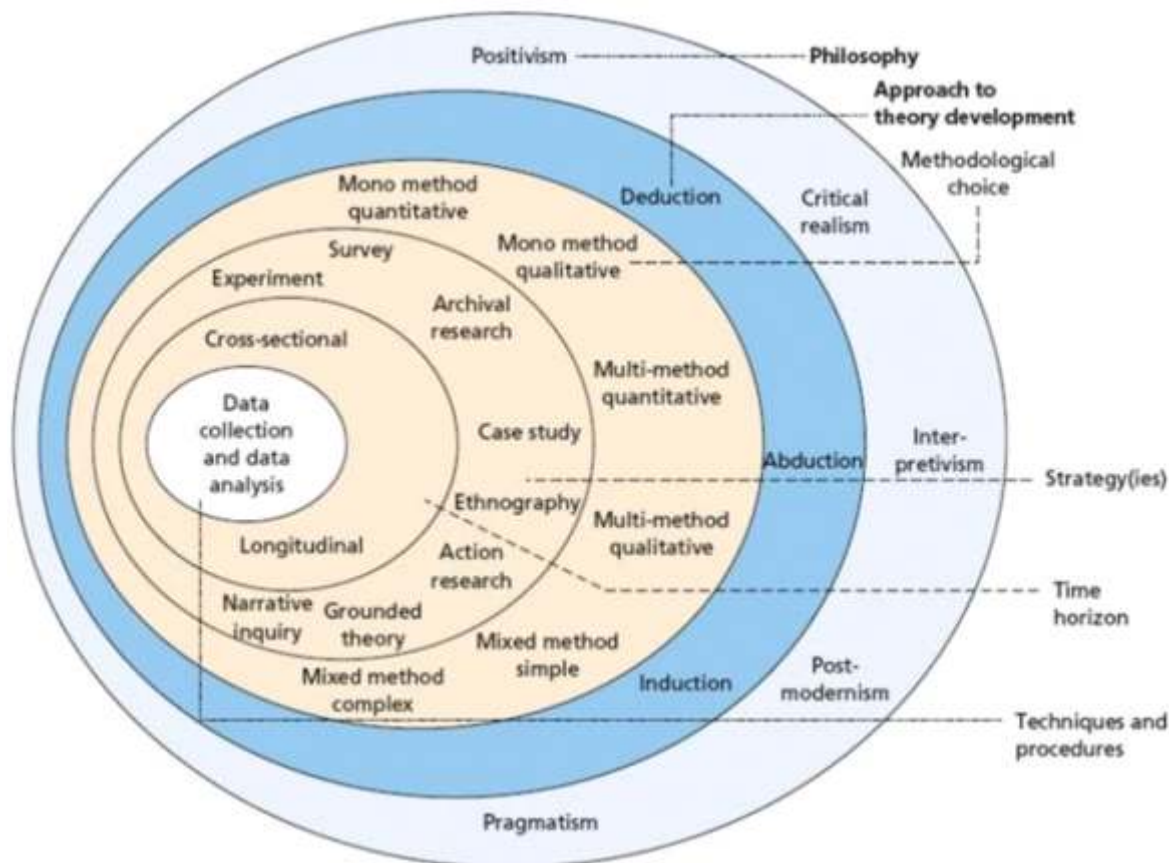
How does the Nigerian home meet the learning needs of children with cerebral palsy?

The specific questions that guide the findings of the study are as follows:

- What are the strategies of engagement adopted by the Nigerian home in promoting learning among early years learners with cerebral palsy?
- What are the prominent learning resources for children with cerebral palsy in Nigerian homes?
- What are the challenges faced by the Nigerian home in the bid to make educational resources available for learners?

## Methodology

This study adopts the thematic literature review using the secondary method of data collection. This has to do with the systematic collection of existing data, critical analysis of data, and presentation of findings. Based on the adoption of the thematic literature review, Saunderson's research onions model (2018) is engaged in this study. As shown in Figure 1, the model includes the different elements of research methodology such as research philosophy, approach, strategies, time horizon, and method of data collection among others.



**Figure 1: Saunders' Research Onions Model (Saunders, Lewis, and Thornhill, 2019)**

Leaning on Saunders' research onions, this study adopts the interpretive research philosophy which has to do with the collection of data from a plethora of sources (Alharahsheh & Pius, 2019). Interpretivism is a philosophical view that also gives room for critical analysis of data which is done in the present study (Goldkuhl, 2012). The inductive research approach is also engaged in this study which is keen on the collection of data from "specific" to "general" (also known as the bottom-up approach) (Burney & Saleem, 2008). On this note, the collection of data was done from a surfeit of studies on the Nigerian home and its impact on the learning of children with cerebral palsy.

It must also be asserted that the qualitative method of data collection was done in this study as information was sought from different databases such as Research Gate, Scopus, Science Direct, and Pub Med. The various sources of data collection include textbooks, peer-reviewed journals, educational websites, and academic articles. The search strings that were engaged include home, cerebral palsy, learning, strategies, and development. In all of these, this study is action research as the focus is on the increase of effective learning practices among children with cerebral palsy in the larger Nigerian society. The inclusion criteria and Boolean operators that have been included in the study are reported in Tables 1 and 2 (below).

**Table 1: Inclusion and Exclusion Criteria**

Parameters	Inclusion criteria	Exclusion criteria
Research title	All data that are related and relevant to the study objectives are included. These are the strategies of engagement adopted by the Nigerian home in promoting learning among early years learners with cerebral palsy ; the prominent learning resources for children with cerebral palsy in Nigerian homes ; and the issues mitigating home in the bid to make educational resources available for learners.	All themes and subjects that are not relevant to the specific objectives of the study.
Research type	Peer-reviewed journals, empirical studies, articles that are adequately referenced, and studies that have detailed methodology.	Journals that are not peer -reviewed, studies that do not have empirical findings (or do not have a result section), articles that are not adequately referenced, and studies without detailed methodology.
Language of publication	English Language	Other languages such as French, and Arabic, apart from English Language.
Time of publication	Papers that have been published in the last 10 years, that is, 2014 to 2024. However, theories will be engaged regardless of their time of publication.	Studies that have been published more than 10 years from the time that the research was conducted.

**Table 2: Boolean Operator**

S/N	Theme Search	or	Alternative Search	of	Learners	In	Educational Industry	in	Country
1	Strategies of engagement adopted by the Nigerian home in promoting learning.	or	Techniques of engagement adopted by the Nigerian home in promoting learning.	of	Children with ADHD	In	Early years education	in	Nigeria



2	Prominent learning resources	or	Foremost learning resources	of	Children with ADHD	In	Early years education	in	Nigeria
3	Issues mitigating home in the bid to make educational resources available for learners	or	Challenges mitigating home in the bid to make educational resources available for learners	of	Children with ADHD	In	Early years education	In	Nigeria

In line with the inclusion and exclusion criteria that have been presented in Tables 1 and 2, the research is intentional about accessing viable studies and articles. The search strategy as presented in the Boolean operator also contributes to the viability of findings in the study. The thematic method of data analysis is used in the study which includes sorting of data, development of codes, design of themes, interpretation, and discussion of findings. All these processes added to the designing of recommendations in tune with the findings.

## Findings and Discussion

### Strategies of Engagement Adopted by the Nigerian Home in Promoting Learning among Early Years Learners with Cerebral Palsy

#### *Enhanced Inclusive Communication Settings*

A prominent way that has been found to work with children with cerebral palsy is the adoption of an inclusive communication strategy. Here is a method that is explored by ensuring the provision of inclusive learning settings for children at home. According to the findings of Abdel Malek, Rosenbaum, and Gorter (2020), a significant relationship was found between inclusive learning settings and effective learning among children with cerebral palsy. It was added that when parents show care toward children with cerebral palsy, their self-esteem and attitude toward learning increase (Abdel Malek, Rosenbaum, & Gorter, 2020). The issue, however, is the fact that many parents do not have adequate awareness about cerebral palsy and many special needs, hence, children are discriminated against and stigmatized in such homes and societies (Olatunji *et al.*, 2023). Olatunji *et al.* (2023) asserted that it was not until recently that Nigerian parents got to know that the treatment of children with cerebral palsy is affordable and that such children can perform effectively academically and be socially relevant in society. In a study done in Cross River State by Duke *et al.* (2021), it was argued that there is a need for more educational stakeholders such as parents and the Nigerian government to be more intentional about working with Nigerian homes toward the provision of a conducive learning environment (Duke *et al.*, 2021).

#### **Adoption of Play-Learn Activities**

Play according to the submissions of Maria Montessori has been described as the work of the child- it is a tool that aids the promotion of learning among children (Modest & Mwila, 2023). In a study that was conducted in Ibadan, Nigeria, it was posited that play-learn activities are becoming more prominent in Nigerian homes towards improving the social and academic performance of children with cerebral palsy (Ajayi, Fatudimu, & Hamzat, 2022). It was also stressed that different games such as gross motor activities, mindfulness, puzzles, coloring games, cool math games, meditation, and art therapy improve the cognitive abilities of children with cerebral palsy (Ajayi, Fatudimu, & Hamzat, 2022). In another study in Kaduna, Nigeria, it was found that play-learn activities have engaged children to be more participatory in academic activities in school because their parents facilitate play among them at home (Lasisi, Ani, Lasebikan, Sheikh, & Omigbodun, 2017). It is on this note that Lasisi *et al.*, (2017) recommended that play-learn activities should not just be delimited to Nigerian



homes but should also be taken seriously among children with cerebral palsy in schools.

### **Assistive/Smart Technologies**

In a study by Adeyemi and Oluyimide (2024), it was posited that there is an increase in the use and adoption of assistive technologies in Nigerian homes and schools. Some of the prominent technologies that were found to engage children in learning include note-taking applications, voice-to-text software, computer-based learning programs, and gaming (Adeyemi & Oluyimide, 2024). While these technologies are effective and functional among children with cerebral palsy, the main challenge is addiction to the technological tools, in the absence of proper monitoring and supervision from parents (Paul, Nahar, Bhagawati, & Kunwar, 2022). Aside from the need to ensure that children are not addicted to technological tools, their learning processes are supported. For example, during the COVID-19 pandemic, an application, *Read Along* was developed by Google to aid learning among children (Shantha, Arunkumar, and Premalatha, 2023). The researcher was one of the volunteers who engaged in the application to aid learning among children with special needs. The outcomes of the *Read Along* were effective among the learners, especially in the process of developing their academic and social performance. A study conducted in five southern states in Nigeria, however, showed that only 8.07% of participants were adequately informed about the use of assistive technologies for children with special needs at home (Okonji & Ogwezzy, 2019).

### **Prominent Learning Resources for Children with Cerebral Palsy in Nigerian Homes**

#### **Adaptative Equipment**

Like every other child with special needs, it is expected that they have access to different forms of teaching and learning resources so that they can gain independence and autonomy. According to the works of Oluyimide and Adeleke (2020), the different forms of equipment that are available for learning among children with special needs in Osun State include walkers, braces, and wheelchairs among others. Although Oluyimide and Adeleke (2020) carried out their study among children with different forms of special needs, those who have cerebral palsy were also involved in the process. One of the main challenges was that most of the children lived in school and rarely lived with their parents. However, even when they are at home, they still use adaptive equipment. This is with the main aim of making sure that the children find it easy to move around and engage their gross and fine motor skills effectively. For instance, the use of wheelchairs has been linked with the ability of children to gain support when they need to move around by themselves (Sogbossi, Houekpetodji, Kpadonou, & Bleyenheuft, 2019). A study that was done among Zimbabwean mothers showed that there is an increase in the rate of wheelchair (with joystick control) provision for their children compared to the Nigerian homes (Dambi, Jelsma, and Mlambo, 2015). By implication, there is a need to ensure that Nigerian homes are more intentional about the provision of flexible and technology-based wheelchairs for their children. In the area of making walkers and braces available for children, the Nigerian home is efficient in this area (Onyeaso, 2023). In addition, the Nigerian home can still do more in the provision of adaptive seating devices for children with cerebral palsy according to the findings of Aduful *et. al.*, (2023).

#### **Computer-Based Learning Resources**

The Nigerian home is beginning to do more in the use of computer-based learning among children with special needs just like developed countries (Sandlund, Waterworth, and Häger, 2014). While the use of computer-based video game therapy is very famous in the UK and USA, Nigerian parents are getting interested in the adoption of these learning resources for children. For instance, gamification has been seen as the new reality for learning among children with special needs (especially those with cerebral palsy) in Nigeria according to the findings of Gkintoni, Vantaraki, Skoulidi, Anastassopoulos, and Vantarakis (2024). The various forms of games that were discussed to have been effective among children include interactive learning games, serious games, augmented reality, cooking games, and reward systems (Gkintoni, Vantaraki, Skoulidi, Anastassopoulos, & Vantarakis, 2024). Active video game play is effective in the promotion of rehabilitation therapies among children with cerebral palsy (Howcroft *et. al.*, 2014). Scanning through these findings, Sunday *et. al.*, (2022) asserted that many challenges are militating the inadequate adoption of computer-based learning resources among children with cerebral palsy in Nigeria which include funds and poor awareness.

## **Challenges Faced by the Nigeria Home in Make Educational Resources Available for Learners**

### **Financial Constraints**

Money is very essential to human activities- this is the same reality with the process of getting educational resources available for children with cerebral palsy. A famous challenge facing Nigerian society is poverty which affects every sector including the educational industry (World Bank, 2024). In tandem with findings such as Oluyimide and Adeleke (2020); and Oluyimide and Adeyemi (2024), it was asserted that funding is the major challenge in developing the social and academic skills of children with special needs in Nigeria. Many children with cerebral palsy have also been found not to have access to quality care in a sampled Hospital in Kano because there are inadequate funds to provide rehabilitation for the children (Abdullahi, 2019). This is the same case with another study in Kano where the provision of learning resources is hindered by inadequate funds (Ogoke & Iloje, 2017).

### **Discrimination Towards Family and the Child**

In the past, discrimination was often against children with special needs, however, in recent times, it has been found that parents who have children with special needs are also faced with stigma in society (Oduyemi, Okafor, Eze, Akodu, & Roberts, 2021). In their study, Oduyemi *et al.*, (2021) asserted that the stigmatization among parents and families who have children with special needs is often caused by people in the inner circle and those who are closer to the home. Here is one of the reasons why some parents tend to keep their children with special needs away from the public. Some parents also homeschool their children and do not allow them to go to school so that they do not face discrimination, segregation, and name-calling according to the research by Daniel *et al.* (2021)

### **Inadequate Awareness about Cerebral Palsy**

Awareness creation has been found as an important tool to aid in creating an effective learning culture among children with cerebral palsy. It has been found that not so many parents are aware of the dynamics and complexities of cerebral palsy in Nigeria- which in a way has reduced the ability to work with children with such a need effectively. For instance, the findings of Okonji and Ogwezzy (2019) showed that educational stakeholders such as parents and teachers did not have adequate awareness about children with cerebral palsy. This, therefore, affects the ability of parents to engage in early intervention when working with children with cerebral palsy. In Port Harcourt, Nigeria, it was also revealed that only 23% of parents were informed about the consequences of cerebral palsy among children and only 12% had adequate awareness of the symptoms exhibited by children with cerebral palsy (Eke & Adeyemi, 2023).

### **Recommendations**

#### **Increase in the Rate of Awareness about Cerebral Palsy**

There should be more awareness about the symptoms of cerebral palsy among parents and the larger society. It is the role of the media and non-government agencies to carry out awareness activities to inform parents about the need to be encouraged when working with children with special needs. When Nigerian society is also aware of cerebral palsy and its complexities and implications for learning, there will be a decrease in the rate of segregation.

#### **Provision of Financial Support for Parents who have Children with Cerebral Palsy**

Finance is key to meeting the social and academic needs of children with cerebral palsy. The Nigerian government should create a financial support scheme for parents who have children with cerebral palsy. Also, they can be given scholarships to support their education without needing to bother their parents. This, in a way, will encourage parents not to feel deterred from having children with special needs.

#### **There should be an increase in Stakeholder Support**

Stakeholder support has to do with the functionality of different people such as teachers, community members, non-governmental agencies, government, and the larger society in meeting the evolving needs of children with cerebral palsy. The children should be supported socially and emotionally. They will also be able to explore their skills to the brim without any form of discouragement.

## Conclusion

This study has examined the strategies of engagement adopted by the Nigerian home in promoting learning among early years learners with cerebral palsy. It has also investigated the prominent learning resources for children with cerebral palsy in Nigerian homes. Moreover, the challenges faced by the Nigerian home in the bid to make educational resources available for learners have been explored. It was found that Nigerian homes engage in inclusive communication settings, play-learn activities, and smart technologies to meet the learning needs of children with cerebral palsy. Adaptive equipment and computer-based learning resources were the prominent learning resources for children with cerebral palsy in Nigerian homes. The challenges faced by the Nigerian home in the bid to make educational resources available for learners were inadequate awareness, poor funding, and discrimination. It was recommended that there should be an increase in government support and increased awareness of cerebral palsy in Nigerian society.

## References

- Abate, B. B., Tegegne, K. M., Zemariam, A. B., Wondmagegn Alamaw, A., Kassa, M. A., Kitaw, T. A., ... Azmeraw Bizuayehu, M. (2024). Magnitude and clinical characteristics of cerebral palsy among children in Africa: A systematic review and meta-analysis. *PLOS Global Public Health*, 4(6), e0003003.
- Abdel Malek, S., Rosenbaum, P., & Gorter, J. W. (2020). Perspectives on cerebral palsy in Africa: Exploring the literature through the lens of the International Classification of Functioning, Disability and Health. *Child*, 46(2), 175–186.
- Abdullahi, A. (2019). *Titles: Caregiver's perspectives on facilitators and barriers of active participation in cerebral palsy rehabilitation in North West Nigeria: a qualitative study*.
- Adebayo, B. (2024). Nigeria overtakes India in extreme poverty ranking. Retrieved May 24, 2024, from CNN website:
- Adeyemi, B. A., & Oluyimide, I. S. (2024). An Investigation of Teacher Intention to Adopt and Integrate Tablets Into Pedagogical Practices. In *New Approaches in Mobile Learning for Early Childhood Education* (pp. 1–24). IGI Global.
- Aduful, A. K., Boamah-Mensah, F., Nyarko, M. Y., Neizer, M. L., Brew, Y. N., Williams, L. A., ... Tette, E. M. A. (2023). Family Needs Assessment of Patients with Cerebral Palsy Attending Two Hospitals in Accra, Ghana. *Children*, 10(8), 1313.
- Ajayi, O. O., Fatudimu, M. B., & Hamzat, T. K. (2022). Effects of An Educational Programme on Knowledge of Cerebral Palsy among Informal Caregivers of Children Presenting at Selected Physiotherapy Clinics in Ibadan. *European Journal of Medical and Health Sciences*, 4(2), 57–62.
- Alharahsheh, H., & Pius, A. (2019). A Review of key paradigms: Positivism vs interpretivism. *Global Academic Journal of Humanities and Social Sciences*, 2(3).
- Ali, S. W., Bhat, J., Ahmed, P., & Ahmed, S. (2022). Cerebral Palsy: An overview. *Current Pediatric Research, Volume 10*.
- Atuh, C., Otti-Agha, N., Eneje, E., Ezema, V., Okonkwo, A., & Ogbaronya, E. (2019). Review of Cerebral Palsy Cases in the University Of Nigeria Teaching Hospital Ituku-Ozalla, Enugu. *Nigerian Journal of Medical Rehabilitation*, 20.
- Bandura, A. (1965). Influence of models' reinforcement contingencies on the acquisition of imitative responses. *Journal of Personality and Social Psychology*, 1(6).
- Bodang, J., & Amwe, R. (2017). The Need for Involving Parents in the Rehabilitation of Persons with Special Needs in Nigeria. *Asian Journal of Social Sciences and Management Studies*, 4, 31–35.
- Bottcher, L. (2010). Children with spastic cerebral palsy, their cognitive functioning, and social participation: A review. *Child Neuropsychology: A Journal on Normal and Abnormal Development in Childhood and Adolescence*, 16(3), 209–228.
- Burney, S. M. A., & Saleem, H. (2008, March). *Inductive and Deductive Research Approach*.
- CDC. (2024). Data and Statistics for Cerebral Palsy. Retrieved July 7, 2024, from Centers for Disease Control and Prevention website:
- Collie, R., & Martin, A. (2019). Motivation and Engagement in Learning. In *Oxford Research Encyclopedia of Education*. Oxford University Press.
- Dambi, J. M., Jelsma, J., & Mlambo, T. (2015). Caring for a child with Cerebral Palsy: The experience of Zimbabwean mothers. *African Journal of Disability*, 4(1), 168.

- Daniel, J., Okefenam, C., Ugorji, T., Agbasi, P., Onyido, D., Odoh, O., ... Egbujo, S. (2021). Challenges Faced by Nigerian Parents with Disabled Children in Caring for Them. *Open Journal of Social Sciences*, 09, 201–212.
- Donald, K., Samia, P., Kakooza, A., & Bearden, D. (2014). Pediatric Cerebral Palsy in Africa: A Systematic Review. *Seminars in Pediatric Neurology*, 21, 30–35.
- Drechsler, R., Brem, S., Brandeis, D., Grünblatt, E., Berger, G., & Walitza, S. (2020). ADHD: Current Concepts and Treatments in Children and Adolescents. *Neuropediatrics*, 51(5), 315.
- Duke, R. E., Torty, C., Okorie, U., Kim, M. J., Eneli, N., Edadi, U., ... Bowman, R. (2021). Pattern of comorbidities in school-aged children with cerebral palsy in Cross River State, Nigeria. *BMC Pediatrics*, 21(1), 165.
- Eke, C., & Adeyemi, O. (2023). Awareness, Knowledge and Perception of Port Harcourt Women on Children Living with Cerebral Palsy. *Research Journal of Mass Communication and Information Technology*, 9, 11–27.
- Franz, D. J., Richter, T., Lenhard, W., Marx, P., Stein, R., & Ratz, C. (2023). The Influence of Diagnostic Labels on the Evaluation of Students: A Multilevel Meta-Analysis. *Educational Psychology Review*, 35(1), 17.
- Gkintoni, E., Vantaraki, F., Skoulidi, C., Anastassopoulos, P., & Vantarakis, A. (2024). Promoting Physical and Mental Health among Children and Adolescents via Gamification—A Conceptual Systematic Review. *Behavioral Sciences*, 14(2), 102.
- Goldkuhl, G. (2012). Pragmatism vs interpretivism in qualitative information systems research. *European Journal of Information Systems*, 21.
- Haberfehlner, H., Goudriaan, M., Bonouvrié, L. A., Jansma, E. P., Harlaar, J., Vermeulen, R. J., ... Buizer, A. I. (2020). Instrumented assessment of motor function in dyskinetic cerebral palsy: A systematic review. *Journal of NeuroEngineering and Rehabilitation*, 17(1), 39.
- Himmelman, K., & Uvebrant, P. (2014). The panorama of cerebral palsy in Sweden. XI. Changing patterns in the birth-year period 2003–2006. *Acta Paediatrica (Oslo, Norway : 1992)*, 103(6).
- Howcroft, J., Klejman, S., Fehlings, D., Wright, V., Zabjek, K., Andrysek, J., & Biddiss, E. (2014). Active video game play in children with cerebral palsy: Potential for physical activity promotion and rehabilitation therapies. *Archives of Physical Medicine and Rehabilitation*, 93(8), 1448–1456.
- Kandel, I., & Merrick, J. (2007). The Child With a Disability: Parental Acceptance, Management and Coping. *TheScientificWorldJournal*, 7, 1799–1809.
- Khan, M., Cassidy, E., Parkin, T., Wallace, A., Carter, B., Paton, J., ... Bunn, L. (2024). The Care and Management of Children and Young People with Ataxia Telangiectasia Provided by Nurses and Allied Health Professionals: A Scoping Review. *The Cerebellum*, 23(2), 722–756.
- Kılınç, G., Yıldız, E., & Harmanci, P. (2018). *Bandura's Social Learning and Role Model Theory in Nursing Education*. Retrieved from
- Lasisi, D., Ani, C., Lasebikan, V., Sheikh, L., & Omigbodun, O. (2017). Effect of attention-deficit-hyperactivity-disorder training program on the knowledge and attitudes of primary school teachers in Kaduna, North West Nigeria. *Child and Adolescent Psychiatry and Mental Health*, 11, 15.
- Levy, J. P., Oskoui, M., Ng, P., Andersen, J., Buckley, D., Fehlings, D., ... Shevell, M. (2020). Ataxic-hypotonic cerebral palsy in a cerebral palsy registry: Insights into a distinct subtype. *Neurology. Clinical Practice*, 10(2), 131–139.
- Li, X., & Arya, K. (2024). Athetoid Cerebral Palsy. In *StatPearls*. Treasure Island (FL): StatPearls Publishing. Retrieved from
- McIntyre, S., Goldsmith, S., Webb, A., Ehlinger, V., Hollung, S. J., McConnell, K., ... Himmelman, K. (2022). Global prevalence of cerebral palsy: A systematic analysis. *Developmental Medicine and Child Neurology*, 64(12), 1494–1506.
- Moawad, H. (2024, March 4). Hypotonic Cerebral Palsy: Causes, Symptoms, Treatment, and More. Retrieved July 14, 2024, from Healthline website:
- Modest, D., & Mwila, P. (2023). The Early Childhood Montessori Pedagogy: Practices and challenges in pupils' cognitive development in Dar es Salaam City, Tanzania. *International Journal of Research and Innovation in Social Science*, 7(3), 1–24.
- National Institute of Neurological Disorders and Stroke. (2024). Cerebral Palsy. Retrieved July 14, 2024, from



- Obaka, A. (2017). Education of people with special needs. *The 3rd International Conference on Social Science*.
- Oduyemi, A. Y., Okafor, I. P., Eze, U. T., Akodu, B. A., & Roberts, A. A. (2021). Internalization of stigma among parents of children with autism spectrum disorder in Nigeria: A mixed method study. *BMC Psychology*, 9, 182.
- Ogoke, C. C., & Iloeje, S. O. (2017). Severity of motor dysfunction in children with cerebral palsy seen in Enugu, Nigeria. *The Pan African Medical Journal*, 27(154).
- Okonji, P. E., & Ogwezzy, D. C. (2019). Awareness and barriers to adoption of assistive technologies among visually impaired people in Nigeria. *Assistive Technology: The Official Journal of RESNA*, 31(4), 209–219.
- Olatunji, G., Faturoti, O., Jaiyeoba, B., Toluwabori, A. V., Adefusi, T., Olaniyi, P., ... Abdulbasit, M. O. (2023). Navigating unique challenges and advancing equitable care for children with ADHD in Africa: A review. *Annals of Medicine and Surgery* (2012), 85(10), 4939–4946.
- Oluyimide, I., & Adeleke, G. (2020). The Influence Of School Resources On Learning Outcomes (Affective Skills' Development) Of Pupils In Special Schools In Osun State, Nigeria. *Scientific Research Journal*, 8, 37–45.
- Oluyimide, I., & Adeyemi, B. (2023). Nigerian Special Needs Education in the 21st century: A reality or mirage? *International Journal of Contemporary Issues in Education*, 5(1), 185–192.
- Omole, J. O., Adegoke, S. A., Omole, K. O., & Adeyemi, O. A. (2018). Pattern of cerebral palsy seen in children attending the outpatient paediatric physiotherapy clinics in Osun State tertiary hospitals in Nigeria. *South African Journal of Child Health*, 12(2), 52–57.
- Onyeaso, C. O. (2023). Orthodontic treatment need of mentally handicapped children in Ibadan, Nigeria, according to the dental aesthetic index. *Journal of Dentistry for Children (Chicago, Ill.)*, 70(2), 159–163.
- Patel, D. R., Neelakantan, M., Pandher, K., & Merrick, J. (2020). Cerebral palsy in children: A clinical overview. *Translational Pediatrics*, 9(Suppl 1), S125–S135.
- Paul, S., Nahar, A., Bhagawati, M., & Kunwar, A. J. (2022). A Review on Recent Advances of Cerebral Palsy. *Oxidative Medicine and Cellular Longevity*, 2022, 2622310.
- Richards, C. L., & Malouin, F. (2013). Cerebral palsy: Definition, assessment and rehabilitation. *Handbook of Clinical Neurology*, 111, 183–195.
- Sandlund, M., Waterworth, E. L., & Häger, C. (2014). Using motion interactive games to promote physical activity and enhance motor performance in children with cerebral palsy. *Developmental Neurorehabilitation*, 14(1), 15–21.
- Shantha, P., Arunkumar, K., & Premalatha, K. (2023). Effectiveness of Google Read Along App in Improving Reading Skills of Rural Area Primary School Students. *Journal of the Oriental Institute*, 72, 1–5.
- Sogbossi, E. S., Houekpetodji, D., Kpadonou, T. G., & Bleyenheuft, Y. (2019). A Cross-sectional Study of the Clinical Profile of Children With Cerebral Palsy in Benin, a West African Low-Income Country. *Journal of Child Neurology*, 34(13), 842–850.
- Sogbossi, E. S., Houekpetodji, D., Kpadonou, T. G., & Bleyenheuft, Y. (2022). Mothers' perception of cerebral palsy in a low-income country of West Africa: A cross-sectional study. *Disability and Rehabilitation*, 44(17), 4767–4774.
- Tseng, S.-H., Lee, J.-Y., Chou, Y.-L., Sheu, M.-L., & Lee, Y.-W. (2018). Association between socioeconomic status and cerebral palsy. *PLoS ONE*, 13(1), e0191724.
- Vitrikas, K., Dalton, H., & Breish, D. (2020). Cerebral Palsy: An Overview. *American Family Physician*, 101(4), 213–220.
- Werkhoven, S., Anderson, J. H., & Robeyns, I. A. M. (2022). Who benefits from diagnostic labels for developmental disorders? *Developmental Medicine and Child Neurology*, 64(8), 944–949.
- World Bank. (2024). Poverty in Nigeria [Text/HTML]. Retrieved August 3, 2024, from World Bank website:
- Yoo, M., Ahn, J. H., & Park, E. S. (2021). The Effects of Over-Ground Robot-Assisted Gait Training for Children with Ataxic Cerebral Palsy: A Case Report. *Sensors*, 21(23), 7875.



# An Assessment of the Impact of Cartoons on the Learning Outcomes of Preschoolers in Lagos State

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## Abstract

*Technology has allowed educators to select suitable instructional resources and methods, and children discover many words from cartoons which they may apply in daily life. Cartoons also motivate children to speak the intended language. The study examined the effects of educational cartoons on the learning outcomes of preschoolers in Lagos State. The study adopted the quasi-experimental research design. The population of the study consisted of all the nursery pupils in public nursery and primary schools in Yaba Metropolis. The sample of the study comprised 52 nursery two pupils in two intact nursery classes from two randomly selected public nursery and primary schools in the study area. 10-item instrument titled Preschoolers' Literacy Outcomes (PLO) was used to measure the pupils' learning outcome in literacy. The validity of the instrument was ensured by experts in English Education and test and measurement in the University of Lagos, Akoka. The instrument was trial tested with 10 randomly selected pupils from a private nursery school in Yaba. The Kuder-Richardson's formula (K-R 21) was used to determine the consistency of the items within the instrument. The PLO yielded a reliability index of 0.84, which is high enough and considered usable. Analytical techniques including frequency distribution tables, mean scores, and Analysis of Covariance (ANCOVA) were used to analyse the collected data. The findings of the study revealed that there is significant effect of educational cartoons on the learning outcomes of preschoolers in the treatment group. Hence, this study recommends that teachers should be encouraged to incorporate educational cartoons in teaching preschoolers to foster good academic performance. Parents should also be encouraged to expose their children to more of educational cartoons than other forms of cartoons. Government should also equip public schools with necessary resources to facilitate the use of educational cartoons.*

**Keywords:** Technology, Instructional Resources, Instructional Methods, Educational Cartoons, and Preschoolers

## Introduction

Stories have been essential aspects of children's education and amusement over the course of history, especially within Nigerian communities. Historically, storytelling played a crucial role in imparting moral principles, societal restrictions, and cultural standards to young people. Furthermore, it served as a pivotal means of establishing strong connections between parents, grandparents, and children, promoting effective communication and mutual comprehension across different generations. Nevertheless, the advancement of technology has led to a significant transformation in children's entertainment. Traditional midnight storytelling sessions, which were once widespread, have been largely displaced by contemporary technological options like television, laptops, and smartphones. Cartoons have emerged as the predominant form of entertainment (Akande, 2023). This transition prompts a significant inquiry on how this alteration in media impacted the educational achievements of preschoolers?

Cartoons have become an integral part of children's everyday routines, providing more than just passive amusement. Their visual appeal is enhanced by vibrant colours, innovative environments, and distinctive character models. These elements captivate the attention of children, arouse their curiosity, and enable them to

form an emotional bond with the characters seen on the screen. Cartoons, with their uncomplicated and frequently amusing plots, are easily comprehensible for young children, providing both amusement and educational value. Moreover, numerous cartoons include components that foster education, such as alphabets, numerals, puzzles, and ethical teachings, hence enhancing children's cognitive, emotional, and social growth (Parlakıyıldız, Seven, &Parlakıyıldız, 2022).

Preschool education, as defined by the Federal Republic of Nigeria's National Policy on Education (FRN, 2014), refers to the initial formal education given to children between the ages of 3 and 5 before they start primary school. It functions as the fundamental basis for the entire educational system. The primary objective of preschool is to facilitate a seamless transition for children from their home environment to the school setting. Preschoolers, as defined by Klenk (2001), encompass children between the ages of three and five. According to Obidikeand Enemu (2016), they possess high levels of energy, creativity, curiosity, and a strong desire for knowledge acquisition. The participants in this study are preschoolers, specifically children between the ages of three and six, who are currently enrolled in a preschool programme. Preschoolers primarily acquire knowledge by engaging their sensory organs, including touch, sight, and hearing. Consequently, they can be classified as tangible or audio-visual learners who may benefit from the utilisation of technologies like animated cartoons.

Despite this, it is evident that the predominant instructional method in Nigerian schools is the lecture technique, which does not seem to foster cognitive development in preschoolers as anticipated by many parents (Nchedo, Ogbeche, & Okeke, 2022). While learner-centred techniques like video tapes and animated cartoons have the potential to enhance the cognitive development of preschoolers, there is typically a lack of focus on using animation cartoons for teaching purposes and how animation can be integrated to facilitate learning (Musa, Ziatdinov, & Griffiths, 2013).

Chiangtong (1975 in Gani, 2020) explains that the term "cartoon" originated from the Latin word "charta," which translates to "paper." During that time, "cartoon" referred to the act of painting on big textile curtains, creating patterns or drawings on mirrors, and producing mosaics. There are seven different sorts of cartoons, which include political cartoons, graphical cartoons, amusement cartoons, comic book or serial cartoons, commercial cartoons, feature-length animated cartoons, and television cartoons. This study examines the impact of animated cartoons. An animated cartoon is a form of animation that is made by capturing sequential images of drawn patterns, resulting in the illusion of continuous motion (Gani, 2020).

In the last decades, cartoons have been an efficient educational tool alongside multimedia technology, especially due to advancements in video quality, easy accessibility of cartoons on video-sharing platforms like YouTube and Teachers tube, widespread use of mobile devices, and faster internet connections. Thus, multimedia research on cartoons and teaching and academic achievement has increased. According to those studies, sound, images, texts, and animations in audiovisual or cartoons generally engaged children, helping them learn (Sinor, 2011). It was underlined that they help children develop mentally, physically, and psychologically and discover their hidden skills (Cho, 2012). However, studies on the effects of cartoons on teachers' in-class teaching methods are neglected or insufficient.

Cartoons' educational benefits and drawbacks have been noted by scholars. Irkin (2012) emphasises that violent-comics caused negative student behaviour. Mayer *et. al.*, (2001) also note that cartoons can mislead learners because they usually simplify a topic and may inhibit them from learning through imagination and mental models. Slang and foreign words may harm children's linguistic development, while excessive cartoon viewing may impede socialisation and critical thinking. Some cartoons teach religion and values poorly, according to Yorulmaz (2013).

It is well known that children in this age range are difficult to control, especially if their teaching is not accompanied by calming techniques. Due to the difficulty of capturing students' attention, Jamal, Ibrahim and Surif (2019) suggest employing visual instructional tools like cartoons. Cartoons should be used in course programs and education like other technologies (Bulbul &Cuhadar, 2011). Teachers who struggle with digital teaching medium also struggle with integration and return to their old teaching methods (Elmas &Geba, 2012). Teachers who choose the best digital tools and materials for pupils should know their educational impact. By selecting technologically appropriate course activities, they boost

learning outcomes (Conole&Alevizou, 2010). Gunes and Baki (2011) claim that teachers' cognition, belief, and attitudes are unsuccessful because their learning and teaching beliefs have not changed.

This study employs the social learning theory, which is crucial for comprehending the influence of cartoons on the educational achievements of preschool children. Bandura's (1977) social learning theory highlights the interplay between cognitive, behavioural, and environmental factors that shape human behaviour. The statement underscores the significance of observation, imitation, and modelling in the process of acquiring new behaviours. Bandura argues that if individuals had to rely exclusively on their own activities to acquire behaviour, the process of learning would be extremely difficult and time-consuming. Instead, the majority of behaviours are acquired through observational modelling, whereby individuals assimilate new behaviours by observing others. The understanding of how preschoolers assimilate and imitate behaviours and attitudes depicted in cartoons is crucial in this process. The theory delineates four distinct stages of social learning which are attention, retention, motor reproduction, and motivation (Baran & Davis, 2003). Preschool-aged children are highly susceptible to influence, and when they are exposed to cartoons, they tend to imitate the behaviours they see. This can have an impact on their ability to read and write, understand numbers, and develop social and emotional skills. Therefore, social learning theory offers a strong framework for analysing the possible impact of media, including cartoons, on the educational achievements of preschoolers in Lagos State.

Scanlan (2000 in Gani, 2020) found that media cartoons assist pupils understand concepts. He emphasises the way cartoons assist pupils understand subject matter with cartoon-based learning approach. The study found that cartoons and student-centered teaching can boost classroom learning. Research shows that animated cartoons help kids learn. Verhallen, Bus, and de Jong (2006) opined that children pay more attention to moving graphics than static ones. Ghilzai, Alam, Ahmad, Shaukat, and Noor (2017) found that Pakistani children who watched cartoons had higher proficiency in languages than those who did not. Lodhi, Ibrar, Shamim, and Naz (2018) found that animated cartoons increased children's cognition. The study also indicated that cartoons improved male and female children's intra and interpersonal conduct. Cartoon-based teaching was examined by Eker and Karadeniz (2014). The quasi-experimental pre-test, post-test control group approach was used with 56 4th graders. The study found that experimental pupils retained more than the control group. In Ilorin, Kwara State, Sulyman, Ajayi, and Reuben (2022) examined how animated films affect social studies students' performance. The study used primary 2 intact classes using a quasi-experimental design. Experimental pupils outperformed control pupils. Omer and Yuksel (2020) examined how three-dimensional cartoons affect preschoolers' spatial perception. The study included 83 48–60-month-old preschoolers. The study employed Solomon four-group experimental design. Researchers devised a concept development test to assess children's conceptual growth. The results showed that cartoons significantly affected preschoolers' conceptual development. These studies show that educational cartoons might help preschoolers in Yaba metropolis Lagos State, learn.

However, the integration of cartoons into official learning contexts in Nigeria is currently limited, despite their significant instructional potential. Cartoons are often disregarded by educators as a teaching tool, even though they have been demonstrated to be beneficial in enhancing engagement and enjoyment in learning (Fleischer, 2010). Gani (2020) opined that cartoons can function as potent visual tools that not only inspire learners but also provoke discourse and improve understanding of intricate concepts. Due to their remarkable characteristics, they serve as a helpful tool for strengthening fundamental principles in both language and mathematics.

Hence, this research aims to evaluate the influence of cartoons on the educational achievements of preschoolers in Lagos State, with a specific emphasis on the impact of these visual tools on the enhancement of literacy skills. Gaining understanding of this connection is crucial for educators as they investigate inventive approaches to captivate children and enhance educational achievements in an ever more technologically advanced society.

**The specific objectives of the study are to:**

- examine the effect of educational cartoons on the learning outcomes of preschoolers in the treatment group; and
- find out whether the effect of educational cartoons on the learning outcomes of preschoolers in the treatment group is influenced by student gender

## Research Questions

- What is the effect of educational cartoons on the learning outcomes of preschoolers in the treatment group?
- What is the influence of student gender on the effect of educational cartoons on the learning outcomes of preschoolers in the treatment group

## Research Hypothesis

**H<sub>0</sub>1:** There is no significant effect of educational cartoons on the learning outcomes of preschoolers in the treatment group

## Methodology

This study adopted quasi-experimental research design. The population of the study consisted of all the nursery pupils in public nursery and primary schools in Yaba Metropolis. The sample of the study comprised 52 nursery two pupils in two intact nursery classes from two randomly selected public nursery and primary schools in the study area. One of the two selected classes was made the control group, comprising 27 pupils, while the other class comprising 25 pupils was made the treatment group. One instrument titled 'Preschoolers' Literacy Outcomes' (PLO) was used to measure the pupils' learning outcome in literacy with 10 items. The validity of the instrument was ensured by experts in the field and test and measurement in the University of Lagos, Akoka. The instrument was trial tested with 10 randomly selected pupils from a private nursery school in Yaba. The Kuder-Richardson's formula (K-R 21) was used to determine the consistency of the items within the instrument. The PLO yielded a reliability index of 0.84, which is high enough and considered usable. The PLO was administered to the two groups before any teaching took place and the pupils' answer scripts from the two groups were recorded separately. At another appointed time, the researchers taught the two groups "Word Formation and Simple Sentence Construction". The control group was taught with traditional method and the treatment group was taught with animated cartoon, then the PLO post-test was administered to the two groups and recorded separately for analysis purpose. Analytical techniques including frequency distribution tables, mean scores, and Analysis of Covariance (ANCOVA) to analyse the collected data.

## Results

**Table 1: Preschoolers' Demographics**

Characteristics	Options	Frequency	Percent (%)
Gender	Male	24	46.2
	Female	28	53.8
	<b>Total</b>	<b>52</b>	<b>100.0</b>
Age	3-4 years	13	25.0
	5-6 years	39	75.0
	<b>Total</b>	<b>52</b>	<b>100.0</b>

Source: Field Survey, 2024

Table 1 shows that 46.2% of the preschoolers were male and the majority 53.8% of them were female. While the majority (75.0%) of them were within the age bracket 5-6 years and the remaining 25.0% of them were ages 3-4.

**Hypothesis:** There is no significant effect of educational cartoons on the learning outcomes of preschoolers in the treatment group



**Table 2: Analysis of Covariance (ANCOVA)**

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1191.941 <sup>a</sup>	3	345.514	11.455	.000	.183
Intercept	6689.879	1	6674.879	193.201	.000	.557
Gender	32.905	1	31.905	.940	.121	.006
Group Between	970.956	2	455.478	13.855	.001	.654
Error Within	5318.283	48	36.989			
Total	94599.000	52				
Corrected Total	6510.224	51				

a. R Squared = .654 (Adjusted R Squared = .593)

Table 2 shows that there was a significant difference in mean scores [ $F(2,43)=36.989$ ,  $p=0.001$ ] between the groups, whilst adjusting for gender (as the moderator). The partial Eta Squared value indicates the effect size and should be compared with Cohen's guidelines (0.2 – small effect, 0.5 – moderate effect, 0.6 – large effect). It can be seen that for groups the effect size is large (0.654). This value is also used to describe how much of the variance in the dependent variable is explained by the independent variable (65.4%). Furthermore, the influence of the covariate (gender) can be determined using the Sig. column, which shows  $0.121 > 0.05$ , which indicates that the influence of gender on the students' achievement in the treatment group test is not significant.

Hence, the null hypothesis that states "there is no significant effect of educational cartoons on the learning outcomes of preschoolers in the treatment group" is rejected, while its alternative that states "there is a significant effect of educational cartoons on the learning outcomes of preschoolers in the treatment group" is therefore accepted.

### Discussion of Findings

The results of this study indicate that instructional cartoons like "Super Why", "Sesame Street", "Dora the Explorer", etc., have a notable impact on the learning outcomes of preschoolers. This is in line with Scanlan (2000), media cartoons aid in the comprehension of concepts by learners. He highlights the manner in which cartoons assist learners in their understanding of subject matter using a pedagogical method centred around cartoons. According to the study, the utilisation of cartoons and student-centered teaching methods might enhance the process of learning in the classroom. Studies indicate that animated cartoons have a positive impact on children's learning. Verhallen, *et al.* (2006) discovered that children exhibit a greater level of focus towards animated visuals compared to motionless ones. In a study conducted by Ghilzalet al. (2017), it was discovered that Pakistani children who regularly viewed cartoons demonstrated greater linguistic skills compared to those who did not engage in this activity. These findings are supported by Eker and Karadeniz (2014), Sulyman, *et al.* (2022), and Omer and Yuksel (2020).

### Conclusion

This study confirms previous studies that instructional cartoons improve preschoolers' learning. Cartoons help children understand things better when taught utilising animated content. Using cartoons with student-focused teaching has been found to improve classroom learning. Children are more engaged by animated graphics than static ones. Cartoon-watching children also develop better language skills. Cartoons can help young learners develop cognitively and linguistically, according to these findings. Thus, using cartoons in preschoolers' education can improve learning and academic advancement.



## Recommendations

The following recommendations were made;

- Animated cartoons can help pupils understand literacy, as it can make learning more fun and help you remember things;
- Educational policymakers and content creators in Nigeria should work together to create high-quality, learning-focused cartoons. These cartoons should cover children's developmental milestones and meet curriculum standards.
- Teachers should learn how to use cartoons in instruction. Access to a variety of educational cartoons and teaching materials will improve their utilisation of this medium;
- Parents should offer educational cartoons at home to increase parental involvement in children's learning. This can enhance classroom learning and intellectual and language development; and
- Cartoons' long-term effects on early childhood development, such as problem-solving, creativity, and social behaviour, should be studied to ensure that instructional content is effective and suitable.

## References

- Akande, Y.J. (2023). Effect of Educational Cartoons on the Learning Outcomes of Pre-Nursery Pupils in Ado Ekiti, Ekiti State. *British Journal of Multidisciplinary and Advanced Studies: Education, Learning, Training & Development*, 4(5), 41-47
- Bandura, A. (1971). *Social learning theory*. Stanford University Press.
- Baran, J. S. & Davis, K. D. (2003). *Mass communication theory: Foundations, ferment, and future*. Belmont, CA: Thomson Wadsworth.
- Bulbul, T. & Cuhadar, C. (2011). Evaluation of policies related with technology use Turkish Educational System. VI. Balkan Education and Science Conference. 29 September-1 October 2011. *Skopje, Macedonia*. pp. 423-428.
- Cho, H. (2012). The use of cartoons as teaching a tool in Middle School Mathematics, PhD Thesis. Columbia University, Graduate School of Arts and Sciences.
- Conole, G. & Alevizou, P. (2010). A literature review of the use of Web 2.0 tools in higher education. A report commissioned by the Higher Education Academy.
- Eker, C., & Karadeniz, O. (2014) The Effects of educational practices with cartoons on learning outcomes. *International Journal of Humanities and Social Sciences*, 4(14), 223-234
- Elmas, R. & Geban, O. (2012). Web 2.0 tools for 21st century teachers. *Int. Online J. Educ. Sci.* 4(1):243-254.
- Federal Republic of Nigeria (2014). *National Policy on Education* (4th Ed). Lagos: NERDC press
- Fleischer, J.A. (2010). Using Cartoons for type education. Retrieved on 14/06/2024, from .
- Gani, M. (2020). Assessment of the effects of cartoons on pupils' performance in Islamic Studies in primary schools in Niger State, Nigeria. An M.Ed. dissertation submitted to the School of Postgraduate Studies, Ahmadu Bello University, Zaria.
- Ghilzai, S.A., Alam, R., Ahmad, Z., Shaukat, A. & Noor, S.S. (2017). Impact of cartoon programs on children's language and behavior. *Insights in language society and culture*, (2), 104-126.
- Gunes, G. & Baki, A. (2011). Reflections from application of the fourth-grade mathematics course curriculum. *HU, J. Educ.* 41(41).
- Irkin, H. (2012). Television and its effects on the process of the development of children, Master Theses, The Radio and Television Supreme Council, Ankara, Turkey.
- Jamal, S. N., Ibrahim, H. N., & Surif, J. B. (2019) Concept of Cartoon in Problem-Based Learning: A Systematic Literature Review Analysis. *Journal of Technology and Science Education*, 9(1).
- Klenk, L. (2001). Playing with Literacy in Preschool Classrooms. *Childhood Education*, 77(3), 150-157.

- Lodhi, M.A. Ibrar, S. N., Shamim, M., & Naz, S. (2018). Linguistic analysis of selected TV cartoons and its impact on language learning. *International Journal of English Linguistics*, 8(5), 247-258
- Mayer, R. F. (2001). *Multimedia learning*. Cambridge: Cambridge University Press.
- Musa, S., Ziatdinov, R., Griffiths, C. (2013). Introduction to computer animation and its possible educational applications. In M. Gallová, J. Gunčaga, Z. Chanasová, M.M. Chovancová (Eds.), *New Challenges in Education. Retrospection of history of education to the future in the interdisciplinary dialogue among didactics of various school subjects* (1st ed., pp. 177-205). Ružomberok, Slovakia: VERBUM.
- Nchedo, A.E., Ogbeche, A.T., & Okeke, C.I. (2022). Effect of animated videos on preschoolers' cognitive development in Benue State, Nigeria. *Webology*, 19(3), 391-402
- Obidike, N. D & Enemu, J. O. (2016). *Childhood education literacy for the 21st century: instructional strategies and procedures*. Enugu. Kelu Press.
- Omer, K., & Yuksel, G. (2020) The Effects of three-dimensional cartoons on pre-school children's conceptual development in relation to spatial perception. *International Journal of Early Years Education*, 29(4), 420-437
- Parlakyildiz, I., Seven, S. & Parlakyildiz, B. (2022) 5-6 Years Old Children's Perception of Cartoon Reality. *Malaysian Online Journal of Educational Technology*, 10(1), 16-31.
- Sinor, M. Z. (2011). Comparison between conventional health promotion and use of cartoon animation in delivering oral health education. *Int. J. Humanit. Soc. Sci.* 1(3):169- 174.
- Sulyman, H. T., Ajayi, O. A., & Reuben, O. A. (2022) Effect of animated film on pupil's academic performance in Social Studies in Ilorin Metropolis of Kwara State. *International Journal of Academic Pedagogical Research*, 6(7), 77-83.
- Verhallen, M., Bus, A. & de Jong, M. (2006). The promise of multimedia stories for kindergarten children at risk. *Journal of Educational Psychology*, 98(2), 410-419.
- Yorulmaz, G. (2013). Research on the animated movie "Pepee" according to religious and values education, *J. Int. Soc. Res.* 6(24).

## **A Comparative Evaluation of Balancing Conventional and Digital Approaches to Literacy Pedagogy in Early Years Classrooms in Lagos, Nigeria**

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### **Abstract**

*The study is a comparative one which evaluated balancing traditional and digital approaches to literacy pedagogy in early years classrooms in Eti-Osa Local Government Area of Lagos, Nigeria. A descriptive survey research design was used for the study. Three research questions were answered in the study. The sample size was one hundred preschool teachers who were sampled using a simple random sampling technique. Two research instruments titled "Questionnaire on Traditional and Digital Approaches in Teaching Literacy in Early Childhood Classroom (QTDATLECC)" and "Observation Schedule on Teachers' Perspectives of the Integration of Traditional and Digital Approaches to Literacy Pedagogy in Early Year Classrooms (OSTPITDALPEYC)" were used to collect data for the study. The data collected were analyzed using descriptive and inferential statistical tools. The results revealed that the extent to which teachers integrate both traditional and digital approaches in teaching literacy in early childhood classrooms is high; and the level of effectiveness of traditional literacy pedagogy methods, such as phonics instruction and storybook reading, in promoting early literacy skills among young children is high. The hypotheses showed that there was a significant difference between the current practices or approaches to literacy pedagogy being used by teachers and school type in early year classrooms in Lagos, Nigeria ( $df = 98$ ;  $t = .513$ ;  $p < 0.05$ ). However, there was no significant difference between traditional and digital approaches in teaching literacy in early childhood classroom in Lagos, Nigeria ( $df = 98$ ;  $t = -.506$ ;  $p > 0.05$ ). It was recommended, among others, that the federal government, in conjunction with the Lagos State Ministry of Education, should organize training on how to integrate digital tools with traditional literacy methods and workshops on the latest literacy pedagogies to upskill preschool teachers.*

**Keywords:** Traditional Approach, Digital Approach, Literacy, Pedagogy, Early Years

### **Introduction**

Early literacy has a significant impact on how children develop during their formative years in terms of their cognitive, social, and emotional growth. Children learn vital language abilities through early reading experiences, such as comprehension, phonemic awareness, and vocabulary, which provide the groundwork for their future academic success. Deliberate early exposure to literacy-rich environments is positively correlated with later-life language competence, cognitive skills, and academic achievement in children (Adeyemi & Ogunlade, 2020). The National Policy on Education (2013) highlights how crucial early childhood care and education (ECCE) is to establishing the groundwork for learning and development that lasts a lifetime. In order to enhance early literacy instruction in preschools and primary schools throughout the nation, the Nigerian Educational Research and Development Council (NERDC) (2013) has also created curriculum frameworks and age-appropriate instructional materials. The United Nations has established Sustainable Development Goal 4 (SDG 4) (2015) to guarantee inclusive and equitable quality education for everyone, encompassing the promotion of early childhood development and literacy. These activities are in line with this goal.

While early literacy is acknowledged to be important for children's development, literature suggests that many young children lack basic literacy abilities, which might negatively impact their future chances and academic performance in the long run. Research by the Nigerian National Bureau of Statistics (NBS) (2018) indicates that differences in literacy rates between regions and socioeconomic backgrounds are still present and that children's literacy rates are still below the target level. The reasons children have poor literacy skills may include a lack of exposure to books, reading activities, and language-rich interactions; a lack of resources and expertise; and so on. It is important to say that the above problem really hampers children's mastery of literacy skills. Poor early literacy abilities can have far-reaching effects on children, affecting not only their academic achievement but also their general well-being and opportunities for the future.

The traditional approach to teaching early literacy remains prevalent in many educational settings, relying on methods such as phonics instruction, rote memorization, and drill-and-practice activities. According to Moats (2010), the traditional approach is the systematic teaching of phonemic awareness, phonics, fluency, vocabulary, and comprehension, typically through teacher-led activities and scripted materials. Relying solely on a traditional approach may neglect the importance of fostering a love for reading and promoting higher-order thinking skills critical for success in today's complex, information-rich and internet-driven society, (National Association for the Education of Young Children, 2009). Thus, while the traditional approach remains a cornerstone of early literacy instruction, educators must also consider innovative and evidence-based practices to meet the diverse needs of learners and cultivate lifelong readers.

There is a need to balance the traditional approach of teaching literacy with a digital approach in this technology-revolving era. According to Ogunyemi (2020), the digital approach encompasses a range of practices, including interactive storytelling, digital games, multimedia presentations, and virtual literacy environments, designed to engage children in meaning. Okoye and Adebayo (2019) and Kucirkova (2019) emphasized further that the digital method involves incorporating digital media and technology into literacy training to support interactive and multimodal literacy experiences, improve digital literacy skills, and scaffold children's literacy development.

Kucirkova (2019) defines the digital approach as integrating digital media and technologies into literacy instruction to scaffold children's literacy development, foster digital literacy skills, and promote interactive and multimodal literacy experiences. Digital technologies offer interactive and personalized learning experiences that can cater to diverse learning styles and abilities (McKenna, & Stahl, 2010). Additionally, digital resources offer access to a vast array of digital texts and multimedia content, expanding children's exposure to diverse literary genres and cultural perspectives (Larson & Marsh, 2016).

Previous researchers have conducted numerous studies on striking a balance between traditional and digital approaches to teaching literacy in early childhood education settings. Adelabu (2016) conducted research in Nigeria on the incorporation of both digital and traditional storytelling methods in early childhood literacy education. The results indicated that the combined approach improved the literacy abilities and engagement of the children. Adebayo (2018) found in his study that there was no significant difference in literacy outcomes between traditional and digital approaches in Nigerian early childhood classrooms. Again, Adeyinka (2017) found significant differences in literacy pedagogy approaches between public and private schools in Lagos, Nigeria. However, Oluwatobi (2020) found no significant advantage of digital approaches over traditional methods in teaching literacy to early childhood learners in Lagos. Similarly, Bamgbose (2019) reported no significant differences in literacy pedagogy approaches between public and private schools in Nigeria but noted variations in teacher confidence and self-efficacy.

It is however noticeable that despite the substantial research on striking a balance between traditional and digital methods of teaching literacy in early childhood education settings, there are still a number of research gaps. The gap is that majority of the studies were conducted in the foreign scene with few in Nigeria context especially Lagos State. Also, previous research has examined the efficacy of merging traditional and digital literacy pedagogies, a thorough grasp of the best ways to combine the two methodologies in a way that maximizes



children's literacy development is still lacking. Furthermore, prior studies conducted in Nigeria have mostly examined the results of particular interventions or programs, ignoring more general contextual elements that could have an impact on the adoption and durability of integrated literacy practices. In order to improve literacy instruction and results for early children in Nigeria, evidence-based practices and policy suggestions must take these gaps into consideration. This however is the basis for this study.

Early literacy activities are very important for young children in their early years. Research evidence has shown that children's early exposure to literacy-rich environments is positively correlated with their later-life language competence, cognitive skills, and academic achievements. While early literacy is important for children's development, reviewed literature suggest that many young children lack basic literacy abilities, which might negatively impact their future chances and academic performances in the long run. If this problem is not addressed urgently, children who struggle with literacy skill may find it difficult to understand academic materials in a variety of topics, which could result in poor performance in school, lowered self-esteem, and a disinterest in learning. Previous researchers have conducted numerous studies on striking a balance between traditional and digital approaches to teaching literacy in early childhood education settings. It is against this background that this study is examining a comparative evaluation of balancing traditional and digital approaches to literacy pedagogy in early years classrooms in in Eti-Osa Local Government Area of Lagos State, Nigeria.

### **Objectives**

- To examine the extent to which teachers integrate both traditional and digital approaches in teaching literacy in early childhood classrooms
- To ascertain the effectiveness of traditional literacy pedagogy methods, such as phonics instruction and storybook reading, in promoting early literacy skills among young children in Lagos, Nigeria
- To identify the factors militating against the implementation of balanced literacy instruction practices

### **Research Questions**

These research questions guided this study

- To what extent do teachers integrate both traditional and digital approaches in teaching literacy in early childhood classrooms?
- What is the effectiveness of traditional literacy pedagogy methods, such as phonics instruction and storybook reading, in promoting early literacy skills among young children in Lagos, Nigeria?
- What are the factors militating against the implementation of balanced literacy instruction practices?

### **Research Hypotheses**

**H<sub>0</sub>1:** There is no significant difference between the current practices or approaches to literacy pedagogy being used by teachers and school type in early years classrooms in Lagos, Nigeria

**H<sub>0</sub>2:** There is no significant difference between traditional and digital approaches in teaching literacy in early childhood classroom in Lagos, Nigeria

### **Methodology**

A descriptive survey research design was employed. The population of the study comprised 1,233 pre-primary and primary school teachers in Eti-Osa Local Government Area of Lagos State (LASUBEB 2021). The sample size used was 123 representing 10% of the total populations of the study. The schools sampled were randomly selected within the geographical location of the study population. Two instruments were used to elicit response from respondents.

The researcher designed two research instruments to collect data for the study. The first was titled "Questionnaire on Traditional and Digital Approaches in Teaching Literacy in Early Childhood Classroom (QTDATECC)". The instrument was divided into five sections (A, B, C, and D). Section A was used to collect demographic data of the teachers, which include gender, highest educational qualification, school type, and experience. Section B was used to gather data on the extent to which teachers integrate both traditional and



digital approaches in teaching literacy in early childhood classrooms. Section C was used to gather data on the effectiveness of traditional literacy pedagogy methods, such as phonics instruction and storybook reading, in promoting early literacy skills among young children. Section D was used to gather data on the factors militating against the implementation of balanced literacy practices. The 4-point likert scale type of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD) were used for sections B, C, and D. Data was analyzed using descriptive statistics (Mean and Standard Deviation).

## Results

**Research Question 1:** To what extent do teachers integrate both traditional and digital approaches in teaching literacy in early childhood classrooms?

**Table 1**

*Extent to which Teachers integrate both Traditional and Digital Approaches in Teaching Literacy in Early Childhood Classroom*

Items	SD	D	A	SA	Mean	Std.D
I regularly use traditional books and printed materials for literacy instruction.	25 (25.0)	1 (5.0)	35 (35.0)	35 (35.4)	3.25	2.13
Digital storybooks are a frequent part of my literacy lessons.	30 (30.0)	15 (15.0)	25 (25.0)	30 (30.0)	2.55	1.21
My classroom incorporates a balanced mix of traditional and digital literacy resources.	40 (40.0)	45 (45.0)	15 (15.0)	0 (0.0)	1.75	.70
I use interactive whiteboards or tablets for teaching reading and writing.	0 (0.0)	15 (15.0)	40 (40.0)	45 (45.0)	3.30	.72
Educational apps and online games are integrated into my literacy activities.	10 (10.0)	15 (15.0)	35 (35.0)	40 (40.0)	3.05	.98
Digital platforms are used to track and assess students' literacy progress.	5 (5.0)	5 (5.0)	30 (30.0)	55 (55.0)	3.35	4.15
My literacy teaching strategies include phonics exercises using traditional methods.	5 (5.0)	5 (5.0)	45 (45.0)	45 (45.0)	3.30	.78
Learners access digital libraries to explore a variety of reading materials.	5 (5.0)	20 (20.0)	35 (35.0)	40 (40.0)	3.10	.89
I create a literacy-rich environment with both physical and digital reading corners.	15 (15.0)	15 (15.0)	20 (20.0)	50 (50.0)	3.05	1.12
Printed worksheets are often used for practicing literacy skills.	40 (40.0)	25 (25.0)	3 (3.0)	5 (5.0)	2.00	.95
<b>Weighted Average</b>				<b>2.87</b>		

N=100; Key: 1= Strongly Disagree (SD), 2= Disagree (D), 3= Agree (A), 4= Strongly Agree (SA)

**Decision Value:** *Low Extent* = 0.00-2.44, *High Extent* = 2.45-4.00

Table 1 shows the extent to which teachers integrate both traditional and digital approaches in teaching literacy in early childhood classroom, Lagos State. The table shows that the teachers agreed that they: regularly use

traditional books and printed materials for literacy instruction (= 3.25), use interactive whiteboards or tablets for teaching reading and writing (= 3.30), use digital storybooks to frequent teach literacy lessons (= 2.55), use educational apps and online games to integrate literacy activities (= 3.05), use digital platforms to track and assess students' literacy progress (= 3.35), use literacy teaching strategies include phonics exercises using traditional methods (= 3.30), they allow learners access digital libraries to explore a variety of reading materials (= 3.10), they create a literacy-rich environment with both physical and digital reading corners (= 3.05). The table further shows that the teachers disagreed as follow: classroom incorporates a balanced mix of traditional and digital literacy resources (= 1.75), and printed worksheets are often used for practicing literacy skills (= 2.00). Based on the value of the weighted average (2.87 out of 4.00 maximum value that can be obtained), which falls within the decision value for high extent, it can be inferred that the extent to which teachers integrate both traditional and digital approaches in teaching literacy in early childhood classrooms is high.

**Research Question 2:** What is the level of effectiveness of traditional literacy pedagogy methods, such as phonics instruction and storybook reading, in promoting early literacy skills among young children in Lagos, Nigeria?

**Table 2**

*The Level of Effectiveness of Traditional Literacy Pedagogy Methods, such as Phonics Instruction and Storybook Reading, in Promoting Early Literacy Skills among Young Children*

Items	SD	D	A	SA	Mean	Std.D
					(	
Children enjoy learning to read using traditional literacy methods.	5 (5.0)	5 (5.0)	30 (30.0)	55 (55.0)	3.35	4.15
Traditional literacy methods effectively teach letter recognition.	5 (5.0)	5 (5.0)	45 (45.0)	45 (45.0)	3.30	.78
Traditional literacy methods support vocabulary development.	5 (5.0)	20 (20.0)	35 (35.0)	40 (40.0)	3.10	.89
Storytelling sessions help children develop a love for reading	15 (15.0)	15 (15.0)	20 (20.0)	50 (50.0)	3.05	1.12
Handwriting practice aids in letter formation and recognition.	40 (40.0)	25 (25.0)	3 (30.0)	5 (5.0)	2.00	.95
Teachers provide adequate individual attention using traditional methods.	5 (5.0)	0 (0.0)	35 (35.0)	60 (60.4)	3.40	.75
Traditional literacy activities are engaging for young children.	10 (10.0)	0 (0.0)	35 (35.0)	55 (55.0)	3.35	.91
Repetition and drills in traditional methods reinforce learning.	25 (25.0)	10 (10.0)	45 (45.0)	20 (20.0)	2.60	1.07
Traditional literacy instruction improves children's spelling abilities.	20 (20.0)	60 (60.0)	20 (20.0)	0 (0.0)	2.20	.98
Traditional literacy methods prepare children for advanced reading.	50 (50.0)	40 (40.0)	10 (10.0)	0 (0.0)	1.60	.66
<b>Weighted Average</b>				<b>2.79</b>		

Table 2 shows the level of effectiveness of traditional literacy pedagogy methods, such as phonics instruction and storybook reading, in promoting early literacy skills among young children in Lagos. The table shows that the respondents agreed as follows: children enjoy learning to read using traditional literacy methods ( = 3.35), traditional literacy methods effectively teach letter recognition ( = 3.30), traditional literacy methods support vocabulary development ( = 3.10) storytelling sessions help children develop a love for reading ( = 3.05), teachers provide adequate individual attention using traditional methods ( = 3.40), traditional literacy activities are engaging for young children ( = 3.35), and repetition and drills in traditional methods reinforce learning ( = 2.60). The table further shows that the respondents disagreed as follows: handwriting practice aids in letter formation and recognition ( = 2.00), traditional literacy instruction improves children's spelling abilities ( = 2.20), and traditional literacy methods prepare children for advanced reading ( = 1.60). Based on the value of the weighted average (2.80 out of 4.00 maximum value that can be obtained), which falls within the decision value for high, it can be inferred that the level of effectiveness of traditional literacy pedagogy methods, such as phonics instruction and storybook reading, in promoting early literacy skills among early years school children in Lagos is high.

**Research Question 3:** What are the factors militating against the implementation of balanced literacy practices?

**Table 3**

*Factors Militating against the Implementation of Balanced Literacy Practices*

Items	SD	D	A	SA	Mean (	Std.D	Remark
Limited professional development opportunities for teachers.	25 (25.0)	1 (5.0)	35 (35.0)	35 (35.4)	3.25	2.13	<i>Accepted</i>
Insufficient funding for literacy resources and materials.	30 (30.0)	15 (15.0)	25 (25.0)	30 (30.0)	2.55	1.21	<i>Accepted</i>
Lack of administrative support for balanced literacy initiatives.	40 (40.0)	45 (45.0)	15 (15.0)	0 (0.0)	1.75	.70	<i>Not Accepted</i>
High student-to-teacher ratios in classrooms.	0 (0.0)	15 (15.0)	40 (40.0)	45 (45.0)	3.30	.72	<i>Accepted</i>
Inadequate time allocated for literacy instruction.	10 (10.0)	15 (15.0)	35 (35.0)	40 (40.0)	3.05	.98	<i>Accepted</i>
Resistance to change among teaching staff.	5 (5.0)	5 (5.0)	30 (30.0)	55 (55.0)	3.35	.95	<i>Accepted</i>
Insufficient training in balanced literacy techniques.	5 (5.0)	5 (5.0)	45 (45.0)	45 (45.0)	3.30	.78	<i>Accepted</i>
Lack of access to high-quality, diverse reading materials.	5 (5.0)	20 (20.0)	35 (35.0)	40 (40.0)	3.10	.89	<i>Accepted</i>
Lack of collaboration opportunities among educators.	15 (15.0)	15 (15.0)	20 (20.0)	50 (50.0)	3.05	1.12	<i>Accepted</i>
Challenges in differentiating instruction for diverse learners.	40 (40.0)	25 (25.0)	3 (30.0)	5 (5.0)	2.00	.95	<i>Not Accepted</i>

Table 3 shows the factors militating against the implementation of balanced literacy practices. The table shows that the teachers agreed with the following factors: limited professional development opportunities for teachers ( = 3.25), insufficient funding for literacy resources and materials ( = 2.55), high student-to-teacher ratios in

classrooms (= 3.30), inadequate time allocated for literacy instruction (= 3.05), resistance to change among teaching staff (= 3.35), insufficient training in balanced literacy techniques (= 3.30), lack of access to high-quality, diverse reading materials (= 3.10), lack of collaboration opportunities among educators (= 3.05). However, the teachers disagreed as follow: lack of administrative support for balanced literacy initiatives (= 1.75), and challenges in differentiating instruction for diverse learners (= 2.00). Based on the result from this table and in line with the decision value, it can be inferred that the factors militating against the implementation of balanced literacy practices are limited professional development, insufficient funding, high pupils-to-teacher ratios, inadequate time, resistance to change, insufficient training in balanced literacy techniques, lack of access to high-quality, diverse reading materials, and lack of collaboration opportunities. Figure 4.6 below further presents the result in a bar chart.

### Hypotheses testing

**H<sub>0</sub>1:** There is no significant different between the current practices or approaches to literacy pedagogy being used by teachers and school type in early year classrooms in Lagos, Nigeria.

Table 4

*Summary of T-test showing Significant Difference between the Current Practices or Approaches to Literacy Pedagogy being Used by Teachers and School Type in Early Year Classrooms in Lagos, Nigeria.*

Test Variable	Grouping Variable (School type)	N	Mean	Std. D	df	t	Sig.	Remark
<b>Current Practices or Approaches to Literacy Pedagogy</b>	Public	55	21.99	11.23	98	.513	.002	<b>Significant t</b>
	Private	45	26.54	13.42				

Table 4 shows the significant difference between the current practices or approaches to literacy pedagogy being used by teachers and school type in early year classrooms in Lagos, Nigeria. The table reveals that the overall mean score for public schools' teachers is 21.99, while that of the private schools' teachers is 26.54. The mean values reveal an appreciable difference. Therefore, there is significant difference between the current practices or approaches to literacy pedagogy being used by teachers and school type in early year classrooms in Lagos, Nigeria ( $df=98$ ;  $t=.513$ ;  $p<0.05$ ). Hence, the null hypothesis 1 was rejected. This result implies that approaches are more used by teachers in private schools.

**H<sub>0</sub>2:** There is no significant different between traditional and digital approaches in teaching literacy in early childhood classroom in Lagos, Nigeria.

Table 5

*Summary of T-test showing Significant Difference between Traditional and Digital Approaches in Teaching Literacy in Early Childhood Classroom in Lagos, Nigeria.*

Test Variable	Grouping Variable (Approach)	N	Mean	Std. D	df	t	Sig.	Remark
<b>Approaches in Teaching Literacy</b>	Traditional	46	30.83	3.83	98	-.506	.614	<b>Not Significant t</b>
	Digital	54	31.17	5.54				

Table 5 shows the significant difference between traditional and digital approaches in teaching literacy in early childhood classroom in Lagos, Nigeria. The table reveals that the overall mean score for traditional is 30.83 while that of the digital is 31.17. The mean values do not reveal an appreciable difference. Therefore, there was no significant difference between traditional and digital approaches in teaching literacy in early childhood classroom in Lagos, Nigeria ( $df=98$ ;  $t=-.506$ ;  $p>0.05$ ). Hence, the null hypothesis 2 was not rejected.

### Discussion of Findings

The major findings of this study indicate that the extent to which teachers integrate both traditional and digital approaches in teaching literacy in early childhood classrooms is high. Furthermore, the level of effectiveness of traditional literacy pedagogy methods, such as phonics instruction and storybook reading, in promoting early literacy skills among preschool pupils in Lagos is high.

The possible reasons responsible for these findings are that the teachers covered in this study have been partially integrating a digital approach to teaching literacy to young children as a way of balancing the traditional approach to teaching. As such, they have had the understanding of the impact of both to the effectiveness of literacy learning, resulting in appreciable level of improvement in children. These findings upheld the result of the joint study by Adeyemi and Ogunlade (2020) who reported that children who received phonics instruction demonstrated significant improvements in phonemic awareness, letter-sound knowledge, and reading readiness compared to those in the control group. The findings are also in consonance with the result of Okoye and Adebayo (2019) that there is a positive association between the frequency of storybook reading at home and children's literacy skills, including vocabulary development, comprehension, and print awareness. Finally, these findings are in line with the result of the joint study by Olatunji and Oladimeji (2018) which revealed that the majority of teachers recognized the importance of integrating digital technologies into literacy instruction to enhance student engagement and learning outcomes.

The factors militating against the implementation of balanced literacy practices are limited professional development, insufficient funding, high pupil-to-teacher ratios, inadequate time, resistance to change, insufficient training in balanced literacy techniques, lack of access to high-quality, diverse reading materials, and lack of collaboration opportunities. Despite the significance of the current practices and approaches to literacy pedagogy being used by teachers in early-year classrooms, quite several factors influence the successful integration of the blended approach. This finding corroborates the result of Ibrahim and Adeleke (2021) who found that teachers faced various challenges in implementation. Common barriers included limited access to digital resources, inadequate training and support in technology integration, and concerns about screen time and digital distractions.

Similarly, this result concurs with the joint result of Abubakar and Ibrahim (2020) and Ogunleye and Adewale (2019) who found several factors militating against the implementation of balanced literacy practices such as limited teacher training and professional development opportunities, inadequate instructional materials and resources, overcrowded classrooms, and pressure to focus on standardized testing and exam preparation.

The first hypothesis showed that there was a significant difference between the current practices or approaches to literacy pedagogy being used by teachers and school type in early-year classrooms in Lagos, Nigeria ( $df=98$ ;  $t=.513$ ;  $p<0.05$ ). This hypothesis upheld the result of Adeyinka (2017) who found significant differences in literacy pedagogy approaches between public and private schools in Lagos, Nigeria ( $p < 0.01$ ). However, the finding contradicts the result of Bamgbose (2019) who reported no significant differences in literacy pedagogy approaches between public and private schools in Nigeria but noted variations in teacher confidence and self-efficacy ( $p > 0.05$ ).

The second hypothesis has shown that there was no significant difference between traditional and digital approaches in teaching literacy in early childhood classroom in Lagos, Nigeria ( $df=98$ ;  $t=-.506$ ;  $p>0.05$ ). This hypothesis is in line with the result of Adebayo (2018) who also found that there was no significant difference in literacy outcomes between traditional and digital approaches in Nigerian early childhood classrooms ( $p > 0.05$ ). However, it contradicts the result of Oluwatobi (2020) who found a significant advantage of digital approaches over traditional methods in teaching literacy to early childhood learners in Lagos ( $p < 0.01$ ).



## Conclusion

The findings of the study have established that integration of both traditional and digital approaches was notably high, and both methods are deemed highly effective in fostering early literacy skills. Teachers view the blend of these approaches positively, recognizing the value in each. However, several challenges hinder the implementation of balanced literacy practices, such as limited professional development, insufficient funding, and high pupil-to-teacher ratios.

## Recommendations

The findings of the study have brought about the following recommendations

The federal government in conjunction with the Lagos State ministration of Education should; organise trainings that center on integrating digital tools with traditional literacy instructional methods, organise workshops on the latest literacy pedagogies, and regular updates on best practices. This will equip teachers with the skills needed to effectively blend traditional and digital approaches, addressing the current gap in training and professional development. Similarly, the federal government in conjunction with the Lagos State education board should ensure adequate financial resources are available for supporting early childhood education. Such funds should be used to provide high-quality, diverse reading materials, modern technological tools, and sufficient classroom supplies. The Lagos State Government should establish digital literacy programs in public schools. This initiative will ensure that students have access to digital tools and resources, bridging the digital divide and enhancing literacy outcomes. Again, the Federal & Lagos State Governments should develop and implement a digital inclusion policy. This policy will outline strategies for integrating digital literacy into education, ensuring equitable access to digital resources, and promoting digital skills development among teachers, students, and the general population.

## References

- Adeyemi, T., & Ogunlade, F. (2020). Impact of Phonics Instruction on Early Literacy Development in Lagos, Nigeria. *Journal of Early Childhood Education Research*, 10(2), 45-62.
- Adeyinka, A. A. (2017). Comparative analysis of literacy pedagogy in public and private schools in Lagos State, Nigeria. *Journal of Education and Practice*, 8(10),
- Bamgbose, O. O. (2019). Teacher confidence and literacy pedagogy in Nigerian schools: A comparative study of public and private schools. *Journal of Teacher Education and Teachers' Work*, 10(1), 53-66.
- Federal Republic of Nigeria (2013). *National Policy on Education*. 6th Edition, NERDC Press, Abuja.
- Ibrahim, A., & Adeleke, B. (2021). Teachers' perspectives on integrating traditional and digital approaches to literacy pedagogy in early year classrooms: A Case Study in Lagos, Nigeria. *Journal of Educational Research and Practice*, 10(2), 45-62.
- Kucirkova, N. (2019). Digital literacy and young children: Towards better understandings of the benefits and challenges of digital technologies in homes and early years' settings. *Journal of Early Childhood Literacy*, 19(4), 473-489. Retrieved from [dren\\_Towards\\_Better\\_Understandings\\_of\\_the\\_Benefits\\_and\\_Challenges\\_of\\_Digital\\_Technologies\\_in\\_Homes\\_and\\_Early\\_Years\\_Settings/link/5b98e41945851531057ef9b1/download?tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6InB1YmxpY2F0aW9uIiwicGFnZSI6InB1YmxpY2F0aW9uIn19](https://www.researchgate.net/publication/347347347_Towards_Better_Understandings_of_the_Benefits_and_Challenges_of_Digital_Technologies_in_Homes_and_Early_Years_Settings/link/5b98e41945851531057ef9b1/download?tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6InB1YmxpY2F0aW9uIiwicGFnZSI6InB1YmxpY2F0aW9uIn19)
- Larson, L., & Marsh, J. (2016). *Making literacy real: Theories and practices for learning and teaching*. SAGE. Retrieved from [real/toc](https://www.sagepub.com/books/making-literacy-real)
- McKenna, M. C., & Stahl, K. A. D. (2010). *Assessment for reading instruction* (2nd ed.). Guilford Press. Retrieved from [ml?id=82MXKbjtn8wC&redir\\_esc=y](https://www.guilford.com/books/assessment-for-reading-instruction/McKenna-Stahl/9781606230808/m1?id=82MXKbjtn8wC&redir_esc=y)
- Moats, L. C. (2010). *Speech to Print: Language Essentials for Teachers* (2nd ed.). Brookes Publishing. Retrieved from [edir\\_esc=y](https://www.brookespublishing.com/books/speech-to-print)
- National Association for the Education of Young Children. (2009). Developmentally appropriate practice in early childhood programs serving children from birth through age 8. NAEYC. [shared/downloads/PDFs/resources/position-statements/PSDAP.pdf](https://www.naeyc.org/resources/position-statements/PSDAP.pdf)

- National Bureau of Statistics. (2018). Multiple indicator cluster survey 2016-17, survey findings report. Retrieved from
- National Educational Research and Development Council (NERDC). (2013). National policy on education (Rev. ed.). NERDC Press.
- Ogunleye, T., & Adewale, K. (2019). Barriers to the implementation of balanced literacy practices in urban schools: Perspectives from Lagos, Nigeria. *Journal of Educational Research and Practice*, 8(1), 78-92.
- Ogunsola, A. O. (2020). Literacy teaching practices in early year classrooms in Lagos State, Nigeria: A comparative study of public and private schools. *International Journal of Educational Research*, 103, 102924.
- Ogunyemi, O. O. (2020). Effective Literacy Pedagogy: Theory and Practice. *Nigerian Journal of Education*, 38(1), 78-92.
- Okoye, C., & Adebayo, R. (2019). The role of storybook reading in early literacy development: Evidence from Lagos, Nigeria. *Journal of Literacy Studies*, 6(1), 78-92.
- Olatunji, D., & Oladimeji, O. (2018). Exploring teachers' perceptions of traditional and digital literacy pedagogy integration in early year Classrooms: A Survey in Lagos, Nigeria. *Journal of Early Childhood Education Research*, 5(1), 78-92. Retrieved from f\_critical\_digital\_literacies\_and\_how\_these\_are\_manifested\_in\_their\_teaching\_practice
- Exploring teachers' perceptions of critical digital literacies and how these are
- UN (2015). Transforming Our World: The 2030 Agenda for Sustainable Development. Resolution Adopted by the General Assembly on 25 September 2015, 42809, 1-13. Retrieved

# Stakeholders' Involvement and Awareness on the Choice of Early Childhood Education in Federal College of Education (Technical) Omoku in River State

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## Abstract

*This study is designed to investigate the influence of Stakeholders awareness involvement on the choice of Early Childhood Education in Federal College of Education (Technical) Omoku, Rivers State. Three research questions were used to obtain the findings of the study. Descriptive research design was adopted for the study. The population of the study consisted of all 856 students in Federal College of Education (Technical) Omoku. Sample random sampling technique was used to select 5 five students from 30 departments making the sample size of 150 respondents. The instrument for data collection was a structured questionnaire titled Stakeholders Involvement and the Choice of Early Childhood Education in Federal College of Education, Omoku (SITCECEO) which was administered using descriptive statistic of mean and standard deviation. The findings of the study revealed that the stakeholders' awareness and involvements influence students' choice of studying Early Childhood Care and Education in Federal College of Education (Technical) Omoku, Rivers State. Therefore, it was recommended that government, parents and community be involved in the awareness of the programme thereby creating a standard and better objective.*

**Keywords:** Stakeholders, Government, Community, Parents, Early Childhood Care and Education

## Introduction

Early Childhood Care and Education (ECCE) is more than preparation for primary school. It aims at the holistic development of a child and broad information for lifelong learning and wellbeing. Early childhood care and education has possibility to nurture and care for capable and responsible future citizens. In this way Early Childhood Care and Education is one of the best investments a country can make to promote human resources development, quality and social cohesion and to reduce the cost of later remedial programmes.

According to Universal Basic Education (2004) in Nigeria, Early Childhood Care and Education was introduced to increase the access of children to basic education. In order for the aim of the Early Childhood Education to be fully realized, the quality of the teachers will determine the strength of the educational system and the value of the learners. Early childhood care and education is an attractive career option for students who enjoy working with children. The ideal early childhood education profession has a varied skill sets, the early childhood education professions are able to be innovative and traditional, analytical and artistic, patient and commanding. Teaching young children requires a different approach than that applied to older children. Early Childhood Education professionals need to have a firm grasp on the developmental stages of early childhood.

According to FRN (2013) the objectives of Early Childhood Care and Education were stated as follows:

- Effect a smooth transition from the home to the school.

- Prepare the child for the primary level of education.
- Provide adequate care, supervision, and security for the children while their parents are at work.
- Inculcate social, moral norms and values.
- Inculcate in the child the spirit of enquiry and creativity through exploration of nature, the environment, art, music and the use of toys, etc.
- Develop a sense of co-operation and team-spirit.
- Stimulate in the child good habits, including good health habits and
- teach the rudiments of numbers; letters, colours, shapes, forms etc., through play.

These objectives of Early Childhood Care and Education cannot be achieved without the use of qualified and trained Early Childhood Care and Education caregivers. As the government have also started in the National Policy on Education that it shall: Set and monitor minimum standard for Early Child Care Centers, encourage both community and private efforts in the establishment of Early Childhood Care Development and Education Centers based on the set standard, make provision in teacher education programmes for specialization in Early Childhood Care and Education, and for retraining of caregivers and so on. The government and other stakeholders should be involved in creating awareness of the programme. A good awareness brings and yields better results. Sending awareness to the public attracts their attention and makes them know the information available at that point in time. Stakeholders have a big role to play in the awareness of early childhood care and education because it is the bedrock of education.

Stakeholders have to do with people who have an interest in something or directly impacted by something. In education, stakeholders include those with an investment or vested interest in the success and welfare of a school or educational system. A stakeholder is synonymous to a partner or shareholder. Internal stakeholders are those who work or study in an educational institution. This includes those who receive remuneration for their contribution. Internal stakeholders focus more on the organization success because their income or education depends on it. Internal stakeholders include; students, parents, teachers, staff support, school administrators and the school board. External stakeholders are those who do not directly participate in the school system daily. They are not employees of the institution and do not realize any financial gain from it. They have a personal interest in the institutions' success as it could impact them one way or the other. External stakeholders include; Government and Local Authorities, Educational Policy Makers, The Community, Local Businesses, Unions, Tax Payers, Philanthropists, Universities, Voters and so on.

Government officials as stakeholders determine the protocols and objectives of the education system. Different ministries regulate educational strategies, including health and nutrition. Local authorities and officials want to ensure that the future workforces are essential knowledge and skills. Stakeholders want to ensure that students are ready to become productive members of their communities. Well-educated students are more employable and able to earn decent wages. This reduces the number of people relying on the benefits system and other government and council assistance packages. Involvement of government improve access to and quality of early education. According to Ford (2013), state investment in Early Education can be an important component of improving the overall education success and eventually future employment and earnings of children. Extensive evidence points to the ability to high-quality preschool to narrow the chance at success later life. Below are two primary actions that can put government on the right track to improving Early Childhood Education.

- Build early childhood education infrastructure and capacity. One way to expand access to early childhood education is ensure states have adequate infrastructures and capacity-that is, facilities and talents. In building infrastructure, state children without sacrificing quality.
- Increase early childhood education quality through training, high standard and incentives states can work towards higher-quality early childhood education in three ways:
  - i. First, they can develop a strong foundational approach to increase training and learning among early childhood care givers and educators.
  - ii. State can raise the bar by setting clear definitions and standards of quality.
  - iii. After developing evidence-based quality of standards for early care and education, states can incentivize programs to improve on those dimensions of quality.

Local communities are stakeholders because they are the ones who benefit from an educated community. Well-educated students are likely to become civic-minded, self-confident leaders. They may participate in community programmes and local campaigns. Community participation in school management has a great mistrust and distance between people and schools by nurturing transparency of information and a culture of mutual respect and by jointly pursuing improvement of school by sharing vision, process, and result (Henderson, 2006) consistent community involvement and engagement at all levels of the school have been shown time and time again to have significant short- and long-term benefits.

According to Karen (2016), Volunteering is one of the most common and popular ways to encourage community involvement in schools. Volunteers should connect with local business, civic organizations, charities, non-profit foundations and other groups in the community to enlist volunteers to come in before, during or after the school day. Volunteering can come in many different shapes and forms. School management invites leaders and individuals in the community who have the time or capacity to participate in-person and on-premise. That is why it is important to also prioritize community involvement in the form of sponsorship and donation programs. Do the Early Childhood teachers need iPad or smart boards to engage children with new technologies? Create and publicize sponsorship and donation need throughout your community, give local organization and businesses the opportunity to partner with your school. The responsibility for raising a well-educated and civic-minded generation of children cannot rest solely with schools.

Parents are key stakeholders because they pay for their children's education. In return, they want their offspring to receive a solid education that prepares them for leaving home and embarking on a career. Parents ensure children attend classes and comply with the school's policies. They complement their children's formal education by ensuring they complete their homework, study for exams and follow healthy diets and sensible sleep patterns. Parents expect the school to keep their children safe and reinforce the values taught at home.

Parents are the first educators of their children. According to Hurley (2015), parental support includes direct learning before and formal education, as well as monitoring and facilitating factors that are indirectly linked, such as nutrition, behaviors, health and hygiene. Also, Wagner, (2006) further said that Early Childhood Education programmes should focus on child-parent interaction and promote whole-child development including parenting skills and knowledge to ensure proper child nutrition, health, and hygiene. Communicating to improve parental involvement in schooling communication between teachers and parents can be facilitated through home/school link programs. Such programmes may be implemented by special school staff who are responsible for connecting families with schools, building relationship, encouraging school attendance and linking the curriculum in the home with school instruction.

According to UNICEF, Early Childhood Care and Education is the most cost-effective investment to start a lifelong path of learning and ensure all children have a fair chance to reach their potentials. Also, Gage (2013), states that Early Childhood is a concerned priority to the government, community and the parents.

### **Statement of the Problem**

The state of Early Childhood Care and Education Department of Federal College of Education (Technical), Omoku in terms of students is very poor as the rate of student's enrollment is low. Early childhood Care and Education Department is under School of Early Childhood and Primary Education which is well equipped with infrastructure, as well as qualified and seasoned lecturers. From observation and questioning, it found out that 80% of the population of people in the school and community are unaware that a course like Early Childhood Care and Education does exist. Some people asked questions like what is the course all about? Efforts have been made by the head of administration of the department alongside teaching and non-teaching staff of the school in campaigning, advertising and working hand in hand with the college in promoting the course to the public. Despite the provision of the standard curriculum, conducive classrooms, learning materials and so on, students' enrollment is still poor. Therefore, it is pertinent to investigate the stakeholders' awareness involvement and the choice of Early Childhood Education as a course in Federal College of Education (Technical) Omoku, Rivers State.



### **Purpose of the Study**

The purpose of the study is to investigate the relationship between stakeholders' involvement and the choice of Early Childhood Care and Education as a course in Federal College of Education (Technical) Omoku, Rivers State. Specifically, the objectives of this study are to:

- determine the relationship between government involvement and the choice of Early Childhood Care and Education as a course of study in Federal College of Education (Technical) Omoku, Rivers State;
- ascertain the relationship between parental involvement and the choice of Early Childhood Care and Education as a course of study in Federal College of Education (Technical) Omoku, Rivers State.

### **Research Questions**

The following research questions were raised to guide the study:

- What is the level of awareness among stakeholders about the importance of early childhood education in Federal College of Education (Technical) Omoku, Rivers State?
- To what extent are stakeholders involved in the decision-making process regarding the choice of early childhood education programmes in Federal College of Education (Technical) Omoku, Rivers State?
- How do stakeholders perceive the quality of early childhood education programmes offered in Federal College of Education (Technical) Omoku, Rivers State?

### **Methodology**

This study adopted descriptive research design. The population of the study comprised all students in Federal College of Education (Technical) Omoku, Rivers State. Through simple random sampling technique, a total of 150 students were selected from 30 departments. A structured questionnaire titled "Stakeholders Involvement and The Choice of Early Childhood Education (SITCECE)" was used for the study. The modified four (4) point likert relating to strongly Agreed (SA-4) Agreed (A-3), Disagree (DS-2) Strongly Disagree (SD-1), as optional on the questionnaire were used. The instrument was a structure design self instrument with fifteen (15) items on the research questions raised for the study. The instrument was divided into (2) sections A and B respectively. Section A elicit information on personal data of the respondents while section B, contains the questions which were answered by each respondent. The questionnaire was subjected to criticism by specialists in Early Childhood in Education who read through it and corrections were made. All the comments and corrections made by the experts were incorporated into the final draft of the instrument before it was finally administered. This process ensured the content validity of the instrument. Therefore, it was subjected to content reliability using Cronbach Aloha. The reliability coefficient was 0.85 which was considered high for a new developed instrument. The questionnaires were administered to the respondents by the researchers. The researchers were able to obtain 92% returned of the instruments distributed. Data collected for the purpose of the study was analyzed using descriptive statistics of mean and standard deviation. To take decision with respect to accepting or rejecting research outcome the midpoint of 2.5 was accepted.

### **Results**

#### **Research Question1:**

What is the level of awareness among stakeholders about the importance of early childhood education in Federal College of Education (Technical) Omoku, Rivers State?

**Table 1**  
**Mean responses of awareness among stakeholders about the importance of early childhood education in Federal College of Education (Technical) Omoku, Rivers State**

S/N	Variables	SA	A	D	SD	Response Score	X	Mean Response	Remark
1.	Government is providing scholarship for early childhood	20	15	30	35	220	2.5	2.2	Rejected
2.	Government campaigns for early childhood education.	15	30	25	15	175	2.5	1.8	Rejected
3.	Government provides jingles to arouse people's interest to make early childhood education a choice in university	14	16	26	50	206	2.5	2.0	Rejected
4.	Government has established pre-primary sections in existing public schools	45	35	15	5	320	2.5	3.2	Accepted
5.	Government approved early childhood education programme in every university	15	5	40	40	195	2.5	2.0	Rejected
<b>Total</b>								<b>2.2</b>	<b>Rejected</b>

From the above analysis in the table above it is observed that the grand mean 2.2 of all the questionnaire item (1-5) is below cut off point of 2.5. Therefore, the level of awareness among stakeholders about the importance of early childhood education in Federal College of Education (Technical) Omoku, Rivers State is low.

#### **Research Question 2:**

To what extent are stakeholders involved in the decision-making process regarding the choice of early childhood education programmes in Federal College of Education (Technical) Omoku, Rivers State?

Table 2

**Mean Response stakeholders involved in the decision-making process regarding the choice of early childhood education programmes in Federal College of Education (Technical) Omoku, Rivers State**

S/N	Variables	SA	A	D	SD	Response Score	X	Mean Response	Remark
6.	Communities announce the availability of early childhood education programmes in their churches.	25	15	30	45	220	100	2.2	Rejected
7.	Community involve s in posting bills or advertisement of early childhood education programmes	20	5	40	30	205	100	2.0	Rejected
8.	Community send s town criers to send information on the importance of early childhood education as a career.	5	10	50	35	185	100	1.9	Rejected
9.	Community provides scholarship for early childhood student teachers	20	15	35	30	225	100	2.2	Rejected
10.	Community has established relationship with early childhood education organization.	30	35	15	5	260	100	2.6	Rejected
<b>Total</b>								<b>2.1</b>	<b>Rejected</b>

From the above analysis in the table above it is observed that the grand mean 2.1 of all the questionnaire items (6-10) is below the cut-off point of 2.5. This implies that stakeholder's involvement in the decision-making process regarding the choice of early childhood education programmes in Federal College of Education (Technical) Omoku, Rivers State is low.

### Research Question 3

How do stakeholders perceive the quality of early childhood education programmes offered in Federal College of Education (Technical) Omoku, Rivers State?

**Table 3**  
**Mean Response of stakeholders perceive the quality of early childhood education programmes offered in Federal College of Education (Technical) Omoku, Rivers State?**

S/N	Variables	SA	A	D	SD	Response Score	X	Mean Response	Remark
11.	Parents are involved in the campaign awareness of early childhood education	10	20	10	45	165	2.5	1.7	Rejected
12.	Parents encourage their children studying early childhood education in university.	15	5	20	5	120	2.5	1.2	Rejected
13.	Parents are aware of early childhood education as a course in university	15	25	20	20	195	2.5	2.0	Rejected
14.	Parents are involved informing committees in school.	40	30	10	5	275	2.5	2.8	Accepted
15.	Parents are involved in educating their children of early childhood education programme.	10	20	25	25	175	2.5	1.8	Rejected
<b>Total</b>								<b>2.0</b>	<b>Rejected</b>

From the above analysis in the table above it is observed that the grand mean 2.0 of all the questionnaire items (11-15) is below the cut-off point of 2.5. This implies that stakeholders perceive the quality of early childhood education programmes offered in Federal College of Education (Technical) Omoku, Rivers State?

### Discussion of Findings

Findings in the work from result of table 1, revealed that there is need for stakeholder awareness on the importance of early childhood education in Federal College of Education (Technical) Omoku, Rivers State. It is the primary responsibilities of the government to announce to the public about the importance of Early Childhood Education and encourage people into it, this is in line with the assertions of Janice Ford (2013) who opined that involvement of government improve access to and quality of early education and investment in early education can be an important component of improving the overall education success and eventually futures employment and earnings of children.

Also, the results of table 2, revealed that there is a need for stakeholders to be involved in the decision-making process regarding the choice of early childhood education programmes in Federal College of Education

(Technical) Omoku, Rivers State. This is evidenced by the calculated grand mean of 2.1 below the cut-off point 2.5. McWilliam and Baily (2018) stated that involvement of community helps in children's development and provide a platform for Early Childhood Education services, schools and other early years services to work together in supporting local children. Possibilities include collaboratively planning transition programs, and planning for the needs of children arriving at school. Early childhood educators can discuss their community results with a range of stakeholders to engage them in action that seeks to improve outcomes for the children of their community.

From table 3 of this work, it is observed that the mean score of the questionnaire items is below 2.5 bench mark, meaning that stakeholders perceive the quality of early childhood education programmes offered in Federal College of Education (Technical) Omoku, Rivers State. Epstein J. L, (2009), Research shows that parental involvement is more important to children's academic success than their family's socio-economic status, race ethnicity, or educational background.

## Conclusion

Early childhood care and education has a global scope and raising for and educating young children have always been integral part of human societies. From the result of the findings, it is concluded that awareness factors affect the choice making of every childhood education as a course in Federal College of Education (Technical) Omoku in Rivers State. It is time to be involved in the early childhood education to give it a quality standard to achieve a better objective. It is a powerful tool for early childhood education services to raise awareness of the importance of early childhood development and the lead action towards improving outcome for children.

## Recommendations

Based on the research the following recommendations were made:

- Government should provide scholarship for early childhood student-teachers
- Awareness should be done about early childhood education to the public.
- Implementation on policy of the National Policy on education should be implemented in schools by the governments, community, parents, teachers as being stated.
- Increase early childhood education quality through consistent training.
- Build early education infrastructure and capacity.
- Government should only employ teachers with Early Childhood Care and Education qualification in Early Childhood Care Centers.

## References

- Adams, G. (2015) *A program wide model for supporting children development and addressing challenges in early childhood settings*. In W. Sailor, G. Dunlap, G. Sugai & Horner (Eds) *handbook of positive behaviour support* (pp. 177-202) New York: Springer.
- Epstein, J. L., Sanders, M. G., Simon, B. S., Salinas, K. C., Jansorn, N. R., & Van Voorhis, F. L. (2002). *School, family, and community partnerships: Your handbook for action*. (2nd ed.). Thousand Oaks, CA: Corwin.
- Epstein, J. (2003). *Creating school, family, and community partnerships*. In A.C. Ornstein, L.S. Behar-Horenstein, & E.F. Pajak (Eds.), *Contemporary issues in curriculum*. (3rd ed.) (pp. 354–373). Boston, MA: Allyn and Bacon.
- Epstein, J.L. (2009). *In School, family, and community partnerships: Your handbook for action* (3rd ed.). USA: Corwin Press
- Ford, J. (2013). Emerging literacy views and practices of Head start preschool teachers, *topics in early childhood special education* (25, 232-242)
- Epstein, J. (2001). *School, family, and community partnerships: Preparing educators and improving schools*. Boulder, CO: Westview.



Federal Republic of Nigeria (2013) National Policy on Education. 6<sup>th</sup> Edition

Gage Witt (2013). An Individual growth and development indicator (IGDI) of parent-child interaction young exception children monograph series,8, 6176.

<https://www.universalbasiceducation.com>

Karen.L. (2016). Home school difference in believes support, and control public prekindergarten and their line to children's kindergarten and their line to the children kindergarten readiness. Early research quarterly. 2010;25 (32): 358- 372

Martinez-beck (2009) Use of positive behaviour to address challenging behaviour of young children within a community early childhood programme topics in early childhoods special education, 30, 68-79

Nelson (2016) Developing a general outcome measure of growth in social skills for infantssand toddlers Journal of early intervention, 26, 91- 114

Reggio Emillia (2009) *The child development index*. The state of Brazil's children 2009. UNICEF: UNICEF Representative Office, Brazil.

Schmidt, (2012) "*The problem with awareness: introductory remarks on awareness in early childhood*". Early childhood support cooperative work . (2-4): 281-298.

Schmidt, (2002) "*The Problem with awareness interdictory remarks on awareness in early childhood*". Early childhood supported cooperative work. (2.4): 281-298. The national association for the education of young children (NAEYC, 2009)

The National Association for the Education of Young Children (NAEYC, 2009).

# **The influence of Technology on Student Teacher's Literacy Skills Acquisition in Colleges of Education in Plateau State, Nigeria**

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## **Abstract**

*This study was conducted to examine the influence of technology on the ECCE student teacher's literacy skills acquisition. The study adopted a descriptive survey research design. Two research questions guided the study. The population of the study comprises all childhood education NCE 3 students in Federal College of Education, Pankshin, and College of Education, Gindiri, with a total number of 128 students, all in Plateau State, Nigeria. A simple random sampling techniques was used for the study, a sample size of fifty (50) students drawn from both colleges were randomly sampled for the study. Two Instruments titled "Causes and Impact of Technology on Poor Literacy Skills (CIPLS)" and "Strategies to Improve Student Teacher's Literacy Skills Acquisition through Mobile Apps (SISTLSAMA)" were used to obtain data for the study. The instruments were subjected to face validity by three experts, and reliability coefficient of 0.81 and 0.87 were obtained using Kuder-Richardson (K-R<sub>1</sub>) method. Mean and standard deviation were used to answer the research questions. The findings of the study revealed among others that ECCE student teachers have reading and spelling difficulties as many of them are more acquainted with internet and Facebook slangs and jargons. The paper concluded by recommending that professional teachers should adopt teaching methods that enhance literacy acquisition such as reading comprehension and responses, and spelling dictation in the class and incorporate the use of mobile Apps in teaching and learning for the student teachers.*

**Keywords:** Technology, Student Teachers, Literacy, Skills Acquisition, Colleges of Education

## **Introduction**

Literacy skill can be seen as the ability to read, write, speak and listen in a way that lets one communicate effectively and make sense to the world. However, understanding the significance of literacy goes far beyond its definition. Literacy is essential. Dasman (2021), without literacy, it is hard to live the life one desires just as it is hard to fall behind when having a tough start in life. From earliest years, literacy skills help one develop and communicate. At school, having the literacy skills to read, write, speak and listen are vital for success. Anyone that finds these skills hard, have to struggle to learn. It affects one's confidence and self-esteem.

As a student-teacher, one would without these skills find it very difficult to navigate through education and everyday life activities. Without these skills, activities such as effective use of the internet, filling out forms and interpreting instructions on any given task including the ability to communicate effectively would be difficult for such a student-teacher. Acquisition of these skills starts from early childhood education.

To understand well the merits of this discourse it is pertinent to take a look at how various people see early childhood. Professionals in the discipline see the pre-school years as a corner stone of learning. Parents view the pre-school years as the time children "get ready" to enter kindergarten or first grade, and begin "formal" schooling. Others still think of pre-school years, the years from three to five, as a time when children should be unburdened of learning, and allowed to play and enjoy life. For many children though, the pre-school years are the beginning of a critical period spanning through fourteen years during which their lives will be dramatically influenced by teachers and schooling.

**PRESCHOOL:** the traditional use of the term pre-school years to describe the period before children enter school is rapidly becoming absolute. Today, it is common for many children to be in a school of some kind beginning as early as age two or three, and childcare centres beginning from six weeks becoming de rigueur for children of working parents. Many states, including Plateau state have public preschool programs for three year olds. The term preschool hardly applies to threes and fours anymore. For the purpose of this study, preschools are

programs for zero – five year old children, before primary school level, therefore, it is pertinent to know "Who and How" are involved in their pedagogies. "Who" is for who are caregivers/teachers? The early childhood professionals? while "how" is how their pedagogies take place? According to Federal Republic of Nigeria (FRN:2013) in her National Policy on Education [(NPE), the preschool also called Early Child Care and Development Education (ECCDE) is segmented for ages 0-4 years, situated in daycare or crèche; it is the stage or level where care, protection, stimulation and learning are promoted in children.

The purpose of early child care development and education shall be to:

- Prepare the child for the primary level of education;
- Inculcate in the child the spirit of enquiry and creativity through the exploration of nature, the environment, art, music and the use of toys, etc.;
- Teach the rudiments of numbers, letters, colors, shapes, forms, etc., through play among others.

Having known the goals and purpose of preschool, the "Who" that carries out the pedagogy becomes very pertinent in order to achieve the goals. An ECCE professional is at least someone who has successfully completed an associate degree from a program conforming to National Associate for the Education of Young Children (NAEYC) guidelines; OR someone who has had a successful completion of an associate degree in a related field, 30 units of professional studies in early childhood development including 300 hours of supervised teaching experience in an early childhood programs (Morrison, 2020). The above qualifications that one needs to acquire in order to become a professional in ECCE are same with the Nigerian Certificate in Education (NCE) that our student teachers are getting, therefore, they are ECCE professionals who are qualified to teach in ECCDE centers.

However, the student teachers' basic literacy skills levels are very important in order to carry out the teaching job effectively. Literacy is the ability to read and write. Kapur (2019) is of the view that basic literacy skills are referred to the skills of reading, writing and arithmetic. The author stated that it is vital for the individual to possess these skills, to carry out various tasks and activities and sustain their living conditions in an appropriate manner.

Basic literacy skills are regarded as an indispensable component of human resources development. It is fundamental to not only growth and development of human resources, but also to lead to social and economic progress of the nation, Rintaningrum, R. (2021). Unfortunately, the level of literacy skills of the student teachers in the college of education are very poor and inadequate to be called teachers. The student teachers under this study are NCE three ECCE students of Federal College of Education Pankshin and College of Education Gindiri both in Plateau State who are about graduating as professional teaches, yet these sets of students find it very difficult to read and write appropriately. It is very unfortunate that these are same people to be called ECCE professionals who would teach the little children of the society. The level of literacy of these student teachers appear so poor that some of them cannot write a correct sentence. However, with the aid of technology (Android phones, computer operators among other mobile apps) they are able to write their final research work (project) which enables them to graduate especially in institutions where plagiarism tests are not used. Another debilitating factor is the issue of result moderation which is usually tilted towards ensuring that almost every student scales through every examination no matter how badly he performs.

Technology is the application of scientific knowledge for practical purposes or applications. Technology uses scientific principles, and applies them to change the environment in which humans live. Technology can also use scientific principles to advance industry or other human constructions. According to the Pattern (2021) "Technology is the science of making machines that can think like humans. It can do things that are considered smart". The author affirms that technology can process large amounts of data in ways, unlike humans. The goal for technology is to be able to do things such as recognize patterns, make decisions, and judge like humans. It is sad to say that some of would be teachers are taking negative advantage of technology to do their thinking and activities for them. Technology appears to be replacing the human in their brains as they no longer study to learn simple correct spellings of words or write correct sentences as professional in order to be called teachers.

Conversely, colleges of education in Nigeria have long been recognized as vital institutions for higher education and the development of the country's intellectual capital for teachers. However, recent research have revealed that despite the significant efforts made by lecturers in teaching and learning processes, there are concerns about the overall academic outcome of student teachers in Nigerian colleges of education. Some factors such as passing centers, overcrowded classrooms, absent of aptitude tests in the colleges before

admission of the students, abuse of moderation of results, and the recent abuse of technology by the students have militated against students' performances in school. These factors have watered down the efforts of lecturers and learning outcome of the student teachers. However, Iro (2023) has attested that "one crucial factor that has identified as a potential determinant of academic success is students attitude towards learning". In accordance, Cohen (2020) opined that attitudes encompass various aspects, including student's motivation, engagement and commitment to their studies. In conformity with the above affirmations, the lecturers, the overcrowded classrooms and the technology are not hindrance to the student teachers literacy skills acquisition, rather the attitudes of the student teachers towards learning.

Furthermore research conducted by Mohammed and Ibrahim (2023) emphasized that the role of self-efficacy beliefs in shaping students attitudes towards learning and subsequently influencing their academic achievement. A student teacher who understands that he/she is studying to become a professional or would one day stand as educationist must know that his/her literacy skills acquisition is paramount. Salido (2023) found out that there are already several technological organization that provide students with Automatic Essay Writing (AEW) tools and that "these AEW programs, which may automatically write individual paragraphs or full essays in response to a prompt such as an essay topic, have become increasingly popular in recent years." The author stated that "Even though the writing that is currently being generated by AEW can be difficult to tell whether the content being generated was written by an algorithm or human student at times." Unfortunately, that is the current situation of majority of ECCE student teachers under this study. To attest to this facts, some samples of class assessments and home assignments are hereby presented (See the Appendix).

### **Statement of Problem**

Education being a light to life cannot be jeopardized at this 21<sup>st</sup> century. Childhood education is a foundational stage that leads other educational levels. Therefore, anyone preparing to teach at this level must be competent and well equipped with literacy skills. Thus, the Early Childhood Care and Education (ECCE) student teachers in colleges of education must be trained to be competent to defend the certificates they earn after graduation. Unfortunately, majority of the student teachers do not usually meet the expectation due to the very poor literacy skills acquisition they had. These include inability to:

- Speak correctly
- read correctly
- spell words correctly
- write correctly and constructively.

These menace must be arrested in order to have sound educational system from our childhood level of education because the competence of a teacher means a lot to teaching and learning of a child. This type of ugly scenario cannot support the achievement of the goals and objective of collages of education as it is stated by Salem University Nigeria (SU: 2021) that colleges of education are in consonance with the realization of national needs and aspirations vis-à-vis personal and national development. The graduates must, therefore be resourceful, creative, knowledgeable and able to perform professionally mastery of problem solving skills and to enhance commitment to the teaching profession among others. The researcher is therefore worried at the poor literacy skills acquisition of our student teachers who graduate as professional teachers; hence want to determine the influence of technology on ECCE student teachers literacy skills acquisition in colleges of education in Plateau state, Nigeria.

### **Purposes of the Study**

The study aimed to investigate the predicate power of technology on the student teacher's literacy skills acquisition, and also aiming to shed light on the factors that contribute to the student's literacy skills acquisition through the technology in colleges of education in Plateau State, Nigeria.

Specifically; the study sought to:

- identify causes of poor literacy skills acquisition among ECCE students teachers in colleges of education.
- identify some strategies to improve ECCE student teacher's literacy skills acquisition through technology apps such as Whatsapp.

## Research Questions

The following research questions were answered to guide the studies:

- What are the causes for poor literacy skills acquisition among ECCE student teachers in colleges of education?
- What are some strategies to improve student teacher's literacy skills through technology like Whatsapp?

## Methodology

The study was carried out in Plateau State, Nigeria. Two research questions were used. The population of the study comprised all ECCE NCE 3 student teachers from FCE Pankshin and College of Education Gindiri with a total number of 165 student teachers which were randomly selected. The researcher developed a structured questioner as data collecting instrument. The Two Instruments titled "Causes and Impact of Technology on Poor Literacy Skills (CIPLS)" and "Strategies to Improve Student Teacher's Literacy Skills Acquisition through Mobile Apps (SISTLSAMA)" were used to obtain data for the study. The instruments were subjected to face validity by three experts, and reliability coefficient of 0.81 and 0.87 were obtained using Kuder-Richardson (K-R<sub>2</sub>) method. Mean and standard deviation were used to answer the research questions which consisted two clusters with 30 items which were designed to capture the variable under study. The structured questioner were on four pointlikert-scale responses valid as Strongly Agreed (SA), Agreed (A), Strongly Disagree (SA), and Disagreed (D).

S/N	Item Statement	SA	A	D	SD	Mean	Decision Point
1	Lack of proper literacy foundation from their basic educational level	36	10	3	-	3.67	A
2	Inadequate opportunities to practice literacy skills in the school system	23	24	2	-	3.43	A
3	Insufficient literacy skill acquisition resources and learning materials	35	12	2	-	3.67	A
4	Student low self-esteem hinders their acquisition of literacy skills	29	19	1	-	3.57	A
5	Students' language barriers and cultural differences	23	20	4	-	3.40	A
6	Lack of motivation from parents	18	22	6	3	3.12	A
7	New innovation in technology and its application is hindering effective literacy skills acquisition	20	15	7	3	3.22	A
8	Constant use of shorthand writing style reduces effective literacy skill acquisition	25	20	3	-	3.46	A
9	Phobia for learning	16	26	4	2	3.17	A
10	Lack of concentration from the part of students	25	20	2	1	3.44	A
<b>Cluster Mean</b>						3.74	A

The instrument was face validated by experts, two from Childhood Care Education department and one from Measurement and Evaluation department all from University of Jos, Plateau State. The reliability test was measured using internal consistency through Cronbach Alpha technique, and it yielded reliability indices of 0.84. In analyzing the data, mean was used to answer the research questions.



## Results

### Research Question 1

What are the causes of poor literacy skills acquisition among ECCE student teachers?

**Table 1. Mean score on the responses on the causes of poor literacy skills acquisition among ECCE student teachers.**

Table one above revealed the mean rating of responses on the causes of poor literacy skills acquisition among ECCE student teachers. The research of the above items was focal on two institutions which are federal college of education Pankshin and college of education Gindiri. Item 1-10 of the research met the standard mean score of 3.67 and above which indicate acceptance by respondents. In the analysis conducted, it was found that the cluster mean score for the both colleges was 3.74. This score represents the average value derived from the variables considered within the colleges.

### Research Question 2

What are the strategies to improve ECCE student teachers' literacy skills acquisition through mobile Apps such as WhatsApp?

**Table 2. Showing Mean Score on responses on some of the strategies to improve ECCE student teachers' literacy skills acquisition through mobile Apps such as WhatsApp.**

S/N	Item Statement	SA	A	D	SD	Mean	Decision Point
1	Provides personalized reading instruction tailored to the students' interest and level	35	11	1	3	3.56	A
2	Provision of virtual instruction that provide real-time feedback reading guidance	18	31	1	-	3.34	A
3	Speech recognition tools to improve pronunciation, fluency and comprehension	30	16	3	1	3.50	A
4	The use of technology-based adaptive assessment that match individual to identify strength and weakness	14	30	6	-	3.16	A
5	Collaborative reading aloud learning platforms among the student through technology	32	14	4	-	3.56	A
6	Gamification and simulation	16	26	7	-	3.18	A
7	Natural language processing	23	18	8	1	3.26	A
8	By analyzing and providing feedback on writing and reading comprehension	26	20	2	1	3.45	A
9	Decreased teachers' engagement	17	16	16	-	3.02	A
10	Ineffective instruction	14	23	10	-	3.09	A
11	Limited feedback	29	10	8	1	3.40	A
12	Increased motivation and enjoyment	17	27	5	-	3.24	A
13	By offering group instruction	25	13	8	1	3.32	A
14	To connect students and teachers for collaborative learning	27	11	6	1	3.42	A
15	By suggesting relevant resources tailored to individual needs	31	14	5	-	3.52	A

16	Improved instructional effectiveness	24	17	6	3	3.24	A
17	By incorporating diverse media to engage students	23	21	4	1	3.35	A
18	By limiting instruction to text only	14	25	10	-	3.08	V
19	To track students' progress and inform instruction	17	20	12	-	3.10	A
20	Confer with students individually during independent reading time	27	17	5	1	3.40	A
<b>Cluster Mean</b>						<b>3.30</b>	<b>A</b>

Table two shows the mean rating of responses on some of the strategies to improve ECCE student teachers' literacy skills acquisition through mobile Apps such as WhatsApp. The above listed 30 items were accepted by the respondents as it met the criterion mean value of 2.50 and beyond. The research study was carried out in the two colleges of education, and the findings were positively received by the respondents. The cluster means scores from the analysis were 3.56, as the 50 respondents were randomly sampled from both colleges. These score represents the average value derived from the variables studied within each institution and the cluster mean was 3.30 which is very high and indicating that with the right use of technology the literacy skill acquisition of the ECCE student teachers can be improved.

### Discussion of Findings

The findings of the study revealed the causes of poor literacy skills acquisition among ECCE student teachers such as lack of proper literacy foundation from their basic educational level and lack of motivation from parents which is indisputable because that is where foundation of education lies. The above mentioned are very big factors that can hinder learning especially that of literacy acquisition because the basic foundation which is early childhood education starts from nursery school to primary school educational levels. The findings above are in line with a study conducted by Olisaeke (2023) who posited that from birth to age two is the most rapid period of brain development with brain cells forming at the rate of more than one million cells per second. The author stated that positive early childhood education experiences and home environment support brain cell connections, while the brain left dormant hinders connection. This can only be achieved at early stage of life of an individual starting from home where the parents are the first teachers of a child and also taking the child to early childhood education centers where the child acquires almost all the developmental domain skills that spurs learning.

The finding further revealed that factors such as inadequate opportunities to practice literacy skills in the school system, insufficient literacy skill acquisition resources and learning materials, student's low self-esteem hinders their acquisition of literacy skills. Students' language barriers and cultural differences, new innovation in technology and its application are hindering effective literacy skills acquisition. Constant use of shorthand writing style reduces effective literacy skill acquisition and phobia for learning. These factors listed above as identified through the findings of this study are attitudinal, thus, having direct influence on the students' acquisition of literacy skills. This is in agreement with the study carried out by Rohani, Rahil, Habibah, Wong, Ahmad and Ayuba (2022). The authors stated that Students achievement problems are often highlighted in academic literature and the mass media and therefore, it is pertinent for educators to be aware and to study the factors related to student achievements such as naches and attitude towards learning. The authors further affirmed that motivation is the driving force behind someone's actions and affects the person's needs, desires and life in general. Same applies to students success in learning. Rohani, Rahil et al made the above affirmation in a study they carried out titled "Learning and Study Strategies Inventory (LASSI)" where they discovered that motivation and attitude were the best predictors of student academic performance. Hence, the student teachers can achieve their high acquisition of literacy through positive attitudes towards learning.

The findings of the study also revealed that through appropriate incorporation and use of technology in teaching and learning of literacy skills, the student teachers will acquire literacy skills easily since they are acquainted with mobile apps.

## Conclusion

In conclusion, the study highlighted the significant roles that literacy skill acquisition play in shaping students educational outcomes. The findings underscore the importance of fostering positive attitudes toward learning among student teachers. Promoting self-efficiency beliefs, nurturing a supportive learning environment through technology such as mobile apps, tailoring teaching methods and encouraging collaboration between educators and student teachers. This will go a long way to produce quality and competent teachers who are in turn teach in early childhood educational level. That is how our educational system in Nigeria can be improved for sustainable development in education and that of Nations economic development.

## Recommendations

Based on the findings the following recommendations were made:

- Factors such as passing centers, overcrowded classrooms, absence of aptitude tests before admission of the students, abuse of moderation of results have negated acceleration of literacy skills acquisition and therefore should be handled with utmost attention by the management of every college of education in Nigeria.
- There should be incorporation of diverse media to engage students in teaching and learning in our colleges of education in Nigeria
- Provision of personalized reading instruction tailored to the students' interest and level, provision of virtual instruction that provide real-time feedback reading guidance, speech recognition tools to improve pronunciation, fluency and comprehension, The use of technology-based adaptive assessment that match individual to identify strength and weakness and collaborative reading aloud learning platforms among the students through technology should be incorporated into teaching and learning by the lecturers in order to improve students learning outcome.

## References

- Cohen, J. (2020). Role of academic support services in improving students' learning attitude.
- Dasman, F. (2021). Literacy: Its importance and changes in the concept and definition. Teflin, 20(2009), 78. (Note: The publication year seems incorrect; please verify)
- Federal Republic of Nigeria (FRN). (2013). National policy on education (6th ed.). Early Childcare Development and Education (ECCDE). NERDC Publisher. International Journal of Higher Education, 32(1), 67-89.
- Iro, S. U. (2023). Impact of students' learning attitudes on academic performance in Nigeria public universities. Journal of Educational Foundation (JEF), 12(2), 23-33.
- Kapur, R. (2019). Significance of basic literacy skills. ResearchGate.
- Main, P. (2023). AI in early childhood education: A comprehensive handbook. Illumine App. Mohammed, A., & Ibrahim, A. (2023). Enhancing learning attitudes through academic support services: A case study of Nigerian public universities. International Journal of Higher Education, 27(3), 210-225.
- Morrison, G. S. (2020). Definition of early childhood education. In Early childhood education today (pp. 1-10). Pearson Education.
- Olisaeke, L. C. (2023). Influence of early schooling on pupils' academic achievement in primary schools. Journal of Educational Foundations, 12(2), 145-151.
- Pattam, A. (2021). Artificial intelligence, defined in simple terms. HCL Technologies. [https://www.google.com/search?q=Pattam%2C+A.+\(2021\).+Artificial+intelligence%2C+defined+in+simple+terms.+HCL+Technologies.&rlz=1C1BNSD\\_enNG1084NG1084&oq=Pattam%2C+A.+\(2021\).+Artificial+intelligence%2C+defined+in+simple+terms.+HCL+Technologies.&gs\\_lcrp=EgZjaHJvbWUyBggAEEUYOdIBCTIyNjcwajBqN6gCCLACAfEFVX0cZ\\_XXso0&sourceid=chrome&ie=UTF-8](https://www.google.com/search?q=Pattam%2C+A.+(2021).+Artificial+intelligence%2C+defined+in+simple+terms.+HCL+Technologies.&rlz=1C1BNSD_enNG1084NG1084&oq=Pattam%2C+A.+(2021).+Artificial+intelligence%2C+defined+in+simple+terms.+HCL+Technologies.&gs_lcrp=EgZjaHJvbWUyBggAEEUYOdIBCTIyNjcwajBqN6gCCLACAfEFVX0cZ_XXso0&sourceid=chrome&ie=UTF-8)

- Rintaningrum, R. (2021). Do absence and mobility (transience) affect reading literacy achievement? *Jurnal Sosial Humaniora*, 8(1), 135.
- Rohani Ahmad Tarmizia et al. (2022). The effect of attitude on student achievement. *ScienceDirect*.
- Salem University Nigeria. (2021). College of Education aims and objectives. Salem University Nigeria.
- Salido, V. (2023). Impact of AI-powered learning tools on student understanding and academic performance. *Research Gate*.



# Effect of Game-Based Instructional Method on Preschoolers' Arithmetic Achievement in Lagos State

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## Abstract

*This study evaluated how game-based learning affected preschoolers' arithmetic achievement. Quasi-experimental research design was adopted and the study population include public nursery school pupils in Lagos Mainland L.G.A. of Lagos State, and the sample size was 34 pupils in two randomly selected Nursery Two classes from two public nursery schools. A class of 18 was the treatment group and a class of 16 was the control group. This study used a 13-item Preschoolers' Arithmetic Achievement Test (PAAT) validated by early childhood education and test and measurement experts at the University of Lagos, Akoka, with a Cronbach Alpha reliability value of 0.87 to assess the group's arithmetic achievement. Frequency counts and independent-samples t-tests were used in SPSS 21.0 to analyse the data at 0.05 significant levels. The P-value of 0.412 was found greater than the level of significance (0.05);  $p > 0.05$ . The results demonstrated that game-based instructions improved preschoolers' arithmetic achievement in Lagos Mainland and that gender did not affect performance. Based on the findings, this study recommends integrating game-based instructional methods into preschoolers' teaching-learning process and encourages curriculum workers and examination bodies to popularise its efficient utilisation.*

**Keywords:** Game-based instructions, Arithmetic Achievement, Preschoolers, Teaching-Learning Process

## Introduction

Arithmetic holds significant importance in all areas of human activity and study (Maduabum&Odili, 2016). It has consistently played a crucial part in the advancement of both persons and nations. Arithmetic is an indispensable tool required for efficient functioning in the current technology era (Aremu, 2018). Even the average individual will acknowledge the fact that knowledge of numbers is crucial for the existence of humanity. Abakpa and Iji (2021) state that arithmetic is a cognitively stimulating discipline that has an impact on several aspects of human activities, including economics, politics, science, and technology.

The importance of early childhood education (ECE) on cognitive development, especially in arithmetic, is widely acknowledged. Proficiency in arithmetic from early childhood is not only critical for achieving scholastic attainment in mathematics, but also plays a central role in the advancement of critical reasoning and problem-solving abilities, which are vital for everyday life. Although crucial, conventional teaching techniques used in preschool environments frequently depend extensively on memorisation through repetition and monotonous exercises. Although these strategies have shown some effectiveness, they have been criticised for being unable to actively engage young learners and promote an extensive understanding of mathematical topics (Clements & Sarama, 2021).

Due to the constraints of conventional teaching approaches, there has been an increasing curiosity with game-based instructional methods, especially in the field of early childhood education. Game-based learning incorporates the use of play in the classroom, using children's inherent desire to play as a method to facilitate learning. The foundation of this technique is based on Jean Piaget's (1963) Constructivist Theory which posits that children actively construct their own knowledge and understanding through hands-on experiences and social interactions. Games, with their inherent components of difficulty, rivalry, and gratification, offer an optimal platform for such educational encounters. Studies have demonstrated that game-based learning not only increases involvement but also promotes the ability to remember and apply knowledge. This is because it corresponds with children's natural inclination to explore and learn via play (Plass, Homer, & Kinzer, 2015).

The present study focusses on Lagos Mainland L.G.A., Lagos State, where the potential of game-based



instructional methods in teaching mathematics to young children has not been thoroughly investigated. Prior studies conducted in different settings have shown that game-based learning has the capacity to greatly enhance arithmetic abilities in young children. For example, a study conducted by Ramani and Siegler in 2018 discovered that engaging in numerical board games or puzzles resulted in significant improvements in number sense among low-income children in the United States. In a similar vein, Laski and Siegler (2024) found that children who participated in numerical games or puzzles had enhanced counting abilities and a more profound comprehension of numerical magnitudes. Nevertheless, these studies were predominantly carried out in Western environments which prompt enquiries over the applicability of their results to diverse cultural and educational settings, such as Nigeria.

There is an urgent requirement in Nigeria, namely in Lagos Mainland, to investigate inventive teaching methods that can improve the standard of early childhood education. Implementing game-based educational strategies shows potential for enhancing math performance in preschool children. However, there is a scarcity of empirical information regarding its efficiency in the Nigerian setting. The dearth of research in this area highlights the significance of doing research that is tailored to the specific setting in order to assess the effects of these instructional strategies on the arithmetic performance of preschool children.

Arithmetic plays a crucial role in education, especially in preschool settings, as it establishes the basis for future mathematical proficiency. Preschool arithmetic generally covers fundamental numerical concepts, including counting, number recognition, comprehension of quantity, and basic addition and subtraction. These notions have a crucial role in the cognitive development of children, as they improve their problem-solving skills and logical reasoning.

Studies indicate that proficiency in basic mathematical operations during early education is a reliable indicator of future academic success, not only in mathematics but also in other academic disciplines (Duncan *et. al.*, 2017). Arithmetic is commonly taught in preschool settings through interactive and enjoyable activities that are tailored to the developmental stage of young learners. This method not only enhances the enjoyment of learning but also facilitates the internalisation of mathematical concepts in children through the use of repetition and hands-on experiences (Clements & Sarama, 2021).

Additionally, there is a strong emphasis on utilising tangible objects and visual aids to assist preschoolers in comprehending complex mathematical ideas. For example, employing blocks as a means to illustrate addition and subtraction enables children to visually understand the procedure, thus promoting better understanding (Ginsburg, Lee, & Boyd, 2018). Integrating mathematics into preschool curriculum is vital since it establishes the foundation for more advanced mathematical learning in subsequent years, rendering it a fundamental component of ECE.

Young children learn science and mathematics most effectively through active engagement in hands-on activities, as shown by research conducted by Salami (2014), Moravick, Nolte, and Feneey (2013), and Ogunsanwo (2003). A game-based technique can be defined as an educational approach that promotes learning by actively immersing and engaging children in various age-appropriate, developmentally suitable, and culturally appropriate games to teach or explain concepts. According to Trybus (2015), game-based strategy involves taking specific ideas from games and using them in real-life situations to actively involve consumers. O'Connor *et. al.*, (2021) posited that game-based approach is the use of games in classrooms to achieve educational goals. These games can encompass both enjoyable and informative elements.

Game-based instruction is an educational tool that incorporates audio-visual elements, animations, films, and games to facilitate student interaction (Chen, *et. al.*, 2019). Instructional games encompass a wide range of games that can be utilised to enhance the process of learning. These include board games, computer games, games created locally or commercially, tangible games, puzzle-based games, internet games, card games, and more. Instructional games can serve as a supplementary tool to enhance the learning process for pupils, in addition to teaching those valuable skills such as rule-following, adaptability, problem-solving, communication, creativity, critical thinking, teamwork, and good sportsmanship (Zirawaga, *et. al.*, 2017).

Research conducted by Spires, Rowe, Mott, and Lester (2021) has demonstrated that educational games effectively bridge the gap between scientific knowledge and real-life situations. According to Schaaf (2022),

game-based learning is most efficient when it corresponds with the requirements of students and the substance of the curriculum. In their study, Liu and Chen (2023) found that primary school students acquire science-related concepts through active engagement in educational card games. Educational academics have shown interest in incorporating puzzle games into science classes, as evidenced by studies conducted by Scott (2016) and Bowers (2016).

According to Letuna (2021), teachers often employ game-based learning once or twice a month to inspire students and enhance their skills. This approach is based on the recognition of the important role that games play in teaching. The infrequent usage of game-based learning motivated its adoption in the study.

This study employs the Jean Piaget's (1963) Constructivist Theory which asserts that children actively construct their own knowledge and understanding through hands-on experiences and social interactions. According to Piaget, children progress through four stages of cognitive development: sensorimotor, preoperational, concrete operational, and formal operational. In the context of arithmetic learning, Piaget's theory suggests that preschoolers in the preoperational stage (2-7 years) learn best through concrete, manipulative experiences that allow them to explore and understand mathematical concepts. Game-based instructional methods align with Piaget's theory by providing interactive, engaging, and concrete experiences that enable preschoolers to construct their understanding of arithmetic concepts, such as numbers, shapes, and patterns.

Piaget's theory also emphasizes the importance of accommodation and assimilation in the learning process. Accommodation refers to the process of adjusting existing mental frameworks to incorporate new information, while assimilation involves integrating new information into existing knowledge structures (Flavell, 2020). Game-based instructional methods facilitate both processes by presenting arithmetic concepts in a playful, interactive manner that challenges preschoolers to adapt and refine their understanding. For instance, a math game that involves counting blocks or shapes helps preschoolers accommodate new information about numbers and quantities, while assimilating this knowledge into their existing understanding of arithmetic concepts. By aligning with Piaget's Constructivist Theory, game-based instructional methods can enhance preschoolers' arithmetic achievement by providing a learner-centered, interactive, and engaging environment that fosters active construction of knowledge.

Mathematics education researchers have documented several factors contributing to the underachievement in mathematics among secondary school students. For example, according to Unodiaku (2010) and Ogbuanya (2019), the reason for students' low achievement in mathematics is the insufficient preparedness of primary school pupils to continue learning mathematics at the secondary school level. Similarly, Unodiaku (2021) stated that the want to learn mathematics is a contributing factor to success in mathematics education.

Ogbuanya (2019) states that a lack of sufficient or solid foundation in earlier grades is a major factor that diminishes children's enthusiasm for mathematics. Additionally, many teachers employ unsuitable approaches when teaching mathematics and interacting with students. Usman and Nwoye (2010) found that incorporating games into mathematics instruction can stimulate students' interest in the subject and lead to improved performance. The study suggested that an effective approach to fostering enduring student interest in arithmetic is through the use of diverse methodologies, educational resources, and procedures, particularly through the incorporation of games. In addition to enhancing the attraction of mathematics education, it will also enhance students' performance in mathematics.

Kebritchi, *et. al.*, (2018) found that there has been a rise in the use of games by kindergarten teachers for improving learning. Games are efficient tools for training complex ideas because they rely on practice rather than explanation, provide individual fulfilment and motivation, present different learning abilities and styles, enhance proficiency, and offer engaging texts that allow users to make their own decisions (Holland, Jenkins & Squire, 2002; Charles & McAlister, 2004). Pernsky (2001, cited in Kebritchi *et. al.*, 2018) suggests that computer games have the potential to establish a novel learning culture that aligns with the behaviours of both children and adults.

The gender of learners is a variable that is believed to have an impact on the acquisition of scientific knowledge in pre-primary schools. Contemporary psychological research has demonstrated that gender, when considered as a variable, is associated with performance (Ezeugo&Agwagah, 2020). According to Adeleke (2018, as cited

in Majebi& Akin 2023), the majority of researchers have seen that boys tend to outperform girls, particularly in higher order knowledge. However, a minority of researchers have discovered that girls perform better than boys, while some others have shown no significant difference, especially in early education.

Wei, Sopory and Hendrex (2019) assessed the impact of competitive and noncompetitive instructional mathematics games on the ability of boys and girls aged four to seven to remember their gaming experience. The findings indicated that the learning outcomes of both boys and girls were enhanced following both competitive and non-competitive activities.

Research conducted by Bilesanmi-Awoderu, (2016); David, Kumar, Stanley, and Helgeson, (2020); Freedman, (2022), has found that there are no longer significant disparities in the affective, cognitive, and psychomotor skill achievements of students based on gender. In their study, Oludipe and Oludipe (2018) found that students' academic performance in sciences was not influenced by gender. Although there was a small disparity in the average scores of female (24.89) and male (23.66) pupils on the post-test, this difference was not statistically significant.

This study seeks to examine the impact of game-based instructional approaches on the arithmetic performance of preschoolers in Lagos Mainland L.G.A., Lagos State. The study aims to add to the wider discussion on successful teaching methods in early childhood education and offer insights that can influence educational policies and practices in Nigeria. This research is anticipated to provide evidence-based suggestions that could assist educators and policymakers in improving the quality of mathematics education in Nigerian preschools.

### **Objectives of the study**

The objectives of the study are to:

- investigate the effect of game-based instructions on preschoolers' arithmetic achievement in Lagos Mainland.
- examine the influence of gender on preschoolers' arithmetic achievement in Lagos Mainland using game-based instructions.

### **Research Questions**

- Does game-based instruction have a significant effect on preschoolers' arithmetic achievement in Lagos Mainland?
- Is there a significant difference in the arithmetic achievement of male and female preschoolers in Lagos Mainland using game-based instructions?

### **Research Hypotheses**

The following hypotheses were tested at 0.05 level of significant in this study:

- H<sub>0</sub>1:** There is no significant effect of game-based instructions on preschoolers' arithmetic achievement in Lagos Mainland
- H<sub>0</sub>2:** There is no significant effect of gender on preschoolers' arithmetic achievement in Lagos Mainland using the game-based instructions

### **Methodology**

The study adopted quasi-experimental research design. The study used one treatment and one control group of intact classes. The treatment group received game-based instruction while the control group received traditional instruction. The study population included public nursery school pupils in Lagos Mainland L.G.A. of Lagos State, and the sample size was 34 pupils in two randomly selected Nursery Two classes from two public nursery schools. The treatment group was 18 pupils and the control group was 16 pupils. In this study, Nursery two pupils learn basic addition utilising a numerical board game for the treatment group and the traditional technique for the control group.

The control group learnt basic addition using chalk-and-talk. The researcher wrote numbers on the board and

showed how to add single-digit numbers with counters, fingers, and pictures. Student participation involved solving simple addition problems on the board and in their notebooks. The goal was repetitious practice, with worksheets offering simple addition problems ( $2 + 3 = 5$ ) to be solved independently.

The treatment group learnt basic addition with a numerical board game that was made just for them. The game board had spots with numbers from 1 to 20 on them. Pupils were told to roll a die and move their game pieces based on the number that came up. At each stop, they had to pick up a card and solve an addition problem. The child has to solve the addition puzzle on the card once they land on a certain spot after tossing the dice. Take the example of a pupil who rolls a 4 and moves their piece four spaces forward. They might end up on a spot that matches a card that says " $3 + 2$ ." The pupil then has to correctly solve " $3 + 2 = 5$ " in order to keep playing.

Both groups were given an equal amount of instruction for duration of two weeks. Their proficiency in basic addition was evaluated by pre- and post-tests to determine the efficacy of each teaching approach. This study utilised a 13-item Preschoolers' Arithmetic Achievement Test (PAAT) that was validated by experts in early childhood education and test and measurement at the University of Lagos, Akoka. The test demonstrated a good level of reliability, as shown by a Cronbach Alpha reliability value of 0.87. The PAAT was administered to the two groups separately before the two-week teaching took place and was readministered to them after the two-week teaching of Basic Addition. The data collected were analysed in SPSS 21.0 using frequency counts and independent-samples t-tests, with a significance threshold of 0.05.

## Results

**Table 1**  
**Pupils' Demographics**

Characteristics	Options	Treatment (%)	Control (%)
Gender	Male	8(44.4)	9(56.2)
	Female	10(55.6)	7(43.8)
	<b>Total</b>	<b>18(100.0)</b>	<b>16(100.0)</b>
Age	3-4 years	12(66.7)	11(68.8)
	5-6 years	6(33.3)	5(31.2)
	<b>Total</b>	<b>18(100.0)</b>	<b>16(100.0)</b>

Source: Field Survey, 2024

Table 1 above shows the demographic characteristics of the pupils. Concerning their gender, most (55.6%) of the treatment group were female and the remaining 44.4% of them were male, while the majority (56.2%) of the pupils in control group were male and the remaining 43.8% of them were female. With respect to their ages, 33.3% of the pupils in the treatment group were 5-6 years and the majority (66.7%) of them were 3-4 years. On the other hand, the majority (68.8%) of the pupils in the control group were 3-4 years and the remaining 31.2% of them were 5-6 years. These indicate that the two genders were well represented among the groups, while the pupils were also within the age range for Nursery two in Nigeria.

## Test of Hypotheses

The research hypotheses were tested with the use of independent samples t-test, as shown below:

**Hypothesis One:** There is no significant effect of game-based instructions on preschoolers' arithmetic achievement in Lagos Mainland

**Table 2**  
**T-Test Statistics**

Test	Group	N	Std.	Df	P-val.	Level	Decision
Pre-test	Treatment	18	4.22	0.37	0.412	0.05	Not Significant
	Control	16	4.63	0.35			
Post-test	Treatment	18	10.21	0.71	0.001	0.05	Significant
	Control	16	7.11	0.12			

*P-value = 0.001 < level of significance*

Table 2 shows the evaluation of the mean scores of the treatment and control groups, indicating the arithmetic achievements for both the pre-test and post-test. The pre-test, which was meant to establish whether there was any meaningful difference between the groups' achievements before the 2-week teachings indicated that the control group had a slightly higher mean score of 4.63 than the treatment group with a lower mean score of 4.22. Furthermore, a mean score of 4.63 from 16 pupils in the control group and a mean score of 4.22 from 18 pupils in the treatment group indicates that the control group was 0.41 (9.7%) higher than the treatment group. More so, the P-value of 0.412 was found greater than the level of significance (0.05);  $p > 0.05$ . This implies that there was no significant difference between the groups' achievements before the 2-week teachings, hence, their residual knowledge on Basic Addition were not significantly different.

On the other hand, the post-test results indicate that the treatment group had a higher mean score of 10.21 than the control group with a lower mean score of 7.11. Furthermore, a mean score of 10.21 from 18 pupils in the treatment group and a mean score of 7.11 from 16 pupils in the control group indicates that the treatment group was 3.1 (43.6%) higher than the control group. More so, the P-value of 0.001 was found less than the level of significance (0.05);  $p < 0.05$ . Thus, the null hypothesis that states "there is no significant effect of game-based instructions on preschoolers' arithmetic achievement in Lagos Mainland" is rejected, and its alternative that states "there is a significant effect of game-based instructions on preschoolers' arithmetic achievement in Lagos Mainland" is accepted.

**Hypothesis Two:** There is no significant effect of gender on preschoolers' arithmetic achievement in Lagos Mainland using the game-based instructions

**Table 3**  
**T-Test Statistics**

Gender	N	Std.	Df	P-val.	Level	Decision
Male	8	10.12	0.12	0.524	0.05	Not Significant
Female	10	10.30	0.14			

*P-value = 0.004 < level of significance*



Table 2 shows the evaluation of the mean scores of the male and female pupils in the treatment group, indicating their arithmetic achievements in post-test. The table showed that the male pupils had a slightly lower mean score of 10.12 than the female group with a mean score of 10.30. Furthermore, a mean score of 10.30 from 10 female pupils in the treatment group and a mean score of 10.12 from their male counterparts indicates that the female pupils was 0.18(1.8%) higher than the male pupils in the same group. More so, the P-value of 0.524 was found greater than the level of significance (0.05);  $p > 0.05$ . This implies that the null hypothesis that states "there is no significant effect of gender on preschoolers' arithmetic achievement in Lagos Mainland using the game-based instructions" is not rejected, indicating that pupils' arithmetic achievement was not affected by their gender provided they are under the same teaching-learning conditions.

### Discussion of Findings

From the test of the first hypothesis, it was found that there is a significant effect of game-based instructions on preschoolers' arithmetic achievement in Lagos Mainland. This implies that the pupils taught with the game-based instructional method achieved significantly higher than their counterparts taught with the conventional method. This supports Kebritchiet. *al.*, (2018)'s observation that kindergarten teachers are using games more to improve learning. Games are effective for teaching complex ideas because they focus on practice rather than explanation, motivate individuals, accommodate different learning styles, improve proficiency, and provide engaging texts that let users make their own decisions. Pernsky (2021, referenced in Kebritchiet. *al.*, 2018) indicates that games can create a new learning culture that matches children's and adults' behaviours.

From the test of the second hypothesis, it was found that pupils' arithmetic achievement was not affected by their gender provided they are under the same teaching-learning conditions. Wei, Sopory and Hendrex (2019) found that competitive and noncompetitive instructional mathematics games help four- to seven-year-old boys and girls recall their games. Both boys' and girls' learning results improved after competitive and non-competitive activities. Implying that male and female student performance is similar. Bilesanmi-Awoderu (2016); David, Kumar, Stanley, and Helgeson (2020); and Freedman (2022) discovered no longer significant gender differences in student affective, cognitive, and psychomotor skill accomplishment. Oludipe and Oludipe (2018) found no gender effect on scientific performance. On the post-test, female (24.89) and male (23.66) students scored slightly differently, but not significantly.

### Conclusion

Overall, this study has shown that using game-based instruction greatly improves the arithmetic performance of preschoolers. The results suggest that children who were taught using game-based teaching methods achieved significantly higher performance compared to those who were taught using traditional instructional approaches, emphasising the efficacy of immersive and interactive learning strategies in ECE. Moreover, the study found that gender has no impact on arithmetic performance when children are subjected to similar teaching and learning circumstances. This indicates that the game-based instructional method is equally efficacious for both males and females, further emphasising its potential as an inclusive and influential teaching strategy. These findings support the idea of include game-based learning in preschool curriculum to enhance arithmetic skills, which in turn establishes a solid basis for future academic achievement.

### Recommendations

Base on the findings of the study, the researchers considered it imperative to give practicable recommendations, as follows:

- It is important to educate teachers in primary schools on the use of an interest-oriented game-based instructional strategy for teaching arithmetic to children. Sensitisation can be achieved by conducting structured workshops, seminars, and conferences for primary school teachers. These events can be organised by government agencies like the Ministry of Education, as well as professional associations like the Mathematics Association of Nigeria (MAN) and the Science Teachers Association of Nigeria (STAN). When conferences, seminars, and workshops are organised for primary school teachers and they attend, there is a propensity for them to learn new approaches in mathematics education.
- The curriculum designers and authors of primary school arithmetic textbooks should use a game-based instructional model as a technique of instruction.

- Examination authorities like the Lagos State Universal Basic Education Board (LASUBEB) should incorporate questions related to mathematical games in their assessments of candidates. In addition, the Ministry of Education should incorporate arithmetic games-based questions into the assessment of preschoolers and primary school pupils.

## References

- Abakpa, B.O. & Iji, C.O. (2021). Effect of mastery Learning On Senior Secondary School Students' achievement in geometry. *Journal of Science Teachers Association of Nigeria*, 1, 165–176.
- Aremu, A. (2018). Strategies for improving the performance of female pupils in Mathematics. *African Journal of Education Research*, 5, 77–88.
- Bilesanmi-Awoderu J.B. (2022). Concept-mapping, students' locus of control, and gender as determinants of Nigerian high school students' achievement in Biology. *Ife Psychologia*, 10(2), 98-110.
- Bowers A. (2016). Teaching with Puzzles. Retrieved from <http://www.education.more4kids.info> on June 23, 2024
- Charles, D., & McAlister, M. (2024). Integrating Ideas about Invisible Playgrounds from Play Theory into Online Educational Digital Games. M. Rauterberg (Ed.): *ICEC 2004*, LNCS 3166, 598 - 601.
- Chen, M.M., Tsai, S., & Chang, C. (2019). Effects of game-based instruction on the results of primary school children taking a natural science course. *Education Sciences*, 9(79),
- Clements, D. H., & Sarama, J. (2021). Early childhood mathematics intervention. *Science*, 333(6045), 968-970.
- Daniels, H. (2016). *Vygotsky and Pedagogy*. Routledge.
- David Kumar D. & Stanley, H.L. (2020). Effect of gender on computer-based chemistry problem-solving. *Electronic Journal of Science Education*, 4(4).
- Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., & Pagani, L. S. (2017). School readiness and later achievement. *Developmental Psychology*, 43(6), 1428-1446.
- Ezeugo, N.C. & Agwagah, U.N.V. (2020). Effects of Concept Mapping on Students' Achievement in Algebra: Implication for Secondary Schools Mathematics Education in the 21st Century. *Abacus: Journal of Mathematical Association of Nigeria*. 25(1), 1-12
- Freedman, J.L. (2022). Media violence and its effect on aggression: Assessing the scientific evidence. Toronto: University of Toronto Press.
- Ginsburg, H. P., Lee, J. S., & Boyd, J. S. (2018). Mathematics education for young children: What it is and how to promote it. *Social Policy Report*, 22(1), 3-22.
- Holland, W., Jenkins, H., & Squire, K. (2022). Video game theory. In Perron, B., and Wolf, M. (Eds). Routledge. Retrieved 14 February 2023 from
- Kebritchi, M. Hirumi. A, & Bai. H. (2018). the effects of modern math video games on student math achievement and math course motivation; Research brief. Unpublished dissertation. College of Education, Department of Educational Technology, Research and Leadership. University of Central Florida.
- Piaget, J. (1954). *The Construction of Reality in the Child*. Basic Books.
- Piaget, J. (1963). *The Psychology of Intelligence*. Littlefield, Adams.
- Flavell, J. H. (1982). Structures, stages, and sequences in cognitive development. In W. A. Collins .(Ed.), *The concept of development* (pp. 43-63). Hillsdale, NJ: Erlbaum.
- Laski, E. V., & Siegler, R. S. (2014). Learning from number board games: You learn what you encode. *Developmental Psychology*, 50(3), 853-864.
- Letuna A. (2021). Game-based learning in primary science and social studies. Proceedings of ICER Conference

- Liu E & Chen P. (2013). The Effect of Game-Based Learning on Students' Learning Performance in Science Learning – A case of conveyance Go, *Procedia - Social and Behavioural Sciences*. 103, 1044-1051
- Maduabum, M.A., &Odili, G.A. (2006) Analysis of students' performance in General Mathematics at SSCE level in Nigeria 1991–2002, *J. Res. Curriculum Teach*, 1, 64–68.
- Majeji, O.I. & Akin, Y.G. (2023). Effects of Game-Based and Exploratory Strategies on Science Content Knowledge and Science Processing Skills of Pre-Primary Children. *Indonesian Journal of Early Childhood Education Studies*, 12(1), 94-111
- Moravick E., Nolte S. and Feeney S. (2013). *Meaningful Curriculum for young children*. 2nd Edition. Boston: Pearson Education, Inc.
- O'Connor, G., Fragkiadaki G. Fleer M. & Rai P. (2021). Early Childhood science education from 0-6: A literature review. *Education science MDPI* 11.178
- Ogbuanya, V.C (2019). Use of games in the evaluation of students' Readiness to learning some concept in Mathematics. Unpublished UG Thesis, UNN.
- Ogunsanwo T. (2013). Developing Children's scientific skills through play based outdoor environment. A paper presented at the 2nd National Conference of the Early Childhood Association of Nigeria on 23rd July at the Faculty of Education, University of Ibadan, Ibadan
- Oludipe, B., and Oludipe, D., (2018). Effects of Gender and Science Anxiety on Nigerian junior Secondary Students' Academic Achievement in Basic Science. *Journal of Education and Practice*, 2(4), 21-29
- Ramani, G. B., & Siegler, R. S. (2018). Promoting broad and stable improvements in low-income children's numerical knowledge through playing number board games. *Child Development*, 79(2), 375-394.
- Salami I. A. (2014). Effects of activity-based strategies on primary school mathematics lesson plan and delivery skills among pre-service teachers in southwestern Nigeria. Unpublished PhD thesis, Dept of Teacher Education, University of Ibadan
- Schaaf R. (2022). Does digital game-based learning improve student time-on-task behavior and engagement in comparison to alternative instructional strategies? *The Canadian Journal of Action Research*, 13(1), 50-64.
- Scott, K. (2016). What is puzzle?
- Spires H., Rowe, J.P. Mott, B.W & Lester J.C. (2021). Problem solving and game-based learning: Effects of middle-grade students' hypothesis testing strategies on science learning outcomes. *Journal of Educational Computing Research*, 44(4), 445-464
- Trybus, J. (2015). Game-Based Learning: What it is, Why it Works, and Where it's Going, New Media Institute. Retrieved from
- Unodiaku, S.S. (2020). Development and Validation of Mathematics Readiness Test for Senior Secondary schools. Unpublished Ph.D Thesis, University of Nigeria, Nsukka.
- Unodiaku, S. S. (2021). Development and validation of Simultaneous Linear Equations Assessment Instrument Among Junior Secondary School Nigerian students. *International Journal of Education, science, mathematics and Environmental studies, Institute of Education, University of Abuja*, 3 (1), 49 – 64.
- Usman, K.O & Nwoye, M.N. (2010). Effect of Graphical – symbol Approach on the pupils' Achievement in Ratio at upper primary school level in Nsukka central local Government area. *Journal of Mathematical Sciences Education*, I(1),123.
- Wei, F.F., Sopory, P., & Hendrex, K. G. (2019). The effects of educational computer games on preschool children's learning; Gender differences playing complete and non-complete mathematics games. Paper presented at the annual meeting of the international communication association, Dresden. *International congress center, Dresden, Germany online*. Retrieved on 2023-05-25, from .

Zirawaga, V. S., Olusanya, A. I., & Maduku, T. (2017). Gaming in education: Using games as a support tool to teach History. *Journal of Education and Practice*, 8(15), 55-64.

# Perception of Classroom Environment and Academic Achievement in Mathematics among Primary School Pupils in Calabar Metropolis, Cross River State

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## Abstract

*The study investigated the perceived correlation between classroom environment and academic attainment of primary school pupils in mathematics in Calabar Metropolis. An ex-post facto approach was used to guide the research methodology. The research adopted a stratified random sampling technique and a total of 144 pupils were chosen at a random from the larger population of 5594 primary six pupils in Calabar Metropolis. Data for the study were gathered using a questionnaire entitled "Perception of Classroom Environment Questionnaire" (PCEQ) and "Mathematics Achievement Test" (MAT). Specialists from the Educational Test and Measurement Department of the University of Calabar, validated the PCEQ while the content of the MAT was validated by specialists in Mathematics Department of the same university. The PCEQ's reliability was assessed using Cronbach's Alpha method, with reliability coefficients ranging from 0.73 to 0.85 for the subscales, while Kuder – Richardson K-R-20 method was used for the MAT with a coefficient of 0.72. The data gathered was subjected to descriptive statistical analysis, and the relationships were examined using Pearson Product Moment Correlation (PPMC) at 0.05 significance level. The result of the analysis showed that classroom facilities and instructional facilities had a significant relationship with academic achievement in Mathematics among primary school pupils in Calabar Metropolis. It is concluded that classroom environment is a key determinant of academic achievement of elementary school pupils in Mathematics in Calabar metropolitan area of Cross River State, Nigeria. It was recommended among others that pupils, policymakers, head teachers, teachers, parents, and researchers should pay adequate attention to classroom environment as an important factor for improved academic achievement in Mathematics.*

**Keywords:** Classroom environment, Academic achievement, Classroom facilities, Instructional Facilities.

## Introduction

Education is a systematic training that leads to knowledge, skills, and character enrichment. It is also the systematic way by which the latent abilities of individuals are designed so that they may be useful to themselves and society (Doharey, Verma, Verma & Yadav 2023).

Primary education, which is the centre of this study, is known to be a major bedrock for the social-economic and political growth of any nation (Etor, Ekanem & Sule, 2024). It aims at learning at an elementary level of complexity with little expertise (International Standard Classification of Education ISCED, 2011). Progression of many people's skills and knowledge through coaching is part of the requirements for national advancement and this begins at the primary level for many nations, including Nigeria. Therefore, any threat to the quality of education at this level cannot be disregarded.

For many Nigerians, primary education starts at around age five, where the pupil will spend six years



after which the pupil will obtain a certificate of primary school completion(Federal Republic of Nigeria FRN, 2013). The Subjects taught at this elementary stage in Nigeria include: English, Mathematics, Agricultural Science, Social Studies, Civic Education and any one of Hausa, Yoruba, Igbo. To qualify for admission into any Nigerian Federal, State, or private secondary school, the pupil must take a common entrance examination (Ige, 2024).

Mathematics is an important subject and in the acknowledgement of this, the Federal Government of Nigeria has mandated mathematics to all students in elementary and high schools. The importance of mathematics in understanding the philosophies and structures of science, technological progress, nation development and the interplay of association existing among disciplines is very critical and cannot be overemphasized. However, the rate at which students fail this subject is very alarming.

There is a general attitude of many to Mathematics either at primary, secondary or even at tertiary level, which often result to mass failure in the subject. The underlying problem to this attitude most times is been investigated at post primary school level neglecting the foundation of the pupils. There is a saying that if the foundation be destroyed what can the righteous do. The reason I supposed is that, most of the pupils at primary school only needed to pass their common entrance, which is an aggregate of scores in Mathematics, English and General Paper. Once they get a score above the cut off mark, straightway they gained admission to Secondary School. Since the pass mark is a function of the aggregate scores of the three subjects, their performance in each subject is often not considered important. However, the result of the common entrance examination of pupils in Calabar Metropolis from 2017 to 2019 has shown that majority of these pupils failed Mathematics though did well in English and General Paper. This work is looking into this omission, which has been unnoticed for so long.

#### Primary six pupils' performance in Mathematics

Schools	Examination Year	Total number of Candidates that enrolled.	Candidates that scored above 50 in Mathematics	Above 50 (%)
School A	2017	78	25	32.1
	2019	60	16	26.7
School B	2017	106	29	27.3
	2019	87	9	10.3
School C	2017	67	1	1.5
	2018	77	22	28.6
	2019	99	58	58.6
School D	2017	114	3	2.6
School E	2017	33	12	36.4
School F	2017	54	18	33.3
School G	2019	115	50	43.5

Source: - Cross-River State Ministry of Education.

Generally, in order to resolve the long-standing challenge of Mathematics underachievement among students, Federal Government of Nigeria through the Mathematical Association of Nigeria (MAN) launched a program tagged 'War Against Poor Achievement in Mathematics' (WAPAM), which was a project to enhance mathematics instruction in schools. The project also catered for how to teach the subject as well as how to deliver it to pupils in order to boost their interest and performance. However, with WAPAM, MAN could not resolve the issues of Mathematics achievement deficits among students in Nigeria post-primary institutions. Thereafter, the

National Mathematical Centre (NMC) in Abuja initiated a Mathematics Intervention Program through the Director of the Centre. The Science Teachers Association of Nigeria (STAN) also made attempts to address the issues surrounding science, technology and mathematics in Nigeria through various workshops, projects and programmes. Yet, the sad situation persists.

The learning environment which includes classroom facilities, instructional materials, are vital in the cultivation of intellectual, emotional, and physical abilities that aid academic achievement in Mathematics. Comfortable classroom enhances teachers' effectiveness as well as provide opportunity for pupils ask questions, engage more fully in the calculation process and get more personalised attention. The attitudes of students to Mathematics at primary and secondary schools' level have been discovered to be greatly influenced by what they encounter in classrooms (Onah, 2017). The application of instructional materials in instructing mathematics has the capacity of making the subject less abstract and application oriented.

Classroom is a place where teaching and learning takes place. A typical classroom has structural and symbolic facilities. The structural facilities are the lighting, noise, air quality, temperature in the classroom while the symbolic facilities are the objects like desk, chairs, whiteboard etc. found in the classroom as well as the wall decorations. These facilities have been found to have impact not only on teachers and students but also on the teaching-learning process (Cheryan, Ziegler, Plaut & Meltzoff, 2014).

Empirical studies have shown that classroom facility affects how well students do in Mathematics. In a research investigation to find out the effect of classroom facilities, which are classroom painting, lightings, air quality, seat, seat arrangement, chalkboard, on the academic achievement of students in mathematics, Shamaki (2015) selected randomly 337 SS 2 students drawn from a target population of 1682 students in Potiskum of Yobe State. The collected data were subjected to t-test and descriptive statistical analysis. His findings revealed that dull classroom paintings and lightings have negative effects on the students' academic performance in mathematics, mathematics lesson becomes boring due to little ventilation, bad seat arrangement makes mathematics uninteresting, and that the students sitting at the back are affected by the class chalkboard since they cannot clearly see the writings on it. The result actually demonstrated that, at 0.05 significance level, the variation in average performance between pupils who were taught in a boring classroom and those who were educated in an ideal one was clear.

Studies have also shown that classroom facilities affect students' performance in other subjects besides Mathematics. In a study by Wali, Abulfathi and Mustapha (2019), they examined classroom environment's impact on students' academic achievement in English language, and in correlation to the difference in performance by gender. Survey and Correlation research methodologies were employed for the study. Sample for the investigation was 401 students representing 20% of the study's total population, which were randomly selected from among the 2003 SS3 students in the chosen schools and 183 teachers. Self-developed questionnaires and proforma were used for the collection of data for this study. The data collected were analyzed using descriptive statistics of Mean and Standard Deviation and Multiple Regression. Their findings revealed that the classroom environment strongly impacts the academic performance of students in the English Language. They conclude that when the school enables an optimum environment, both students and teachers tend to be highly inspired toward teaching and learning.

Instructional materials are a diverse array of equipment deployed by educators to enhance teaching-learning process and to stimulate self-activity by the pupils. We have several types of instructional materials that can be used in learning, it is divided into three major categories based on their sensory appeal, which are audio, visual, and audio-visual (Akpan, Okpara, Okoli & State, 2017). According to Ede, Oleabhiere and Modebelu (2016) instructional materials assist educators in facilitating meaningful learning experiences for students. The quality of education a learner received is usually a function of availability, quality, and access to or the lack of physical structure (instructional facility inclusive) and the entire environment in which learning takes place.

Instructional materials are very important tool in the teaching-learning process of all subjects (Lyimo & Too, 2017). To discover how instructional materials affect the performance of students in Economics, a study was carried out by Oleabhiere and Ede (2016) using the control and experimental groups. In the study, which looked into the effect of instructional materials on senior secondary students' performance in Economics, a quasi-experimental design was adopted. Sixty students sampled for the study were obtained through a simple random sampling, thirty of the sixty students were assigned to the treatment group, and the remaining thirty were allocated to the non-treatment group. It was discovered that after the application of treatment (instructional

material), the treatment group outperformed the non-treatment group. Since the difference in means in the achievement was statistically significant, it meant that the utilization of instructional tools helped the learners to perform better in economics.

Awoyale, Alagbe, Olorunmaiye, & Adewara (2024) in examining the influence of effective usage of Instructional materials on the academic performance of pupils in Mathematics had in total 130 students and 134 teachers as their sample. A descriptive and a quasi-experimental design were adopted for the study. Results from the study demonstrated a high potency of the instructional tools in increasing pupils' achievement in Mathematics.

The findings of Ogundeji, Farayola and Adetunji (2024) in their research on the impacts of educational resources on the academic achievement of college students in Biology in Lagos State corroborate with the findings in the above reviewed studies. The investigation, which also employed a quasi-experimental design, had all the S.S.S 2 students from 2 private schools as its population, out of which 100 were sampled. Analysis of the data was done using t-test. Their report showed a significant difference in the academic attainment of the learners taught with educational resources and those taught without educational resources. The researcher concluded that the learners exposed to educational resources had exceptional performance scores compared with those taught without any material.

Many more researchers have stated some more important functions of instructional tools in facilitating student learning experience alongside their studies. Educational resources help to optimise learning experience (Onyia, 2013). It also assists in the formation of skills, values, abilities, and knowledge by learners in the learning process. (Saglam, 2011). Akpan, Okpara, Okoli and State (2017) submitted that instructional tools enhance learning and aid faster assimilation. Another role of instructional material is that it initiates self-confidence, self-realization, and acts as a drive for students. (Saad, 2017). Other roles are that it gives room to educators and learners for prompt engagement in the learning process, enhances learning objectives and students' interest, conserves time, and also optimises the retention of memory in students (Awolaju, 2016). However, the importance of educational resources in enhancing academic achievement in a school environment cannot be over-emphasized.

A close interaction with pupils in most Nigerian government primary schools shows that these children are barely learning. Many of these pupils cannot read, let alone solve simple arithmetic, which is evidenced in their common entrance results.

However, the Nigerian Government in an attempt to close the gap to improve the performance of primary school pupils had made several efforts by ensuring that quality supervisors are sent periodically to schools for routine checks and inspection, they have organized several seminars, workshops for teachers, they increased their consistency in the payment of teachers' salaries, yet, there seems to be insignificant progress in the students' performance especially with respect to Mathematics. The question that borders the researchers is: could the pupils' low achievement in mathematics be due to their classroom environment?

### **Purpose of the Study**

The primary goal of this research was to determine the perceived relationship between classroom environment and pupils' mathematics success in Calabar Metropolis. The study will focus on the following key objectives to:

- i. investigate the perceived relationship between classroom facilities and academic success in Mathematics among primary school pupils in Calabar Metropolis.
- ii. determine the perceived relationship between instructional facilities and academic success in Mathematics among primary school pupils in Calabar Metropolis.

### **Hypotheses**

The following hypotheses guided the study.

- i. There is no significant relationship perceived between classroom facilities and academic success of primary school pupils in mathematics in Calabar Metropolis
- ii. There is no significant relationship perceived between instructional facilities and academic success of primary school pupils in mathematics in Calabar Metropolis.

### **Methodology**

The study was conducted using an ex-post facto research methodology, which is a research design where

inquiries begin after the fact has happened without involvement from the researcher. Ex-post facto research design fits the research since the quality that already exists (the classroom environment) is compared to the dependent variable (academic performance).

The population study is 5594 primary six pupils in the 46 public primary schools in Calabar Metropolis. The sample school used for the investigation was 12 out of the 46 government elementary schools in Calabar Metropolis selected by hat and draw method. The researcher proportionally sampled the pupils using fifty percent of the pupils in each school, giving an overall of 144 pupils as the sample.

Stratified random technique, which was deployed in this study, is a method that gives each member an equal opportunity for selection, it is a chance event. This technique was employed to enable effective representation of the population, which has equal likelihood of being selected. The researcher wrote the names of all the government elementary schools in Calabar Metropolis on different pieces of paper, each piece was rolled into a paper ball and put in a container to blindly draw the required number of primary schools, which was twelve, that is six for Calabar Municipal and six for Calabar South.

The study's data were gathered using the two instruments (PCEQ and MAT). The researcher conducted a visit to the selected schools and informed the school authority of the intention behind the study. After the formal introduction, the instrument was administered to the pupils with the help of the teachers in the various schools. The pupils were informed on the need to give honest responses to the instruments and that the data gathered will be used exclusively for research purposes. All the instruments distributed were collected after the exercise as the researcher thanked the pupils for their cooperation and the teachers for their assistance.

The data gathered were analysed by Pearson Product Moment Correlation analysis.

## Results

**TABLE 1**  
Descriptive statistics of research variables (N=144)T

SN	Variables	Mean	SD
1.	Classroom facilities	14.08	3.27
2.	Instructional facilities	13.98	3.20
3.	Achievement test in Mathematics	8.30	2.99

Table 1 shows the descriptive statistics (means and standard deviations) that are calculated for the two variables of interest and the achievement test scores. The result indicated that classroom facilities produced a mean value of 14.08, and a standard deviation SD of 3.27, while instructional facilities gave a mean score of 13.98 with SD 3.20. The result finally indicated that the mean of the pupils' performance in Mathematics is 8.30 with SD 2.99.

**TABLE 2**  
Perceived relationship between classroom facilities and academic success of primary school pupils in Mathematics using Pearson Product Moment Correlation Analysis (N=144)

Variables	$\bar{X}$	SD	r-ratio	p-level
Perceived classroom facilities (X)	14.08	3.27	.206*	.013
Academic performance in Mathematics (Y)	8.30	2.99		

\*Significant at .05 alpha level. df=142.



**TABLE 3**

Perceived relationship between instructional facilities and academic success of primary school pupils in Mathematics using Pearson Product Moment Correlation Analysis(N=144)

Variables	$\bar{X}$	SD	r-ratio	p-level
Perception of instructional facilities (X)	13.98	3.20	.221*	.008
Academic performance in Mathematics (Y)	8.30	2.99		

\*Significant at .05 alpha level. df=142.

### Result interpretation

Hypothesis one indicated no significant relationship between perceived classroom facilities and academic success in Mathematics among primary school pupils in Calabar Metropolis. To examine the hypothesis, a correlational analysis using PPMC was carried out on the perceived classroom facilities and Mathematics academic achievement. The analysis result is shown in Table 2.

Table 2 showed that Pupils' perceptions of classroom facilities yielded a mean score of 14.08 (SD = 3.27), while their Mathematics academic achievement had a mean score of 8.30 (SD = 2.99). The result which also revealed that the calculated r-ratio is .206 and p-value is .013 at 142 degrees of freedom is significant in as much as the obtained p-value is less than .05. Thus, the null hypothesis is not accepted. With the obtained value of .206, it means that there is a significant positive relationship between perceived classroom facilities and academic achievement in Mathematics.

The second hypothesis stated that, perception of instructional facilities do not significantly relate with academic success in mathematics among primary school pupils of Calabar Metropolis. To investigate this hypothesis, a correlational analysis deploying PPMC was performed on perception of instructional facilities and Mathematics academic achievement. The result of the analysis is shown on Table 3.

As presented by Table 3, the result indicates that pupils' perceptions of instructional facilities yielded a mean score of 13.98 (SD = 3.20), whereas their Mathematics academic achievement had a mean score of 8.30 (SD = 2.99). Additionally, the study found that the calculated r-ratio of .221 with a p-value of .008 at 142 degrees of freedom is statistically significant since the p-value is less than 0.05. Hence, the null hypothesis that perception of instructional facilities do not significantly relate with academic success in mathematics among primary school pupils in Calabar Metropolis is rejected. With the obtained value of .221, it means that the correlation between perception of instructional facilities and academic achievement in Mathematics is significant.

### Discussion of Findings

It was observed that the classroom facilities of some of the schools visited was nothing to write home about, talking in terms of desks, chairs and white board for the pupils and of course the outcome is what is seen in their performance. According to Asiyai (2014), she reported that motivation and learning for students is strongly dependent on the classroom environment of the student. Whatever, the condition of the classroom environment, this serves as a motivation for these pupils and when the classroom environment is not conducive, it has a high tendency of distracting learning. Mathematics is such a subject that requires high concentration on the part of the pupils and even the teacher, so anything that can serve as a distraction will definitely affect learning.

This research findings corroborates with the research carried out by Shamaki (2015) that investigated the influence some classroom facilities had on students' academic attainment in mathematics. His findings reveals that chalkboard affect students' performance especially those sitting at the back because they cannot see the writings on the chalkboard clearly, as such the student cannot comprehend what is being taught. The findings of



the study also concurred with Wali, Abulfathi and Mustapha, (2019), who assessed the effect of classroom environment on students' academic success in English language, discovered a positive relationship between the variables. They concluded that optimal environment inspires and motivates both learners and teachers. However, the findings of this study does not conform with the findings of Ibrahim, Umar and Clement (2017) who studied the impact of school facilities on secondary school students' performance in Bauchi State. Their findings revealed that school facilities does not have impact on students' achievement.

The use of Instructional materials by teachers creates a collaborative learning environment, leading to a more interactive and engaging classroom experience. This research finding was consistent with the opinions of Awoyale, Alagbe, Olorunmaiye, and Adewara (2024) who described the effectiveness of instructional tools which help pupils to develop strategy pattern in solving fraction problem in Mathematics. In addition, the findings of this study align with the report of Ogundeji, Farayola and Adetunji (2024) who found that students exposed to instructional materials outperformed their peers who received instruction without materials. According to the outcomes of the study on the impacts of educational materials on the academic achievement of secondary school students in Biology in Lagos State, the authors strongly suggested that teachers of Biology should seek out engaging instructional materials that stimulate students' senses, arouse their interest, foster participation, and enhance academic performance.

Additionally, the findings in this study establish the fact that instructional facilities help students to remember the lessons they have learnt. This corroborates the findings of Effiong and Igiri (2015) who researched on the impact of Instructional tools in the teaching and learning of Biology concluded that instructional materials bring learning to life, which in turn enhances good assimilation of the subject matter and ultimately promotes the retention of the subject matter learnt.

## Conclusion

The study investigated perceived relationship between classroom environment and intellectual achievement of elementary school pupils in Mathematics in Calabar Metropolis. The study used variables such as instructional resources and classroom facilities. As indicated by the analysis of the data collected, the outcome of the study was that classroom environment plays a significant role in the academic achievement of primary school pupils in Mathematics in Calabar Metropolis.

## Suggestions

Based on the research findings, the following are suggested.

1. A well ventilated classroom with clear white boards should be made available in classrooms.
2. Mathematics teachers should make good use of instructional material that will help the pupils understand the concept of the mathematics topic being taught.
3. Mathematics teachers should create a more engaging and supportive classroom setting that motivates students and builds up their confidence in Mathematics
4. Government should also ensure that standard classroom facilities and instructional materials are in regular supply to schools.

## References

- Akpan, V. I., Okoli, A. C., Okpara, M. & State, A. (2017). Effect of the use of instructional materials on academic performance of pupils in Ikwuano Abia State. *International Journal of Trend in Research and Development*, 4(1), 247-250.
- Asiyai, R. (2014). Students' perception of the condition of their classroom physical learning environment and its impact on their learning and motivation; *College Student Journal*, 48(4), 714-723.
- Awolaju, B. A. (2016). Instructional materials as correlates of students' academic performance in biology in senior secondary schools in Osun State. *International Journal of Information and Education Technology*, 6(9), 705-709.
- Awoyale O., Alagbe S.O., Olorunmaiye, E.O., and Adewara O.S. (2024) Influence of Effective Usage of Instructional Materials on Primary School Pupils' Academic Performance in Mathematics in Niger State, *International Journal of Education, Learning and Development*, Vol. 12, No.9, pp.1-18,
- Cheryan, S., Ziegler, S. A., Plaut, V. C. & Meltzoff, A. N. (2014). Designing classrooms to maximize student achievement. *Policy Insights from the Behavioural and Brain Sciences*, 1(1), 4-12.

- Doharey, R., Verma, A., Verma, K. & Yadav, V. R. (2023). Education: Meaning, definition & types. Research Gate.
- Ede, M. O., Oleabhiele, E. O. & Modebelu, M. N. (2016). *Fundamentals of Economics Education*. Awka: SCOA Heritage Nigeria Limited.
- Effiong, O. E. & Igiri, C. E. (2015). Impact of instructional materials in teaching and learning of Biology in senior secondary schools in Yakurr L.G.A. *International Letters of Social and Humanistic Sciences*, 62, 27-33.
- Etor, R., Ekanem, E. & Sule, A. (2024). Access and Resource Allocation to Education in Nigeria. *International Education Studies*. 13. 79-79. 10.5539/ies.v13n3p79.
- Federal Republic of Nigeria (2013). National Policy on Education. Abuja: NERDC Press.
- Ibrahim, W. Y., Umar, A. H. & Clement, I. (2017). Impact of school facilities on students' academic achievement. *International Journal of Advanced Research (IJAR)* ISSN 2320-5407.
- Ige, A. M. (2024). Reflections on Provision of Primary Education and Way Forward in Nigeria. *Journal of Educational Research and Evaluation* 3(2), 105-114
- ISCED (2011). The International Standard Classification of Education 2011. *Comparative Social Research* 30, 365–379.
- Lyimo, N. S. & Too, J. K. (2017). Perception of Teachers on Availability of Instructional Materials and Physical Facilities in Secondary Schools of Arusha District, Tanzania. *International Journal of Educational Policy Research and Review*. 4(5), 103–112.
- Ogundeji, L. F., Farayola, B. F & Adetunji, A. A. (2024). Effect of Instructional Materials on Senior Secondary School Students' Achievement in Biology. *Educational Perspectives* Vol. 12, Issue 3
- Onah, N. L. (2017). Managing classroom disruptive behaviours among primary school pupils in Nsukka Central Education Authority. M.Ed thesis submitted to the Department of Educational Foundations, Faculty of Education, University of Nigeria, Nsukka.
- Onyia, M. N. (2013). Instructional materials and design: Issues and challenges. *Academic Journal of Interdisciplinary Studies*, 2(6), 153-158.
- Saad, K. M. (2017). Effects of instructional materials on cognitive achievement of secondary schools students in Economics in Gombe State, Nigeria. *ATBU Journal of Science, Technology and Education*, 5(2), 19-26.
- Saglam, H. I. (2011). An investigation on teaching materials used in Social Studies lesson. *Turkish Online Journal of Educational Technology-TOJET*, 10(1), 36-44.
- Shamaki, T. A. (2015). Influence of learning environment on students' academic achievement in Mathematics: A case study of some selected secondary schools in Yobe State, Nigeria. *Journal of Education and Practice*, 6(34), 40-44.
- Wali, S. Y., Abulfathi, F. A. & Mustapha, A. M. (2019). Impact of classroom environment on students' performance in English Language. *Journal of Education and Practice*, 10(17), 21-26.

# Learning Environment as Correlate of Children's Interest and Academic Achievement in Numeracy Skills Development in Public Early Childhood Development Education Centres

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## Abstract

*The study investigated the relationship between the learning environment, children's interest, and academic achievement in numeracy skills within public Early Childhood Development Education (ECDE) centres in Pankshin Local Government Area, Plateau State. Three research questions and two hypotheses guided the study, tested at a 0.05 significance level. The study adopted a correlational research design, sampling 50 children from 5 public ECDE centres across 6 districts using simple random sampling. Data were collected using a structured 8-item Quality of Early Childhood Development Education Questionnaire (QECDEQ) to assess ECDE quality, a 10-item Learning Environment and Children's Interest Observation Checklist (LECIOC) to measure children's interest in numeracy, and a Numeracy Achievement Test (NAT) to evaluate numeracy skills. The instruments were validated by experts and tested for reliability, yielding indices of 0.78, 0.74, and 0.76, respectively. Data were analyzed using mean and standard deviation for research questions and Pearson Product Moment Correlation Coefficient for hypotheses testing.*

*Findings revealed that the overall quality of public ECDE centres in Pankshin LGA is inadequate, with most learning environments failing to meet acceptable standards. However, a significant positive relationship was found between the learning environment and children's interest and achievement in numeracy. Children in more conducive environments showed greater enthusiasm and higher numeracy performance. Based on the findings, it was recommended to enhance classroom design and establish clear standards for ECDE environments to ensure consistency and quality among others.*

**Keywords:** Classroom environment, interest, numeracy skills, academic achievement

## Introduction

Education is the single most important instrument for national development. Without the enlightenment education provides, one could imagine where the world and people would have been stuck in perpetual cycle of stagnation and ignorance. This is because education is the vehicle which drives technological, social, political and economic development of any nation. It is a means by which the society ensures its stability. It is through the educational system that young members of the society are taught the expected behaviour. Through the educational system, people are taught to meet changing situations. Schools are opened by communities not only to preserve the culture and maintain continuity but also to bring about progressive change. Education among other social institutions, is a vehicle for changing society through inculcating in children the right knowledge, skill, attitude and norms through the teaching of Early Childhood Education (ECE) in schools.

Similarly, Early Childhood Education is an education provided to children prior to their entry into primary school. ECE offers learning and educational activities with a holistic approach to support children's early cognitive, physical, social, and emotional development. It introduces young children to organized instruction outside of the family context, aiming to develop skills necessary for academic readiness and prepare them for entry into primary education (UNESCO, 2024). ECE is a term used to describe both formal and informal educational programs that guide the growth and development of children from birth up to the age of eight (Buergo, 2022). The Federal Republic of Nigeria (FRN, 2013) in her National Policy of Education defines Early Childhood Care and Development (ECCDE) as the care, protection, stimulation, and learning promoted in children aged from 0-4 years in crèche or nursery. As such, the FRN (2013) stipulate among other objectives are to effect smooth transition from home to school, preparing the child for primary education, and introducing

rudiments of numbers, letters, colors, shapes, forms, etc., through play. In order to achieve the ECCDE objectives of the FRN (2013) children learning should take place in a conducive and stimulating learning environment.

Furthermore, learning environment in ECE is a place where learners feel comfortable, encouraged, and inspired by their surroundings to learn. Movchan (2024) defines learning environment as the physical and psychological space in which learning takes place. A well-organized learning environment in ECE allows more time for classroom interactions and positively supports children's development in learning (Karlidağ, 2021). It provides learners with a crucial role in shaping their numeracy learning skills, behavior, attitude, and overall development. Learning environment is more than just physical spaces, a right learning environment fosters children numeracy skills development and ensures that they feel safe, secure, empowered, and flexible in making sense of their environment. Ikegbusi, Egwu and Iheanacho (2021) maintained that learning environment plays a vital role in determining how learners perform or respond to circumstances and situations around them. This implied that no society is void of environmental influences. The learning environment determines to a large extent how children behave and interacts, that is to say that the environment in which children find themselves tends to mold their skills, behaviour, attitudes and knowledge so as to meet the demands of their development. Learning environment is important in developing and stimulating children's interest in numeracy skills.

Specifically, Numeracy in early childhood refers to the foundational mathematical skills and understanding that children develop during their early years, typically from birth to around age eight. The New South Wales Government (2024) defines numeracy in the Early Years learning framework as the capacity, confidence, and disposition to use mathematics in daily life. Children bring new mathematical understandings through engaging with problem-solving. It is essential that the mathematical ideas with which young children interact with, are relevant and meaningful in the context of their current lives. Caregivers require a rich mathematical vocabulary to accurately describe and explain children's mathematical ideas and to support numeracy development. The terms mathematics and numeracy are positioned as separate from one another (Millan, 2024). In early childhood, however, numeracy and mathematics can be viewed as interconnected with each building upon and informing the other. Numeracy skills in early childhood encompass a wide range of abilities that allow children to engage with numbers and basic mathematical concepts in meaningful ways. These skills are crucial as they set the stage for more complex mathematical understanding and problem-solving abilities in later years. In early childhood, numeracy skills are nurtured through playful, everyday activities and interactions that help children make sense of the world around them. These skills include: Number Sense, Counting, Sorting, Basic Arithmetic, Measurements, Spatial Awareness etc. For children to develop numeracy skills effectively, a good and conducive learning environment is essential to stimulate their interest toward acquisition of numeracy skill.

Moreover, as children are exposed to a range of toys, activities, playmates, and play settings, they develop personal preferences. Having personal interests is common, and some children develop extreme interests in specific things. Ivanna, Sheri, Jo-Anne, and Carla (2018) have found that these interests are associated with schematic knowledge development. Parents and caregivers play a crucial role in the development and maintenance of their children's interest in numeracy by providing interest-related activities and materials that enhance their children's interest in developing numeracy skills. Interest in numeracy skills offers positive learning opportunities and the ability to perform better in numeracy-related subjects in both basic and higher education in future. Interest in learning is related to liking, attention, and a somewhat fixed interest in certain things (Ivanna *et.al.*, 2018). For children to be exposed to the rudiments of numbers, letters, colors, shapes, and forms, their interest must be considered. Interest in numeracy at the elementary level could help determine a child's readiness to learn mathematically inclined subjects at other level of education. Darmadi (2017) opined that interest is a condition that reflects the relationship between something that is observed or experienced and one's own desires or needs. In other words, there is a tendency for what a child sees and observes to be related to their desires and needs. Ezike (2018) also sees interest as a psychological state of having an affective reaction and focus attention for particular content. If learning materials within the learning environment do not align with the children's interest, they will not be serious about learning. Children find it easier to learn numeracy when interest-driven materials and activities are put in place to encourage numeracy



skills development which in turn enhances their academic achievement. Children's interest in numeracy skills development may enhance children's academic achievement in numeracy.

Consequently, academic achievement represents the performance outcome that indicates the extent to which a person has accomplished specific goals which were the focus of activities in an instructional environment (Ezike, 2018). Academic achievement is the ability to study and remember facts and being able to communicate this knowledge orally or in written form even in an examination condition (Kpolovie, Joe & Okoto, 2019). Academic achievement is the ability to study and remember facts and being able to communicate knowledge acquired orally or in written form even in an examination condition. Also, Akunne and Anyamene (2021) stated that, academic achievement is described as the ability to study and remember subject content and being able to communicate such knowledge orally or in written form even in an examination condition. Nonetheless, Early childhood education level plays crucial roles in laying foundation for further education of learners. A child's academic achievement is influenced by his school environment. According to Barrett, Davies and Zhang (2015) a good classroom arrangement inspires and encourages pupils to easily interact with each other and develop various skills including language and social behaviour. Numeracy skills are also been developed in a well equipped and conditioned learning environment.

### **Statement of the Problem**

In Pankshin Local Government Area of Plateau State, there is growing concern among educators, parents, and policymakers about the quality of the learning environment in public Early Childhood Development and Education (ECDE) centers. Despite educational reforms and investments, significant gaps remain in the academic achievement and interest levels of children in numeracy skills development. Research highlights the importance of a conducive learning environment for fostering children's interest and enhancing their academic performance, especially in early education. However, many public ECDE centers in Pankshin suffer from inadequate facilities, insufficient learning materials, overcrowded classrooms, and untrained teachers. These deficiencies may hinder children's ability to develop essential numeracy skills, which are critical for their future academic success. Therefore, it is essential to investigate the correlation between the learning environment in public ECDE centers and children's interest in numeracy and academic achievement.

### **Purpose of the Study**

The purpose of the study is to examine learning environment as correlate of children's interest and academic achievement in numeracy skills development in public early childhood development education centres in Pankshin Local Government Area of Plateau State. Specifically, the study sought to determine to:

- identify the quality of Early Childhood Development Education (ECDE) centres in Pankshin Local Government Area of Plateau State.
- examine the relationship between the learning environment and children's interest in numeracy skills development in public ECDE centres in Pankshin Local Government Area.
- examine the relationship between the learning environment and children's academic achievement in numeracy skills development in public ECDE centres in Pankshin Local Government Area.

### **Research Questions**

The following research questions guided the study.

- What is the quality of ECDE centres in Pankshin Local Government Area of Plateau state?
- What is the relationship between learning environment and children's interest in numeracy skills development in public ECDE Centres in Pankshin Local Government Area?
- What is the relationship between learning environment and children's academic achievement in numeracy skills development in public ECDE Centres in Pankshin Local Government Area?

### **Research Hypotheses**

The following null hypothesis guided the study.

- H<sub>0</sub>1: There is no significant relationship between learning environment and children's interest in numeracy skills development
- H<sub>0</sub>2: There is no significant relationship between learning environment and children's academic achievement in numeracy.



## Methodology

This study was carried out to examine the relationship between learning environment on children interest and academic achievement in numeracy skills in public ECDE Centres in Pankshin Local Government Area of Plateau State. Two research questions guided the study with two formulated hypotheses. The study adopted a correlational design, because the study examined the relationship between learning environment on children interest and academic achievement. The population for this study comprises of 220 children in 5 public ECDE schools in Pankshin LGA. The sample size for this study comprised of 50 children, selected using simple random sampling techniques from the selected 5 ECDE centres across the study area. The researcher developed an 8-item questionnaire titled "Quality of Early Childhood Development Education Questionnaire (QECDEQ)" to assess the quality of ECDE centres, 10-items structured observation checklist, titled "Learning Environment and Children Interest Observation Checklist (LECIOC)" to assess the children interest in numeracy skills. Also, 10-items Numeracy Achievement Test (NAT) was developed by the researcher to examine their numeracy skills. The instruments were validated using face and content validity by experts, in the Department of Early Childhood Care and Education and Measurement and Evaluation unit. Reliability test was conducted using Cronbach Alpha and split-half to ascertain the internal consistency of the instruments. Therefore, reliability index of 0.78, 0.74 and 0.76 were obtained. A four-point rating scale of High quality, Moderate quality, low quality and No quality. Rated as 4,3,2, and 1 based on the quality observed. A five-point rating scale of Always observed, frequently observed, occasionally observed, rarely observed and not observed. Rated as 4,3,2,1 and 0 based on the Interest observed. The data were analyzed using Mean and standard deviation to answer the research questions and Pearson Product Moment Correlation Coefficient to establish the relationship. Mean rating of 2.50 and above were regarded as accepted while below 2.50 were regarded as rejected.

## Results

**Research Question One:** What is the quality of ECDE centres in Pankshin Local Government Area of Plateau state?

**Table 1**  
**Quality of ECDE centres in Pankshin Local Government Area of Plateau state**

S/n	Item	NQ	LQ	MQ	HQ	Mean	Decision
1	How is the overall condition of the classrooms?	10	13	15	13	2.24	Rejected
2	Is there a safe and secure playground for children?	18	15	12	5	1.84	Rejected
3	Is your classroom big enough?	8	12	22	8	2.22	Rejected
4	Do you have enough toys to play with?	9	16	18	7	2.14	Rejected
5	Do you feel safe at school?	14	17	11	8	1.98	Rejected
6	Do you have enough books to read?	20	15	12	3	1.92	Rejected
7	Is your classroom clean and beautiful?	17	15	11	7	1.84	Rejected
8	Do you like your teacher?	8	12	18	12	2.22	Rejected
9	Are the bathrooms clean?	21	13	12	4	1.94	Rejected
	Sectional Mean					2.04	

Table 1 above reveals the assessment of the quality of ECDE centres in Pankshin Local Government Area of Plateau State. 9 items were used to observe the quality of ECDE Classrooms, all were rejected base on 2.50 decision point. Items such as the overall condition of classrooms (2.24), the safety and security of playgrounds (1.84), the adequacy of classroom space (2.22), the availability of toys (2.14), the feeling of safety at school (1.98), the availability of books (1.92), classroom cleanliness (1.84), and bathroom cleanliness (1.94)

are all below 2.50. Consequently, all these aspects are rejected as they do not meet the expected quality standards. Furthermore, the sectional mean of these items is 2.04, which also falls below 2.50, reinforcing the conclusion that the overall quality of the ECDE centres in Pankshin Local Government Area is inadequate or are not upto standard.

**Research Question Two:** What is the relationship between learning environment and children's interest in numeracy skills development in public ECDE Centres in Pankshin Local Government Area?

**Table 2**  
**Children interest in numeracy skills Development in public ECDE**

S/N	Item	Observation	NO	RO	OO	FO	AO	Mean	Decision
1.	Engagement in Numeracy Activities	Children actively participate in numeracy games and activities.	5	13	5	12	15	2.30	Rejected
2.	Interest in Counting and Number Activities	Children show excitement and enthusiasm during counting and number activities.	2	5	12	18	13	2.70	Accepted
3.	Use of Numeracy Resources	Children independently choose and use numeracy-related toys, books, and materials.	5	11	10	15	9	2.10	Rejected
4.	Initiation of Numeracy Play	Children initiate their own numeracy-related play or activities without prompting.	8	12	8	12	10	1.98	Rejected
5.	Attention During Numeracy Lessons	Children remain focused and attentive during teacher-led numeracy lessons.	5	8	15	14	8	2.22	Rejected
6.	Verbal Engagement with Numeracy	Children talk about numbers, counting, and other numeracy concepts during play or activities.	12	6	10	15	7	1.88	Rejected
7.	Positive Attitude Toward Numeracy	Children display positive attitudes and enjoyment while engaging with numeracy activities.	5	12	12	9	12	2.18	Rejected
8.	Collaboration in Numeracy Tasks	Children work together with peers on numeracy-related tasks or games.	3	8	7	17	15	2.72	Accepted

9.	Creativity in Numeracy Activities	Children demonstrate creativity by inventing new numeracy games or finding unique ways to engage with numeracy materials.	5	9	15	11	10	2.04	Rejected
10.	Problem-Solving Using Numeracy	Children use numeracy skills to solve problems during play or structured activities.	8	12	15	9	6	1.84	Rejected
	Sectional Mean							2.20	

Table 2 above reveals the assessment of children's interest in numeracy skills development within public ECDE centers in Pankshin Local Government Area. The children engagement in numeracy activities (mean = 2.30), use of numeracy resources (mean = 2.10), initiation of numeracy play (mean = 1.98), attention during numeracy lessons (mean = 2.22) among others are all rated below 2.50, leading to their rejection. However, children show excitement and enthusiasm during counting and number activities (mean = 2.70) and collaborate well with peers on numeracy-related tasks (mean = 2.72), which are above 2.50 and are therefore accepted. The overall sectional mean of 2.20 indicates that the learning environment in these ECDE centers generally does not foster children's interest in numeracy skills development effectively. Most areas require significant improvements to enhance numeracy engagement among children.

**Research Question Three.** What is the relationship between learning environment and children's academic achievement in numeracy skills development in public ECDE Centres in Pankshin Local Government Area?

**Table 3**  
**Mean achievement Result of children in numeracy**

S/N	Schools	N	Average Score
1.	School 1	10	45.99
2.	School 2	10	43.36
3.	School 3	10	46.02
4.	School 4	10	45.35
5	School 5	10	4.42
	Sectional Mean		37.03

Table 3 presents the academic performance of children in public ECDE centres in Pankshin Local Government Area following the administration of the Numeracy Achievement Test (NAT). The average scores across the schools range from 43.36 to 46.02, indicating a moderate level of achievement in most schools. However, School 5 significantly underperformed with an average score of just 4.42, which notably lowers the overall sectional mean to 37.03. This disparity suggests that while most schools are performing at an adequate level in numeracy, there is a critical need for targeted interventions to support underperforming schools like School 5, thereby improving the overall numeracy outcomes in the ECDE centres in the area.

**Hypothesis 1:** There is no significant relationship between classroom environment and children's interest in numeracy skills development in public early childhood care development and education centres in Pankshin Local government area of Plateau State.

**Table 4**  
**Correlation Coefficient showing the relationship between classroom environment and children interest in numeracy**

Variable	N	Mean	Std.Dev	R	Sig	Remark
Learning environment	50	2.04	7.30	.191	.005	Significant
Children's interest	50	2.20	2.82			

Results of analysis presented in table 4 reveals that the correlation coefficient(r) is significant at  $P < .05$  ( $r = .191$ ,  $P < .05$ ). This implies that the null hypothesis of no significant relationship is rejected indicating a relationship between classroom environment and children's' interest in numeracy public early childhood care development and education centres in Pankshin Local government area of Plateau State.

**Hypothesis two:** There is no significant relationship between learning environment and children's' academic achievement in numeracy skills development in public ECDE Centres in Pankshin Local Government Area.

**Table 5**  
**Correlation Coefficient showing the relationship between learning environment and children academic achievement in numeracy**

Variable	N	Mean	Std.Dev	R	Sig	Remark
Learning environment	50	2.04	.483	.12	.031	Significant
Academic achievement	50	4.12	2.82			

Result of analysis shown in table 5 reveals that the correlation (r) is significant at  $P < .05$  ( $r = .12$ ,  $P < .05$ ). This implies that the null hypothesis of no significant relationship is rejected indicating a significant relationship between classroom environment and children's academic achievement in numeracy in public early childhood care development and education centres in Pankshin Local government area of Plateau State.

### Discussion of Findings

This study aimed to determine if a relationship exists between one independent variable (Learning environment) and two dependent variables (children interest and academic achievement in numeracy). The results show a significant positive relationship between the classroom environment and both children's interest and academic achievement. This finding aligns with Ekpo and Imo (2019) found that classroom climate significantly affects children's academic achievement in Social Studies. Sang (2019) reported that preschool children in a favorable classroom environment in Uasin Gishu County, Kenya, performed better in Mathematics than those in an unfavorable environment. These findings are further supported by research from Indrawan and Pratomo (2021) and Mahaputra and Saputra (2020), who noted that a positive school culture, strong ethos, and supportive interactions boost student motivation. Havidz and Mahaputra (2020) and Zulhendra and Nofrialdi (2022) also found that a distraction-free learning environment enhances academic achievement. Furthermore, Chong and Ali (2022) demonstrated that motivated students, driven by aspirations and a supportive environment, achieve better academically. The study underscores the importance of a positive learning environment in fostering both children interest and academic achievement.

### Conclusion

From the result of the study, it could be concluded that learning environment is a vital factor that can affect children's interest in learning. Interest has the potential to dictate the level of children's motivation, academic achievement and subsequent commitment in any activity.

## Recommendations

Based on the findings of this study, which revealed a positive relationship between learning environment and children's interest and academic achievement in numeracy skills development. The researcher hereby recommends that:

- Care givers should enhance classroom design to create a stimulating and well-organized learning environment that fosters exploration and curiosity. This could involve incorporating age-appropriate numeracy materials like counting blocks, puzzles, and manipulatives in designated activity areas.
- Caregivers should also incorporate engaging numeracy activities in planning lessons that utilizes varieties of teaching strategies, such as games, songs, and hands-on activities to make learning numeracy concepts fun and interactive to children.
- Policymakers should develop guidelines for ECDE classroom environment and establish clear guidelines and standards for the physical layout, resources, and teacher-to-children ratios within ECDE centres. This will ensure consistent quality and promote optimal learning environments. Sufficient resources for ECDE centres to acquire age-appropriate learning materials and maintain a stimulating classroom environment for learning efficiency.

## References

- Akunne, I.L & Anyamene A.N. (2021). Locus of control and self-esteem as correlates of secondary school students academic achievement in English Language in Anambra State. *Asian Journal of Advanced Research and Reports*. DOI:10.9734/ajarr/2021/v15i230366
- Barrett, P., Davies, F., and Zhang, Y.(2015). The impact of classroom design on pupils' learning: Final results of a holistic, multi- level analysis. *Building and Environment*, 89, 118-133. doi.org/10.1016/j.buildenv.2015.02.013
- Buergo, M.G( 2022) Early Childhood Vs Preschool Education.
- Chong, D., and Ali, H.(2022). Literature review: competitive strategy, competitive advantages, and marketing performance on e-commerce shopeenidonesia. *Dinasti International Journal of Digital Business Management*, 3(2), 299–309.
- Darmadi, K., (2017) Effect of blended learning to academic achievement. *Journal of Human Sciences*, 14(1), 308.
- Ekpo, E.E & Imo M.O(2019) Classroom Climate and Students' Academic Achievement in Social Studies in Cross River, Nigeria. *African Research Review* 3(4). DOI:10.4314/afrrrev.v3i4.47576
- Ezike B.U (2018). Classroom environment and academic interest as correlates of achievement in Senior Secondary School chemistry in Ibadan South West Local Government area, Oyo State, Nigeria. *Global Journal of Educational Research*. 17:61-71.
- Fardlillah, Q & Suryono, Y.(2018). Physical Environment Classroom: Principles and Design Elements of Classroom in Early Childhood Education. *Advances in Social Science, Education and Humanities Research*, vol 296
- Havidz, H. B., & Mahaputra, M. R. (2020). The Factor Which Influences It Infrastructure: Software, It Flexibility and Organizational Performance (Study of Management Information Systems Literature). *Dinasti International Journal of Digital Business Management*, 1(6), 1023–1031.
- UNESCO (2024). Ikegbusi, N. G., Nonye E.C., & Iheanacho, R. C. (2021). Influence of school environment on academic. *Journal of Educational Research and Development*; 4 (2); 217 – 231 DOI: 10.9331/japr/2021/v15i330366
- Indrawan, J., & Pratomo, R. R. (2021). Conflict Resolution Mechanisms in ASEAN: ASEAN as a Conflict Facilitator. *Journal of Hubungan Internasional*, 17(2), 172 - 185. DOI.org/10.26593/jihi.v17i2.3830.172-185
- Ivanna L, Sheri L, Jo-Anne L, Carla (2013) The Role of Child Interests and Collaborative Parent–Child Interactions in Fostering Numeracy and Literacy Development in Canadian Homes *Early Childhood Education Journal* 42(4) DOI:10.1007/s10643-013-0604-7
- Karlıdağ, O.I. (2021) Creating Learning Environments in Preschool Classrooms: Perspectives of Pre-service Preschool Teachers. *International Journal of Progressive Education*, 17(3). DOI: 10.29329/ijpe.2021.346.21



- Kpolovie, P. J., Joe I.A., & Okoto, T (2014). Academic Achievement Prediction: Role of Interest in Learning and Attitude towards School, *International Journal of Humanities Social Sciences and Education* (IJHSSE) 1 (11), 73-100. ISSN 2349-0381
- Mahaputra, M. R., & Saputra, F. (2021). Literature Review the Effect of Headmaster Leadership on Teacher Performance, Loyalty and Motivation. *Journal of Accounting and Finance Management*, 2(2), 103–113
- Malik, R. H., & Rizvi, A. A. (2018). Effect of classroom learning environment on students' academic achievement in mathematics at secondary level. *Bulletin of Education and Research*, 40(2), 207–218.
- Millan M. C (2024) The Imperative for Teachers to Master Foundational Numeracy, retrieved on 25 June, 2024
- Movchan, S (2024, February 15). What Makes a Good Learning Environment. Raccoon Gang. on May 22, 2024
- Sang, C. J., 2013. Effect of classroom environment on academic performance mathematics of preschool children. In pioneer zone, Uasin Gishu County. Unpublished Med dissertation in Early Childhood Department of educational Communication and Technology, University Nairobi. x +72
- Zulhendra, K., & Nofrialdi, R. (2022). Petty Cash Accounting Analysis on CV Min Java Farm. *Journal of Accounting and Finance Management*, 3(1), 28–35.

# Evaluation of Psychosocial Variables Prevalence on Academic Performance of Pupils in Literacy Skills in Public Primary Schools, Lagos State

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## **Abstract**

*The study investigated psycho-social variables prevalence on academic performance of pupils in literacy skills especially in public primary schools in Lagos State. Two objectives were formulated to guide the focus of this study as survey research design of correlation approach was employed. This design type seeks to determine the relationship and association between dependent and independent variable. Population comprise all Pupils in public primary schools in Lagos State while target population was Basic 5 pupils in public primary schools in Badagry Local Government Area of the State. A sample of 300 pupils was selected through multi-stage sampling procedure in selection of sample. Two instruments Teacher Made Achievement Test on Literacy Skills (TMATLS) and self-designed Evaluation of Psycho-Social Variables on Academic Performance of Pupils in Literacy Skills Questionnaire (EP-SVAPPLSQ) was used in data collection. The instruments were validated by two experts in the Department of Early Childhood Care Education and Primary Education, in Lagos State University of Education, Lagos State. Suggestions, comments and observations were effected to ensure content validity as reliability of the instruments determined using Cronbach Alpha, reliability form with index value of 0.807 and 0.890 which shows internal consistency achieved. Data generated was analysed through correlation analysis and tested at 0.05 significant level. The study revealed that test anxiety and pupil-teacher interaction are predictors of academic performance. It concluded that in order to improve on pupils' academic performance their anxiety level should be reduced by exposing them to less difficult items.*

**Keywords:** Evaluation, Psycho-Social Variables, Performance, Literacy Skills, Pupils

## **Introduction**

Evaluation is a term used to justify conveyance of value or determination of the worth of a thing or programme. Evaluation is very important because it helps in the execution of sensitive decisions when faced with alternatives choices to make. Nigeria educational system is confronted with diverse degree of challenges which ranges from psycho-social challenges like family problems, socialization, underachievement and poor academic performance, test anxiety, self- efficacy, poor communication network, examination malpractice, low self-esteem, peer group pressure, emotional instability, poor motivation, poor socio-economic background of parents, poor level of pupil-teacher interaction, poor nutrition among others. At the primary school level, these psycho-social variables if not well managed have the likelihood of affecting pupils' performance negatively (Mafikuyomi, Udofia & Busari, 2023).

The act of learning to read and write is a basic skill that unfortunately not all children in the world learn sufficiently. In a time when societal change puts increasing demands on individuals' competence in using written language it is important that schools are able to teach such skills to all children. In many countries major problems include too little time spent in school and lack of teachers. But even in countries where children go to school many years and have teachers, there are problems. The "information society" in practice means a huge rise in informational activities due to the internet and other ICT (Information and Communication Technology) related activities. More people in the world need enhanced literacy skills to be able to find, select, interpret, analyze, and produce information. According to Mullis, Martin, Foy and Drucker (2012), the recommended international benchmark on literacy skills includes four levels, low (locate and retrieve information),

intermediate (make straightforward references), high (make inferences and interpretations with text-based support), and advanced (integrate ideas and information across texts to provide reasons and explanations). The information society requires that more people acquire skills towards the high end of this scale. In Mullis, *et. al.*, (2012) benchmark, even the highest performing countries only barely achieve a score of 20% in the "advanced" category (Mullis *et. al.*, 2012) and just over 60% in the "high" category. So, every country improvement in literacy skills is important.

Psycho-social variable are relative depending on the condition and prevalent study undertaken. According to Meera (2015) Psycho-social variables are conditions that comprises of a range of factors relating to an individuals' psychological state and social environment which potentially have either positive or negative consequences for health and behavioural outcomes. Psycho-social variables consist of psychological risk factors, social and psychological resources. Psycho-social variables can be categorised into two groups of psychological tributes like hostility, depression and hopelessness which exists at the individual level and are likely to be the process of socialization; as the second category is more structural in nature and work conditioned.

On the paradigm of teaching and learning, Ali, Jusoff, Ali, Mokhtar and Salamat (2009) noted that psycho-social variable include self-esteem, emotional state of mind, pupil-teacher interaction level, attitude, disposition, behaviour, self-discipline, test anxiety and self-efficacy (Ali, *et. al.*, 2009). Interaction between teacher and pupil or pupil-pupil plays an important role in determination of pupils' academic performance. The degree of interaction plays a very significant role in the measurement of productivity and performance. Interaction of teacher's with pupils in primary schools goes a long way to enhance good performance due to exchange of ideas, influence of thought and x-ray of opinions with others. Following interaction process, teachers listening skills, communication and professionalism becomes enhanced significantly in an effort to know the world of pupils, which can be envisaged in pupils' academic performance. A study conducted by Fan (2012), established that there exists a significant and positive relationship between teacher-pupils interaction and academic performance. Fan (2012) maintained that pupils who establish mutual bond with their teachers or peers are always bound to have an improved performance than their counterparts who keep to themselves.

Test anxiety another psycho-social variable plays a multi-dimensional role in determination of academic performance of pupils. Test anxiety is a psychological feeling that individuals go through especially when not prepared for such an exposure. It happens when a person feels powerless when exposed to an event or planned activity. Anxiety is sparked in pupils when they think that the evaluating situation, like an examination, is about their level of intelligence, drive, and social abilities. This weakness may sometimes arise due to ill preparation, lack of pre-knowledge on an event, fear of academic failure, difficulty of test items among others. However test anxiety, is the term used to describe the excessive levels of distress that learners experience when it negatively impacts their examination performance (Kendra, 2020). According to Kitsantas, *et. al.*, (2008) test anxiety is characterized by trembling, stress and worrying over potential failure or poor performance during an examination or test. There are many factors that can contribute to learners developing test anxiety, prominent includes phobia of failure, procrastination, past experiences and beliefs, students' poor study habits, inadequate subject knowledge, persistently poor performance and lack of confidence in one's abilities (Kendra, 2020). In a study conducted by Chapell, *et. al.*, in Myrna and Aida (2015). They claimed that anxiety in test is a significant contributor to poor academic performance. They noted that naturally when learners are exposed to examination or test of any kind, they may feel worried, anxious, apprehensive, or uneasy. But the ability of the teacher to calm the nerves of the tensed pupils plays a very significant role in their outcome. In a relative study, Myrna and Aida (2015) learners who are less nervous when taking a test are better able to concentrate on the activities that are necessary for them, whereas learners who are more worried when taking a test tend to pay more attention to their inner selves and worry they experience.

Early age learning is crucial as previous studies of Akin (2010) and Makinde (2020) shows that children who lag behind in early years' reading and writing development encounter considerable difficulties in following education later on in life as (text formation) sentence construction get longer and more complicated thereafter. Given this situation and circumstances, there is a need for identification of other psycho-social variables relationship to academic performance of pupils with respect to literacy development. Drawing on a critical social practice view on possible contributors to performance of pupils, this work is out to investigate notable psychosocial variables as a determinant of academic performance of pupils in literacy skills development especially in public primary schools in Lagos State Nigeria.

### Statement of the Problem

Over the past one decade about 44.1% of public primary schools in Lagos State have witnessed a steady decline in the academic performance of pupils in most standardized literacy examinations (External examiner report, 2023). The prevalent factors often associated with this poor academic performance includes test anxiety, poor teaching methodology, poor development of literacy skills, low self-esteem, lack of interest and motivation, poor interaction relationship between pupil-teacher, unstable government policies, non-use of instructional materials among others. Previous studies by Akim (2010) and Makinde (2020) revealed that prevalent factors of poor development of literacy skills, test anxiety and motivation contributed significantly to poor academic performance. However, failure to identify test anxiety and lack of pupil-teacher interaction in classroom may likely lead to loss of interest by pupils, demotivation, development of phobia for word formation among others which would further compound the worsened poor academic performance of pupils in literacy skill. Hence this research seeks to establish the extent of significant relationship that exists between test anxiety (psychological variable) and pupil-teacher interaction (social variable) to academic performance in literacy skills.

### Objectives of the study

The broad objective of this study is to evaluate the impact of Psycho-social variables on academic performance of pupils in literacy skills especially in public primary schools in Lagos. The specific objectives include:

- identify how psychological variable (test anxiety) academic performance of pupils in public primary schools
- state how social variable (pupils to teachers interaction) relates with academic performance of pupils in public primary schools.

### Research Hypotheses

H<sub>1</sub>: Test anxiety does not have any significant relationship with academic performance of pupils in literacy skills development in public primary schools

H<sub>2</sub>: Pupils-Teachers interaction does not have any significant relationship with academic performance of pupils in public primary schools

### Methodology

Survey research design of correlation approach was used for the study. This design type seeks to determine the nature of relationship that exists between the independent variable (psycho-social variables) and the dependent variable (academic performance in literacy skills) of pupils in public primary school. Population was all Pupils in public primary schools in Lagos State while target population was mainly Basic 5 pupils in public primary schools in Badagry Local Government Area of the State. A sample of 300 pupils was used for this study as multi-stage sampling process was adopted in the selection of sample for this study. First, Badagry Local Government area of Lagos State was identified for the study. The choice of this local government lies on the premise that it is one of the oldest existing local government in the state and also has all the properties (high and low rates of pupils) expected of pupils to exhibit in a given classroom situation. Moreso, it is this same local government where primary school was first established in Nigeria. Secondly, the researcher then introduced stratified approach to stratify the local government into six sections where random sampling technique was also introduced to select six public primary schools from each of the stratified 6 Zones of the local government. Through simple random sampling method fifty pupils were selected from each of the selected schools to account for a total of 300 pupils respectively. Two instruments Teacher Made Achievement Test on Literacy Skills (TMATLS) and a self-designed Questionnaire on Evaluation of Psycho-social Variables on Academic Performance of Pupils in Literacy Skills was used for data collection (QEPVAPPLS). The achievement test was developed with the aid of table of specification as 20 multiple choice objective items were developed using 4-options format. Items in the Questionnaire contained 16-items with pupils expected to respond using 4-likert format of strongly agree, agree, disagree and strongly disagree respectively. The instruments were scrutinized and validated by experts in the Department of Early Childhood Care Education and Primary Education, in Lagos State University of Education, Epe, Lagos State. Reliability of the instruments was determined using Cronbach Alpha a reliability form. An index value of 0.807 and 0.890 was derived on 20 pupils in one of the public primary

schools in Alimosho LGA. Internal consistency was achieved as data generated was analysed through the use of Pearson product moment correlation analysis and tested at significant level of 0.05 respectively.

### Results

H<sub>1</sub>: Test anxiety does not have any significant relationship with academic performance of pupils in literacy skills development in public primary schools

**Table 1**  
**Correlation between Test anxiety and Academic Performance in Literacy Skills**

Variables	N	R	Sig.(2 -tailed)	Decision
Test anxiety	330	.893	.018	Significant
Academic Performance				

$\alpha = 0.05$

Table 1 reveals that with r-value of 0.893, it shows that there exists a positively strong relationship between the independent variable (test anxiety) and the dependent variable (Academic performance in literacy skills). At r-value of .893 and *p*-value of 0.018, *p*-value is greater than the alpha level hence the null hypothesis is rejected while the alternative which states that test anxiety does have a significant relationship with academic performance of pupils is retained.

H<sub>2</sub>: Pupils-Teachers interaction does not have any significant relationship with academic performance of pupils in public primary schools

**Table 2**  
**Correlation between Pupils-Teacher interaction and Academic Performance in Literacy Skills**

Variables	N	R	Sig.(2 -tailed)	Decision
Pupil -Teacher Interaction	330	.871	.021	Significant
Academic Performance				

$\alpha = 0.05$

Table 2 reveals that with r-value of 0.871, it shows that there exists a positively strong relationship between the independent variable (pupils-teacher interaction) and the dependent variable (Academic performance in literacy skills). At r-value of .871 and *p*-value of 0.021, *p*-value is greater than the alpha level hence the null hypothesis is rejected while the alternative which states that pupils-teachers interaction does significantly have a relationship with academic performance of pupils is retained.

### Discussion of Findings

From hypothesis 1, the result revealed that there is a positively strong relationship between test anxiety and academic performance of pupils in literacy skills. This implies that sudden pronouncement by the teacher to conduct test or examination contributes significantly to their performance in school related academic tasks. The outcome of this work corroborates with that of Wubbels, Hayman and Grints (2013) who noted that test anxiety is a psychological term used to show a state of imbalance of organism when confronted with set of activities. Exposures to conditions not favourable, ill preparation, wrong timing, lengthy test items, difficulty of items, among others are drivers of test anxiety. Moreso, Wubbels, *et. al.*, (2013) further stated that when pupils are taken unawares on test administration, they become unprepared and unready for such an exercise which in turn shows on their response pattern to the test, Test anxiety in pupils is reduced when they are pre-informed on future tasks and exposure to tests or examination because the anxiety level of pupils is positively correlated to their achievement.

From hypothesis 2 the result revealed that there is a positively strong relationship between pupil-teacher interaction and academic performance of pupils. Pupil-teacher interaction is a social variable that shows how pupils-teacher relationship is related to academic performance of pupils. Interaction relationship between



teacher-pupil is a form of relationship that is symbiotic in nature and can be between teacher versus learner or pupil versus pupil respectively. When learner's interaction level with peers and teacher is not cordial, there is a likelihood that it could lead to poor academic performance. The outcome of this study is in consonance with that of Ahmed and Ahmed, (2018) who revealed that pupils who establish a cordial relationship with teachers or contemporaries always perform better in their academic tasks because they tend to learn from their mistakes, personal deficiencies identified and corrected thereby serving like a feedback mechanism for personal assessment.

### Conclusion

The study concluded that in order to improve on pupils academic performance, their test anxiety level must be very low effortlessly by designing items that are moderate for pupils of that age bracket and establish good interaction between teacher and pupils at all time. Psycho-social variables if not well managed by the teacher would contribute negatively towards academic performance of pupils.

### Recommendations

This study recommended that:

- Teachers across all levels should introduce the use of motivation technique in the course of teaching because it goes a long way to improve the quality of learning in classrooms.
- Pupils should be conditioned to interact effectively with peers and teachers as it would enhance cross pollination of ideas, concepts and learning.
- Curriculum developers should revise the curriculum once in every ten years so that adequate studies can be carried out in order to allow for proper evaluation studies viz-a-viz time frame.

### References

- Ahmed, D.N. & Ahmed, A.M. (2018) Socialization conditioning and academic performance of pupils in selected public primary schools in Niger State. A paper delivered at the 6<sup>th</sup> International Summit of Heads of Public-Private Institutions in Abuja. Nov 3<sup>rd</sup>, 2013. Abuja
- Akim, D.E. (2010). Relationship between learning styles and academic achievements of Students in Ifo LG. A of Ogun State. An unpublished B.Ed project. Tai-Solarin University of Education, Ijagun, Ogun State. 45-47.
- Ali, N., Jusoff, K., Ali, S., Mokhtar, N., & Salamat, A. S. A. (2009). The Factors Influencing Students' Performance at Universiti Teknologi MARA Kedah, Malaysia. *Management Science and Engineering*, 3(4), 81–90.
- Chapell, M.S., Blanding, Z.B., Silverstein, M.E., Takahashi, M., Newman, B., Gubi, A., & Mc Cann, N. (2005). Test anxiety and academic performance in undergraduate and graduate students. *Journal of Educational Psychology*, 97(2), 268-274.
- Fan, F.A. (2012). Teacher students' interpersonal relationship and students' academic achievement in social studies. *Teachers and teaching*. 18(4), 483-490.
- Kendra, C. (2020). Test Anxiety Symptoms, Causes, and Treatments Retrieved on August 6, 2020 from - 2795368
- Kitsantas, A, Winsler, A & Huie, F. (2008) self-regulation and ability predictors of academic success during college: a predictive validity study. *Journal of Advanced Academics*, 20(1) 42-48.
- Kunle, S. & Adeoye, O.C. (2015) Nexus between Test Anxiety and Academic Achievement in Colleges. *International Journal of Educational Studies*, India. 5(2) 23- 34
- Mafikuyomi, J.A., Udoia, I.G. & Busari, M.F. (2023). Measurement Indicators and Literacy Skills as Predictors of Poverty Prevalence LASU. *Journal of Educational Perspectives*. Faculty of Education, Lagos State University Ojo, Lagos. 12(2) 43-51.
- Makinde, C.B. (2020). Self-efficacy as correlates of pupils' academic performance in Literacy Skills Development. *Journal of Educational Research and Development*. ICAA house, Ikot-Ekpene, Uyo. 5(2) 23-25.
- Meera, J. (2015): Self-Efficacy and Academic Performance in English Language *Journal of Counseling Psychology*. 4(1) 54-56.

- Mullis, I.V.S., Martin, M.O., Foy, P., & Drucker, K.T. (2012). PIRLS 2011 International results in reading. TIMS & PIRLS International Study Center. ISBN-10: 1 - 8 8 9 9 3 8 - 6 5 - 3. <http://timssandpirls.bc.edu/pirls2011/international-results-pirls.html>. Retrieved January 16, 2013.
- Myrberg, E. (2007). The effect of formal teacher education on reading achievement of 3rd- grade students in public and independent schools in Sweden Educational Studies, 33(2), 145–162. Department of Education, Unit for Individual, Culture and Society.
- Myrna, D.R & Aida, C.C. (2015), Test Anxiety and College Students' Performance on Mathematics Department Examination: Basis for Mathematics Achievement Enhancement. Asian Pacific Journal of Education, Arts and Sciences, 2(1), 62-69.
- Wubbels, S.U., Hayman, W.C. & Grints, D.S. (2013). Psycho-social condition as predictors of students' academic performance in tertiary institutions. Journal of Educational Research and Managerial Development. University of Cyprus. 8(2)290-293.

# A Systematic Profiling of Child Labour in Nigeria: The Forms, Causes and Way Forward

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## Abstract

*Forced labour, particularly child labour, is a rarely studied issue in Nigeria using secondary data collection methods. This study aims to identify the prevalent forms of child labour in Nigeria and their implications for children's learning and social life. It also investigates the leading causes of child labour and their impacts on children's holistic development through a systematic review of existing studies. The research utilized secondary data from Scopus, Research Gate, ScienceDirect, and PubMed. Various academic sources, including peer-reviewed journals, theses, educational websites, textbooks, and educational books, were examined. An interpretive research philosophy was adopted to allow for extensive illustration and critical discussion of findings. Thematic analysis was conducted by sorting relevant data and coding it into themes for discussion. Prominent forms of child labour reported include street children, those with intellectual disabilities, unpaid domestic workers, and migrant children involved in sexual work. Key causes identified are poverty, illiteracy, household deprivation, and regional factors. The study concludes with recommendations for societal vigilance against child abuse by parents. By raising awareness and implementing protective measures, the practice of child labour in Nigeria can be addressed more effectively.*

**Keywords:** Child Labour, Exploration, Children, Sexual Workers

## Introduction

Child labour in Nigeria is evident in the exposure of children to hardships such as lack of food, inadequate housing, and exposure to harsh chemicals (pesticides and insects) (Samuel, 2024). Evidence of child labour include child street hawking, children working in factories etc., In some cases, it has been found that children are forced into prostitution and sexually abused (Samuel, 2024). Female children forced to work on a plantation in Akwa Ibom Nigeria have been reported to be sexually violated by other male trafficked victims and supervisors (Obinaju & Asa, 2023). Young girls forced to work as domestic servants also reported being sexually abused by male members of the families in which they worked (Akpotor, 2023). All these do not mean that child labour is delimited to sexual abuse, other forms of child labour will be discussed as this research unfolds.

Child labour inhibits the ability of a child to grow to achieve higher full potential and to meet the expected cognitive, affective, psychomotor, and cognitive development (Dhage & Nagtode, 2023). Azonuche and Ego (2023) defined child labour as the act of using children for forced and labourious activities. Child labour is child exploitation, that is, a situation where children are forced into deceit coercion, or bandage to engage in exploitative work. Hence, the children work as labourers and in dangerous situations e.g., on farmlands, plantations, markets, and many more when they should be in school learning (Fanton d'Andon *et. al.*, 2022).

Every child is born with the potential to develop to his/her full potential- teachers, parents and the community at large should fight against child labour so that the child can develop to their full potential in life (Onipede, 2024). The aforementioned shows that the childhood period would mistakenly determine the type of content that would be inculcated into the child. Consultative Group on Early Childhood Care and Development (2024) noted that the child is a precious material in society that must be attended to with all forms of seriousness and professionalism in order to become a good adult that would promote the values, norms, and beliefs of the society. That is, what a child learns would go a long way from what he or she would become as an adult. When the child at this stage has been taken through the negative rudiments of abuse and laborious tasks, becoming an enviable adult for the child would in the long run be a difficult task.

Thus, child labour is defined as any kind of work by children which interferes with the full development of

children (Consultative Group on Early Childhood Care and Development, 2024). Children are meant to be exposed to education so they can be fully grown and developed into enviable adults in society. Child labour occurs when children are faced with services and laborious activities to fend for themselves or the larger family. United Nations (2024) found that victims of child labour might be tricked, forced, threatened, or otherwise coerced into moving to a situation in which they are then exploited for complex situations, sexual acts, domestic services, identity abuse, removal of organs, or other criminal acts. This points to the fact that child labour has become a menace in Nigerian society which the national laws, regulations, and acts are against.

Child labour is a form of forced labour that has become famous in this part of the world. This is the prevalence of having the rights of the children stamped upon (Ibrahim, Abdalla, Jafer, Abdelgadir, & de Vries, 2019). In other words, child labour has been associated with the use of the child in tune with their ability to work for others all in the name of making profits. Radfar, Asgharzadeh, Quesada, and Filip (2018) asserted that Nigerian children experience child labour a lot based on the functions of culture and social norms. Children from northern Nigeria are mainly exposed to the danger of forced labour. It has been repeatedly said that the northern Nigerians use their children as a means of making money. As such, they expose their children mostly girls to child marriage. Studies by Radfar, Asgharzadeh, Quesada, and Filip (2018); Onipede (2024); mentioned that the dangers that child marriage exposes children to are many such as birth complications, lack of good parenting styles, and many more.

Samuel (2024) asserted that aside from poverty, some parents are carried away into the goodies of child labour and child trafficking because they are ignorant of what the menaces are. For instance, some parents or guardians do not agree that it is wrong for them to send out their wards hawking on the streets all because of the risks involved. Aside from the fact that children are minors and could be exposed to all forms of risks on the street, they might be misguided by others on the street and have their academic lives affected (Azonuche & Ego, 2023). This present study is needful to assess the complex re-occurrence of forced labour activities among children in Nigeria. Also, the study helps to torchlight different for forced labour that still exist among children in Nigeria.

### **National Policy on Child Labour**

UNICEF in the year 2010 started an initiative tagged; Global Out-of-School Children Initiative (GOSCI) which started as a way of ensuring that the rights and privileges of children are guided and protected. Further goals of the organisation are to enable out-of-school children and street children to be taken to the classroom and properly educated. The specific purposes of the initiative are to; ensure that children are well taken care of and that all forms of discrimination against children are removed; and encourage school participation among children regardless of the social status of their parents (UNESCO, 2024a). The following are the specific tenets of the National Policy on Child labour:

- Provision of guidelines in the form of creating awareness, advocacy, and sensitization among the general populace about the effect caused by child labour as well as its prevention.
- Provision of guidelines and modalities for action creations in the forms of projects and programmes being carried out by critical stakeholders and government in fighting child labour in the country.
- Provision of guidelines for effective resource mobilisation and sustainability of action programmes and projects amongst implementing partners and agencies.
- Provision of guidelines for the coordinating and networking programmes among critical stakeholders and government with the view to streamlining and strengthening efforts.
- Provision of guidelines for monitoring, evaluating, and reviewing policies, legislations on projects, and programmes on child labour.

The following are the Age Recommendations of supplementing the Minimum Age Convention No. 138 by the International Labour Organization Minimum Age Recommendation No. 146;

- Provision of sufficient educational facilities
- Facilitation of employment-oriented training
- Parental guidance and care ensure that parents work in a way of alleviating poverty and taking good care of their children.
- Social security and child maintenance;
- Ensuring that children are protected from all forms of harm and unsafe actions and inactions.

## **Theoretical Framework**

The socialisation theory was developed by Charles Horton Cooley, a psychologist which was developed in the year 1902 and was enhanced by the scholar Max Weber (Siljanovska & Stojchevska, 2018).. The term "Socialisation" can be seen as the process of relating, interacting, and communicating with others in our immediate environment (Siljanovska & Stojchevska, 2018). Human beings unlike animals have ideas, ideologies, beliefs, philosophies, norms, and many more that guide their actions and inactions. Man is a social animal that functions differently in their various communities and societies. The attitude and behaviour of human beings which is displayed from time to time is a factor of actions and inactions learnt from the society.

It is believed that man is a biological being who needs some elements of interactions with others to live and for sustenance. Despite the extent of cultural diversities and complexities, man still needs to survive and adhere to his fundamental human rights. This is the case that everyone in the society has rights and privileges glued to them as the case maybe. Unlike other living species, everyone in the social structure has ways of interaction that must not be hindered.

This is one of the reasons why Charles Horton Cooley preached and emphasised that children are not only part of the family but also part of the bigger society and that, they must be treated as humans and not animals. They are the first to be cared for in times of need and attended to when they request help. They should not be treated on the contrary, they should not be treated as slaves or used for activities that do not align with their emotional, psychological, health, social, academic, and physical development as the case maybe (Hinkle, 2008).

The early days of children are categorised with different development ranging from academic to social to psychological and many more. In other words, early development is a time when the child must be allowed to experience development in the form of the cognitive, language, perceptual, and socio-emotional (Schubert, 2006). Children in their early years are often exposed to extreme vulnerability when they are not well attended to by their parents and caregivers (Hinkle, 2008). This is a pointer to the fact that the need for adequate protection, care, and stimulation is essential for the growth and development of these children. Hence, the need for the activities of preschool is essential.

## **Statement of the Problem**

Children do not have access to formal education and they are still forced to work for other people regardless. This is one of the prime foci of this study. UNESCO (2024a) observed that children who are ripe for schooling are still made to go through the inconveniences. International Labour Organisation and United Nations (2018) added that there are many causes of child labour. Azonuche and Ego (2023) asserted that poverty is a basic cause of child labour. It is the case that typical Nigerian parents who are relatively poor would want their children to assist them in hawking goods for the effective sustenance of the family. Abject poverty keeps reoccurring in Nigeria leaving the children to have no choice but to be exposed to child labour activities, hence this study.

The main aim of this study is to investigate the forms and causes of child labour in Nigeria through the aid of a systematic review of existing studies. In the recommendation section, the way forward to child labour will be presented. On this note, the specific objectives of the study are to:

- determine the prevalent forms of child labour in Nigeria and their implications for children's learning and social life.
- investigate the leading causes of child labour in Nigeria and their impacts on children's holistic development.

## **Research Questions**

The following questions have been asked to guide the findings of the study.

- What are the prevalent forms of child labour in Nigeria and their implications for children's learning and social life?
- What are the leading causes of child labour in Nigeria and their impacts on children's holistic development?

## **Methodology**

This study engages the systematic literature review which aids in the collection of numerous data on the two objectives that have been raised. Using the secondary method of data collection, some of the advantages of



adopting the systematic literature review in this research include access to myriads of information, extensive discussion of findings, and representation of findings in a structural manner (Johnston, 2014). However, one of the limitations of engaging the secondary method of data collection in this study is the fact that the findings were delimited to the studies accessed. This is unlike the primary method of data collection that gives room for the use of raw data collected from participants in their environment. The researchers were able to access data from a range of databases such as Scopus, Research Gate, ScienceDirect, and Pub Med. Different academic sources such as peer-reviewed journals, theses, educational websites, textbooks, and educational books were used. The interpretive research philosophy was also explored in the study as it gives room for the extensive illustration and critical discussion of findings (Chowdhury, 2014). More so, using the inductive research approach, data formation was done in a bid to make implications and inferences (Woiceshyn & Daellenbach, 2018). Recommendations were also designed to put an end to the practice of child labour in Nigeria. Thematic analysis was done by browsing relevant data, sorting the information, and coding them into themes used for discussions.

## **Findings and Discussion**

### **Forms of Child Labour in Nigeria and Implications for Children's Learning and Social Life**

#### ***Child Worker of Street Children Category***

These are types of children who are not privileged to have homes to live being the fact that they do not have parents or they have lost their parents. Uyanga, Ekpo, and Davies (2019) noted that these children are very special because they need special attention. They are children who have been neglected by the hand of love by people in the society at large. Some of the children often work on construction sites and shops as helpers, some work in eateries, some in barbers' workshops, some in garages, and many more (Uyanga, Ekpo, & Davies, 2019). Uyanga and Emana, (2016) in "Education as an Instrument for Achieving Social Justice and Good Governance", street children increased because education has not been effective in different places around the Nation (Nigeria) and that some other regions of the country are still faced with socio-cultural challenges just the Northern part of Nigeria (Uyanga & Emana, 2016).

These children live and stay on the street. They are always on the street hawking when they should be in the classroom learning. A study by Stephen, Okon, Franklyn, Effiong, Okon, and Okoro (2016) titled; "Effect of Child Labour on Children's Education in Katsina State, Nigeria" revealed that children now sell sachet water and biscuits and many more in semi-urban and urban metropolitan centres mainly for survival among the children. Some of the children are said to have lost their parents or do not have family members to stay and live with (Abdu, Rabi, & Usman, 2020). Some of these children are said to flood a larger part of Lagos in the past. In recent times, they can now be found in other towns and capital towns in the country like Osogbo, Ondo, Ibadan, Uyo, and many other places. Some people have been observed to employ these children as parttime workers and are played on meagre salaries.

#### ***Children with Intellectual Disabilities Category***

The inability of being able to reach the expected developmental stages in growth and consciousness is a great challenge with pupils with severe/profound general learning disability causing them to be exposed to the danger of child labour especially in a country like Nigeria (Cheng & Lai, 2023). Some people have been observed to use this kind of child for forced labour in the form of making shoes, weaving baskets, and many more. Some even transit the children to other countries to work with companies in illegal settings. Hence, all the money made from these ventures goes to the trafficker and a little just for the sake of feeding goes to the child.

One of the reasons why the use of children with disabilities has become famous is that they have significant challenges in being able to communicate their feelings and communication with other people around them. Abdu, Rabi, and Usman (2020) concluded that this is when some people take advantage of the children and ask them to wash clothes, and plates and do some other house chores for them in their homes. When they are through with this, they get a token.

According to Emana (2016), many of the children suffering from severe/profound general learning disability always have other intellectual disabilities ranging from autistic behaviour and sensory disabilities as the case may be, hence, they are misused and abused by some community members especially when their parents are carefree. This reveals that children with severe/profound general learning disabilities largely depend on other people around them (friends, teachers, parents, and the community at large) throughout their lifetime in other to

assist them with basic needs such as movement, bathing, feeding and toileting etc (Abdu et al., 2020). When they are not assisted with this, they are used and abused, and become less of themselves (Flink, Broberg, Strid, Thunberg, & Johnels, 2022).

### ***Child as Unpaid Domestic Worker***

In Nigeria, the reality of child labour where the child has to work on farmland with the parents is not unpopular. Parents are truly the first teachers of their children. Parents are partners in the educational process of their children, not to use the children as housemaids or workers. Findings according to Stephen, Okon, Franklyn, Effiong, Okon, and Okoro (2016) have shown that some parents are not directly the biological parents of their children, therefore they tend to use them for labourous activities. Though children are meant to carry out some roles for the parents, not such that would be injurious to their health and physical development.

On the other hand, Nnabuchi (2013) noted that parents are like gods, and children are meant to listen and obey the orders of such parents as a form of respect and honour. This implies that children are used to some activities in the home like fetching water, cooking, working in the garden, watching after livestock, and many more; Nnabuchi (2013) mentioned that when these activities continuously affect the academics, social, moral, and health life of the children, it is a form of overwork or hard labour. While these activities affect children socially, their academic performance is also affected negatively in school (Taiwo, Badiora, & Adebara, 2021)..

### ***Migrant Child Labour as Sexual Workers***

The use of children as sex workers is becoming popular in Nigeria especially in Enugu State according to the findings of Enebe et al. (2021). While many of the people in the country are educated- many remain unemployed, some of them make connections with people in other countries or states and send children who have become desperate to travel out abroad mainly to be used as sex machines (Enebe et al., 2021).

The origin of migrant child labour originated from labour mobility towards districts or states or outside where industry and employment opportunities are expanding. This is when the family migrates with the children mainly under economic compulsion apart for many reasons which could range from shelter to clothing to feeding (Uyanga and Emana 2016). In most cases, these children are automatically deprived of schooling and are made to serve people mainly to make money for their family members anywhere they find themselves. Abdu et al., (2020) revealed that some children are now used for the main aim of impregnating them so that they can give birth to children- afterward, these children are sold or kept for one reason or the other.

### ***Causes of Child Labour in Nigeria and Impacts on Children's Holistic Development***

Several reasons have been found to have led or been leading to child labour in Nigeria. The following are some of the reasons.

#### ***Poverty and Child Labour***

Research has shown that poverty is significant to child labour in Nigeria (Kaur & Byard, 2021). In the same vein, societal poverty has been found as a core contributor to child labour in Nigeria (Naeem, Shaukat, & Ahmed, 2011). By implication when parents are poor, they tend to use their children to make money by asking them to hawk goods on the street. A recent study has shown that the Nigerian poverty rate is 40.7% (Adebayo, 2024) which increases the extent of child labour.

#### ***Education and Child Labour***

Child labour has become one of the most elusive and most difficult concepts in the social sciences children were imposed to a high level of formal education in Nigeria. Akpan and Oluwabamide, (2010) in their study "The Menace of Child Labour in Nigeria: A case study of street hawking in Uyo, Akwa Ibom State, Nigeria" found that unemployment and poverty are the major causes of child hawking in the study area which has been caused mainly because the children do not have access to education. Also, the study found that punitive measures should be taken against children who engage in hawking as well as their parents in the city of Uyo basically by making sure that there is free education for the children (Akpan & Oluwabamide, 2010).

### ***Household Deprivation and Child Labour***

Household deprivation is a situation where the child is deprived of a home and some other household equipment like food, shelter, love and belongingness, and many others. A study by Okoronkwo and Oprah (2024) on "Ocio-Economic Factors That Influence Child Labour in Nigeria" showed that sex, age, occupational and marital status of the respondents have a statistically significant relationship with the perception of chores that should constitute child labor in the study population. In the same vein, women are more likely to know which chores constitute child labour than men(Okoronkwo & Oprah, 2024). In all of these, there is a need to ensure that children are not allowed to engage in activities that can deprive them of their social, emotional, and cognitive development.

### ***Religion and Child Labour***

The religion of people could be seen as a determinant or cause of child labour activities. Samuel Effiong Ekong (2016) In "Nigeria Policy on Child Labour: An Evaluation of the Education Sector Preparedness for Effective Policy Implementation: A Case Study of Akwa Ibom State, Nigeria." revealed that the state of infrastructure in the schools, particularly in the rural communities, was in a condition of neglect with a high teacher-pupil ratio, whereas, a few children who practiced Islam were not adequately brought to school. In this vein, Aminigo and Nwaokugha (2016) reported that most of the children in the northern part of Nigeria where the parents are religious fanatics are consistently exposed to different forms of practices like child marriage.

### ***Health and Child labour***

Badoe(2017) in "Perspectives on Child Abuse and Labour: Global Ethical Ideals Verse African Cultural Realities" found that there is a need to protect children against hazards and dangers (physical and psychological injuries), as well as provide basic needs for children so as not to make them responsible for their needs too early in life. However, it was revealed that what is considered an abuse in one culture may not be regarded as an abuse in another. International Labour Organisation (2024) in their findings on "Child labour statistics; manual on methodologies for data collection through survey" revealed that millions of children work under hazardous conditions which present dangers to their health, safety, and welfare. They toil in mines and quarries, are exposed to agrochemicals in agriculture, squat in crippling positions to weave rugs and carpets, and scavenge in rubbish tips(Ajayi & Torimiro, 2024). Too many are enslaved in bonded labour, isolated in domestic service, and traumatised and abused in the commercial sex trade(Badoe, 2017).

### ***Recommendations***

One of the ways to tackle child labour is to put pressure on companies that use teen children for labour, if any. Also, people in Nigerian society need to be on the look out for parents who abuse their children through excess flogging, errands, hawking, and many more. In the same vein, parents must ensure that they make efforts to work effectively and make money for their homes rather than depending on their children who should be in school. When this is achieved, a gross decrease will be brought to poverty among the people. Aside from the fact that the child is not made to work under the people, the government should be ready and able to create and make more jobs available to the people.

The use of time-to-time television, radio, and social media awareness on reasons why child trafficking abuse must stop is a necessity. More facilities and mediums such as billboards, newspapers, word of mouth, and many more can be engaged to put a stop to these menaces. In the same vein, rather than forcefully engaging children in forced labour, they can rather be exposed to some forms of vocational training for self-development.

### ***Conclusion***

This study has looked into the investigation the forms and causes of child labour in Nigeria through the aid of a systematic review of existing studies. It has been found that children often work on construction site and shops as helpers, some work in the eatery, some in barbers' work shop, some in the garage and many more due to many factors such as poverty and illiteracy on the part of their parents. The prominent forms of child labour in Nigeria that have been reported include child worker of street children category, children with intellectual disabilities category, child as unpaid domestic worker, and migrant child labour as sexual workers among others. The leading causes of child labour that have been found in the study are poverty, illiteracy, household deprivation and region among other themes that were raised. It was recommended that people in the society need to be on the

watch out for parents who abuse their children. Also, there should be an increase in the rate of awareness about child labour and their implications on the holistic development of children in Nigeria.

## References

- Abdu, A., Rabi, I., & Usman, L. (2020). Effect of Child Labour on Children's Education in Katsina State, Nigeria. *Mediterranean Journal of Social Sciences*, 11, 74.
- Adebayo, B. (2024). Nigeria overtakes India in extreme poverty ranking. Retrieved May 24, 2024, from CNN website:
- Agbor, U. (2016). The State, Academia and Poverty: Towards a Schema for Effective Poverty Reduction in Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 6.
- Ajayi, A., & Torimiro, D. (2024). Perspectives on child abuse and labour: Global ethical ideals versus African cultural realities. *Early Child Development and Care*, 174, 183–191.
- Akpan, N., & Oluwabamide, A. (2010). The Menace of Child Abuse in Nigeria: A Case Study of Street Hawking in Uyo, Akwa Ibom State. *Journal of Social Sciences*, 24, 189–192.
- Akpotor, J. (2023). Parental Poverty as a Determinant of Children Street Hawking in Warri Metropolis of Delta State, Nigeria. *Research on Humanities and Social Sciences*, 8(10).
- Azonuche, J., & Ego, E. (2023). Hawking Practices among School Children in Delta State, Nigeria; The Place of the Home. *Benne State University Journal of Education (BSUJE)*, 20(1).
- Badoe, E. (2017). A critical review of child abuse and its management in Africa. *African Journal of Emergency Medicine*, 7(Suppl), S32–S35.
- Cheng, A. W. Y., & Lai, C. Y. Y. (2023). Parental stress in families of children with special educational needs: A systematic review. *Frontiers in Psychiatry*, 14, 1198302.
- Chowdhury, M. (2014). Interpretivism in Aiding Our Understanding of the Contemporary Social World. *Open Journal of Philosophy*, 04, 432–438.
- Consultative Group on Early Childhood Care and Development. (2024). Consultative Group on Early Childhood Care and Education. Retrieved August 23, 2024, from
- Dhage, V. D., & Nagtode, N. (2023). Health Problems Among Under-Five Age Group Children in Developing Countries: A Narrative Review. *Cureus*, 16(2), e55019.
- Enebe, N. O., Enebe, J. T., Agunwa, C. C., Ossai, E. N., Ezeoke, U. E., Idoko, C. A., & Mbachu, C. O. (2021). Prevalence and predictors of child labour among junior public secondary school students in Enugu, Nigeria: A cross-sectional study. *BMC Public Health*, 21(1), 1339.
- Fanton d'Andon, C., Greene, C., Pellenq, C., Yilma, T. M., Champy, M., Canavera, M., & Pasquini, C. (2022). Child Labor and Psychosocial Wellbeing: Findings from Ethiopia. *International Journal of Environmental Research and Public Health*, 19(13), 7938.
- Federal Government of Nigeria. (2022). Federal Ministry of Labour and Employment – Ensuring Decent Work for all Nigerians. Retrieved August 23, 2024, from
- Flink, A. R., Broberg, M., Strid, K., Thunberg, G., & Johnels, J. Å. (2022). Following children with severe or profound intellectual and multiple disabilities and their mothers through a communication intervention: Single-case mixed-methods findings. *International Journal of Developmental Disabilities*, 69(6), 869–887.
- Hinkle, R. (2008). Charles Horton Cooley's General Sociological Orientation. *The Sociological Quarterly*, 8, 5–20.
- Ibrahim, A., Abdalla, S. M., Jafer, M., Abdelgadir, J., & de Vries, N. (2019). Child labor and health: A systematic literature review of the impacts of child labor on child's health in low- and middle-income countries. *Journal of Public Health (Oxford, England)*, 41(1), 18–26.



- ILO. (2024). Every child counts: New global estimates on child labour. Retrieved August 23, 2024, from
- Johnston, M. (2014). Secondary Data Analysis: A Method of Which the Time has Come. *Qualitative and Quantitative Methods in Libraries*, 3, 619–626.
- Kaur, N., & Byard, R. W. (2021). Prevalence and potential consequences of child labour in India and the possible impact of COVID-19—A contemporary overview. *Medicine, Science, and the Law*, 61(3), 208–214.
- Naeem, Z., Shaukat, F., & Ahmed, Z. (2011). Child labor in relation to poverty. *International Journal of Health Sciences*, 5(2 Suppl 1), 48–49.
- Obinaju, L., & Asa, U. (2023). Analysis of Child Labour Among Farming Households: A Case Study of Abak Local Government Area in Akwa Ibom State, Nigeria. *International Journal of Innovative Agriculture & Biology Research*, 1(1).
- Okoronkwo, I., & Oprah, N. (2024). Ocio-Economic Factors That Influence Child Labour in Nigeria. *British Journal of Multidisciplinary and Advanced Studies*, 5, 1–15.
- Omokhodion, F., & Omokhodion, S. (2004). Health status of working and non-working school children in Ibadan, Nigeria. *Annals of Tropical Paediatrics*, 24, 175–178.
- Onipede, A. (2024). Socio-Economic Factors Affecting Children Hawkers in Moba Local Government of Ekiti State. *British Journal of Multidisciplinary and Advanced Studies*, 5, 42–52.
- Radfar, A., Asgharzadeh, S. A. A., Quesada, F., & Filip, I. (2018). Challenges and perspectives of child labor. *Industrial Psychiatry Journal*, 27(1), 17–20.
- Samuel, U. (2024). Impact of Street Hawking on Children's Academic Wellbeing: A Critical Assessment. *IDOSR Journal of Communication and English*, 9, 7–11.
- Schubert, H.-J. (2006). The Foundation of Pragmatic Sociology. *Journal of Classical Sociology*, 6, 51–74.
- Siljanovska, L., & Stojchevska, S. (2018). A Critical Analysis of Interpersonal Communication in Modern Times of the Concept "Looking Glass Self(1902). *SEEU Review*, 13, 62–74.
- Taiwo, A. O., Badiora, A. I., & Adebara, T. M. (2021). Public Spaces and Concentrations of Child Labourers in Ibadan Municipality, Nigeria. *Journal of Asian and African Studies*, 56(7), 1708–1723.
- UNESCO. (2024a). Global Initiative on Out-of-School Children: UNICEF and the UNESCO Institute for Statistics. Retrieved August 23, 2024, from
- UNESCO. (2024b). Human trafficking in Nigeria: Root causes and recommendations. Retrieved August 23, 2024, from
- UNICEF Nigeria. (2022). 16 facts about violence against women and girls in Nigeria. Retrieved August 23, 2024, from
- Uyanga, D., Ekpo, O.-O., & Davies, K. (2019). Child labour and educational development of the Nigerian children. *International Journal of Development and Sustainability*, 8(1), 69–77.
- Uyanga, D., & Emanu, I. (2016). Education as an Instrument for Achieving Social Justice and Good Governance. *Journal of Educational and Social Research*, 6.
- Woiceshyn, J., & Daellenbach, U. (2018). Evaluating Inductive versus Deductive Research in Management Studies: Implications for Authors, Editors, and Reviewers. *Qualitative Research in Organizations and Management: An International Journal*, 13, 00–00.



# **Empowering Nigeria's Early Childhood Development: A Stakeholder-Centric Approach to Leadership and Governance**

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## **Abstract**

*This paper examines the critical issue of early childhood development (ECD) in Nigeria through a stakeholder-centric lens, focusing on leadership and governance strategies to empower this crucial stage of human development. The study identifies the challenges facing ECD in Nigeria, including inadequate funding, limited access to quality early education, and a lack of coordination among stakeholders. Methodologically, a mixed-methods approach involving literature review, surveys, and interviews with key stakeholders was employed to gather data. Findings reveal that effective leadership and governance are essential for addressing the multifaceted challenges of ECD in Nigeria. Moreover, engaging diverse stakeholders, including government agencies, NGOs, communities, and parents, is critical for implementing sustainable interventions. The study concluded that there is need for inclusive policies, increased investment in ECD programs, and strengthened collaboration among stakeholders in view of this it is recommended that fostering political will, enhancing capacity building, and promoting community involvement to ensure holistic development in Nigeria's early childhood sector. Ultimately, by adopting a stakeholder-centric approach to leadership and governance, Nigeria can advance the well-being and future prospects of its youngest citizens.*

**Keywords:** Empowering, Early Childhood Development, Stakeholder-Centric Approach, Leadership and Governance

## **Introduction**

Early Childhood Development (ECD) is a fundamental phase in human development that shapes the future health, well-being, and capabilities of individuals. Early Childhood Development (ECD) is a critical stage in human development that encompasses physical, cognitive, emotional, and social growth from birth to eight years of age. The significance of ECD in shaping the future of individuals and societies has been well-documented. In Nigeria, ECD faces significant challenges, including inadequate funding, limited access to quality education, and a lack of coordination among stakeholders. This paper investigates these challenges through a stakeholder-centric lens, emphasizing the roles of leadership and governance in empowering ECD initiatives.

## **Importance of Early Childhood Development**

ECD encompasses the physical, cognitive, emotional, and social development of children from birth to eight years. According to UNESCO (2021), quality early childhood education and care (ECEC) can lead to better learning outcomes, improved health, and increased economic productivity. In Nigeria, however, many children do not have access to these essential services, exacerbating issues of poverty and inequality.

Research shows that investments in ECD yield substantial returns in terms of improved health, educational outcomes, and economic productivity (Heckman, 2016). Early interventions can mitigate the effects of poverty and inequality, contributing to more equitable and prosperous societies (Britto, Yoshikawa & Boller, 2017). Research consistently shows that the first few years of life are critical for brain development and lay the foundation for future learning and well-being (Shonkoff & Phillips, 2000). Quality early childhood education has been linked to better academic performance, higher earnings, and improved social outcomes in adulthood (Heckman, 2006). In Nigeria, where over 40% of the population is under the age of 15, investing in ECD is not only a moral imperative but also a strategic necessity for national development (National Population Commission, 2018).

### **Challenges Facing ECD in Nigeria**

Numerous studies have highlighted the barriers to effective ECD in Nigeria. A report by UNICEF (2020) identifies inadequate funding, insufficient infrastructure, and a lack of trained personnel as significant obstacles. Additionally, cultural practices and socio-economic factors further impede access to early education and care (Obidike & Enemuo, 2013).

**Inadequate Funding:** Funding for ECD programs in Nigeria is insufficient and inconsistent. Government expenditure on education remains below the UNESCO-recommended benchmark of 15-20% of total public expenditure (UNESCO, 2015). This financial shortfall hampers the provision of quality early education and child care services.

**Limited Access to Quality Early Education:** Access to quality early education is unevenly distributed, with rural areas particularly disadvantaged. According to UNICEF (2019), only 35% of Nigerian children aged 3-5 years are enrolled in pre-primary education, with significant disparities between urban and rural regions.

**Lack of Coordination Among Stakeholders:** Effective ECD requires coordination among various stakeholders, including government agencies, NGOs, communities, and parents. However, in Nigeria, there is a lack of integrated planning and implementation, leading to fragmented and inefficient service delivery (Akinrotimi & Olowe, 2016).

**Leadership and Governance in ECD:** Effective leadership and governance are crucial for addressing the challenges of ECD. Leadership involves setting a vision, mobilizing resources, and fostering collaboration, while governance encompasses the structures and processes that ensure accountability and transparency (Jones *et. al.*, 2014). A stakeholder-centric approach recognizes the importance of engaging diverse actors in decision-making and implementation.

### **Role of Leadership and Governance**

Effective leadership and governance are crucial for addressing ECD challenges. Good governance involves transparent decision-making, accountability, and inclusive policies that consider the needs of all stakeholders (World Bank, 2019). In the context of ECD, this means creating a cohesive strategy that integrates the efforts of government agencies, NGOs, communities, and parents. Strong leadership can mobilize resources, foster partnerships, and create an enabling environment for ECD programs (Bush, 2018). Governance, on the other hand, ensures that policies and practices are transparent, accountable, and inclusive (Grindle, 2010).

### **Methodology**

This study employs a mixed-methods approach to gather comprehensive data on ECD in Nigeria. The methodology includes a literature review, surveys, and interviews with key stakeholders.

**Literature Review:** An extensive review of existing research on ECD in Nigeria was conducted to identify key issues and gaps.

**Surveys:** Questionnaires were distributed to parents, teachers, and community leaders to gather quantitative data on ECD access and quality.

**Interviews:** In-depth interviews were conducted with policymakers, NGO representatives, and education experts to gain qualitative insights into the challenges and potential solutions for ECD.

### **Data Analysis**

Quantitative data from surveys were analyzed using statistical methods, while qualitative data from interviews were thematically analyzed to identify common themes and recommendations.

## Findings

The survey data revealed that 70% of ECD centers in Nigeria lack adequate funding, leading to insufficient learning materials, inadequate facilities, and low teacher salaries. Interview responses highlighted the need for increased government investment and innovative financing solutions to bridge the funding gap. Only 45% of children in rural areas have access to early childhood education, compared to 80% in urban areas. This disparity is attributed to a lack of infrastructure, trained teachers, and awareness among parents in rural communities. Stakeholders emphasized the importance of targeted interventions to ensure equitable access to quality ECD services. The lack of coordination among various stakeholders was a recurring theme in both survey and interview responses. This fragmentation leads to inefficiencies and undermines the potential impact of ECD programs. Effective governance structures that facilitate collaboration and information sharing were identified as critical to addressing this issue.

The study also found that effective leadership and governance are pivotal for overcoming the multifaceted challenges of ECD in Nigeria. Leadership at all levels, from national policymakers to local community leaders, plays a critical role in setting priorities, allocating resources, and ensuring accountability. Engaging diverse stakeholders is essential for the successful implementation of ECD interventions. Government agencies, NGOs, communities, and parents each have unique roles and perspectives that can contribute to holistic and sustainable ECD programs. The findings highlight the need for inclusive policies that prioritize ECD and allocate sufficient resources. Increased investment in ECD programs, particularly in underserved areas, is necessary to ensure equitable access to quality early education.

## Discussion

The findings underscore the importance of strong leadership and governance in addressing the challenges of ECD in Nigeria. Effective leadership can drive policy reforms, secure funding, and build partnerships that are essential for sustainable ECD programs. Governance mechanisms that ensure transparency, accountability, and inclusiveness can enhance the efficiency and impact of these programs. Engaging a wide range of stakeholders, including government agencies, NGOs, communities, and parents, is crucial for the success of ECD initiatives. Collaborative efforts can leverage the strengths and resources of different actors, leading to more holistic and sustainable outcomes. The involvement of parents and communities, in particular, is vital for creating a supportive environment for early childhood development.

Political will is crucial for advancing ECD initiatives. Advocacy efforts should focus on raising awareness among policymakers about the long-term benefits of ECD and the need for sustained investment and support. Building the capacity of ECD practitioners, including teachers, caregivers, and administrators, is essential for improving the quality of early education and care. Training programs and professional development opportunities should be prioritized. Communities play a vital role in supporting ECD. Engaging parents and community members in ECD programs can enhance their effectiveness and sustainability. Community-based approaches can also address local needs and cultural contexts.

## Conclusion

The study concludes that addressing the challenges of ECD in Nigeria requires a stakeholder-centric approach to leadership and governance. Inclusive policies, increased investment, and strengthened collaboration among stakeholders are essential for empowering ECD and advancing the well-being of Nigeria's youngest citizens. By fostering political will, enhancing capacity building, and promoting community involvement, Nigeria can ensure holistic development in its early childhood sector.

## Suggestions

- Advocate for the prioritization of ECD in national and local policy agendas to ensure sustained commitment and investment.
- Develop and implement comprehensive training programs for ECD practitioners to improve the quality of early education and care.
- Encourage active participation of parents and community members in ECD programs to enhance their relevance and sustainability.
- Allocate sufficient resources to ECD programs, particularly in underserved areas, to ensure equitable access to quality early education.

- Establish mechanisms for coordination and collaboration among government agencies, NGOs, communities, and parents to create integrated and efficient ECD services.

## References

- Adebayo, B. (2019). Early childhood development in Nigeria: Challenges and opportunities. *International Journal of Child Development and Education*, 12(2), 123-135.
- Akinrotimi, A. A., & Olowe, P. K. (2016). Challenges in Early Childhood Education in Nigeria: Implications for Child Development and Education. *African Educational Research Journal*, 4 (3), 108-118.
- Britto, P. R., Yoshikawa, H., & Boller, K. (2017). Quality of Early Childhood Development Programs and Policies in Global Contexts: Rationale for Investment, Conceptual Framework and Implications for Equity. *Social Policy Report*, 31 (2), 1-23.
- Bush, T. (2008). Leadership and management development in education. *Educational Management Administration & Leadership*, 36(2), 123-134.
- Grindle, M. S. (2010). Good governance: The inflation of an idea. Harvard Kennedy School Faculty Research Working Paper Series.
- Heckman, J. J. (2006). Skill Formation and the Economics of Investing in Disadvantaged Children. *Science*, 312 (5782), 1900-1902.
- Heckman, J. J. (2006). Skill formation and the economics of investing in disadvantaged children. *Science*, 312(5782), 1900-1902.
- Jones, N., Presler-Marshall, E., & Stavropoulou, M. (2014). Building Better Governance for Children: A Roundtable to Explore the Key Components of Governance Fit for Children. Innocenti Discussion Paper No. 2014-02. UNICEF Office of Research.
- National Population Commission (2018). Nigeria Demographic and Health Survey 2018. NPC.
- Obidike, N. D., & Enemu, J. O. (2013). Challenges in the implementation of early childhood education in Nigeria: The way forward. *Journal of Education and Practice*, 4(5), 18-23.
- Shonkoff, J. P., & Phillips, D. A. (2000). From neurons to neighborhoods: The science of early childhood development. National Academies Press.
- UNESCO (2015). Investing against evidence: The global state of early childhood care and education. UNESCO Publishing.
- UNESCO. (2021). Early childhood care and education. Retrieved from [
- UNICEF (2020). Early childhood development in Nigeria: A baseline report. UNICEF Nigeria.
- UNICEF. (2019). The State of the World's Children 2019: Children, Food and Nutrition – Growing Well in a Changing World. UNICEF.
- UNICEF. (2020). State of the World's Children 2020: Children, food and nutrition - Growing well in a changing world. Retrieved from [
- World Bank (2019). Education in Nigeria: A status report on early childhood education. World Bank Group.
- World Bank. (2019). Improving early childhood development: A global challenge. Retrieved from [https://www.worldbank.org/en/topic/earlychildhooddevelopment](https://www.worldbank.org/en/topic/earlychildhooddevelopment)



# Impact of Montessori Pedagogical Approaches on Preschoolers' Learning Outcomes A Case Study of Mainland LGA, Lagos State

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## **Abstract**

*This study evaluated how Montessori pedagogy affects preschoolers' learning in Mainland Local Government Area of Lagos State. A descriptive survey research design was adopted in the study. The population of the study comprised all preschoolers in Mainland LGA, Lagos State. The sample size included a total of 71 pupils from four intact Nursery Two classes from two randomly selected two Montessori and two non-Montessori nursery schools in Mainland LGA. This study utilized the Preschoolers' Achievement Test (PAT) with a reliability coefficient of 0.81, to measure preschoolers' learning outcomes. The data collected was analyzed using descriptive and inferential statistics. Participants' demographics were presented using frequency distribution tables, and the two hypotheses were tested using an independent-samples t-test in SPSS 21.0 at 0.05 significance. The results of this study indicated a significant gap in literacy skills between pupils attending Montessori schools and those attending non-Montessori schools ( $p=0.004$ ,  $p<0.05$ ). Additionally, it was observed that pupils in Montessori schools exhibited significantly higher performance in numeracy compared to their counterparts in non-Montessori schools ( $p=0.101$ ,  $p<0.05$ ). This study recommended that Montessori methods should be used in preschools to improve reading and numeracy. Hands-on, child-centered strategies can help enhance numeracy and reading skills. Montessori-based early intervention programs should be promoted by policymakers. These programs can help underprivileged children develop literacy and numeracy early on.*

**Keywords:** Montessori, Pedagogical Approaches, Preschools, Learning Outcome

## **Introduction**

Early Childhood Education and development are essential for the beginning of life and serve as a dependable basis for ongoing education. The early childhood phase extends till the age of eight years. This phase of education is considered important because it allows children to develop a comprehensive concept of schooling, starting from playgroup to pre-primary and then to primary level (Lillard, 2022). Human learning commences instantly upon birth, although certain talents, such as language acquisition, physical skills, and intellect, typically emerge by the age of eight. The primary purpose of early childhood education (ECE) is to facilitate effective growth and development. ECE establishes a necessary foundation for learning in young children, thus promoting the effective development of skills and abilities during the early stages of childhood. ECE equips families and communities with knowledge and information that improves their ability to contribute to the successful growth and development of young children (Lillard, 2022).

Early childhood education offers a comprehensive curriculum that encompasses wisdom, cognitive abilities, astuteness, attitude, character, knowledge, and skills development. These activities are crucial for children to cultivate a positive mindset that can contribute to their personal growth and development (Lillard, 2022). It is essential for young children to be well equipped to get into the formal education system. For children to be admitted to formal schools, it is crucial that they have a sufficient grasp of academic concepts. This will enable them to effectively adapt to the instructional methods employed by their teachers and improve their performance. ECE plays a significant role in promoting learning and education (Manuel, 2023).

Early childhood education currently serves the dual purpose of preparing children for primary school and facilitating their holistic development through various means. These institutions fulfil the need for creating a developmental domain and social setting that adapt to rapidly evolving life standards. Due to the significant role of ECE, a wide range of instructional approaches are employed in practice. The Montessori method is a choice among the various options available in the realm of educational methodologies. Montessori's objective in education is to cultivate independent children who possess a clear sense of purpose and understanding of their actions (Wentworth & Wentworth, 2013).

Montessori devised an educational approach that prioritizes the needs and interests of the child in order to



accomplish this objective. Montessori schools possess unique attributes; such as those who have had Montessori training, have particular standards that they adhere to. Teachers possess the ability to instruct groups of pupils of different ages, taking into account their respective stages of development. In addition, teachers are knowledgeable in Montessori instructional approaches. Conversely, children attending schools that employ the Montessori approach are subject to certain prerequisites. Children are granted the liberty to roam freely and engage in their own tasks without any disruptions (Yulia, Raharjo, Fakhruddin, & Formen, 2022).

Early Childhood Education (ECE), often known as Nursery or Pre-primary Education, is a field of educational theory that focusses on the teaching of young children, informally as well as formally, until around the age of eight. Early childhood care and education (ECCE) encompasses a variety of procedures and systems that facilitate and enhance development in the early years of life. This includes education and care in areas such as physical, emotional, social, and cognitive stimulation, language, as well as healthcare and nutrition (Olowe, Kutelu, & Majebi, 2014). Additionally, it involves providing the necessary support to families and communities to promote the healthy development of children (UNICEF, 2012). Oduolowu, (2011) defines Early Childhood Education as a field of study that encompasses the fundamental elements of family and program structures for children from birth to the age of six, as mandated by law.

The Montessori methods, initiated by Maria Montessori in 1907, prioritises autonomy and self-directed tasks to augment pupils' cognitive capacity. The approach places children at the focal point of the learning process, with teachers assuming the role of observers and facilitators. Meanwhile, the learning atmosphere is meticulously arranged to cater to the specific requirements of the children (Lillard, *et al.*, 2017; Lillard, 2021). Within this setting, children have the liberty to engage with their immediate environment, which promotes their physiological, mental, and spiritual growth (Fleming, Culclasure & Zhang, 2019). The learning environment emphasises the importance of sensing, living practices, and basic skills, while recognising that freedom is crucial for healthy growth. Montessori contended that genuine autonomy results in self-awareness, enabling children to exercise unrestricted agency and comprehend the outcomes of their choices (Denervaud *et al.*, 2019; Mavric, 2020).

Montessori classrooms are intentionally structured to mirror the organisation and arrangement found in the natural world. Toys are arranged in easily accessible and categorised areas, facilitating consistency and cognitive growth. The educational setting adheres to pragmatic principles by providing children with actual items such as cell phones and other materials that are appropriate for their size, enabling them to grasp and internalise real-world limitations (Janssen, Kinney & Farfaring, 2021). The classrooms are expansive and well-organised, specifically created to promote focus and dynamic engagement. Montessori emphasised the importance of attention in a child's development and advocated for schools to offer materials that facilitate children's ability to focus (Marks, 2016).

The Montessori Method also includes the practice of having children of different ages (3-6, 6-9, 9-12) learn together and engage in self-directed learning for long periods of time. Educational materials are specifically tailored to align with the cognitive and emotional growth of children, guaranteeing that the tasks presented are both demanding and achievable. Montessori categorised development into four distinct stages: infancy, childhood, adolescence, and maturity. She emphasised the importance of aligning tasks with the child's specific level of movement, language, sensory perception, and sense of order (Lillard, 2012).

### **Theoretical Framework**

This study's theoretical foundation is based on Montessori's Planes of Development, which outlines four separate phases of human growth. Each stage is defined by certain learning abilities and developmental objectives. The first phase spans from birth to six years old, the second phase is 6-12 years, the third is 12-18 years and the final phase is 18-24 years.

The first phase of development, which aligns with the focus of this study, is commonly referred to as "The Absorbent Mind" period. This phase holds significant importance in the context of preschool education. During this stage, children have a heightened ability to receive and process sensory information, and they primarily learn by engaging with their surroundings. This is consistent with Montessori's notion that a well-prepared environment, filled with interactive learning materials, facilitates the acquisition of fundamental abilities in reading, writing, and mathematics (Lillard, 2017). The Montessori setting, which is both organised and flexible, promotes independence and cognitive development by allowing children to interact with objects that facilitate self-directed learning (Fleming *et al.*, 2019). Within this developmental stage, infants possess sensitive periods

that facilitate the effortless acquisition of language and mathematical concepts through frequent exposure and exploration (Lillard, 2021). At this time, the focus on tangible experiences aids in strengthening the ability to think in abstract terms, which in turn prepares individuals for achieving academic accomplishments in the future (Gordon, 2023). The Montessori method improves learning outcomes in literacy and numeracy by adapting the educational environment to meet the developmental requirements of children. This approach is in line with Thrush's (2015) argument that effective teaching should be tailored to the learner's psychological and developmental stage.

According to Salminen, Khanolainem, Koponem, *et. al.*, (2021 in Manuel, 2023), the environment in which children grow up has an impact on their development during the developmental period. The early stages of development are crucial for the acquisition of numeracy and literacy skills, since they form the foundation for future mathematical and reading abilities. According to Watts, Duncan, Siegler *et. al.*, (2014), the acquisition of non-symbolic and symbolic numeracy skills throughout early childhood can have a significant impact on a child's future mathematical abilities.

Key foundational numeracy skills encompass the ability to handle and compare quantities, count proficiently, and identify numbers accurately. The longitudinal study conducted by Duncan, Dowsett, Claessens, *et. al.*, (2017) has proven that children's achievement in mathematics and general academic performance is dependent on their strong foundation in mathematics. The study conducted by Morgan, Farkas and Wu, (2019) establishes the significance of numeracy skills in determining children's educational achievement. The findings of the study indicated that 70% of grade 5 students who scored below the 10th percentile also scored below the 10th percentile at the conclusion of their early childhood education.

Literacy skills in children foster the capacity to write and read with assurance, so bolstering their overall communication abilities. The development of literacy skills is of utmost importance for every child, and it is frequently essential for their overall growth and success. Hence, the teacher responsible for facilitating the growth of children's reading skills in ECE must possess a comprehensive understanding of the approaches and techniques that effectively promote skill development (Literacy Project, 2019).

The Montessori Method of teaching posits that the environment plays a significant role in either impeding or facilitating the development of children (Manuel, 2023). The ready-made setting serves as the implementation platform for these fundamental components. It is a pre-established learning environment that is tailored to the child's growth and enables the child to freely explore the classroom. In this framework, a child is entitled to select 'job' learning activities (Lillard, 2013). There is a debate among educators and scholars of education on the suitability of the Montessori approach in the present era. It is argued that this approach is more effective than the traditional teaching method in terms of knowledge acquisition by students (Manuel, 2023).

Furthermore, Studies on gender gaps in literacy skills among Montessori pupils have yielded mixed findings, with certain research revealing differences and others indicating gender-neutral results. Montessori education prioritises personalised learning, which should ideally reduce gender disparities by enabling each child to advance at their own rhythm. Nonetheless, multiple studies have indicated that gender may continue to affect literacy development in diverse manners.

Hohmann and Weikart (2020) discovered that whereas Montessori pedagogy promotes critical thinking and self-regulated learning, boys generally underperform compared to girls in early literacy skills, including reading fluency and comprehension. This disparity is ascribed to developmental variances in language and cognitive abilities during early life (Davis & Mahoney, 2019). Females, on average, tend to develop language abilities earlier, potentially providing them with an advantage in literacy activities. Montessori methods may mitigate these differences by fostering a holistic, child-centered approach that prioritises phonological knowledge and reading comprehension. Lillard (2021) posits that the lack of rigid gender-specific education facilitates increased flexibility, which may lead to more equitable outcomes over time.

Maria Montessori established the teaching method over a century ago as an instructional approach that places the student at the centre of attention. The strategy facilitates the selection of learning activities, organises them into several stages, and promotes uninterrupted work periods. (Lillard, Heise, Richey, *et. al.*, 2017). In addition, Montessori learning resources that encourage active participation are carefully organised and provided to children in a visually appealing environment. Children are encouraged to explore certain interests while also engaging in other activities without receiving any rewards or external grades (Lillard *et. al.*, 2017).

Multiple studies have been carried out in the past decades to examine Montessori education and evaluate the

implementation and impact of participation in the private and public sectors (Culclasure, Fleming, & Riga, 2018). Although numerous studies support the effectiveness of Montessori education, there is a dearth of research specifically examining the influence of the Montessori approach on the development of literacy and math abilities in nursery schools located in Lagos State, particularly in the Lagos Mainland area. Therefore, the paper examines the impact of Montessori teaching methods on the academic achievements of preschool children in Mainland LGA of Lagos State, namely in the areas of literacy and numeracy.

### **Purpose of the Study**

The study examines the impact of Montessori teaching methods on the academic achievements of preschool children in Mainland LGA of Lagos State, namely in the areas of literacy and numeracy. The specific objectives are to:

- evaluate the gap between the literacy skills of pupils attending Montessori schools and those attending non-Montessori schools in Mainland LGA;
- assess the gap between the literacy skills of pupils attending Montessori schools based on their gender in the study area.

### **Research Hypotheses**

The following hypotheses were tested at 0.05 level of significant in this study:

**H<sub>0</sub>1:** There is no significant gap between the literacy skills of pupils attending Montessori schools and those attending non-Montessori schools in Mainland LGA.

**H<sub>0</sub>2:** There is no significant gender gap in the literacy skills of pupils attending Montessori schools in the study area.

### **Methodology**

Descriptive survey research design was used for this study. The population of the study comprised all preschoolers in Mainland Local Government Area of Lagos State. The sample size included a total of 71 pupils from four intact Nursery Two classes. Multistage sampling procedure was used in the study. Random sampling was used to select two Montessori schools and two non-Montessori nursery schools in Mainland LGA. Stratified sampling technique was used to select 45 children from the two non-Montessori schools and 26 children were selected from the Montessori schools. Preschoolers' Achievement Test (PAT) was self-designed by the researcher. The researchers administered the PAT to the pupils with the help of their class teachers, after seeking the school administrators' approval. The PAT scripts were collated for data analysis purpose. Split-half technique was used to check the Preschoolers' Achievement Test (PAT) and the reliability coefficient yielded 0.81, to measure preschoolers' literacy skills. The data collected were analysed using descriptive and inferential statistics. Participants' demographics were presented using frequency distribution tables, and the two hypotheses were tested using an independent-samples t-test in SPSS 21.0 at 0.05 significance level.

### **Results**

**Table 1: Preschoolers' Demographics**

Characteristics	Options	Frequency	Percent (%)
Gender	Male	38	53.5
	Female	33	46.5
	<b>Total</b>	<b>71</b>	<b>100.0</b>
Age	4-5 years	52	73.2
	6-7 years	19	26.8
	<b>Total</b>	<b>71</b>	<b>100.0</b>
Method	Non-Montessori	45	63.8
	Montessori	26	36.2
	<b>Total</b>	<b>71</b>	<b>100.0</b>

Source: Field Survey, 2024

Table 1 indicates that the majority (53.5%) of the preschoolers were male and the remaining 46.5% of them were female. While most (73.2%) of them were within the age bracket 4-5 years and the remaining 26.8% of them were ages 6-7. Similarly, 63.8% of the preschoolers were from non-Montessori schools and the remaining 36.2% of them were from Montessori schools.

### Test of Hypotheses

The research hypotheses were tested with the use of one sample t-test, as shown below:

### Hypothesis One

There is no significant gap between the literacy skills of pupils attending Montessori schools and those attending non-Montessori schools in Mainland LGA

**Table 3: Summary of t-test statistics**

Method	N		Std.	df	P-val.	Level	Decision
Non-Montessori	45	6.14	0.531				
Montessori	26	8.72	0.714	70	0.004	0.05	Significant

$P\text{-value} = 0.004 < 0.05$  level of significance

Table 2 shows the evaluation of the mean scores of the pupils selected from Montessori schools and those of their counterparts from non-Montessori schools in their literacy skills outcomes, with the Preschoolers Achievement Test (PAT). The table showed that the pupils from non-Montessori schools had a lower mean score of 6.14 than their counterparts from Montessori schools with a higher mean score of 8.72. Furthermore, a mean score of 8.72 from 26 pupils selected from Montessori schools and a mean score of 6.14 from their non-Montessori school counterparts indicates that those from Montessori schools achieved 2.58 (42.0%) higher than the non-Montessori school pupils. More so, the P-value of 0.004 was found less than the level of significance (0.05);  $p < 0.05$ . This implies that the null hypothesis that states "there is no significant gap between the literacy skills of pupils attending Montessori schools and those attending non-Montessori schools" is rejected, and its alternative that states "there is a significant gap between the literacy skills of pupils attending Montessori schools and those attending non-Montessori schools" is accepted.

## Hypothesis Two

There is no significant gender gap in the literacy skills of pupils attending Montessori schools

**Table 3: Summary of t-test statistics**

Method	N	Std.	df	P-val.	Level	Decision	
Male	38	8.63	0.252			Not	
Female	33	8.81	0.591	70	0.101	0.05	Significant

$P\text{-value} = 0.101 > 0.05$  level of significance

Table 3 shows the evaluation of the mean scores of the male pupils selected from Montessori schools and their female counterparts from the same schools in their literacy skills outcomes, with the PAT. The table showed that the female pupils had a higher mean score of 8.81 than their male counterparts from same schools with a lower mean score of 8.63. Furthermore, a mean score of 8.81 from 33 female pupils and a mean score of 8.63 from 38 male pupils indicates that the female pupils achieved 0.18 (2.1%) higher than the male pupils. More so, the P-value of 0.101 was found greater than the level of significance (0.05);  $p > 0.05$ . This implies that the null hypothesis that states "there is no significant gender gap in the literacy skills of pupils attending Montessori schools" is rejected, and its alternative that states "there is a significant gender gap in the literacy skills of pupils attending Montessori schools" is accepted.

## Discussion of Findings

The findings of this study revealed substantial gaps in literacy and numeracy abilities of pupils enrolled in Montessori schools compared to those attending non-Montessori schools. This aligns with the assertion that the developmental period of children is influenced by the environment in which they are raised (Salminen, *et. al.*, 2021). The initial phases of development are crucial for the acquisition of numeracy and literacy skills, since they establish the groundwork for future mathematical and reading proficiencies. Watts, Duncan, Siegler, *et. al.*, (2014) argue that the development of both non-symbolic and symbolic numeracy skills during early life can greatly influence a child's future mathematical aptitude. Foundational numeracy skills include the capacity to manipulate and assess quantities, count fluently, and accurately recognise numbers. The longitudinal study undertaken by Duncan, Dowsett, Claessens, *et. al.*, (2017) has demonstrated that children's success in mathematics and overall academic performance is contingent upon their solid grounding in mathematics. The research undertaken by Morgan, Farkas, and Wu (2019) demonstrates the importance of numeracy skills in influencing the educational success of children. According to Manuel (2023), this strategy is believed to be more effective than the traditional teaching method in terms of students' acquisition of knowledge.

## Conclusion

This study uncovers significant gaps in literacy and numeracy skills between Montessori and non-Montessori pupils, underscoring the impact of early educational settings on growth and progress. The Montessori methods were proven to boost early numeracy skills, including as counting and comparing, which are crucial for future academic achievement. The results indicate that the Montessori educational approach is more effective than traditional techniques in promoting the development of literacy and numeracy skills in preschool-aged children, while there is no meaningful difference between the performances of male and female pupils' performances in the Montessori schools. This highlights the significance of utilising instructional approaches that correspond to early phases of development, as exemplified by Montessori education. This research provides evidence that the Montessori approach continues to be beneficial in enhancing learning results in preschoolers, particularly in crucial areas like as numeracy and literacy, despite the ongoing arguments regarding its relevance.

## Recommendations

The following are recommended based on the findings:

- Montessori methods should be used in preschools to improve reading and numeracy. Hands-on, child-centered strategies can help enhance numeracy and reading skills.



- To adopt Montessori strategies in the classroom, teachers need specialised training. This can prepare teachers to foster cognitive growth and academic performance in preschoolers.
- Montessori-based early intervention programs should be promoted by policymakers. These programs can help underprivileged children develop literacy and numeracy early on.
- Long-term effects of Montessori education on children's intellectual and social development should be studied to fully understand and optimise its benefits in varied educational environments.

## References

- Culclasure, B., Fleming, D. J., Riga, G. (2018). An evaluation of Montessori education in South Carolina's public schools. The Riley Institute at Furman University, Greenville, SC. Unpublished manuscript.
- Davis, R., & Mahoney, P. (2019). Gender differences in early literacy skills. *Early Childhood Research Quarterly*, 48(3), 189-198.
- Denervaud, S., Knebel, J.-F., Hagmann, P., & Gentaz, E. (2019). Beyond executive functions, creativity skills benefit academic outcomes: Insights from Montessori education. *PLoS ONE*, 14(11), 1-13.
- Duncan, G.J., Dowsett, C.J., Claessens, A., Magnuson, K., Huston, A.C., Klebanov, P., & Japel, C. (2017). School readiness and later achievement. *Developmental Psychology*, 43, 1428–1446.
- Fleming, D.J., Culclasure, B.T., & Zhang, D. (2019). The Montessori model and creativity. *Journal of Montessori Research*, 5(2), 1-14.
- Gordon, C. (2023). *Together with Montessori* (1st ed.). Minneapolis: Jolla.
- Hohmann, M., & Weikart, D. (2020). *Educating young children: Active learning practices for preschool and child care programs*. HighScope Press.
- Janssen, L.M., Kinney, J.M., & Farfsing, K.M. (2021). Through the Montessori looking-glass: Barriers to implementing a Montessori-Based intervention. *Journal of Applied Gerontology*, 40(9), 1-5.
- Lillard, A. S. (2022). Preschool children's development in classic Montessori, supplemented Montessori, and conventional programs. *Journal of School Psychology*, 50, 379-401.
- Lillard, A. S. (2013). Playful learning and Montessori education. *NAMTA Journal*, 38(2), 137-174.
- Lillard, A. S., Heise, M. J., Richey, E. M., Tong, X., Hart, A., & Bray, P. M. (2017). Montessori preschool elevates and equalizes child outcomes: A longitudinal study. *Frontiers in Psychology*, 8, 33-44. 83.
- Lillard, A.S. (2021). Montessori as an alternative childhood education. *Early Child Development and Care*, 1-11.
- Literacy Project, (2019). Five essential skills needed for childhood literacy. Retrieved on 13/06/24, from <https://Literacyproj.Org/2019/04/29/Five-essential-skills-needed-for-childhood-literacy/>.
- Manuel, M.N. (2023). Impact of Montessori teaching methods on developmental domains in early childhood education in Lagos state, Nigeria. *Journal of Educational Research in Developing Areas*, 4 (1), 113-122. Retrieved on 12/07/24, from .
- Marks, L. (2016). Playing to learn: an overview of the Montessori approach with pre-school children with Autism Spectrum Condition. *Support for Learning*, 31(4), 313-328.
- Mavric, M. (2020). The Montessori approach as a model of personalized instruction. *Journal Montessori Research*, 6(2), 13-25.
- Morgan, P.L., Farkas, G., & Wu, Q. (2009). Five-year growth trajectories of kindergarten children with learning difficulties in mathematics. *Journal of Learning Disabilities*, 42, 306–321.
- Oduolowu, E.A. (2011). *Contemporary issues in early childhood education*. Franco-Ola Publishers, Ibadan.
- Olowe, P. K., Kutelu, B. O., & Majebi, O. I. (2014). Teaching social ethics in early childhood classrooms: A panacea for promoting peaceful Nigerian society. *International Journal of Humanities and Social Science*, 4(6.1), 263-268.

- Thrush, U. (2015). *Montessori teacher training albums*. Unpublished manuscript.
- UNICEF, U.A. (2012). *EFA Goal 1: Early Childhood Care and Education*. Bangkok: UNESCO.
- Watts, T. W., Duncan, G. J., Siegler, R. S., and Davis-Kean, P. E. (2014). What's past is prologue: relations between early Mathematics knowledge and high school achievement. *Educational Research*, 43, 352–360.
- Wentworth, R. A. L., & Wentworth, F. (2013). *Montessori for the New Millennium: Practical guidance on the teaching and education of children of all ages, based on a rediscovery of the true principles and vision of Maria Montessori*. Taylor & Francis.
- Yulia, S., Raharjo, T.J., Fakhruddin, F., &Formen, A. (2022). Montessori Method in character education: Analysis of the effectiveness of the Montessori Method in character education in early childhood education. *ISSET: International Conference on Science, Education and Technology* (2022), 881-889.

## Impact of Social and Academic Skills of Pre-Primary School Children for Scaling Up Childhood Education in Pankshin Local Government: The Stakeholder's Roles

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### **Abstract**

*This research therefore examines the impact of social and academic skills development of pre-primary school children for scaling up the status of childhood education in Pankshin Local Government Area. The study adopted a descriptive survey design. This study employed an interactive model data analysis included: data validating, data collection, data reduction, data display, and conclusion drawing. The population of the study were all the teachers of pre-primary schools in Pankshin LGA numbering 750 comprising class helps, head teachers and parents. Simple random sampling technique was used to draw 750 teachers from the 48 public primary schools. 1-30 item questionnaire titled 'Teachers' Classroom social and academic skills development questionnaire (TCSACDQ) was developed by the researcher and used to obtain relevant data from respondents. Three research questions guided the study. The instrument yielded reliability co-efficient of 0.86. Cronbach Alpha method. The results showed that the instrument was reliable. The data was analyzed using mean scores and standard deviation. Any item with a mean score of 2.50 and above was accepted value while items with a mean rating below were not accepted value. It was discovered that: the cooperation aspect, children may collaborate well; the assertion aspect, children may get along with new friends and communicate with others; the responsibility aspect, children understand their role and responsibility to guide themselves, others, and society; the empathy aspect, children may feel others' feeling and problem; the self-control aspect, children can control their mental state so that they can avoid anger and bad influences in order to scale up early childhood development and education in Nigeria for qualitative acquisition of skills and sustainability. Based on these findings, recommendations were made.*

**Keywords:** Social, Academic Skills, Pre-primary Schools, Stakeholders

### **Introduction**

The major problems facing the world today can be solved only if there is improvement in our understanding of human behavior" (Peterson, 2018). Educational leaders, teachers, school counselors, social workers and school psychologist who are stakeholders whom have long argued that some pupils were under-performing academically because they lack proper social skills (inattentiveness and unpreparedness during instructional periods, show of aggressive behavior toward classmates and educational staff, inability to engage cooperative learning and disruptive behavior in classroom) which affected their academic skills (studying skills, problem-solving skills, critical and decision-making skills, mastery and performance skills, task management skills). Pupils who struggled to master social skills at pre-primary school faced more disciplinary consequences when they failed to engage in appropriate behavior. Pupils need to be taught directly and systemically skills to succeed in schools (Leigh, 2020). In some cases, the combination of a lack of social and academic study skills have precluded the pupils' quest to experience academic success during their high school matriculation. "Under the realm of behaviorism the intellect, feelings, and emotions of a person's inner life are not observable or measurable and therefore not investigated. Thus, a behavioral educator would advocate that effective learning is best accomplished by a change on behavior and relies heavily upon behavioral objectives to accomplish the teaching learning task" (Mercer, 2017).

Classroom teachers have long recognized the importance of social and behavior skills, viewing cooperation, self-control, and other social skills as critical to achieving academic and behavioral success (Zaretta, 2020). Still, others have argued that pupils' lack of social skills affected their ability to acquire proper academic skills that would have allow them to experience a successful educational experience during their years

of matriculation in grade K-12. Because the pupil's social skills are absent, the pupils are constrained mentally to wonder about during the instructional period, unable to understand and this concentrated on the subject matter being taught unable to formulate proper questions (Kems&Brumariu, 2020). The pupils inability to follow along; unable to (or fearful to) ask question clarify illustrations or demonstrations out of shame or embarrassment (Wong & Lee, 2020). Some of these pupils have minor to severe trouble grasping the new knowledge. Maths, Science, Language, Arts and Social Studies. Understanding and comprehending concept like themes and notions are also elements needed to be successful in the high school and succeed on the state wide mandated proficiency examinations or other state or federal sponsored proficiency examinations.

Toward off embarrassment in front of their peers, some pupils, because of their lack of academic skills and their inability to constructively engage in classroom learning, engaged in the improper behavior such as inattentiveness during instructional periods, and aggressive behavior toward classmates and teachers. Being unprepared for class is common because the pupil fails to understand the content area. Since the child is incapable of engaging in classroom work, this child may be susceptible to an admonishment by the teacher, removal from the classroom, disciplinary referral or faced with the possibility of being expelled from school. Some researchers have ventured to conclude that this defensive behavior, on the child's part, is because the child lacks the ability to function academically, socially, constructively, and or contribute to classroom learning, thus leading to an unsuccessful educational experience (Allan, 2020). While educational leaders, teachers, school counselors, social workers and school psychologist are focused on the major core subjects as Math, Reading and Language, Arts, and Science. They all agree that the knowledge and understanding derived from these content subjects are instrumental in creating the whole children and life-long learners.

Teacher's factor could affect children's social and academic reasoning skills acquisition. García, Jorge, and Luis, (2016) observed that lack of commitment by the teachers and inappropriate teaching methods constitute major problems associated with poor social and mental reasoning skills of pre-primary school children. Lack of teachers' commitment and inappropriate teaching method appears to undermine children's social and mental reasoning skills which are part of the worries of the present research, This is because traditionally, schools have focused on teaching content-area, knowledge and abilities, such as, social habits, Basic Science, Physical Education, Mathematics and English Language among others leaving out the teaching of skills, needs and interest (Joshua, Brandon, & David, 2019) which presumably leads to poor social skills development. However, the issues of the lack of academic and social skills are both stressful to the children and teachers because the children, in some cases, are precluded/ and hampered their ability to process the information which may affect the teachers' awareness of the learner's non-educational problem. The process of learning occurs because children's learning is associated with a condition and that condition is the environment (Vermeulen, & Van, 2020). As such, children learn from their interactions with environment or surrounding. Lacking in either or both social and academic study skills, at the pre-primary level of education constitute failure for children to achieve and enjoy a successful educational experience.

Stake holders' expectations of their pupils suggest that it is important and imperative that pupils demonstrated and displayed cooperation and self-control skills during school hours. Astuti (2021) studied the expectations of teachers with regard to students' behavior in class. Each year, many educators expect their pupils to listen carefully and attentively, follow direction and turn in assignments that are done correctly and adequately (Crawford, 2020). Pupils who lack these skills or expectations during pre-primary levels may be at risk for pejorative outcomes including poor school adjustment in the form of impaired relationships with teachers and peers, academic underachievement and high rates of disciplinary contact (Allan, 2020). However, it must be first recognized and noted whether the teacher's goals and expectations are explained clearly and identified prior to the beginning of the school year. Teaching and Teacher Education (TTE, 2020 & Asisigan & Samuel (2021), writes that if the expectations are not clear, either because the skills are not explicitly taught in early years or consistently enforced through a pupil educational experience, was difficult for learners to meet the teacher's expectations in the classroom. In addition, if children are given variation of rules and expectations from subject class to subject class, to grade level to grade level and from teacher to teacher, children's transition may become difficult (Caldwell, 2020). Early investigations related to teacher expectations regarding students in educational setting by Walker and Herse (1992), led to the development of the Model of Interpersonal Social-Behavior competence with School Settings.

## Statement of the Problem

Educational researchers and social educational theorist noticed a steady increase of pupils exhibiting a lack of social and academic skills. The lack of social skills has been identified as inappropriate pupil's classroom behavior, inattention during instructional periods, aversive relationships and interactions with educators and fellow classmates, and disruptive classroom behavior are found. The lack of social skills has produced negative consequences in the pupil's classwork and homework or assignments; examinations, tests, and quizzes; the lack of organization surrounding school work; tardiness, absenteeism, and the inability to maintain or sustain social relationships among classmates. In addition, the impact of the lack of social skills on the pupils' academic skills have shown to exist in the pupil's ability to engage in proper studying skills, problem-solving, decision-making, content mastery, performance skills, and task management skills. Astuti, Rusilowati, and Subali, (2021), offered that most high school students engaged in inappropriate classroom behavior because they lacked the basic educational foundations to be in the classroom and as a consequence, these students, to avoid looking unintelligent in front of their classmates or peers, engaged in inappropriate behavior they know will get them tossed out of class, into detention, suspended from school, or created aversive interactions with the teacher resulting in the teacher avoiding the student (and unlikely to provide direct education instructions). Hence, this study examines the relationship between social and academic skills development

## Purpose of the Study

This study explored and examined the impact of social and academic skills development of pre-primary school children for scaling up childhood education in Nigeria. Stakeholder's role. Specifically, the objectives are to:

- examine if there exists a relationship between social and academic skills of pre-primary school children in Pankshin LGA;
- determine the extent of the relationship between social and academic skills of children in pre-primary school in the study area;
- investigate if educational stakeholders assist the pre-primary school children in making improvement in social and academic skills in the study area.

## Research Question

The following research questions guided the study:

- What is the Impact of social and academic skills development of pre-primary school children in Pankshin LGA?
- What is the extent of the relationship between social and academic skills development of children in pre-primary school in the study area?
- What is the stakeholder's roles in assisting children in making improvement in social and academic skills in the study area?

## Methodology

This study is a descriptive survey research design which aimed at examining the impact of social and academic skills development of pre-primary school children for scaling up childhood education in Pankshin LGA: The stakeholder's roles. The study was carried out in Pankshin Local Government Education Area of Plateau State. Pankshin Local Government Area is located in Plateau Central Senatorial Zone; Pankshin Local Government Area is made up of eight autonomous communities namely: Pankshin, Chip, Langkang, Tal, Kadung, Dokpai, Wokkos and Fer. Pankshin is popularly known for its trade hub. Majority of Pankshin people are farmers. Pankshin Local Government is made up of 20 education supervisory zones, two tertiary institutions, federal college of education and state college of health; Pankshin-North is the headquarters of the education supervisory zones. Each zone is unique and tends to impact on children's social and academic skill development. The population for this study comprised all the 750 teachers, head teachers, class helps and parents in 48 public primary schools (Statistics Unit PPSMB, Pankshin Zone, 2023). The entire 750 stakeholders in Pankshin Education Zone were used as the sample of this study. The instrument for data collection was a structured questionnaire titled 'Teachers' Classroom Social and Academic Skills Development Questionnaire (TCSASDQ). The questionnaire was developed by the researcher and has two sections, A and B. Section A dealt with the biodata of the respondents, while section B dealt with information on the impact of social and academic



skill development of children in pre-primary schools, it has 30 items built in three clusters. Cluster A had 10 items on social skills and cluster B had, 10 items on relationship between social and academic skills development and Cluster C had 10 items on stake holder's roles. A four point rating scale with assigned value was used to rate the responses to the questionnaire items as follows: strongly agreed,(SA)-4 points, Agreed (A)-3points, Disagreed (D)-2points, Strongly Disagreed(DA)-1 point. The criterion mean of acceptance was 2.50. The instrument was validated by two experts in Childhood Education and another from Measurement and Evaluation all from the federal college of education, Pankshin. The Cronbach Alpha method was used to reliability. The instrument yielded a reliability of co-efficient of 0.86 which showed that the instrument was reliable. The data was analyzed using mean scores and standard deviation. Any item with a mean score of 2.50 and above was accepted value while items with a mean rating below were not accepted value.

### Results

Research Question 1: What is the Impact of social and academic skills of pre-primary school children for scaling up early childhood education in Pankshin?

To answer the question, teachers, head teachers and parent's responses on social and academic skills was used as the independent variables, while scaling up early childhood education was used as the dependent variable. These were subjected to test using mean and standard deviation and the results are presented in the following table.

**Table 1: Mean response and the standard deviation of the Impact of social and academic skills of pre-primary school children in Pankshin LGA of Plateau State. Nigeria**

Impact of social and academic skills of pre-primary school pupils in Pankshin LGA of Plateau	Mean (x)	Std	Decision
Children often share toys with others	3.50	0.11	Agreed
Children take turns in games	3.00	0.30	Agreed
They show kindness to friends	3.00	0.30	Agreed
They often cooperate with other children during play	2.88	0.21	Agreed
Pupils resolves conflict with ease	2.50	0.11	Agreed
Pupils express their feelings with words	3.00	0.22	Agreed
They Listen to others always in the classroom	3.00	0.33	Agreed
They often engage in conversation with other children	2.98	0.28	Agreed
They use polite Language when communicating with peers	3.00	0.33	Agreed
Children recognize and express emotions in a good way	3.50	0.31	Agreed
<b>Grand mean 2.99</b>	<b>Srd.0.32</b>		

N= 750

The table presents mean and standard deviation on the impact of social and academic skills of pre-primary school children in Pankshin Local Government. Ten items were presented and all the question items were agreed to base on 2.50 decision point set in the study. The accepted items were sharing of toys with others, taking turns in games, showing kindness to friends among others. The overall mean was 2.99 this implies that, the social and academic skills has impact on pre-primary school children in Pankshin Local Government Area of Plateau State.

**Research Question 2:**What is the extent of the relationship between social and academic skills of children in pre-primary school for scaling up childhood education?

To answer the research question two, teachers, head teachers and parent's responses on the extent of the relationship between social and academic skills questionnaire was used as the independent variables, while

scaling up early childhood education was used as the dependent variable. These were subjected to test using mean and standard deviation and the results are presented in the following Table 2.

**Table 2: Mean response and Standard deviation of the relationship between social and academic skills of pupils in pre-primary school in Pankshin LGA of Plateau State, Nigeria.**

S/N	Relationship between social and academic skills of pupils in pre -primary school are that:	Mean (x)	Std.	decision
11.	Pupils often cooperate well with others in group work	3.00	0.30	Agreed
12.	Show empathy towards friends	2.95	0.29	Agreed
13.	Resolve conflicts peacefully	2.59	0.22	Agreed
14.	Pupils communicate effectively with peers	2.50	0.28	Agreed
15.	Pupils reading comprehension is high	3.00	0.30	Agreed
16.	Pupils social skills help them with their academic skills	3.00	0.30	Agreed
17.	Pupils academic skills affect their social relationships	2.85	0.91	Agreed
18.	They have strong ability to follow instructions	3.00	0.30	Agreed
19.	Pupils social skills helps them with difficult academic task in class	3.00	0.30	Agreed
20.	Social skills helps pupils with Mathematics problem solving	2.50	0.28	Agreed
<b>Grand mean: 2.85 Std: 0.57</b>				

**N=750**

Table 2 shows the relationship between social and academic skills of pre-primary school pupils for scaling up childhood education in Pankshin. Ten items were presented and all the question items were agreed to base on 2.50 decision point set in the study. The accepted items were show empathy towards friends, Pupils academic skills affect their social relationships and Pupils social skills helps them with difficult academic task in class. The overall mean was 2.85 this implies that, the relationship between social and academic skills has impact on pre-primary school children in Pankshin Local Government Area of Plateau State for scaling up childhood education.

**Research question 3:** What have educational stakeholders do to assist the pupils in making improvement in social and academic skills for scaling up childhood education?

To answer these question, stakeholder's roles in assisting children to make improvement in social and academic skills for scaling up childhood education in pre-primary schools in Panksin LGA were subjected to mean and standard deviation test and the results are presented in the following Table 3.

**Table 3: Mean response and the standard deviation of Stakeholders roles in assisting pupils in making improvement in social and academic skills for scaling up childhood education in Pankshin Local Government Area in Plateau State.**

S/N	Stakeholders roles for assisting pupils in making improvement in social and academic skills in Pankshin LGA. .	Mean(x)	Std	decision
21.	Teachers always observes pupils engaging in social skills like sharing and cooperation with others.	3.00	0.01	Agreed
22.	Teachers always engage pupils with Maths games, reading aloud and writing activities.	2.80	0.80	Agreed
23.	Teachers often encourage pupils to take risk and try new thing	3.00	2.01	Agreed
24.	Teachers often communicate with parents/ guardians about pupils progress	3.00	0.30	Agreed
25.	Parents often engage in activities with their pupils that promotes social and academic skills	3.00	0.30	Agreed
26.	Parents sometimes communicate with teachers for their pupils academic progress.	3.50	0.30	Agreed
27.	Head teachers always implement initiatives to support social and academic skills development pre-primary school pupils.	3.00	0.88	Agreed
28.	Pupils do feel supported by their teachers and parents in their learning.	2.50	0.21	Agreed
29.	Teachers use different resources to teach social and academic skills development.	3.50	0.31	Agreed
30.	Parents often engage in using different strategies in providing resources in the school.	3.00	0.30	Agreed
<b>Grand mean</b>		<b>3.32</b>	<b>Std: 0.43</b>	

**N= 750**

Table 3 shows the stakeholder's roles in assisting pupils in making improvement in social and academic skills for scaling up childhood education in Pankshin Local Government Area in Plateau State. Items number 21-30 were presented and all the question items were agreed to base on 2.50 decision point set in the study. The accepted items were Teachers always observes pupils engaging in social skills like sharing and cooperation with others, Teachers often communicate with parents/ guardians about pupils progress and Parents often engage in using different strategies in providing resources in the school. The overall mean was 3.32, this implies that, the stakeholder's roles has impact in assisting pupils in making improvement in social and academic skills for scaling up childhood education in Pankshin Local Government Area in Plateau State.

## Discussion of Findings

The findings of the study from research question 1 indicates that, the major indicator that without social skills; the pupil's academic skills will not mature to the necessary level to create a successful primary school experience. The need for the research is critical, in light of the sanctions that can be imposed on a state's educational system, if the academic standards and benchmarks are not met pursuant to the criteria set forth under the No Child Left behind Act of 2001 and Inclusive Learning by UNICEF of 2018. These often competing and conflicting skills – academic and social – have precluded some pupils from becoming life-long learners and successful members of our growing society. A pupil's lack of one or both skills - social skills and academic - in pre-primary school are a pressing concern to both those within and without the educational community because the absence of either skill has affected the pupils' academic success in primary school most importantly. Cowie (2018), declared that education consist of a series of interaction between a teacher and the learners, between groups of learners, or between learners and various school personnel. This is same concerning childhood education. Even with that explanation, a high-quality education is often described as the presence of standards-based curriculum taught by a highly-qualified teacher, and the effectiveness of even the best instruction hinged on the pupils' ability to engage in personal interaction. Without those skills, the pupil opportunities to learn effectively are likely to diminish greatly (Mercer, 2013; Herse, 2016,).

Research question 2 the relationship between social and academic skills of pre-primary school pupils are key to scaling up childhood education in Pankshin LGA: Pupils often cooperate well with others in group work, Pupils communicate effectively with peers, they have strong ability to follow instructions, Pupils reading comprehension is high, Pupils social skills helps them with difficult academic task in class and Social skills helps pupils with Mathematics problem solving Thus, with a grand mean of 2.85 and standard deviation of 2.57, it implies that social and academic skills has great relationship for scaling up childhood education in Pankshin LGA. The finding of the study is in line with the study of Joshua, Brandon and David (2019). By this finding, through quality relationship between social and academic skills of childhood education children will scale up in Pankshin as well as in Nigeria.

The findings of research question 3 showed that, the stakeholder's roles for assisting pupils in making improvement in social and academic skills development in Pankshin LGA. Table 3 revealed that Teachers always observes pupils engaging in social skills like sharing and cooperation with others, Teachers always engage pupils with Math's games, reading aloud and writing activities, Parents often engage in activities with their pupils that promotes social and academic skills, Head teachers always implement initiatives to support social and academic skills development pre-primary school pupils. Teachers use different resources to teach social and academic skills development and Parents often engage in using different strategies in providing resources in the school. By this, 21-30 were all above the criterion mean of 2.50, hence, they rated positive. Based on the analysis of the data in table 3, a great mean and standard deviation of 3.32 and 0.43 respectively, it is established that they are the major impact on social and academic skill development to the scaling up of childhood education in Nigeria. The finding are in line with Teacher and Teacher Education (ITE, 2020 & Asigigan & Samuel, 2021) which specifically anticipated the stakeholder's roles in supporting pupil's education attainment for scaling up childhood education in Nigeria.

## Conclusion

The study concluded that the scaling up of childhood education in Pankshin LGA is the major priority of government which is aimed at the supporting Pupils social and academic skills development. Stake holders have roles to play in this regard as it arms the citizens of the areas with the required knowledge and ability, skills and right values which adds to national cohesion in a heterogeneous nation like Nigeria. In the face of scaling up childhood education in Pankshin, quality relationship between social and academic skills must be strengthened. There is also need for Stakeholders so serious on a daily bases through provisions of teaching resources and checking on the activities of teachers and pupils in school. In offsetting these roles, the study made some useful recommendations.

## Recommendations

Based on the findings of this study, the following recommendations were made:

- The Stake holders should provide more learning resources to pre-primary schools to enable Children learn to scale up their skills.

- Social and Academic skills development strategies should be integrated into the curriculum of Nigeria's education system.
- The government should provide functional and qualitative avenue for parley between schools and stakeholders especially at pre-primary schools to curb any unending issues that can hinder childhood education from scaling up.
- Stake holder's role should be included in the National Education curriculum of pre-primary school children in Nigeria.
- Efforts should be made by the ministry of education and their staff to set up a new programme of action that will help to checkmates the stake holder's attitudes in areas of their supervisory roles on children's learning as well as curriculum implementation in the various schools assigned to them.

## **References**

- Allan, J. (2020). Ableism, inclusion, and academy. *Journal of educational and psychological studies*, 10(2), pp1-12.
- Asigigan, C.N., & Samuel, O. (2021). Exploring teacher education programs and students' learning outcomes. *Journal of Educational Research*, 114(4), pp, 538-548.
- Astuti, N.H., Rusiloeati, A., & Subali, B. (2021). Science, technology, engineering, and mathematics based learning analysis to improve students' problem-solving abilities in science subject. *Journal of Innovative Science Education*, 9(3).
- Caldwell L. (2020). Social adjustment and academic achievement: A predictive model for students with diverse academic and behavior competencies. *School psychology review*, 35 (3), pp. 493-501
- Cowie's, H. (2018). Teacher-students interaction and academic achievement. *International Journal of educational research*, 87, pp.53-62.
- Crawford, M. (2020). Exploring academic preparedness in pre-primary education. *Journal of early childhood education*, 48(3), pp.257-573.
- Garcia, J.L., & Luis, R. (2016). Developing academic reasoning skills in higher education. *Journal of educational research*, 109(4), pp.432-442.
- International Teacher Education (ITE, 2020). Global teacher professional development: A reviewed journal of teacher education, 71(3), pp.311-325
- Joshua, L, Brandon, C., & David, L.W. (2019). Fostering 21st- century skills in education. *Journal of quality relationships in children educational research*. 112(4), pp.538-547.
- Kems, K.A., & Brumariu, L.E. (2020). Developing social skills across childhood and adolescence child development perspectives. 14(2), pp 104-110.
- Leigh, A. (2020). Teaching students with autism and other developmental disabilities to succeed in school. *Journal of teaching exceptional children*, 52(3), pp.168-177.
- Mercer, N. (2017). Improving academic and behavior skills through self-management Procedures, preventing school failure, summer 94, 38(4), 5-12 (Retrieved March 22, 2017 from professional development collection, ). Leadership, 28 (1), pp.123-124.
- Peterson, J.B. (2018). 12 Rules for life: An antidote to chaos. Random House Canada
- Vermeulen, K.M. & Van den Berg, E. (2020). The effectiveness of social skills training for juvenile offenders: A meta-analysis. *Journal of experimental criminology*, 16(12), pp 146-165.
- Walker, D., & Herse, K. (1992). Teacher expectations and student achievement. *Journal of educational research*, 85(5), pp.303-309.
- Wong, C.K., & Lee, T.M.C. (2020). Peer influence and social learning in social skills development. *Journal of Adolescent Research*, 35(3), pp. 257-284.
- Zaretta, L. (2020). Academic and behavioural success: Strategies for diverse learners, Corwin



# **Impact of Training on Caregivers' Skills in Designing, Usage of Individually and Age Appropriate Assessment Tools for Early Years in Eti-osa Local Government Area, Lagos State, Nigeria**

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## **Abstract**

*This study examined impact of training on caregivers' skills in designing, usage of individually and age appropriate assessment tools for early years in Eti-osa Local government area, Lagos State, Nigeria. The study adopted descriptive survey and non-experimental impact evaluation designs. Study population and sample covered all the 60 ECCDE caregivers in Eti-osa, Local Government Education Authority (LGEA), purposively selected and officially authorised to participate in the training. Research instruments used for the study were Capacity Programmes' Assessment Questionnaire (CPAQ), Pre and Post-training Evaluation Tests (PPTET) and Individual and Age Appropriate Assessment Tools (IAAAT) Manual used for the training. The Internal consistency of research instruments were determined using Cronbach's Alpha which yielded co-efficient of 0.85, 0.81, 0.79 and 0.83 respectively, indicating good internal consistency. Data collected were analysed using simple percentages, interview schedule (IS) and paired sample t-Test. Hypothesis was tested at 0.05 level of significance. The interviews were analysed using the thematic approach. The study found among others that; participants rated the effectiveness of the existing provisions for caregivers' training on designing individual and age appropriate performance-based assessment tools in the study area very low; exposure to IAAAT training manual had a positive significant effect on the skills of the participants in designing and usage of performance-based assessment tools [ $t\text{-Cal}=7.21 > t\text{-Crt}=2.23$ ]. The study concluded that improving caregivers' competencies in designing and usage of individual and age appropriate assessment tools requires adequate exposure to regular training guided by focused training manuals. Based on the findings, the study recommended among others; a comprehensive examination of the effectiveness of the existing provisions for training ECCDE caregivers in the study area; regular exposure of caregivers to training programmes that focus on designing and usage of performance-based assessment tools.*

**Keywords:** Assessment, Age Appropriate, Assessment, Caregivers, Individually appropriate Assessment Tools

## **Introduction**

Each child is an individual; each child brings a different history, a different way of development, a different way of responding to phenomenon, a different style of learning and a different dream for the future. Therefore, for

caregivers to appropriately cater for individual needs and respect every child's uniqueness, he/she required to be skilful in designing diversified assessment tools for measuring all domains of development and learning in early years. Recognizing and respecting each child as a unique individual with his/her strengths, interests, and learning styles is imperative for caregivers. Therefore, regular assessment of children's development to understand their progress, preferences, and areas where they may need additional support is crucial and can be appropriately carried out by trained caregivers skilled in designing, selecting and implementing assessment instruments suitable for measuring across all domains of development. Typically, developmental areas comprise but not limited to academic skills-reading, writing, drawing and number work; arts and creative expressions; cognitive-intellectual development; concept acquisition- concepts of time, colour, size; emotional development- self-confidence, self-esteem; language skills – oral development, reading and vocabulary; motor skills – fine and large muscles; sensory awareness; sensory motor skills- visual and auditory training; social-interpersonal skills – cooperation and obeying rules; verbalizing feeling (Fowowe&Usmann-Abdulqadri, 2019).

Individual appropriate practices in the field of early childhood education are conceptualized as range of strategies and approaches that are tailored to meet the unique needs of each child. Individuality of children in development and learning can never be compromised. Uniqueness of children is denied when assessment of their development and learning progress is done against one another (NRC, 2008). Research findings have revealed that early years' caregivers are ignorant of various assessment tools and procedures appropriate for holistic assessment which has resulted to only traditional paper-pencil assessment method for assessing only the cognitive domain at the expense of other domains (Yusuf &Alabi, 2021). However, the broad goal of early childhood care development and education in Nigeria can be best achieved through individually appropriate assessment carried out by professionally skilled caregivers (Usman-Abdulqadri, 2023). This is why, regular professional development of caregivers in designing age and individually appropriate assessment tools for early years is crucial to equip them to stay current with best practices in performance-based assessment strategies. This is in line with the fact that, current approaches in the field of early childhood education advocate for authentic assessment measures that reflect real-life activities and interactions. There is a shift towards integrating various assessment tools and frameworks to provide a comprehensive evaluation of a child's development (NAEYC, 2023).

Considering the peculiarity of early years across the globe, child assessment needs to expand its scope to adequately equip childcare practitioners to appropriately respond to the emergent paradigms in the field. The National Association for the Education of Young Children, (NAEYC) rightly noted that an early childhood professional, working with young children is a decision-maker that makes many decisions about the children in their programmes daily. Understanding individually Appropriate Practices (IAP) is critical in guiding the decisions practitioners make for young children (NAEYC, 2009). Developing the skills to make good decisions for children relies on building knowledge about individual children and child development principles combined with adequate knowledge of effective collecting and recording observational data using individually appropriate tools. Thus, responding appropriately to the changing context of child care development and learning necessitates improving early childhood caregivers' skills in designing age and individually appropriate assessment tools (Ige, 2020; Ige&Usman-Abdulqadri 2022).

But while there have been series of efforts on the part of government and private organizations as well as individuals to improve caregivers' skills through in-service training programmes in the general area of practice (Ige&Omotuyole, 2015), one of the major challenges in this area is the extent to which the training aligns with the dynamism of individually appropriate child assessments in the global contexts. The challenge becomes even more daunting in the light of the large quantum of barely trained, largely unskilled caregivers operating in early childcare institutions across the state (Usman-Abdulqadri, 2023).

Studies that focused on training programmes reported that many early years caregivers in Nigeria receive inadequate training on child assessment techniques. The training programs often lack depth and fail to cover essential aspects of assessment quality comprehensively. The inadequacy in these training of caregivers in assessment is not unconnected with lack of standardized curriculum (Obiweluo&Nwanekezi, 2020). According to Okoro&Osuji, 2020, there is a lack of a standardized curriculum for the training of early years' caregivers, leading to inconsistencies in the quality and content of training programmes across different

areas and institutions. Limited practical experience has also been observed as a gap in the previous training of caregivers. Ajayi and Kuku, (2021) reported that, training programs often emphasize theoretical knowledge over practical skills. Caregivers do not get enough hands-on experience with real-life assessment scenarios, which is crucial for effective child assessment. A systematic review of studies centered on training of caregivers indicated that, continuous professional development (CPD) opportunities for early years' caregivers are limited. This leads to outdated knowledge and practices in child assessment, as caregivers are not regularly updated on new assessment tools and methods. Lack of continuous professional development on designing age and individual appropriate assessment tools pushed caregivers to employ only traditional paper-pencil form of assessment despite all its weaknesses (Pamela, 2013 cited in Hafees, Olumuyiwa & Usman-Abdulqadri, 2022).

However, despite the crucial need for preschoolers to be assessed holistically to inform instructional strategies, learn about each child's readiness, interests and learning preference by professionally skilled caregivers in modern assessment strategies, many studies have observed inadequacies of caregivers' in-service training programmes. Attention has been drawn to the quality and scope of training manuals that were used to train early childhood caregivers. A content review of these manuals reveals that the training manuals tend to use a formal approach that allows little or no participation from participants; present content that focuses mainly on engaging participants in responding to questionnaire items underplaying skills in designing age and individually appropriate assessment tools in contemporary early child care development and education (Ige, Usman-Abdulqadri, Salami, & Ogunleye, 2020).

The apparent deficiency of the existing training programme and specific manuals tailored to age and individual appropriate assessment suggests a disconnection with the modern realities of contemporary child holistic assessment in the study area (Usman-Abdulqadri, 2023). This is a disturbing situation, especially viewed against the background that a sizable number of caregivers working in preschool institutions in the study area are without the requisite professional preparations (Ige and Omotuyole, 2015; Ige, Usman-Abdulqadri, Salami & Ogunleye, 2020), as a result of which they are also mostly deficient in skills in designing age and individual appropriate assessment tools. While there have been efforts by the Lagos State Universal Basic Education Board (LASUBEB) to ameliorate this problem through capacity development programmes organised for teachers in the state, one major area of concern has been how these training programmes have impacted caregivers' skills in the area of designing individual and age appropriate assessment tools for early years' holistic assessment. These categories of caregivers, who were neither specially prepared prior to their entry into the service nor equipped with the requisite skills through effective in-service training programmes, might not be competent enough to design age and individually appropriate assessment tools in order to assess children's developmental and learning progress with suitable techniques and relevant modern assessment tools.

This background of identified inadequacies provides a justification for the development, validation, and subsequent deployment of the individual and age appropriate assessment tool (IAAAT) manual and a focused in-service training on emphasizing the what, and how caregivers can appropriately assess children's developmental and learning progress. This is one premise which justifies research of this nature to examine the impact of training on caregivers' skills in designing age and individually appropriate assessment tools for early years in the study area with a view to determining its effectiveness.

### **Purpose of the Study**

The study aimed at examining impact of training on caregivers' skills in designing usage of individually and age appropriate assessment tools for early years in Eti-osa Local government area, Lagos State, Nigeria. Specifically, the objectives of the study are to:

- investigate how caregivers view effectiveness of antecedent training on assessment in early child care development and learning in Eti-osa Local government area;
- assess how the training on individual and age appropriate assessment impact caregivers' skills in designing and using performance-based assessment tools in preschool settings in the study area.

### **Research Questions**

- How do caregivers assess effectiveness of antecedent training on assessment in early child care development and learning in Eti-osa Local government area?
- How would the training on individual and age appropriate assessment impact caregivers'

skills in designing and using individual and age appropriate assessment tools in preschool settings in the study area?

### *Hypothesis*

This hypothesis was tested in the study:

- Exposure to the training does not significantly improve caregivers' skills in the design and usage of individually and age appropriate assessment tools in Eti-osa LGA.

### **Methodology**

This study adopted a combination of the descriptive survey and non-experimental impact evaluation designs. The rationale for survey design is its efficacy to describe the frequency distribution of certain characteristics of a population as well as eliciting the opinions of respondents in a study. The appropriateness of the non-experimental impact design is justified on the basis that the outcomes for groups of participants are measured before and after an intervention and an assessment of impact is inferred from the differences (Bell, Bell, & Scanlon, 1979, in Ige, 2011). This design is often used to assess whether the knowledge and skills of the group changed after exposure to a classroom curriculum or job training programme. The population and sample for the study comprised all 60 ECCDE caregivers in Eti-osa Local Government Education Authority (LGEA) in Lagos State. Adopting purposive sampling technique. This technique was most appropriate for the officially recommended caregivers by the Local Government Education Authority (LGEA) to participate in the training. Research instruments used for the study were: Capacity Programmes' Assessment Questionnaire (CPAQ), this is a researcher-designed instrument that comprised 5 items which sought the participants' opinions on the training programmes they have participated in, prior to IAAAT training. Pre and Post-training Evaluation Tests (PPTET). This was constructed by the researcher. The pre and post-training tests focused on: caregivers' ability to design and use individual and age appropriate assessment tools. The tests were aimed at finding training needs assessment before participants' exposure to IAAAT training and impact of the training on skills of the participants. Interview Schedule (IS) this instrument consisted of one semi-structured question that assessed participants' opinion on Individual and Age Appropriate Assessment Tool (IAAAT) training programme. Individual and Age Appropriate Assessment Tools (IAAAT) Manual used for the training. This training manual was developed and used to train caregivers towards improving their existing skills, experiences and competency. It comprises samples of assessment tools like: rating scale, anecdotal records, event sample, narrative recording, developmental and behavior checklist. The training manual was adapted from Assessment in Early childhood Education (Wortham, 2008). The reliability values of the instruments were determined using the internal consistency coefficient method. Cronbach Alpha Statistical tool was employed. Good internal consistency Alpha values of 0.85, 0.81, 0.79 and 0.83 were recorded respectively as reliability co-efficient showed that the instruments were reliable. Data collected were analysed using simple percentages, and paired sample t-Test. Hypothesis was tested at 0.05 level of significance. The interviews were analysed using the thematic approach.

### **Results**

#### **Research Question 1:**

How do caregivers perceive effectiveness of antecedent training on assessment in early child care development and learning?



Table 1: Caregivers' perception of antecedent training on assessment in early child care development and learning

	Mode of preparation	Never	Rarely	Sometimes	Often
1	Participation in organised training for the ECCDE caregivers	8 13.3%	6 10%	8 13.3%	38 63.3%
2.	Exposure to knowledge and skill enhancement seminars.	5 8.33%	4 6.67%	6 10%	45 75%
3	Attendance at training on individual differences among children	47 78.33%	13 21.67%	0 0.0%	0 0.0%
4.	Participation in workshop on development of individual appropriate assessment tools.	45 75%	15 25%	0 0.0%	0 0.0%
5	Exposure to training on usage of appropriate assessment tools.	48 80%	12 20%	0 0.0%	0 0.0%

**Source: Field Survey, 2024**

Analysis of items 1 and 2 shows that majority (63.3%) of the respondents often participated in organised training on ECCDE and 75% have been exposed to knowledge and skill enhancement seminars. Analysis of item 3 suggests that majority (78.33%) of the respondents never attended training on individual differences among children. Item 4 depicts that 75% of the participants never participated in workshop on development of individual appropriate assessment tools. Item 5 indicates that an overwhelming majority (80%) were never trained on usage of appropriate assessment tools.

#### **Research question 2:**

How would the training on individual and age appropriate assessment impact caregivers' skills in designing and using individual and age appropriate assessment tools in preschool settings?

#### **Impact of training on caregivers' skills in designing and usage of individual and age appropriate assessment tools in preschool settings**

The data analysis from caregiver informants (CIs) produced a construct, and a theme and in the framework of analysis as developed for data analysis. The coding of the caregivers' data generated a construct called "Capacity building Programme's Focus". The construct has one theme namely: Skills with Antecedent Professional Preparation. The in-depth discussion on the theme exhibited a comprehensive account of caregivers' perceptions on IAAAT training as it relates to their skills in area of holistic child assessment.

Theme: Designing and using a variety of individual and age appropriate assessment tools

#### **Interview Question: "Has this training improved your skills in designing and using different individual and age appropriate assessment tools in the classroom?"**

Caregiver informants agreed that the capacity building programme has improved their knowledge and skills in designing and using variety of assessment tools and also helped them to recognize the importance of various assessment tools in their interactions with children. Their statements connected to designing and using variety of assessment tools are presented as follows:

"Through this training, I have learnt that assessment isn't limited to mental ability alone children's behaviour can also be assessed".

"I know I have learnt a lot about assessment. Bringing the children into small groups for example would help me in learning various ways in assessing them".

"This training has exposed me to a lot of assessment tools like: anecdotal records, event sampling, portfolios,



checklist and so on which we can use to assess children in our classrooms. Learners can be assessed through reasoning, actions, and so on".

The statements amply reflect caregivers' overwhelming agreement on the impact of the IAAAT training programme on their knowledge and skills in the area of designing appropriate assessment tools. It is clear from the responses that IAAAT training programme made a significant difference in caregivers' knowledge and skills in designing and using variety of assessment tools and also helped them to recognize the importance of various assessment tools in their interactions with children.

**Hypothesis:** Exposure to the IAAAT training manual will not significantly improve caregivers' skills in the design and usage of assessment tools.

#### **IAAAT training and caregivers' skills in design and usage of assessment tools**

t-Test: Paired Two Sample for Means

	<i>PRE</i>	<i>POST</i>
Mean	36	61.36
Variance	32.6	67.65
Observations	11	11
Pearson Correlation	-0.38	
Hypothesized Mean Difference	0	
Degree of Freedom	10	
	0.05	
t-Calculated	-7.21	
P(T<=t) two -tail	2.89E-05	
t Critical two -tail	2.23	
Remark	Significantly different	
Null Hypothesis result	Rejected	

programmes with precise curriculum and coaching are beneficial. Furthermore, the results corroborated the findings of Franziska, Ruben & Andrea (2018), who found that training, influences both the quality of the teaching process and the growth of children. The study also supported Mustapha-Dokunmu and Morenikeji's (2019) suggestion that in-service caregivers should regularly attend seminars and workshops to be current and prepared to handle the learning demands of children in the twenty-first century.

The strategic role the caregivers play in fostering growth, development and learning, makes it imperative that all those who care for and teach young children should possess a broad synthesis of knowledge and skills that enhance child development and positively influence learning, including assessment. The finding of this study justifies the stand of National Association for the Education of Young Children (NAEYC, 2023), that training caregivers in developmentally appropriate assessment practices is essential. The use of authentic and performance-based assessments is adjudged to capture the holistic development of children. These forms of assessments focus on real-world tasks and children's everyday experiences to provide a more accurate understanding of their development and learning needs.

## Conclusion

The study established that improving caregivers' competencies in designing and usage of individual and age appropriate assessment tools requires adequate exposure to regular training guided by focused training manuals. Furthermore, the training manual: Individual and Age Appropriate Assessment Tools (IAAAT) positively enhanced knowledge and skills of the training participants. It also demonstrated that the training significantly improved participants' skills in designing and utilization of individual and age appropriate assessment tools. The research concludes that improving caregivers' skills to design and utilize appropriate assessment tools in order to assess preschoolers holistically requires adequate exposure to periodic training modalities guided by enriched training manuals that capture a broad range of emergent areas of assessing child development and learning.

## Recommendations

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

- A comprehensive examination of the effectiveness of the existing provisions for training ECCDE caregivers in the study area.
- Caregivers should be constantly exposed to training programmes that focus on holistic assessment of child development and learning.
- There is a need for agencies of governments and other education stakeholders to offer early years' caregivers continuous opportunities for knowledge and skills improvement in development and appropriate usage of variety of assessment tools.
- Head of schools and Proprietors of private schools should also be trained on the need to avoid paper-pencil assessment strategies as the only method of evaluating preschoolers and incorporate performance-based strategies.

## References

- Ajayi, H. O., & Kuku, A. O. (2021). Teacher Education and Early Childhood Care and Education in Nigeria: Challenges and the Way Forward. *African Journal of Education and Practice*, 7(3), 85-93.
- Fowowe, S.S. & Usman-Abdulqadri, T. (2019). Assessment and Evaluation Techniques in Pre and Primary School. Lagos: ANPEIN Inc.
- Hafees, T.S, Olumuyiwa, A. A. Usman-Abdulqadri, T. (2022). The Use of Performance Based Assessment In Early Childhood Centers: Pre-School Teachers perception. *International Journal of Academic Multidisciplinary Research (IJAMR)*, 6 (8), 61-65. [Franziska, E,](#)
- Ruben G. F. & Andrea, G. E. (2018). Impact of In-Service Professional Development Programs for Early Childhood Teachers on Quality Ratings and Child Outcomes: A Meta-Analysis. [Review of Educational Research 88 \(3\) 34-42.](#)
- Ige, O. O. (2011). Need for Specialist Teachers in Early Childhood Education (ECE) delivery for Sustainable Development in Nigeria. *African Research Review*, 8, 294-304.

- Ige, O.O. & Usman-Abdulqadri, T. (2022). In-service training and Developmentally Appropriate Child Learning Environment Stimulation and Assessment in Selected Local Government Areas in Lagos State. *Jigawa Journal of Multidisciplinary Studies (JJMS)*, 5 (2), 150-162.
- Ige, O.O. & Omotuyole, C.O. (2015). Perceived Effectiveness of Early Childhood Educators Capacity Development Programmes in Lagos and Oyo States of Nigeria. *Journal of Sociology and Education in Africa*, 13(1), 65-75.
- Ige, O.O. (2020). Early Childhood Education: From Dimensions to Directions. Childworld Publishers.
- Ige, O.O., Usman-Abdulqadri, T., Salami, I.S. & Ogunleye, T.O. (2020). Teachers' Content Knowledge of Early Childhood Care Development and Education Policy Documents and Pedagogical Skills: Implications for Preschoolers' Active Participation in Learning. *International Journal of Innovative Research & Development*, Guru Ghasidas University, India, 9(6), 117-123.
- Ige, O.O. (2013). Professional Development, Motivation and Gender as Correlates of Early Childhood Caregivers' Attitude towards Early Childhood Care and Education Delivery. *Journal of Early Childhood Association of Nigeria (JECAN)*, 3(1), 151-164.
- Mustapha-Dokunmu, F. A & Morenikeji, A. B (2019). The effects of in-service training for caregivers in the 21st century and the implementation of early childhood education curriculum in Oyo-South Senatorial District of Oyo State. *International Journal of Advanced Academic Research* 5 (7); 31-41.
- National Association for the Education of Young Children (NAEYC, 2023). Developmentally Appropriate Practice (DAP) in early Childhood Programs: "Advancing Equity in Early Childhood Education" Position Statement. [www.naeyc.org](http://www.naeyc.org).
- National Association for the Education of Young Children (NAEYC, 2009). Developmentally Appropriate Practice in Early Childhood Programs: "Serving Children from Birth. Through Age 8." Position statement. [www.naeyc.org](http://www.naeyc.org).
- National Research Council (2008). Early Childhood Assessment: Why, What and How. Washington D.C: The National Academies Press .
- Obiweluozor, N., & Nwanekezi, A. (2020). Professional Development of Early Childhood Education Teachers: Implications for Quality Education in Nigeria. *International Journal of Early Childhood Education Care*, 9(1), 1-12.
- Okoro, C. C., & Osuji, U. S. (2020). Challenges of Early Childhood Education in Nigeria: The Way Forward. *Journal of Educational and Social Research*, 10(3), 32-41.
- Pamela, M. (2013). Information Literacy and Inquiry-based Learning: Evaluation of a five-year Programme of Curriculum Development. Retrieved from <http://journals.sagepub.com/doi/abs/10.1177/0961000613477677>
- Usman-Abdulqadri, T. (2023). Impact of Enhanced In-service Training on Early Childhood Caregivers' Knowledge and Skills in Lagos State, Nigeria. (Unpublished Doctoral Dissertation). University of Lagos, Nigeria.
- Wortham, S.C. (2008). Assessment in Early Childhood Education. United State: Pearson Education Inc. Yusuf, H. O. & Alabi, A. O. (2021). Assessment Practices in Early Childhood Education in Nigeria: Current Trends and Challenges. *African Journal of Teacher Education*, 10(1), 67-80.

# Impact of School Supervision on Implementation of Educational Policies in Early Childhood Education in Lagos State

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## Abstract

*The purpose of this study was to investigate the impact of supervisory activities on the implementation of early childhood educational policies in government pre-primary schools in Amuwo-Odofin local government area of Lagos. A total number of one hundred (100) teachers/caregivers in pre-primary schools in Alimosho local government area of Lagos State were selected as participants for this study. Meanwhile, simple random sampling technique was adopted to select twenty pre-primary schools and five (5) caregivers/teachers were selected from each of the school randomly selected. In this study, questionnaire was adopted as research instrument used for data generation. The questionnaire was a ten (10) structure questionnaire items rated on responses options of Yes or No for first research question and five for research question two. The reliability coefficient of the instrument was 0.94 and the data generated were analysed through simple percentage method of analysis. It answered two research questions, The result of the study identified rigorous efforts put in place by state supervisors and most importantly the supervisors from Amuwo-Odofin Local Government Education Authority (LGEA). The findings also revealed gross inadequate supervision of schools in the riverine area. Based on the findings of this study recommendations were made.*

**Keywords:** School supervision, Educational Policies, Implementation, Early Childhood Education

## Introduction

Education is one of the crucial instruments for humanizing a person and emancipating them from all parts of their life, supervision is therefore necessary during the implementation of education in order to ensure quality of education and keeps improving for nation building (Sumarmi, & Sudadi, 2023). Similarly, sustainable development in educational system is rooted in access to quality education at the foundational phase which is the starting point for child's development in early childhood education (Aguh, & Olutola (2023). Farmayash, Ali, and Mehmood (2023) purported that early childhood education plays vital role in nation building by nurturing cognitive, social, and emotional development of children during their formative years. The early childhood education (ECE) phase is a crucial period of rapid development of physical, cognitive, social and emotional, language, and speech development of the child. This is because quality education in early childhood

education is the most significant factor that enhances child's potential for survival in the later years. Therefore, the quality and intensity of the education, support, care, stimulation and nutrition received during this phase determine to a large extent the promotion of lifelong learning experiences from early years to adulthood.

The early childhood period is a starting point for a young learner's development, it is an important phase for brain development of a child that is well rooted in the formation of individual potential for achievement of educational goals and objectives. National Policy on Education (NPE) is concerned with the adherence of rules and regulations to govern the operations of an educational system (Bolaji, et al. 2019). This is because educational policies formulation in Nigeria embraces solid development guidelines and procedures that shape the educational sectors at all levels (Ndem, 2025). However, the quest for a quality and standardised educational system in Nigeria led to the formulation of various educational policies including that of ECE (Torpev *et. al.*, 2015). Oluwafemi *et. al.*, (2014) observe that the current National Policy on Education (2014) has numerous provisions to promote early childhood education, in addition to providing detailed texts on the philosophy of education in Nigeria.

In Nigeria today, inadequate monitoring and supervision has done more harm than good to successful implementation of educational policies most importantly, to early childhood education which is the education at the foundational phase. Several literatures have established the fact that poor or lack of supervision is one of the primary problems contending with effective implementation of government policy in early childhood education (Akinrotimi, & Olowe, 2016; Taofik, 2020; Jacob, & Olajumoke, 2021; Jacob, Jegede, & Solomon, 2021; Ogunode, & Ojo, 2021; Aguh, & Olutola, 2023; Aluko, & Adeyemi, 2023). In the same vein, Sooter, (2013) affirms that early childhood education in Nigeria is not adequately, sufficiently and properly supervised for actualisation of objectives. This implies that, despite the efforts of government, stakeholders and collaborating partners in trying to improve the quality of education in early childhood education, there are challenges militating against effective implementation of educational policies which are rooted in inadequate supervisory activities. It is also pertinent to note that school supervision exercise causes reluctance or fear of domination in some teachers, including school administrators. This is because they see school supervision exercises as a means to exposed incompetencies or shortcoming of teachers during teaching and learning process (Sumarmi, & Sudadi, 2023).

Meanwhile, from all indications, it is clear that school supervision enhances quality of teaching and learning, as it focuses on monitoring of activities of both teaching and non-teaching staff within the school in order to effectively utilise their potential to promote quality assurance (Gidado, & Daramola, 2022). Supervision is not only to facilitate teaching and learning process but also to help teacher or caregivers to achieve objectives as stated in the national policy on education (Jacob, Jegede, & Solomon, 2021). By implementing effective supervision in schools can create conducive environment that would promote high quality education for great improvement in teaching and learning process (Ameli, 2024). Tarda, (2016) asserts that school supervision majorly deals with efforts of government educational officials in providing pedagogical leadership experience to teachers and also to discover special creative abilities for the purpose of improving quality of instruction. This implies that the reports of school supervision could be used for staff training, development and regular implementation of educational policy in early childhood education programs Ugwu, and Ekweozor, (2021).

As noted earlier in this study, most of the available past studies revealed evidence of inadequate and lack of effective supervision by government officials in Early Childhood Education in Nigeria. In attempt to bridge this research gap therefore, this study was conducted to specifically assess the impact of supervisory activities on the implementation of early childhood education policy in government pre-primary schools in Amuwo-Odofin local government area of Lagos.

### **Purpose of the Study**

The purpose of the study is to establish the relationship between school supervision practices and implementation of educational policy in early childhood education

### **Objectives of the Study:**

The study was guided by the following specific objectives:

- To establish the impact of supervisory activities carried out by government officials on implementation of educational policy in Early Childhood Education.
- To determine the significance of supervision exercise on implementation of educational policy in Early Childhood Education in Amuwo-Odofin Local Government Area of Lagos State.



## Research Questions

- i. What is the impact of supervisory activities carried out by government officials on implementation of policy in Early Childhood Education in Amuwo-Odofin Local Government Area of Lagos State?
- ii. What is the importance of supervision exercise on implementation of policy in Early Childhood Education in Amuwo-Odofin Local Government Area of Lagos State?

## Methodology

This study employed descriptive survey research design. The population of the study consist of all pre-primary schools in Ojo local government area of Lagos State. A purposive sampling was adopted to select teachers in early childhood education schools. Therefore, Simple random sampling technique was used to select 20 pre-primary schools and five 5 caregivers/teachers were selected from each of the school randomly selected which was made up of 100 respondents. The research instrument used was divided into two sections A and B. Section A sought information on socio- demographic variables which include: Name of school, Local government area, Gender, Years of experience in service, qualifications/ professional qualification. The section B was used to elicit responses on impact of school supervision on implementation of educational policy in Early Childhood Education. Data generation instrument was questionnaire and the reliability of the instrument was ascertained through careful consideration of suggestion and observation that were included to prepare final questionnaire. This is because the researcher used Cronbach Alpha method to get reliability of the instrument. (50) caregivers/teachers in another Local government Area of Lagos State were selected and given the research questionnaire item to fill. Data generated from the fifty-sampled selected respondents were calculated using Cronbach Alpha. Based on the calculation a coefficient of 0.914 was retained. Along similar line, the statistical measured enhanced and promote the reliability coefficient of the study. Furthermore, the researcher employed the services of two research assistants to help the researcher to distribute questionnaires in all the schools selected most especially schools in riverine areas in Ojo local government area of Lagos state. The co-researchers (assistants) were trained on effective administration of questionnaire in various centres of early childhood education schools located within the Local government area. Similarly, (100%) returned was recorded after the exercise and simple percentage was employed for the study.

## Results

**Research Question 1:** To what extent has supervisory activities been carried out by government officials on implementation of educational policy in Early Childhood Education?

**Table 1**

**Simple Percentage Showing Supervisory Activities Been Carried out by Government Officials on Implementation of Educational Policies in Early Childhood Education**

S/N	ITEMS	YES	%	NO	%
1.	Supervision exercise has improved the quality of teaching and learning in my school.	89	89%	11	11%
2.	I often received feedback from supervisors and it helps to improve teaching and learning process for policy implementation.	53	53%	47	47%
3.	Government has organised training based on the results of supervisory activities carried out in my school to facilitate effective policy implementation.	35	35%	65	65%
4.	I received professional counsel from supervisor after monitoring and supervision exercise.	86	86%	14	14%
5.	I received supervision and monitoring regularly to ensure effective policy implementation and better performance of learners	75	75%	35	35%

6.	The supervision exercise is carried out properly/effectively to enhance quality assurance and policy implementation in early childhood education	88	88%	12%	18%
7	I received regular supervision exercise in riverine school	4	4%	96	96%
8	Supervisory activities create more awareness on how I can support effective implementation of policy	95	95%	5	5%
9.	I received more supervisor from LGEA officials than SUBEB officials	75	75%	25	25%
10.	I have had several supervisory activities/trainings in riverine area on how to facilitate effective policy implementation.	20	20%	80	80%

The study reveals that supervision exercise has improved the quality of teaching and learning in Amuwo-Odofin local government area as majority of the respondents 89% chose yes for item 1 and 11% opted for No. For item two majority of the respondents 53% chose Yes, while the remaining 47% selected No. Item three majority of the respondents chose No 65% while 35% selected No, for item four majority of the respondents 86% received counsel and advise from the officials after supervision exercise while 14% never experience such. In addition, on item five majority of the respondents chose Yes 75% and No 35%. Majority of the respondents on item six chose yes which is 88% and 10% chose No. for item seven majority of the respondents chose No, which is 96% and 4% responded positively. On item eight, majority of the respondents 95% accepted that supervisory activities create more awareness on how they can support effective implementation of policy in early childhood education. Item nine shows that majority of the respondents chose Yes, 75% and 25% chose No. Finally on table 1, on itemten majority of the respondents chose No, 80% and 20% responded yes, based on exposure to several supervisory activities/trainings in riverine area on how to facilitate effective policy implementation.

**Research Question2:** In what ways has the government-built capacity of pre-primary school teachers/caregivers through effective supervision to promote implementation of policy?

**TABLE 2**

**Simple Percentage Showing Ways the Government Built Capacity Building of Pre-Primary School Teachers/Caregivers Through Effective Supervision to Promote Implementation of Educational Policies**

S/N	ITEMS	YES	%	NO	%
1.	I have received government training on how to improve teaching and learning process in the classroom.	51	51%	49	49%
2.	Lagos state government has trained me on significant roles to play as teachers to promote implementation of policy in early childhood education	56	56%	44	44%
3.	Government has sent me on training in which I learned how to facilitate effective teaching and learning in early childhood education.	52	52%	48	48%
4.	Government has organised training based on the results of supervisory activities carried out in my school to facilitate effective policy implementation.	40	40%	60	60%
5	Government has organised special training for us in riverine schools on quality assurance and policy implementation in early childhood education	36	36%	64	64%

Table 2 indicates various ways in which government built the capacity of pre-primary school teachers/caregivers through effective supervision in order to promote implementation of policies at the foundational phase. In table 2 and item one majority of the respondents which is 51% accepted that they have received training on how to improve teaching and learning process in the classroom while 49% answered No. In item two majority of the respondents, 56% chose Yes, while 44% chose No. In addition, in item three majority of the respondents, 52% answered Yes and the remaining 48 answered No, while in item four majority of the respondents, 60% chose No and the remaining 40% chose Yes. In conclusion, 36% responded Yes and majority of the respondents, 64% chose No.

### Discussion of Findings

This study was concerned with assessing the impact of school supervision on implementation of policy in early childhood education in Amuwo-Odofin local government area of Lagos state. The study revealed the extents in which Supervision exercise has improved the quality of teaching, learning and enhancement of implementation of policy in pre-primary schools. The study revealed that government must intensify more efforts in providing for the needs of supervisors and ensure effective monitoring of their activities to promote quality supervision exercise. This aligned to Gidado and Daramola (2022) that supervision enhances quality of teaching and learning, as it focuses on monitoring of activities of both teaching and non-teaching staff within the school in order to effectively utilise their potential to promote quality assurance within the school system. This view also corresponds with Jacob, Jegede and Solomon (2021) that supervision is not only to facilitate teaching and learning process but also to help teacher or caregivers to achieve objectives as stated in the national policy on education.

Furthermore, the results also revealed that, in order to achieve the policy of leaving no child behind, the pre-primary schools in the riverine area of Amuwo-Odofin local government area should not be left behind for effective supervision exercise. The study further revealed the need for government to organise training based on the results of supervisory activities carried out, most especially riverine schools in order to facilitate effective educational policy implementation in early childhood education. This is also supported by Aguh and Olutola, (2023) that sustainable development in educational system is rooted in access to quality education at the foundational phase which is the starting point for child's development in early childhood education. Along similar line, Tarda (2016) also concurred that school supervision majorly deals with efforts of government educational officials in providing pedagogical leadership experience to teachers and also to discover special creative abilities for the purpose of improving quality of instruction at all phases of educational system.

### Recommendations

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

1. The level of government commitment to early childhood education has to increase more than before in order to ensure effective implementation of policy.
2. Teachers/caregivers should be trained and retrained on new trends and based on supervisor's reports.
3. Government should ensure that riverine area schools are not left behind in monitoring and supervision exercise.
4. Supervision should also be allowed to provide enough guidance for teachers so as to enhance their professional skills.

### References

- Adewusi, O.E., Al Hamad, N.M., Adeleke, I.J., Nwankwo, U.C., & Nwokocha, G.C. (2023). Assessment and evaluation in adaptive early childhood education: a comprehensive review of practices in Nigeria. *International Journal of Applied Research in Social Sciences*, 5(8), 292-307.
- Adewusi, O. E., Al Hamad, N. M., Adeleke, I. J., Nwankwo, U. C., & Nwokocha, G. C. (2023). Adaptive teaching strategies in early childhood education: a review for Nigeria and the UK. *International Journal of Applied Research in Social Sciences*, 5(8), 255-271.
- Akinrotimi, A.A., & Olowe, P.K. (2016). Challenges in implementation of early childhood education in Nigeria: The way forward. *Journal of Education and Practice*, 7(7), 33-38.
- Ameli, I.L. (2024). Evaluation Valuation of Teachers Supervision Practices and Implementation of Early Childhood Programme in Khwisero Sub-Country, Kenya

- Aguh, J.C., & Olutola, A.T. (2023). Examining the Challenges of Early Childhood Education in Nigeria. *Indonesian Journal of Educational Research and Technology*, 3(2), 91-96.
- Aluko, O., & Adeyemi, O. (2023). Education governance and sustainable development in Nigeria: A review of Edo-BEST policy. *Journal of Research Administration*, 5(2), 9737-9751.
- Bolaji, S.D., Campbell-Evans, G., & Gray, J.R. (2019). Management of universal basic education policy in the villages in Nigeria. *Australian and International Journal of Rural Education*, 29(3), 76-91.
- Caruso, J.J., & Fawcett, M.T. (2014). Supervision in early childhood education. Teachers College Press, 13-18.
- Farmayash, M., Ali, S., & Mehmood, S. (2023). Public Secondary Schools' Early Childhood Education System and its Effectiveness for Learners in Punjab Province. *Global Educational Studies Review*, VIII (8) 589-597.
- Edwards, S. (2017). Play-based learning and intentional teaching: Forever different? *Australasian Journal of Early Childhood*, 42(2), 4-11.
- Gidado, S.D., & Daramola, R. (2022). School supervision and inspection: Strategies for quality assurance in business education in post covid-19 era. *KWASU International Journal of Education (KIJE)*, 4(1), 126-133.
- Jacob, O.N., & Olajumoke, A.A. (2021). Supervision of Early Child Education Programme in Nigeria: Problems and Suggestions. *International Journal on Integrated Education*, 4(6), 154-159.
- Jacob, O.N., Jegede, D., & Solomon, A.T. (2021). Education Policies of Early Child Education Programme in Nigeria: Challenges of Implementation and the Ways Forward. *European Journal of Humanities and Educational Advancements*, 2(3), 1-10.
- Iskandar, Y., Ardhiyansyah, A., & Jaman, U.B. (2023). The Effect of Leadership, Supervision, and Work Motivation of the Principal on Teacher Professionalism at SMA Yadika Cicalengka, Bandung Regency. In *International Conference on Education, Humanities, Social Science*, Atlantis Press. 460-468.
- Ndem, C.M. (2025). The Impact of Politics on Educational Policy Formulation and Implementation in Nigeria. *International Journal of Educational Management*, Rivers State University., 1(2), 130-145.
- Ogunode, N.J., & Ojo, I.C. (2021). Management of Early Child Education in Nigeria: Problems and the Way Forward. *Middle European Scientific Bulletin*, 16.
- Sooter, T. (2013). Early childhood education in Nigeria: Issues and problems. *Journal of Educational and Social Research*, 3(5). doi:10.5901/jesr.2013.v3n5p17
- Sumarmi, S., & Sudadi, S. (2023). School Supervision Improving Learning Quality School Quality in Early Childhood Education. *Journal on Education*, 6(1), 10235-10244.
- Taofik, H. M. (2020). Managing and funding early childhood education in Nigeria: The way forward. *Journal of Contemporary Education Research*, 20(8), 306-318.
- Tarda, B.A. (2016). Introduction to educational administration and management. Abuja: Yincus & Son Ent. 7(4) 56
- Ugwude, D.I., & Ekweozor, C.E. (2021). The Role of Early Childhood Education for Sustainable Development in Nigeria. *University-Led Knowledge and Innovation for Sustainable Development*, 25-31.



# Teachers' Perceptions of Outdoor Play on the Socio-Cognitive Development of Preschoolers in Lagos State

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## Abstract

*Outdoor play is important for every child. It is a crucial part of a child's existence and environment. This study explored preschool teachers' perspectives of outdoor play's effects on socio-cognitive development. Four research questions were used to guide the study and two hypotheses were formulated for the study. Descriptive survey research design was adopted for the study. Simple random sampling, 50 teachers from selected private and public nursery schools in Mainland LGA. A self-designed questionnaire titled; "Teachers Perceptions of Outdoor Play Questionnaire" (TP\_OPQ) was used for the study. Cronbach Alpha reliability value of 0.88 indicates that the 25-item questionnaire is very reliable. The data gathered was analysed using frequency counts, mean scores, and a one-sample t-test with the help of the Statistical Package for the Social Scientists (SPSS 23.0). The results of this study indicate that engaging in outdoor play has significant impacts on the social (communication and self-efficacy skills) and cognitive (thinking and recalling abilities) development of preschoolers in Mainland LGA. Consequently, the study recommended that teachers and caregivers in nursery school should involve the children in outdoor play; while also ensuring they take appropriate safety measures and provide sufficient supervision. Furthermore, it is imperative that both public and private school administrators ensure the provision of sufficient and up-to-date outdoor play facilities in order to promote outdoor play among preschoolers attending nursery schools.*

**Keywords:** Preschoolers, Nursery Schools, Teachers' Perceptions, Outdoor play, Social Skills Development, Cognitive Development

## Introduction

During early life, the brain undergoes fast development, resulting in the multiplication of neurone circuits in the millions. It is essential during this period to appropriately develop and refine the child's cognitive, socio-emotional, and physical abilities. The acquired knowledge, vocabulary, and assimilated habits form the basis for future development. According to research conducted by the Canadian Council of Learning in 2010, it was found that the experiences a child has during their early years significantly impact their performance in the job and various other areas of a well-rounded and satisfying life. The developmental milestones of a preschooler encompass their physical, cognitive, and social growth, serving as a benchmark for the expected abilities of a child at a specific age. Development refers to the progressive increase in a child's capacity to engage in more complex tasks as they grow older (Charlesworth, 2012).

Development encompasses a child's capacity to acquire proficiency and command over physical actions, executing tasks with competence and ease. The development of preschoolers can be shaped by both hereditary factors and environmental influences. Additionally, it has been observed that children adapt to their surroundings through play. Play has been a crucial factor in promoting the growth and progress of preschool children. Academics have reached a consensus that play empowers children to actively explore their surroundings. Play is an essential means by which children express themselves. It is an engaging natural pastime that brings pleasure and offers experiential learning to children. Regrettably, certain adults are unaware of the crucial significance of play in the holistic development of children. Consequently, they perceive children's play as a futile use of time. Teachers and parents frequently view play as a respite or release from the process of acquiring knowledge. Play, in its true nature, serves as a valuable educational tool for children. Self-directed play stimulates a child's inquisitiveness, inventiveness, and innovation. These cognitive talents are like muscles that require exercise, as neglecting them might result in their decline (Nnaeme, Okoyeuzu, & Chuka, 2022).

Recent years have seen the rise of preschool in Nigeria. Early childhood education (ECE) helps working-class



parents without relatives or house help care for their children while they work (Obiweluozor, 2015). Parent and teacher schedule after-school sessions, homework, and tutorials, denying children time to play. Academic activities overwhelm preschoolers, hindering their growth. Instead of playing outside, children watch TV or play video games, which inhibit their socialisation. Children and teens become less active as screen time rises and schools limit playtime (Ertheo, 2019).

As education becomes more standardised and competitive, schools prioritise maths, reading, and science over physical activity, and playtime (Ertheo, 2019). In order to prepare their children for primary school, many Nigerian parents have made preschool highly intellectual. Importantly, many preschools expose their pupils to intellectual activities for older children to impress parents (Salami, 2016). Most importantly, denying children play is denying them their childhood. Most adults deny children childhood. Lack of communication or neighbourhood relations has raised safety concerns for youngsters, restricting outdoor play. Play teaches children community living and socio-cultural values in addition to development. Thus, this paper explores teachers' views on how outdoor play affects preschoolers' socio-cognitive development.

Famlii (2019) described play as childhood's primary learning and social activity. Play takes many shapes and stages. Bento and Dias (2017) stated that engaging in play is a spontaneously fascinating activity which encourages cognitive, emotional, physical, and social wellbeing, enabling children to grow and learn. Classical play scholar Parten (1932) identified six social stages of play from infancy to preoperational development. Parten lists unoccupied, isolated, observer, parallel, associative, and social/cooperative play as stages of play. Play can be motor-physical, productive, vocal, fantasy/dramatic, collaborative, or virtual/digital. Children's play time and type vary by gender, region, and socioeconomic level. Girls play nearer to home with relatives, whereas boys play farther away with friends, according to Brockman, Fox, and Russell (2011). Middle-class children are typically compelled to substitute play with academics or screen time, whereas low-income children must help in the household business (Lancy, 2012).

Outdoor education is older than 20 years. It involves applying theory in nature and outdoors (Bartunek *et al.*, 2002). Museums, zoological parks, flower gardens, aquatic parks, playgrounds, woodlands, and rivers can be used for learning (Elliott & Davis, 2008). Aristotle and Plato advocated outdoor schooling. Later scientists and philosophers including Basedow, Froebel, Locke, Pestalozzi, Rousseau, and Schelling advocated for children to spend time in nature. Research demonstrates that "direct, ongoing experiences of nature in relatively familiar settings remains a vital source for children's emotional, physical, and intellectual development". Children's focus and cognition improve with proximity and everyday exposure to nature (Kellert, 2005).

Outdoor education broadens children's perspectives because of the vast world outdoors. Outdoor play places encourage child development through nature connection. However, children raised in artificial environments lack nature awareness and have a less active existence. Outdoor playgrounds can help children maximise their mental and physical growth by providing activities tailored to their age, development, interests, and needs (Öztürk, 2009).

Play is important for brain, body, and intelligence development in children. Studies show that children learn through play, experimenting, exploration, and discovery. Adventure, risk-taking, fine and gross motor development, and the acquisition of huge amounts of basic knowledge are best learnt through outdoor play, according to research (Johnson, Christie, & Wardle, 2010).

Moving besides, near, over, through, and under objects and persons helps children understand prepositions and arithmetic. When children can actively show action words like pounce, stalk, slither, or stomp or adjectives like huge, smooth, soft, or strong word knowledge is immediate and permanent. Words are learnt in context, not just as letters. This fosters language love and developing literacy. Children who take on low, high, narrow, and wide bodily shapes will learn numeric concepts better than those who are merely given words and explanations. Learning by doing increases brain and body brain connections, making the body a learning instrument (Pica, 2014).

Socio-cognitive development pertains to the progression of children's capacity to understand social connections, regulate emotions, and cultivate cognitive capacities through play and educational encounters.

Socio-cognitive development in early childhood education (ECE) is crucial, as it involves a child's capacity to establish connections, manage emotions, resolve issues, and comprehend the viewpoints of others. These skills are crucial for achieving academic achievement in the future and adapting well to social environments (Bierman & Erath, 2020).

Preschools have a crucial role in promoting socio-cognitive development through both organised and spontaneous activities. ECE fosters social play, allowing children to actively participate and so improve their cognitive skills, including language acquisition, retention, and mental agility (Collins & O'Donnell, 2019). Research has demonstrated that engaging in outdoor play can enhance socio-cognitive abilities by fostering collaboration, conflict resolution, and critical thinking in a natural setting (Tremblay *et. al.*, 2021).

The cognitive aspect of socio-cognitive development is intricately connected to children's capacity to engage in critical thinking, comprehend rules, and participate in intricate play scenarios. The amalgamation of social and cognitive growth facilitates the cultivation of self-awareness and the proficiency to adeptly navigate social encounters (Vygotsky, 1978). Preschools are placing increasing importance on holistic development, and one key method they use is encouraging socio-cognitive growth through play. For the purpose of this study, however, communication and self-esteem skills were considered as social skills while thinking and recall abilities are considered as cognitive skills.

Outdoor environments play a crucial role in allowing children to develop self-awareness and gain knowledge about their surroundings by engaging their senses (Ouvry, 2003). They enhance children's abilities to communicate their information, articulate their emotions, and exercise autonomy, so fostering greater success in their lives. Additionally, they provide educational settings conducive to conducting experiments, making discoveries, and doing research. Children engage in autonomous learning and derive enjoyment in a conducive setting that integrates natural elements and stimulates all sensory faculties. Unrestricted access to learning materials can enhance creativity and comprehension in preschool children. They explore and develop their self-awareness and skills through unrestricted play (Ouvry, 2003).

Interacting with nature enhances linguistic ability, cognitive skills such as inference, planning, observation, recognition, and decision-making, as well as motor skills like coordination, endurance, and balance. Furthermore, the occurrence of antisocial behaviours diminishes while cooperation, solidarity, consensus, and conflict resolution abilities are improved (Burdette & Whitaker, 2005).

It generates many prospects for the advancement of motor skills. Furthermore, outdoor education enhances time management skills and fosters positive social relationships, enthusiasm for achieving success, leadership abilities, and the development of emotional regulation (Miller, 2008). Outdoor education unequivocally boosts personal and social growth, enhances children's comprehension of scientific principles, and promotes heightened engagement in physical pursuits.

According to the literature, education programs that include outdoor activities and begin in early childhood have been found to enhance cognitive, social-emotional, and physical-motor skills. They also improve awareness, the ability to identify cause-effect association, observation skills, creative thinking skills, imagination, and concentration (Adhemar, 2000). Outdoor exposure may benefit children's cognitive development and health (Chawla & Nasar, 2015). Outdoor time and cognitive-behavioral development may also be explained by creche philosophy, kind, or socioeconomic position (Geoffroy *et. al.*, 2007). To satisfy assessment and achievement expectations, our children appear to be taking fewer academic breaks. Studying more prevents the brain from resting and recharging. Children should play unorganised, monitored, during playtime in schools (Pellegrini & Bohn-Gettler, 2013).

Playtime or outside play time lets kids play or think freely without adult supervision. This kind of thinking lets kids use their brains as they choose. Children exercise and learn social, emotional, and cognitive skills while playing. More time outside helps kids physically and mentally refresh, which should improve their educational, social, and cognitive performance (Pellegrini & Bohn-Gettler, 2013). Spaced out learning improves recall, according to memory and attention research. Play lets the brain "regroup". Brain research links physical activity to brain connection growth. Children lead, teach games, take turns, and manage problems on the playground. Children develop negotiation and conflict resolution to keep the play going in free choice situations (Licata, 2016).

## **Objectives of the study**

The following were the objectives of this study:

- to investigate teachers' perceptions of the impact of outdoor play on the communication skills of preschoolers.
- to examine teachers' attitudes towards outdoor play as a tool for promoting socio-cognitive development of preschoolers.
- to identify the perceived benefits of outdoor play on socio-cognitive development of preschoolers.
- to determine the frequency and duration of outdoor play sessions in preschool as reported by the teachers.

## **Research Questions**

- What are the teacher's perceptions of the impact of outdoor play on the communication skills of preschoolers?
- How often and for how long do preschools engage in outdoor play sessions?
- What are the perceived benefits of outdoor play on socio-cognitive development in preschoolers?
- Is there a relationship between teachers' perceptions of outdoor play and their teaching practices in promoting socio-cognitive development in preschoolers?

## **Hypotheses**

The following hypotheses were tested in this study:

**H<sub>0</sub>1:** There is no significant impact of outdoor play on preschooler social skills development.

**H<sub>0</sub>2:** There is no significant impact of outdoor play on preschooler cognitive development.

## **Methodology**

This study employed the descriptive survey approach, and four research questions with two hypotheses were raised to guide this inquiry. Public and private preschool teachers in Mainland LGA of Lagos State formed the population for this study while 50 teachers were selected using the simple random sampling. Data collection was achieved with a self-designed 25-item questionnaire titled "Teachers Perceptions of Outdoor Play Questionnaire" (TP\_OPQ) was used for the study. The questionnaire was validated by experts in the department of measurement and evaluation from the University of Lagos, Akoka, while it yielded a Cronbach alpha reliability coefficient of 0.88, which indicates that the instrument was very reliable. The collected data were analysed with frequency counts to present the participants' personal data, mean scores to answer the research questions, and one-sample t-test to test the hypotheses, with the use of the Statistical Package for the Social Scientists (SPSS 23.0).

## Results

**Table 1: Participants' Personal Data**

Characteristics	Options	Frequency	Percent (%)
Gender	Male	17	34.0
	Female	33	66.0
	<b>Total</b>	<b>50</b>	<b>100.0</b>
School	Private	28	56.0
	Public	22	44.0
	<b>Total</b>	<b>50</b>	<b>100.0</b>
Experience	1-5 years	12	24.0
	6-10 years	26	52.0
	11-15 years	12	24.0
	<b>Total</b>	<b>50</b>	<b>100.0</b>

*Source: Field Survey, 2024*

Table 1 indicates that the majority (66.0%) of the participants were female and the remaining 34.0% of them were male, implying that there are more female teachers than there are male in preschools. 56.0% of the teachers were from private schools and the remaining 44.0% of them were from public schools. Furthermore, 24.0% of the teachers had 1-5 years teaching experience, 52.0% of them had 6-10 years teaching experience, and the remaining 24.0% of them had 11-15 years teaching experience.

### Analysis of Research Questions (RQs)

This section answers the research questions earlier raised using mean scores, as shown below:

**Table 2: RQ1:** What are the teacher's perceptions of the impact of outdoor play on the communication skills of preschoolers?

S/N	Item	Mean	Std. Dev.
1	Engaging in outdoor play improves children's cognitive skills, such as critical thinking	2.53	.081
2	Children have exceptional cognitive abilities and deep thinking when they engage in outdoor play.	3.34	.301
3	Children who engage in outdoor play demonstrate an increased desire towards learning compared to those who do not have such exposure	3.44	.198
4	A child exposed to outdoor play have better academic performance	2.94	.135
5	Engaging in outdoor play improves children's cognitive skills like problem -solving.	2.90	.120
6.	Engaging in regular outdoor play enhances the cognitive development of preschoolers by fostering their capacity for independent thinking and decision -making.	3.12	.213
<b>Sub -mean</b>		<b>3.05</b>	<b>.175</b>

**Strongly Agree (SA) = 3.5 & above; Agree (A) = 2.5-3.49; Disagree (D) = 1.50-2.49; and Strongly Disagree (SD) = below 1.5**

Table 2 shows all of the mean scores of the items 1-6 above are greater than 2.5 and the sub-mean = 3.05. These imply that most of the participants agreed with the items answering the research question one. Hence, the answer to the research question is that the teachers opined that outdoor play has positive effects on the communication skills of preschoolers.

**Table 3: RQ2:** How often and for how long do preschools engage in outdoor play sessions?

S/N	ITEM	Mean	Std. Dev.
7	Engaging in outdoor play greatly improves the capacity of children to remember what they have learnt.	3.25	1.978
8	Consistent participation in outdoor activities enhances the memory retention abilities of preschool -aged children.	3.43	.177
9	Children who engage in outdoor play demonstrate enhanced cognitive abilities in terms of remembering and executing instructions and tasks	3.23	1.094
10	Engaging in outdoor play creates enriching surroundings that enhance the memory capacity of children when participating in classroom activities.	3.32	1.119
11	Engaging in outdoor play facilitates long -term retention of knowledge in children.	2.69	1.081
12	Engaging in outdoor play offers children firsthand experiences.	2.98	1.312
13	Engaging in outdoor play enhances children's ability to easily recall and remember information.	3.31	.121
Sub -mean		3.17	.983

**Strongly Agree (SA) = 3.5 & above; Agree (A) = 2.5-3.49; Disagree (D) = 1.50-2.49; and Strongly Disagree (SD) = below 1.5**

Table 3 shows all of the mean scores of the items 7-13 above are greater than 2.5 and the sub-mean = 3.17. These indicate that the majority of the participants agreed with the items answering research question two. Hence, the answer to the research question is that outdoor play helps in enhancing preschoolers' self-esteem.

**Table 4: RQ3:** What are the perceived benefits of outdoor play on socio-cognitive development in preschoolers?

S/N	ITEM	Mean	Std. Dev.
14	Exposing children to outdoor play improves their speech development	2.71	.038
15	Engaging in outdoor play fosters efficient communication among children.	3.40	1.065
16	Children engage in social interaction with one another by participating in outdoor play activities.	3.33	.025
17	Children who engage in outdoor play demonstrate superior socialisation skills compared to those who do not.	2.79	1.157
18	Engaging in outdoor play greatly enhances the language expression and conversational skills of preschool children.	3.30	1.145
19	Preschoolers who regularly engage in outdoor play experience improved listening and understanding skills while interacting with others.	3.42	.231
Sub -mean		3.16	.610



**Strongly Agree (SA) = 3.5 & above; Agree (A) = 2.5-3.49; Disagree (D) = 1.50-2.49; and Strongly Disagree (SD) = below 1.5**

Table 4 shows all of the mean scores of the items 14-19 above are greater than 2.5 and the sub-mean = 3.16. The implication of this is that most of the participants agreed with the items answering the research question three. Hence, the answer to the research question is that outdoor play inculcates critical thinking ability in preschoolers.

**Table 5: RQ4: Is there a relationship between teachers' perceptions of outdoor play and their teaching practices in promoting socio-cognitive development in preschoolers?**

S/N	ITEM	Mean	Std. Dev.
20	Engaging in outdoor activities enhances children's self-confidence in their skills.	3.22	.611
21	Consistent engagement in outdoor activities boosts children's sense of self-esteem.	3.31	.502
22	Children that participate in outdoor activities are inclined to exhibiting positive self-esteem.	2.72	.310
23	Engaging in outdoor activities fosters a sense of accomplishment in children.	3.34	1.017
24	Outdoor activities contribute to the development of children's self-identity.	2.65	1.091
25	Engaging in outdoor activities diminishes feelings of inferiority and enhances children's self-confidence.	2.92	.721
<b>Sub-mean</b>		<b>3.03</b>	<b>.709</b>

**Strongly Agree (SA) = 3.5 & above; Agree (A) = 2.5-3.49; Disagree (D) = 1.50-2.49; and Strongly Disagree (SD) = below 1.5**

Table 5 shows all of the mean scores of the items 20-25 above are greater than 2.5 and the sub-mean = 3.03. These indicate that most of the participants agreed with the items answering research question four. Hence, the answer to the research question is that the preschool teachers believed that outdoor play positively affects preschoolers' ability to recall knowledge.

### Test of Hypotheses

The research hypotheses were tested with the use of one sample t-test, as shown below:

#### Hypothesis One

There will be no significant impact of outdoor play on preschooler social skills.

**Table 4.6: One Sample Statistics**

One-Sample Statistics	N	Mean	Std. Deviation	Std. Error Mean	
There will be no significant impact of outdoor play on preschooler social skills	50	3.10	.659	.013	
One-Sample Test	Test Value = 2.5				
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Diff.
					LowerUpper
There will be no significant impact of outdoor play on preschooler social skills	5.126	49	.001	.60	.1820.4203

Table 4.6 shows that the mean score ( $M = 3.10$ ,  $SD = .659$ ) for the construct is rated above '2.5', a statistically significant mean difference of 0.60, 95% CI [0.182 to 0.4203  $t(49) = 5.126$ ,  $p = .001$ . Hence, the null hypothesis that states "There will be no significant impact of outdoor play on preschooler social skills" is rejected and its alternative that states "There will be significant impact of outdoor play on preschooler social skills" is accepted.

### Hypothesis Two

There will be no significant impact of outdoor play on preschooler cognitive development.

**Table 4.7: One Sample Statistics**

One-Sample Statistics	N	Mean	Std. Deviation	Std. Error Mean		
There will be no significant impact of outdoor play on preschooler cognitive development	50	3.11	.579	.026		
One-Sample Test	Test Value = 2.5					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Diff.	
					Lower	Upper
There will be no significant impact of outdoor play on preschooler cognitive development	18.207	49	.003	0.61	1.191	1.291

Table 4.7 shows that the mean score ( $M = 3.11$ ,  $SD = .579$ ) for the construct is rated above '2.5', a statistically significant mean difference of 0.61, 95% CI [1.191 to 1.291  $t(49) = 18.207$ ,  $p = .003$ . Hence, the null hypothesis that states "There will be no significant impact of outdoor play on preschooler cognitive development" is rejected and its alternative that states "There will be significant impact of outdoor play on preschooler cognitive development" is accepted.

### Discussion of findings

The results of this study demonstrate that outdoor play has a notable influence on the social skills of preschoolers. This aligns with the notion that engaging with the natural environment improves linguistic proficiency, cognitive abilities such as deduction, strategising, perception, identification, and decision-making, as well as physical qualities like dexterity, stamina, and stability. Moreover, the frequency of antisocial behaviours decreases while cooperation, solidarity, consensus, and conflict resolution skills are enhanced (Burdette & Whitaker, 2005). It creates several opportunities for the development of motor skills. Moreover, outdoor education improves the ability to manage time effectively and promotes the formation of healthy social connections, a strong desire to achieve success, leadership qualities, and the cultivation of emotional self-control (Miller, 2018). Outdoor education undeniably helps personal and social development, deepens children's understanding of scientific ideas, and fosters increased involvement in physical activities.

The results of this study demonstrate a substantial influence of outdoor play on the cognitive development of preschoolers. Consistent with prior research, Adhemar (2000) discovered that educational programs incorporating outdoor activities and commencing in early childhood have been shown to improve cognitive, social-emotional, and physical-motor abilities. Additionally, they enhance awareness, the capacity to recognise cause-effect relationships, observational abilities, creative thinking skills, imagination, and focus. According to Chawla and Nasar (2015), spending time outdoors can have positive effects on children's cognitive development and health. The relationship between outdoor time and cognitive-behavioral development can also be influenced by factors such as creche ideology, kindness, or socioeconomic position (Geoffroy et al., 2007). In order to meet assessment and success standards, it seems like our children are taking fewer academic breaks. Engaging in further studying inhibits the brain from experiencing rest and rejuvenation. According to Pellegrini & Bohn-Gettler (2013), it is recommended that children engage in unsupervised play during designated playtime at schools.

## Conclusion

The findings of this study indicate that engaging in outdoor play has a substantial impact on the socio-cognitive development of children in preschool. The results demonstrate that engaging in outdoor activities facilitates the cultivation of essential social abilities, encouraging the engagement, collaboration, and communication of young children. In addition, engaging in outdoor play boosts cognitive capacities by encouraging curiosity, problem-solving skills, and critical thinking. The beneficial influence on both social and cognitive aspects underscores the need of integrating outdoor play into early childhood education programs to promote comprehensive development.

## Recommendations

This study's findings lead to the following suggestions:

- Preschool programs should incorporate regular outdoor play sessions into their curriculum to improve the socio-cognitive development of children.
- Early childhood educators should receive training on the advantages of outdoor play and the proper utilisation of outdoor settings to enhance social and cognitive abilities in preschoolers.
- Schools should allocate resources towards the creation of secure and engaging outdoor recreational spaces that foster curiosity, ingenuity, and interpersonal communication.
- Parents should be urged to promote outdoor play activities at home, creating an atmosphere that enhances social and cognitive development outside of school.
- Educational planners should provide utmost importance to outdoor play in ECE regulations, guaranteeing that preschools dedicate ample time and resources for outdoor activities.

## References

- Adhemar A. (2000). *Nature schools*. Resurgence, 199:44.
- Bartunek D, Brügge B, Fenoughty S, Fowler D, Hensler M, Higgins P, Laschinski H, Löhrmann I, Neißl M, Neuman J, Nicol R, Seyfried C & Szczepanski A. (2002). *Outdoor education - authentic learning in the context of landscapes*. Scotland: European Service Training Course Book.
- Bento, G., & Dias, G. (2017). The importance of outdoor play for young children's healthy development. *Porto Biomedical Journal*, 2(5), 157-160.
- Bierman, K. L., & Erath, S. A. (2020). Socio-cognitive development in early childhood: Pathways toward academic and social competence. *Annual Review of Psychology*, 71, 187-210.
- Brockman, R., Fox, K. R., & Jago, R. (2011). What is the meaning and nature of active play for today's children in the UK? *International Journal of Behavioural Nutrition and Physical Activity*. Retrieved from .
- Canadian Council of Learning. (2010). *Report on the state of learning in Canada*. Ottawa, Canada: Canadian Council of Learning.
- Charlesworth, R. (2012). *Understanding child development*. (7th edition), United States: Delmar Learning.
- Chawla, L., & Nasar, J. L. (2015). Benefits of nature contact for children. *CPL Bibliography*, 30(4), 433-45
- Collins, A. W., & O'Donnell, M. (2019). Early childhood development: Advancing social and cognitive growth through play. *Journal of Educational Psychology*, 111(3), 425-438.
- Elliott S & Davis J. (2008). Introduction: Why natural outdoor play spaces? In S Elliott (ed). *The outdoor playspace naturally for children birth to five years*. Castle Hill, Australia: Pademelon Press.
- Ertheo, (2019). The importance of physical play/ Ertheo.education& sports. Retrieved on 12/07/24, from .
- Famlii, (2019). Why do kids need 12 types of play? Retrieved on 12/07/24, from [.com/why-kids-need-different-types-of-play/](https://www.famlii.com/why-kids-need-different-types-of-play/).
- Geoffroy, M. C., Cote, S. M., Borge, A. I., Larouche, F., Seguin, J. R., & Rutter, M. (2007). Association between nonmaternal care in the first year of life and children's receptive language skills prior to school entry: The moderating role of socio-economic status. *Journal of Child Psychology and Psychiatry*, 48(5), 490-497.
- Johnson, J., Christie, J., & Wardle, F. (2010). The Importance of Outdoor Play for Children. Retrieved on 12/07/24, from: <http://www.communityplaythings.com/resources/articles/2010/outdoor-play>
- Kellert, S. R. (2005). *Building for life: Designing and understanding the human-nature connection*. Washington, DC: Island Press.

- Lancy, D.F. (2012). *The chore curriculum. In African children at work: Working and learning in growing up for life* (pp.23-56). Berlin: LIT Verlag.
- Licata, E. (2016). Texas School Triples Recess Time and Sees Positive Results. Retrieved on 12/04/2024 from: .
- Miller, T. J. (2018). The Alaska factor: Outdoor education program design in Alaska. MEd thesis. Anchorage, AK: University of Alaska Anchorage.
- Nnaeme, B.N., Okoyeuzu, V., & Chuka, A.B. (2022). Influence of play on the development of preschool children in Anambra State. *Journal of Educational Research and Development*; 5(1); 220–226
- Obiweluozor, N. (2015). Early childhood education in Nigeria, policy implementation: Critique and a Way Forward. *African Journal of Teacher Education*, 4(1).
- Ouvry, M. (2003). *Exercising muscles and minds: Outdoor play and the early years curriculum*. London, UK: National Children's Bureau.
- Öztürk, Ş. (2009). Okulda eğitimle bütünleştirilmiş mekân dışı eğitim [Outdoor education integrated with the education at school]. *Milli Eğitim Dergisi (The Journal of National Education)*, 181: 131–144.
- Parten, M. (1932). Social participation among preschool children. *Journal of Abnormal and Social Psychology*, 28 (3), 136-14.
- Pellegrini, A. D., & Bohn-Gettler, C. M. (2013). The Benefits of Recess in Primary School. *Scholarpedia*, 8(2), 304-318
- Pica, R. (2014). Why Movement Matters. Retrieved on 12/07/24, from [things.com/resources/articles/2014/why-movement-matters](https://things.com/resources/articles/2014/why-movement-matters)
- Salami, I.A. (2016). Nigerian early childhood education policies and practices for sustainability. *European Journal of Research and Reflection in Educational Science*, 4(5), 72-85.
- Tremblay, M. S., Gray, C., & Babcock, S. (2021). The benefits of outdoor play on preschoolers' socio-cognitive development: A comprehensive review. *Early Child Development and Care*, 191(7-8), 1103-1115.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

# An Investigation into Character Education in Early Childhood Education in Jos Metropolis: Considerations for Curriculum and Stakeholders

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## Abstract

*Holistic development is an important goal for early childhood education (ECE). However, not much research has been conducted on character education in the Nigerian context, especially in early childhood education (birth through age 8). Indeed, there is a pervasive perception that character is declining amongst the youth in Nigeria, evidenced in exam malpractice, substance abuse, and other social ills. Research has found that character education, which includes explicit and implicit educational activities that help students develop character strengths, positively impacts academic and social outcomes. Therefore, the purpose of this study was to investigate the implementation of character education in early childhood programmes in Jos Metropolis. A descriptive research design was conducted. A total of 135 administrators of ECE programmes and 701 parents of young children constituted the sample via purposive selection. The instruments for data collection consisted of a teacher interview protocol whilst parents completed a questionnaire. Results showed that only one out of four schools are implementing character education whereas almost all school administrators (99.17%) and parents (99.14%) are in favour of teaching character education. A major challenge for implementing character education is a lack of an effective curriculum. The study concluded that character education in Nigeria is an important area for additional research and action amongst educational stakeholders to integrate character education into school curriculums, especially from the early years. Based on the research findings, it was recommended that schools should integrate character education into their curriculum.*

**Keywords:** Character Education, Early Childhood, Curriculum, Stakeholders

## Introduction

Early childhood programmes can impact pupils' academic achievement and well-being through a curriculum that enhances learning and development in all domains (National Academies of Sciences, Engineering, and Medicine, 2024; National Association for the Education of Young Children, 2020). Learning and development can be categorized into five domains: physical, social, cognitive, character, and spiritual (Korb, 2018). Because development in each domain is influenced by growth in other domains, intentional teaching strategies impacting each domain are critical from birth through age 8 (National Association for the Education of Young Children, 2020). This means that early childhood educators are responsible not just for teaching academic knowledge, but just as importantly, for nurturing children's physical, social, character, and spiritual development.



Holistic learning has many positive outcomes for learners. Research has shown that holistic learning approaches lead to improved academic achievement (Hill, 2002), enhanced social and emotional skills (Durlak *et. al.*, 2011) and increased creativity and critical thinking abilities (Plucker & Renzulli, 1999). Additionally, holistic learning has been linked to better mental health and well-being outcomes, including reduced stress and anxiety (Hart, 2001) and improved self-esteem and self-concept (Marsh & Craven, 2006). Furthermore, holistic learning approaches have been found to promote greater student engagement and motivation (Wiggins & McTighe, 2005), leading to a more positive and supportive learning environment.

One specific domain of development, character, plays a crucial role in life process as it influences thoughts, feelings and actions (Tackett *et. al.*, 2017). Character is a set of personal traits or dispositions that produce specific moral emotions, inform motivation, and guide conduct (The Jubilee Centre Framework for Character Education in Schools, 2022). Research has shown that good character is linked to better academic performance (Durlak *et. al.*, 2011), improved mental health and well-being (Park & Peterson, 2009), and stronger social relationships (Gilliland & Dunn, 2003). Character is critical for optimal human development (Rashid *et. al.*, 2015). Good character is what parents look for in their children, what teachers look for in their students, what siblings look for in their brothers and sisters, and what friends look for in their peers (Park & Peterson, 2009).

Character education, which includes explicit and implicit educational activities that help pupils develop character strengths (The Jubilee Centre Framework for Character Education in Schools, 2022), has been shown to positively impact a range of important developmental outcomes. First, research has found that character education programs lead to improved academic achievement, including higher grades, and standardized test scores (Durlak *et. al.*, 2011). Second, character education has been linked to increased social-emotional skills such as empathy, self-awareness, and self-regulation (Hart, 2001). Again, character education has been shown to promote moral development and ethical reasoning, including increased moral responsibility and civic engagement (Narvaez, 2006).

Character education is implicitly written into Nigeria's *National Policy on Education* (Federal Republic of Nigeria, 2013). First, the goals of education in Nigeria are to "Develop individuals into morally sound, patriotic, and effective citizens, inculcate national consciousness, values and unity, and development of appropriate skills, mental, physical and social abilities and competencies to empower the individual to live in and contribute positively to the society" (Federal Republic of Nigeria, p. 1-2). The phrase "morally sound," the need to inculcate values, as well as the competences to contribute positively to society all bespeak character education. Again, the *National Policy on Education* reads, "The quality of instruction at all levels of education shall be oriented towards inculcating moral and spiritual principles in inter-personal and human relations" (p.2-3). Character education is included in instruction that will inculcate moral principles. Finally, character education is included in the policy for early childhood education, whereby one of the goals of Basic Education is to "Inculcate values and raise morally upright individuals capable of independent thinking" (p.4). Values and morals are part of character education. In summary, character education features importantly throughout Nigeria's Policy on Education.

### Statement of Problem

Character is declining amongst youth in Nigeria. This is evidenced in examination malpractice, substance abuse, and other social ills. Statistics showed that in 2019, there were 224,711 occurrences of test malpractice, affecting 11.26% of applicants who sat for West African Senior School Certificate Examination (Ajayi, 2024). According to Chukuwumeka (2024), 75% of students who take West African Examination Council and Joint Admissions and Matriculation Board examinations in special centers around the country, where examination malpractice is prevalent, were advised by their parents to go there.

This study sets examines the perspectives of early years parents and teaches whether character education can be one important strategy for addressing the decline in character amongst Nigerian youth.

### Objectives of Study

The main aim of this study was to investigate the implementation of character education in early childhood programmes in Jos Metropolis, Nigeria. Specific objectives of the study are to:

- ascertain the number of early childhood schools implementing character education in Jos Metropolis, Nigeria.

- identify the proportion of school administrators who believe that character education should be taught in Jos Metropolis, Nigeria.
- identify challenges that school administrators face in implementing character education in Jos Metropolis, Nigeria.
- ascertain the number of parents of young children who believe that character education should be taught in Jos Metropolis, Nigeria.

### **Research Questions**

- How many early childhood schools are implementing character education in Jos Metropolis, Nigeria?
- What proportion of school administrators believe that character education should be taught in Jos Metropolis, Nigeria?
- What challenges do school administrators face in implementing character education in Jos Metropolis, Nigeria?
- How many parents think that character education should be taught in Jos Metropolis, Nigeria?

### **Methodology**

This research adopted a descriptive research design to examine schools that incorporate character education in early childhood education. Both qualitative and quantitative approaches were used to collect data. Qualitatively, the investigation involved conducting in-depth interviews with school administrators which were transcribed, coded and analysed to determine their practices and experiences with character education. Quantitatively, a questionnaire was administered to parents to investigate their beliefs about character education.

The target population for the study included both administrators of nursery and primary schools as well as parents of nursery and primary pupils. A total of 135 school administrators at private schools were selected. (Public schools were excluded as they were on strike at the time of data collection.) In order to select schools, research assistants were assigned a geographical area within Jos Metropolis and went to every nursery/primary school in their geographical area. This ensured that both low-income and high-income schools were selected.

Parents of nursery or primary pupils responded to a questionnaire as part of a larger experiment examining the impacts of a character education curriculum. For parent report, schools were purposively selected as being low-income schools. All parents of one classroom between Nursery 3 and Primary 2 in each school were invited to a parent meeting to collect data for this study. A total of 701 parents completed the questionnaire item addressing one of the research questions in this study.

An open-ended interview protocol with 11 interview questions was used to collect data from school administrators. The data were collected as part of a broader interview process, with this study specifically focusing on responses to the following three questions: Is character education being taught at the nursery-primary levels in your school? Do you think that character education should be taught to children? What challenges do you face at your school in teaching character education? Probing questions were employed to elicit more detailed insights. Specifically, after the first question of whether character education was taught at their school, participants were asked to describe the nature of the character education.

Parents in the study completed a questionnaire. The item on the questionnaire relevant to this study focused on responses to the question, "Character education can be taught as a subject, just like English and mathematics are taught as subjects. Character education means directly and purposefully teaching good morals and ethics, like honesty, respect, and treating others fairly. "Do you think that character education should be taught to children?" Parents ticked either Yes or No. The questionnaire was translated into Hausa using back-translation procedures for parents with limited understanding of English. Each questionnaire had the English version printed on one side of the paper and the Hausa version printed on the other side of the paper.

School administrators were interviewed according to a structured protocol, with each session being audio-recorded for transcription. The interviews were completed over the course of five working days. The duration of the full interviews ranged from 14 minutes to 56 minutes. These interviews were conducted at the participants' respective schools between 8:00 a.m. and 1:30 p.m. The recorded interviews were then transcribed verbatim for subsequent data analysis.

Parents completed the questionnaire during a parent meeting, with the process spanning 10 working

days. On average, administering the full questionnaire took about 30 minutes. Parent meetings were conducted at the participants' respective schools, where their children are enrolled, between 8:00 a.m. and 2:00 p.m. Two research assistants guided the parents in completing the questionnaire by reading each item out loud to ensure that parents with limited literacy could complete the questionnaire. Each item was read three times: first in the language that most parents were comfortable in (e.g., English for most schools), then in the other language (Hausa), and again in the first language (English).

Open-ended items were analysed through qualitative content analysis. To answer the first research question about whether schools taught character education, character education was operationally defined through consensus of four researchers, with inclusionary and exclusionary criteria. The operational definition was "a character education curriculum/subject distinct from other subjects." Responses that were included as character education were moral education, ethics, character themes per month (or other timeframe), focused discussions on character during circle time or other group discussions, and specific times dedicated to talking about character. Responses that were excluded include religious education, civic education, social studies, disciplining children, assembly, and extracurricular activities. Two researchers coded administrators' descriptions of the character education at their school against this operational definition. Discrepancies in coding were discussed until a consensus was reached.

Analysis of the second research question about whether school administrators believed character education should be taught was straightforward as administrators almost always gave clear a yes or no response. The third research question addressing the challenges of character education was analysed by first reading over the transcripts for themes. Themes were operationally defined, and responses were then coded by two researchers using the same procedure as in research question one. Descriptive statistics were used to answer the final research question about parents' beliefs of character education.

## Results

The first research question asked, how many early childhood programs are implementing character education in Jos Metropolis, Nigeria. Based on the coding procedures described above, results are presented in Table 1.

Table 1. Frequency of Character Education being Taught in Nursery and Primary Schools.

	Frequency	Percent <sup>1</sup>
<b>Yes, Character Education is Taught</b>	<b>34</b>	<b>25.95</b>
<b>No, Character Education not Taught</b>	<b>97</b>	<b>74.05</b>
<b>No Response Given</b>	<b>4</b>	
<b>Total</b>	<b>135</b>	

As can be seen in Table 1, few nursery and primary schools teach character education. Despite character education featuring prominently in Nigeria's *National Policy on Education*, few schools in Jos Metropolis are actually teaching character education.

The second research question asked, what proportion of school administrators believe that character education should be taught in Jos Metropolis, Nigeria. Results are presented in Table 2.

Table 2. Administrators' Beliefs of whether Character Education Should be Taught.

	Frequency	Percent <sup>1</sup>
Yes, Character Education should be taught	119	99.17
No, Character Education should not be taught	1	0.83
No Response Given	15	
Total	135	

Table 2 shows that administrators in Jos Metropolis were almost unanimous in agreeing that character education should be taught in nursery and primary schools, with only one school administrator disagreeing. Even though school administrators believe that character education should be taught, very few are teaching character education. Therefore, it is important to examine the challenges confronting character education, which is the topic of the third research question.

The third research question asked, what challenges do school administrators face in implementing character education in Jos Metropolis, Nigeria. Table 3 first presents whether school administrators perceived that there were challenges to implementing character education.

Table 3. Administrators' Beliefs of whether there are Challenges to Implementing Character Education.

	Frequency	Percent
Yes, there are challenges	86	78.18
No, there are no challenge	24	21.82
No Response Given	25	
Total	135	

As can be seen from Table 3, 78% of school administrators in Jos Metropolis perceive there are challenges to implementing character education. The challenges that school administrators reported were coded according to seven themes, as seen in Table 4.

Table 4. Challenges for Character Education.

Theme	Definition	Frequency	Percent <sup>1</sup>
Parent Beliefs	Parents have differing beliefs on what character strengths should be taught (including religious differences)	28	32.56
Lack of Parent Cooperation	Parents do not support character education, including parents do not support character development in the homes or lack of awareness about the importance of character education	20	23.26
Difficulty of Children Learning Character	Character is difficult for young children to learn; They are not able to or interested in learning about character	18	20.93
Lack of Curriculum/Materials	Lack of a coherent character curriculum, textbooks, and/or materials	13	15.12
Not in the Curriculum	Character education is not part of the school's curriculum	6	6.98
Lack of Time	Character education is not in the timetable or the timetable is too full	5	5.81
Other	Other challenges such as lack of funding, peer pressure, and lack of awareness that character education can be taught	7	8.14

As seen in Table 4, the most commonly mentioned challenge of character education is parent beliefs, meaning that parents have different beliefs of character, such as religious differences. For example, one administrator said, "I said we're having challenges with parents. You know, we have individual differences and as such you will see that this child will come with a belief on his family or from the background... When you bring your own, they would now look at it strange." The next most frequently mentioned challenge was lack of parent cooperation. School administrators who mentioned this theme focused mostly on parents not enforcing good character in the home or parents were not aware of the importance of character education. Other commonly mentioned challenges of character education were related to curriculum, including lack of a coherent curriculum

(N=13), that character education is not in the school's curriculum (N=6), or that character education was not on the school's timetable (N=5).

The last research question asked, how many parents think that character education should be taught in Jos Metropolis, Nigeria. Results are presented in Table 5.

Table 5. Parents' Beliefs of whether Character Education Should be Taught.

	Frequency	Percent
Yes, Character Education should be taught	695	99.14%
No, Character Education should not be taught	6	0.86%
Total	701	100%

Table 5 shows that almost all of the surveyed parents believed that character education should be taught.

### Discussion of Findings

The purpose of this study was to investigate the implementation of character education in early childhood programmes in Jos Metropolis, Nigeria. The first research question addressed the number of early childhood programs that implement character education. The results show that only about 1 out of every 4 schools are teaching character education, in contrast to Nigeria's *National Policy on Education* which promotes character education in schools. Given that growth in each developmental domain is influenced by growth in other domains (National Association for the Education of Young Children, 2020), children in these schools where character education are not taught may not demonstrate holistic development, especially in the domain of character. This limits the potential developmental progress that is impacted by character education, such as improved academic achievement (Hill, 2002), enhanced social and emotional skills (Durlak et al., 2011) and increased creativity and critical thinking abilities (Plucker & Renzulli, 1999).

The second research question addressed school administrators' beliefs of whether character education should be taught whereas the fourth research question addressed the same belief amongst parents of young children. There was widespread agreement amongst both school administrators and parents that character education should be integrated into the school curriculum. Similarly, Birhan and colleagues (2021) also found that parents in Ethiopia support the inclusion of character education in preprimary and primary schools. The discrepancy found in this study between school officials' and parents' beliefs and actual practice merits increased attention as to the challenges and opportunities of character education in early childhood education in Jos Metropolis and beyond.

The third research question addressed school administrators' perceptions of the challenges of implementing character education. The two most commonly cited challenges were about parents, including differing beliefs amongst parents and lack of parent cooperation. However, as noted by the results from the fourth research question, parents are almost all in favour of character education being taught in the schools. All but one of the other commonly mentioned challenges was regarding a character education curriculum.

### Recommendations

Based on the findings of this study, the following recommendations are made.

- First, schools should integrate character education into their curriculum. The benefits of teaching character education in the classroom include better academic performance
- Therefore, awareness campaigns should be made to school administrators about parents' beliefs of character education.
- Experts in early childhood education should focus their attention on developing character education curriculums.
- Educational researchers should conduct research examining the impacts of character education amongst Nigerian children – especially young Nigerian children.



## Conclusion

This study concluded that very few nursery/primary schools in Josteach character education, in contrast to Nigeria's *National Policy on Education* which promotes character education in schools. The study also showed school administrators were almost unanimous in agreeing that character education should be taught in nursery and primary schools, and parents also strongly supported the teaching of character education. An important challenge noted by educators in implementing character education was the lack of a character education curriculum, so educational stakeholders should focus attention on developing a character education curriculum for the Nigerian context. Character education in Nigeria is an important area for additional research and action amongst educational stakeholders.

## References

- Ajayi, O.S. (2024). Examination malpractice in WASSCE for school certificates: A comprehensive analysis of the 2019 statistics in Nigeria. *International Journal of Interdisciplinary Research Methods*, 11, 11-27.
- Birhan, W., Shiferaw, G., Amsalu, A., Tamiru, M., & Tiruye, H. (2021). Exploring the context of teaching character education to children in preprimary and primary schools. *Social Sciences & Humanities Open*, 4, 100171.
- Chukwuemeka, E.S. (2024). Examination malpractice in Nigeria: Major causes, effects and solutions. *BScholarly*.
- Durlak, J.A., Weissberg, R.P., & Pachan, M. (2011). *Social and emotional learning: What we know and where we go from here*. Taylor and Francis.
- Esere, M. O., Omotosho, J. A., & Idowu, A. I. (2011). Useful dimensions of education in Nigerian family traditions. In A. B. Namenang & T. M. S. Tchombe (Eds.), *Handbook of African educational theories and practices: A generative teacher education curriculum* (pp. 257-269). Bamenda, Cameroon: Human Development Resource Centre.
- Federal Republic of Nigeria. (2013). *National Policy on Education*. 6<sup>th</sup> Ed. NERDC.
- Gilliland, S.E., & Dunn, J. (2003). Social influence and social change in the development of moral character. *Journal of Moral Education*, 32(2), 151-166.
- Hart, K. (2001). The impact of a holistic approach to early childhood education on children's cognitive, social, and emotional development. *Early Childhood Research and Practice*, 3(1), 1-22.
- Hill, H. (2002). The importance of holistic development in early childhood education. *Journal of Early Childhood Education*, 40(2), 147-155.
- Korb, K. A. (2018). *Celebrating Young Children: An Introduction to Early Childhood Education*. Fab Educational Books.
- Marsh, H.W., and Craven, R.G. (2006). Reciprocal effects of self-concept and performance from a multidimensional perspective: Beyond seductive pleasure and unidimensional perspective. *Educational Psychologist*, 41(2), 131-146.
- Narvaez, D. (2006). Integrative ethical education. In M. Killen & J. Smetana (Eds.), *Handbook of moral development* (pp. 703-722). Taylor and Francis.
- National Academies of Sciences, Engineering, and Medicine. (2024). *A new vision for high-quality preschool curriculum*. The National Academies Press.
- National Association for the Education of Young Children. (2020). *Developmentally appropriate practice: A position statement of the national association for the education of young children*.
- Park, N., & Peterson, C. (2009). Positive psychology and the life well-lived. In C.R. Snyder & S.J. Lopez (Eds.), *Handbook of Positive Psychology* (pp. 129-140). Oxford University Press.
- Park, N., Peterson, C., & Seligman, M. E. P. (2004). Strengths of character and well-being. *Journal of Social and Clinical Psychology*, 23, 603-619.
- Plucker, J.A., & Renzulli, J.S. (1999). Psychological profiling and the concept of creativity. In R.J. Sternberg (Ed.), *Handbook of Creativity* (pp. 273-294). Cambridge University Press.
- Rashid, T., Anjum, A., Lennox, C., Quinlan, D., Niemiec, R. M., Mayerson, D., & Kazemi, F. (2015). Assessment of Character Strengths in Children and Adolescents. In C. Proctor & P. A. Linley (Eds.), *Research, applications, and interventions for children and adolescents: A positive psychology perspective* (pp. 82-115). Springer.

- Tackett, J.L., Lahey, J.N., & Waldman, I.D. (2017). The development of character: A conceptual framework. *Journal of Personality and Social Psychology*, 113(3), 431-446.
- Wiggins, G., & McTighe, J. (2005). *Understanding by Design* (2<sup>nd</sup> ed.). Association For Supervision and Curriculum Development.

# Impact of Educational Reforms on Pupils' Academic Achievement in Kosofe Local Government Area, Lagos State

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## Abstract

*This study examines the impact of educational reforms on pupils' academic achievement in Kosofe Local Government Area, Lagos State; the study evaluates the effectiveness of educational reforms in improving pupils' academic achievement in Kosofe Local Government Area. It highlights successes, identifies challenges, and provides insights for policymakers to enhance education quality and accessibility for sustainable development. The study utilized a descriptive survey design to investigate the impact of educational policy reforms on pupils' academic achievements in Kosofe Local Government, Lagos State. Fifty teachers from various primary schools were selected through stratified and random sampling to ensure fair representation. Data was collected using a self-structured questionnaire titled "Impact of Educational Policy Reforms on Pupils' Academic Achievement" (IEPRPAA), which comprised sections on respondents' background information and research-aligned questions. The data were analyzed using descriptive statistics for summarization and inferential methods to conclude the influence of the reforms on academic performance. The findings indicate that educational policy reforms in Kosofe Local Government Area, such as the distribution of free GCE and JAMB forms (Mean = 3.06, SD = 0.577) and the "Educare" program (Mean = 3.04, SD = 0.628), have significantly enhanced access to education and reduced barriers for students. Teachers expressed positive perceptions, with a grand mean of 3.05, noting improvements in teaching practices (Mean = 3.20), teaching experiences (Mean = 3.10), and classroom engagement (Mean = 3.06). However, challenges persist in the provision of state-of-the-art facilities (Mean = 2.69, SD = 0.613) and adequate infrastructure (Mean = 2.75, SD = 0.624), highlighting areas requiring further intervention to achieve more comprehensive educational improvements. Based on the findings it is recommended that the government should ensure funding and consistent reforms, schools should adopt diverse teaching methods, and curriculum planners should focus on building pupils' communication and collaboration skills.*

**Keywords:** Early childhood, Education, Policy, Reforms

## Introduction

Educational policy refers to the principles and government policies that guide the planning, administration, and evaluation of education systems. It encompasses a wide range of issues including the allocation of resources, curriculum standards, teacher qualifications, and the structure of educational institutions. Educational policies are instrumental in shaping the quality and accessibility of education, and they reflect the societal values and goals of a particular time and place. The impact of educational policy is far-reaching, affecting not only the

immediate educational environment but also long-term societal outcomes. Effective educational policies can lead to improved student achievement, greater equity in education, and a more skilled workforce. Conversely, poorly designed policies can exacerbate inequalities and hinder educational progress. Policies that promote early childhood education have been shown to significantly improve cognitive and social outcomes for children, particularly those from disadvantaged backgrounds (Heckman, 2011).

Nigeria has witnessed several educational reforms which started pre-independence. It was to the credit of Nigerians notably agitators for a self-rule that led the British colonial rulers to change the educational system in operation in 1954 from an 8-6-2-3 system that is 8year primary, 6year secondary, 2year higher school certificate and 3year university to a new system 6-5-2-3 that is 6year primary, 5year secondary, 2year higher school certificate and 3year university. The change resulted in reducing the number of years at the primary and secondary school levels. Nigerians then were more concerned about education. It is viewed as a patriotic struggle to effect a change in the educational structure for the general good of the country (Bello, 2008).

The hope in the educational reforms continued to rekindle after independence. The freedom of self-rule Nigeria was enjoying had to match with educational progress. In September 1969 there was a National Curriculum Conference held in Lagos. Participants at the conference were eager to see Nigeria chart a new course in its educational system. Such a system they reasoned will empower the country towards the path of scientific and technological development. They criticized the colonial education system as lacking in vitality and relevance. In short, the conference recommended changes in the system, from a 6-5-2-3 system to a 6-3-3-4 system; that is 6year primary, 3year junior secondary, 3year senior secondary, and 4year university education.

In Nigeria, the educational system of education has been controlled and managed by the federal, state, and local governments. The Federal Ministry of Education handles national policy formation and ensures quality control in the educational system. It is also responsible for federal higher education. The state government is responsible for the administration of secondary school education and the local government handles the basic education in their domain (Ogunode& Adah 2020).

Educational programs and policies developed by the federal government are to meet the various United Nations conventions on issues regarding educational development and access. Ogunode and Adah (2020), listed some of the educational policies and program which are; the Child act law (2003), Universal Basic Education Act (2004), National Policy on HIV and AIDS for the Education Sector in Nigeria (2005), National Gender Policy (2006), National School Health Policy (2006), the Safe School Initiative (SSI) in Nigeria (2014), National Policy on Inclusive Education in Nigeria (2016) and National Home Grown School Feeding Programme (2016).

Since the emergence of COVID-19 to date, Nigeria's education system has suffered unprecedented setbacks, and continuously experienced the impact of COVID-19 after the long shutdown period of the schools because of the ravaging nature of the pandemic (Crawfordetal., 2020). This has increased the fear and tension for the school leadership regarding the possibility of a second lockdown of the academic institutions (Samuel,2020). The conditions of the first lockdown of schools that lasted for over six months have quadrupled the retrogressive situations of Nigeria's education, such as the high rate of teacher attrition (Alhat,2020). School dropout percentage has risen dramatically as students do not fancy going to school to avoid the unknown outcome of the virus and its mutational potency in affecting their lives (Lee,Malcein, & Kim, 2021).

This led to the greater inclusion of technology in the teaching and learning process making it the new normal. This leads to additional policies that focus on teacher quality and professional development can enhance teacher effectiveness and student achievement (Darling-Hammond, 2017). Educational policy reforms are initiatives undertaken to improve the effectiveness, efficiency, and equity of educational systems. These reforms are designed to address emerging challenges, adapt to societal changes, and enhance educational outcomes for all students. Educational policy reforms can have profound impacts on pupils, teachers, and the broader society. Effective reforms can lead to improved student outcomes, greater equity, and a more skilled workforce.

Pupils' academic achievement refers to the extent to which pupils have achieved their educational goals, as measured by standardized tests, grades, and other performance indicators. It encompasses not only cognitive skills and knowledge but also other aspects of learning such as critical thinking, problem-solving abilities, and social skills. Academic achievement is a crucial indicator of the effectiveness of the education system and the quality of instruction provided.

Educational policy reforms play a crucial role in shaping the quality and effectiveness of the education system,

with the goal of improving pupils' academic achievement. These reforms encompass a wide range of initiatives aimed at addressing various factors that influence pupils' learning outcomes. One significant impact of educational policy reforms is the improvement in teaching quality. Policies that focus on teacher training and professional development have been shown to enhance educators' pedagogical skills and knowledge, leading to better pupil outcomes (Darling-Hammond, 2017).

Hattie (2009) found that effective teaching practices have a substantial impact on pupils' achievement, with highly skilled teachers producing significantly higher learning gains. Educational policy reforms often target reducing educational inequality to ensure that all pupils have equal opportunities to succeed. By addressing disparities in resources, funding, and access to quality education, these reforms aim to level the playing field for Pupils from diverse backgrounds (OECD, 2018). Reardon (2011), highlights the importance of equitable educational policies in narrowing the achievement gap between Pupils from different socio-economic backgrounds, thereby improving overall academic achievement.

Reforms focused on curriculum and instruction aim to align educational practices with current research and best practices in teaching and learning. By updating curricula to be more relevant and engaging, educational policy reforms can increase pupils' motivation and interest in learning (OECD, 2018). Studies have shown that innovative teaching methods and curriculum reforms can lead to improvements in student achievement (Hattie, 2009). Another significant impact of educational policy reforms is the promotion of student engagement in learning. Policies that emphasize student-centered approaches, project-based learning, and hands-on experiences have been shown to increase pupils' motivation and involvement in their education (OECD, 2018). Research by Ryan and Deci (2000) underscores the importance of intrinsic motivation in driving academic achievement, with engaged pupils demonstrating higher levels of performance and persistence. Educational policy reforms play an important role in shaping the quality and effectiveness of education systems worldwide. These reforms are often driven by the need to improve educational outcomes, address inequities, and adapt to changing societal and economic demands. In Nigeria, educational policy reforms have been implemented to enhance the quality of education and improve academic achievement among pupils. This study focuses on the impact of such reforms on pupils' academic achievement in Kosofe Local Government Area, Lagos State.

Lagos State, as one of Nigeria's most populous and economically significant states, has been at the forefront of educational reforms in terms of policy. The state government has introduced various policies aimed at improving the quality of education, such as the Lagos State Education Reform Policy (LASERP). LASERP includes initiatives like increased funding for schools, teacher training programs, curriculum updates, and the provision of educational materials and infrastructure improvements (Ogunode, 2020). Educational reforms in Lagos State also emphasize the integration of technology in education. The introduction of e-learning platforms and the provision of digital resources have been aimed at enhancing teaching and learning processes, the use of education tabs (Eko Excell), as well as the "leave no child behind policy". These initiatives are expected to bridge the digital divide and ensure that pupils are well-equipped with the necessary skills for the 21st century (Adeyemi & Uko-Aviomoh, 2020).

Despite these efforts, there are still challenges that hinder the effective implementation of educational policies. Issues such as inadequate funding, lack of trained teachers, and poor infrastructure continue to affect the quality of education in many schools. Additionally, socioeconomic factors and disparities in resource allocation between urban and rural areas contribute to variations in educational outcomes (Olaleye, 2017).

Kosofe Local Government Area, being a part of Lagos State, experiences these dynamics firsthand. The area encompasses a mix of urban and semi-urban communities, with varying levels of access to educational resources. Understanding the specific impacts of educational policy reforms in this context is essential for identifying areas of improvement and ensuring that the intended benefits of these policies are realized. Studies have shown that effective educational reforms can lead to significant improvements in pupils' academic performance. For instance, increased investment in teacher training has been associated with better teaching practices and improved student outcomes (Hanushek & Rivkin, 2010).

Similarly, the provision of adequate learning materials and infrastructure has been linked to higher academic achievement (Glewwe *et al.*, 2011). However, the success of these reforms depends on several factors, including the level of implementation, stakeholder involvement, and continuous monitoring and evaluation. Ensuring that policies are effectively translated into practice requires collaboration between government agencies, educators, parents, and the community at large.



This study examines the impact of educational policy reforms on pupils' academic achievement in Kosofe Local Government Area, Lagos State. By analyzing data on academic performance before and after the implementation of key policies, this research seeks to provide insights into the effectiveness of these reforms and identify factors that contribute to or hinder their success.

### **Statement of the Problem**

Education is widely regarded as a key driver of socio-economic development, and governments across the globe continue to introduce educational reforms to improve learning outcomes and academic achievements. Despite such efforts, the success of these reforms often varies due to contextual factors, particularly in under-resourced and diverse environments. In Kosofe Local Government Area of Lagos State, Nigeria, educational challenges such as inadequate infrastructure, overcrowded classrooms, and a shortage of trained teachers persist. These challenges undermine the objectives of reforms, leaving the academic performance of pupils below desired standards (Akinyele, 2022). Furthermore, disparities in resource allocation between urban and peri-urban schools further exacerbate inequalities in educational opportunities and outcomes (Olawale, 2023).

While past studies have examined the effects of educational reforms on learning environments, there is a gap in understanding their specific impact on pupils' academic achievement within Kosofe Local Government Area. This knowledge gap is particularly pronounced in exploring how reforms address unique socio-economic and infrastructural challenges prevalent in the region. Existing literature often highlights national or state-level outcomes but neglects the nuanced realities faced by local schools (Adebanjo, 2021). Consequently, it becomes imperative to assess whether these reforms are effectively enhancing pupils' academic performance in this locality. This study aims to bridge this gap by investigating the impact of educational reforms on pupils' academic achievement in Kosofe Local Government Area of Lagos State.

### **Purpose of the Study**

The purpose of the study was to investigate the Impact of Educational Reforms on Pupils' Academic Achievement in Kosofe Local Government Area, Lagos State. The specific objectives were to:

- examine the specific educational policy reforms implemented in Kosofe Local Government Area, Lagos.
- assess the extent to which these educational policy reforms have been implemented effectively in schools within Kosofe.
- explore the perceptions and experiences of stakeholders, including pupils and teachers, regarding the impact of educational policy reforms on pupils' academic success.

### **Research questions**

The following questions guided the study:

- What specific educational policy reforms have been implemented in schools within Kosofe Local Government Area, Lagos State?
- To what extent have these educational policy reforms been effectively implemented across schools in Kosofe Local Government Area?
- How do teachers and pupils in Kosofe Local Government Area perceive the impact of these educational policy reforms on pupils' academic success?

### **Methodology**

The study adopted a descriptive survey design to examine the impact of educational policy reforms on pupils' academic achievements in Kosofe Local Government, Lagos State. The target population consisted of teachers in schools within Kosofe, Lagos State. Stratified sampling was utilized to select participants from various primary schools in Kosofe Local Government. Primary schools within the local government were randomly chosen to ensure fair representation.

A total of 50 teachers were randomly selected to participate in the study. Data was collected using a self-structured questionnaire titled "Impact of Educational Policy Reforms on Pupils' Academic Achievement" (IEPRPAA). The questionnaire consisted of two sections: Section A collected background information from

respondents, while Section B focused on questions directly aligned with the research objectives. Descriptive and inferential statistical methods were employed to analyze the collected data. Descriptive statistics summarized respondents' background information, while inferential analysis facilitated drawing reliable conclusions and inferences about the impact of educational policy reforms on pupils' academic achievements in Kosofe Local Government, Lagos.

### Distribution of Teacher based on Genders

#### Results

Table 1

<b>Gender</b>	<b>Frequency (N)</b>	<b>Percentage (%)</b>
Male	24	23.5
Female	78	76.5
<b>Total</b>	<b>102</b>	<b>100.0</b>

**Table 2**

Table 1 indicated that out of 102 teachers sampled for Education Policy in Kosofe Local Government, 24(23.5%) were male teachers while 78 (76.5%) were female. This shows that female teachers who participated in the study were more than their male counterparts.

**Table 1**

*Distribution Teachers based on Highest Qualification*

<b>Highest Qualification</b>	<b>Frequency (N)</b>	<b>Percentage (%)</b>
NCE	12	11.8
B. ED	74	72.5
M.ED	14	13.7
PhD	2	2.0
<b>Total</b>	<b>102</b>	<b>100.0</b>

Table 2 indicated that out of 102 teachers sampled for Education Policy in Kosofe Local Government, 12(11.8%) were NCE holders; 74(72.5%) were B, ED holders; 14(13.7%) were M. ED holders while 2(2.0%) were PhD holders. This implies that majority of the biology teachers involved obtained B.ED.

### Answering Research Questions

**Research Question 1:** What specific educational policy reforms have been implemented in schools within Kosofe Local Government Area, Lagos State?

Research question 1 was answered with Table 3 below

**Table 3**  
*Education reforms implemented in schools in Kosofe*

S/N	Items	Mean	SD
1	The introduction of the "Educare" program has significantly improved the quality of primary education in Kosofe Local Government Area.	3.04	.628
2	The distribution of free GCE and JAMB forms has enhanced students' access to higher education opportunities.	3.06	.577
3	The local government has provided adequate educational facilities to support effective teaching and learning in schools. schools.	2.75	.624
4	Teachers in Kosofe Local Government Area have received sufficient training and support to implement recent educational reforms.	3.02	.580
5	The state-of-the-art facilities introduced in schools have created a conducive learning environment for students.	2.69	.613
<b>Average</b>		<b>2.912</b>	<b>0.604</b>

Table 3 above illustrates the findings suggest that the most effectively implemented reforms are the distribution of free GCE and JAMB forms (Mean = 3.06, SD = .577) and the introduction of the "Educare" program (Mean = 3.04, SD = .628). These indicate high levels of agreement among respondents about their positive impacts. On the other hand, reforms related to providing state-of-the-art facilities (Mean = 2.69, SD = .613) and adequate educational facilities (Mean = 2.75, SD = .624) show relatively lower means, suggesting room for improvement in these areas. The overall average (Mean = 2.912, SD = .604) reflects a general agreement that the reforms have been beneficial, though the standard deviation indicates some variability in respondents' opinions.

**Research Question 2:** To what extent have these educational policy reforms been effectively implemented across schools in Kosofe Local Government Area?

The research question 2 was answered with Table 4 below

**Table 4**  
*Extent education policy reforms implemented*

S/N	Items	Mean	SD
1	Educational resources provided under the policy reforms are accessible to all schools in Kosofe Local Government Area.	2.98	.613
2	Monitoring and evaluation mechanisms have been established to ensure the sustainability of these educational reforms.	2.94	.542
3	There has been consistent funding to support the implementation of the educational policy reforms.	3.02	.545
4	The reforms have successfully addressed key challenges such as overcrowded classrooms and teacher shortages.	2.96	.525
5	Stakeholders (e.g., parents, teachers, and community leaders) are actively engaged in the implementation process of the reforms.	3.00	.597
<b>Average</b>		<b>2.98</b>	<b>0.564</b>

Table 4 reveals a positive perception of the extent to which educational policy reforms have been effectively implemented in schools within Kosofe Local Government Area, with an average mean score of 2.98 and a standard deviation of 0.564. The item with the highest means (3.02, SD = 0.545) indicates that consistent funding has been relatively well-implemented, suggesting financial stability in supporting these reforms. Engagement of stakeholders (Mean = 3.00, SD = 0.597) and accessibility of educational resources (Mean = 2.98, SD = 0.613) also scored relatively high, emphasizing inclusivity and active participation. However, mechanisms for monitoring and addressing challenges like overcrowded classrooms (Mean = 2.94, SD = 0.542 and 2.96, SD = 0.525, respectively) were slightly lower, indicating areas where further effort may be required. Overall, the data reflects an effective implementation, though some variability suggests room for improvement in certain aspects.

**Research Question 3:** What are the perceptions of teachers regarding the effectiveness of educational policy reforms in Kosofe Local Government?

**Table 5**  
*Perceptions of teachers regarding educational policy reforms*

S/N	Items	Mean	SD
1	Teachers believe the reforms have improved their teaching practices in Kosofe Local Government	3.20	.564
2	Teachers believe the reforms have improved their teaching experiences in Kosofe Local Government.	3.10	.536
3	Teachers think the reforms have been well managed in Kosofe Local Government.	2.94	.672
4	Teachers think the reforms have made teaching more engaging in Kosofe Local Government	3.06	.611
5	Teachers believe the reforms have addressed their professional development needs in Kosofe Local Government	2.94	.577
<b>Average</b>		<b>3.048</b>	<b>0.592</b>

Table 5 above illustrates the perceptions of teachers regarding educational policy reforms as indicated by the respondents. Taking the benchmark of mean as 2.50. In analysing research question 1, the responses of the teachers in Kosofe (means) for all the five questionnaire items were above the benchmark of 2.50 mean. The average mean and standard deviation are ( $M = 3.05$ ,  $SD = 0.564$ ). This indicated that the perception of teachers in Kosofe regarding the effectiveness of educational policy reforms was very high.

### Discussion of Findings

The findings revealed that specific educational policy reforms implemented in schools within the Kosofe Local Government Area include the distribution of free GCE and JAMB forms and the introduction of the "Educare" program. These reforms have been notably effective in reducing barriers to education and enhancing access for students, which aligns with research emphasizing the role of subsidized programs in improving educational participation (Afolabi, 2024). However, the implementation of reforms related to state-of-the-art facilities and the provision of adequate educational infrastructure showed lower effectiveness, indicating challenges in resource allocation and infrastructure development. As Oladele (2023) points out, the availability of modern facilities is essential for creating an environment conducive to learning yet remains a persistent issue in the Nigerian education system. These findings highlight both the successes achieved and the areas requiring targeted interventions for more holistic educational improvement.

These findings also revealed a positive perception of the extent to which educational policy reforms have been effectively implemented in schools within the Kosofe Local Government Area. Consistent funding has been identified as a key factor supporting these reforms, which corroborates the assertion by Ogunlewe (2023) that stable financial investments are essential for the success of educational initiatives. Additionally, the active engagement of stakeholders and accessibility of educational resources highlight the inclusivity of the reform process, aligning with the findings of Bilesanmi (2023), who emphasized the importance of stakeholder collaboration in achieving sustainable educational improvements. However, the relatively lower effectiveness in addressing challenges such as overcrowded classrooms and insufficient monitoring mechanisms underscores persistent issues that require attention. This observation is consistent with Bilesanmi's (2023) argument that infrastructural bottlenecks and weak evaluation frameworks often hinder the full realization of educational reform objectives.



The findings indicate that teachers in Kosofe Local Government Area perceive educational policy reforms positively, with a grand mean of 3.05. This suggests that teachers believe the reforms have enhanced their teaching practices, improved their teaching experiences, and made teaching more engaging. Additionally, the reforms are perceived to have addressed professional development needs and been relatively well-managed. These perceptions align with the assertion by Hanushek and Rivkin (2010) that increased investment in teacher training correlates with improved teaching practices and better student outcomes. Similarly, recent studies, such as those by Ogunlewe (2023), emphasize the importance of consistent teacher training and professional development in fostering effective instructional strategies. These findings suggest that the reforms in Kosofe have been successful in enhancing the quality of teaching and learning.

## Conclusion

In conclusion, the study highlights the notable progress achieved through educational policy reforms within the Kosofe Local Government Area. Key initiatives, such as the distribution of free GCE and JAMB forms and the introduction of the "Educare" program, have significantly improved access to education and reduced barriers for students. These reforms have positively impacted teaching practices, enhanced learning experiences, and addressed professional development needs among teachers. However, challenges such as inadequate state-of-the-art facilities, insufficient infrastructure, and gaps in monitoring mechanisms were identified, signaling areas that require targeted interventions. Overall, while the reforms have been largely effective and well-received, addressing the existing challenges is crucial to ensuring sustainable and holistic educational development in Kosofe.

## Recommendation

This study recommends the following.

The government should continue to provide adequate funding and consistent implementation across all public schools in Kosofe Local Government Area of Lagos state to sustain and improve on the level of progress made.

School administrators should create a more engaging and interactive learning environment by incorporating diverse teaching methods, such as project-based learning, to maintain and increase pupils' interest and motivation during the teaching and learning process.

Curriculum planners should ensure that teachers teach pupils on how to effectively communicate, collaborate, and resolve conflicts to create a more positive and supportive school environment that will benefit both their academic and personal growth.

## References

- Adeyemi, T. O., & Uko-Aviomoh, E. E. (2020). Technology integration in education: Case of Lagos State. *Journal of Education and Practice*, 11(6), 44–55.
- Afolabi, T. (2024). *Challenges and prospects of educational reforms in Nigeria*. Lagos: Education Press.
- Alhat, S. (2020). Virtual classroom: A future of education post-COVID-19. *Shanlax International Journal of Education*, 8\*(4), 101–104. <https://doi.org/10.34293/education.v8i4.3238>
- Bilesanmi, A. (2023). *Enhancing welfare and infrastructure in public schools*. Echo News. Retrieved from <https://kosofepost.com>
- Crawford, J., Henderson, K. B., Rudolph, J., Malkawi, B., Glowatz, M., Burton, R., & Lam, S. (2020). COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Learning & Teaching*, 3(1), 1–20.
- Darling-Hammond, L. (2017). *The flat world and education: How America's commitment to equity will determine our future*. Teachers College Press.
- Glewwe, P., Hanushek, E. A., Humpage, S., & Ravina, R. (2011). *School resources and educational outcomes in developing countries: A review of the literature from 1990 to 2010*. NBER Working Paper No. 17554.
- Hanushek, E. A., & Rivkin, S. G. (2010). *Generalizations about using value-added measures of teacher quality*. *American Economic Review*, 100(2), 267–271.
- Hanushek, E. A., & Rivkin, S. G. (2010). *Teacher quality*. In E. A. Hanushek, S. Machin, & L. Woessmann (Eds.), *Handbook of the Economics of Education* (Vol. 3, pp. 1051–1078). Elsevier.
- Hanushek, E. A., & Woessmann, L. (2008). The role of cognitive skills in economic development. *Journal of Economic Literature*, 46(3), 607–668.

- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement\**. Routledge.
- Jeynes, W. H. (2012). *A meta-analysis of the efficacy of different types of parental involvement programs for urban students*. *Urban Education*, 47(4), 706–742.
- Lee, K. (2020). Who opens online distance education, to whom, and for what? *Distance Education*, 41(2), 186–200. <https://doi.org/10.1080/01587919.2020.1757404>
- National Center for Education Statistics (NCES). (2020). *The condition of education 2020*. U.S. Department of Education. Retrieved from <https://nces.ed.gov/programs/coe/>
- Ogunlewe, M. (2023). *Kosofe Local Government Chairman applauds Lagos State's basic education reform program*. Kosofe Post. Retrieved from <https://kosofepost.com>
- Ogunode, N. J. (2020). Educational policy reforms and implementation in Nigeria: Challenges and prospects. *International Journal of Research and Innovation in Social Science (IJRISS)*, 4(7), 119–125.
- Oladele, R. (2023). The impact of EKOEXCEL on education in Lagos State. *Journal of African Education*, 12(3), 45–61.
- Olaleye, S. O. (2017). Educational development in Nigeria: Trends and challenges. *\*African Journal of Educational Management*, 19\*(1), 11–21.
- Organisation for Economic Co-operation and Development (OECD). (2018). *Equity in education: Breaking down barriers to social mobility*. OECD Publishing. <https://doi.org/10.1787/9789264073234-en>
- Organisation for Economic Co-operation and Development (OECD). (2020). *PISA 2018 results (Volume I): What students know and can do*. OECD Publishing. <https://doi.org/10.1787/5f07c754-en>
- Reardon, S. F. (2011). *The widening academic achievement gap between the rich and the poor: New evidence and possible explanations*. In *Whither opportunity* (pp. 91–116).
- Ryan, R. M., & Deci, E. L. (2000). *Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being*. *American Psychologist*, 55(1), 68–78.
- Samuel, A. I. (2020). Coronavirus (COVID-19) and Nigerian education system: Impacts, management, responses, and way forward. *Education Journal*, 3(4), 101–102. <https://doi.org/10.31058/j.edu.2020.34009>
- Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). *A review of school climate research*. *Review of Educational Research*, 83(3), 357–385.
- Weare, K., & Nind, M. (2011). *Mental health promotion and problem prevention in schools: What does the evidence say?* Health Promotion International, 26(S1), i29–i69.
- World Bank. (2020). *World Development Report 2020: Learning for all*. World Bank Group. Retrieved from <https://www.worldbank.org/en/publication/wdr2020>.

# Social Support and Support Need as Predictors of Parenting Stress of Mothers of Children with Autism Spectrum Disorder in Lagos Nigeria

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## Abstract

*Because of the particular difficulties involved in providing care, mothers of children with autism spectrum disorder (ASD) frequently endure high levels of stress. Limited access to resources and social support in Lagos, Nigeria, makes this stress worse, underscoring the need for studies on variables that can lessen these impacts. This study, conducted in Lagos, Nigeria, explored the relationship between social support, support needs, and parental stress among mothers of children with Autism Spectrum Disorder (ASD). Employing a descriptive survey design, the research involved 100 mothers of children with ASD. Data were collected using the Coping Health Inventory for Parents (CHIP), the Family Needs Questionnaire (FNQ), the Social Support Scale (SSS), and the Parenting Stress Index-Short Form (PSI). Hypotheses were tested at a 0.05 significance level, with multiple linear regression analysis and Pearson Product-Moment Correlation (PPMC) used to examine correlations and the predictive influence of the variables. The study revealed significant positive correlations between parenting stress and social support ( $r = .31, p < 0.05$ ), as well as between parenting stress and support needs ( $r = .21, p < 0.05$ ). The findings suggest that higher levels of social support and the fulfillment of specific support needs are associated with lower parenting stress. Emphasizing the crucial role of strong social support networks and the satisfaction of these needs, the study highlights the importance of targeted interventions and policies aimed at enhancing the well-being of mothers of children with ASD in Lagos, Nigeria, and strengthening their caregiving capacity.*

**Keywords:** Social Support, Parenting Stress, Autism Spectrum Disorder, Support needs,

## Introduction

Parenting is inherently challenging, but the stress experienced by parents, particularly mothers, of children with autism spectrum disorder (ASD) can be overwhelming. ASD is a complex developmental disorder characterized by significant deficits in social interaction, communication, and the presence of repetitive behaviors or restricted interests (American Psychiatric Association, 2013). Recent research suggests a rise in the worldwide occurrence of Autism Spectrum Disorder (ASD) in recent years. According to a 2022 systematic study, the median prevalence among children globally was 1%, which is higher than previous estimates (Sun et al., 2022). According to the Global Burden of Disease Study 2021, around 1 in 127 individuals globally are thought to be on the autistic spectrum (Global Burden of Disease Study, 2024). According to data from the Centers for Disease Control and Prevention (CDC), roughly 1 in 36 children in the US had an ASD diagnosis by 2020. Improved screening techniques and broader diagnostic criteria are mostly responsible for this increase (CDC, 2025). The strain of raising an ASD child places significant emotional, physical, and financial demands on families, with mothers often shouldering the majority of these responsibilities. The role of primary caregiver is frequently assumed by mothers, who must navigate the complex needs of their child while managing their own stress and

well-being (Boyd, 2002). Mothers may experience increased stress, worry, and even despair as a result of the demanding and ongoing nature of caring for a child with ASD, making it crucial to understand and address the factors that contribute to their well-being (Abbeduto *et al.*, 2004).

Social support refers to the availability of assistance and comfort provided by family, friends, and the community, encompassing emotional, informational, and practical help (Lindsey & Barry, 2018). It acts as a buffer against stress, helping individuals manage difficult situations. In contrast, support needs are the specific requirements or resources that an individual feels necessary to cope effectively with challenges (Boyd, 2002). While social support involves the external provision of help, support needs focus on the internal assessment of what is required to alleviate stress. Understanding both constructs is crucial, as even when social support is available, unmet support needs may still lead to heightened stress if the assistance provided does not align with what is genuinely needed.

In many cases, the lack of adequate social support exacerbates the challenges faced by these mothers. Social support, which includes emotional, informational, and practical assistance, is a critical buffer against the stress associated with parenting a child with ASD. Studies have shown that mothers with strong social support networks experience lower levels of stress and are better able to cope with the demands of caregiving (Lindsey & Barry, 2018). Conversely, the absence of such support can lead to feelings of isolation and increased psychological distress, making the experience of providing care even more difficult (Boyd, 2002). It is unclear, meanwhile, if caregivers of children living with ASD in Lagos, Nigeria, experience the same relationship between social support and less parenting stress. In order to better understand how local characteristics may affect the efficacy of social support networks for these women, this study intends to investigate this link within the particular setting of Lagos.

Furthermore, it is impossible to ignore the financial strain that comes with being a caregiver of a child having ASD. Many families struggle to access specialized services, therapies, and educational resources necessary for the child's development, which can lead to significant economic strain. In Nigeria, where public support and healthcare services for children with ASD are often inadequate, the financial challenges can be particularly severe (Adebowale-Tambe, 2022). This situation is compounded by the cultural stigma associated with ASD, which can further isolate families and limit their access to essential resources and support (Bakare & Munir, 2011).

Given these challenges, it is evident that more needs to be done to support families, particularly mothers, in Nigeria who live with children having ASD. Enhancing social support networks, increasing access to specialized services, and addressing the cultural stigma associated with ASD are critical steps that could reduce the stress experienced by these families and improve their overall well-being.

In Lagos, the difficult situation encountered by mothers caring for children with Autism Spectrum Disorder (ASD) are significantly intensified by the observed lack of adequate social support systems, limited access to specialized healthcare, and a general scarcity of resources tailored to their unique needs. Bakare and Munir (2011) highlighted that in many parts of Nigeria, including Lagos, public awareness and healthcare services for ASD remain underdeveloped, leading to inadequate support for families. Additionally, Adebowale-Tambe (2022) reported that the financial burden associated with accessing necessary therapies and treatments might be quite difficult for children with ASD in Nigeria, often resulting in severe stress for caregivers, with a focus on mothers, who serve as the primary caregivers. The demands of caregiving not only increase stress levels but also have detrimental effects on the mental and physical well-being of these mothers. According to Al-Kandari *et al.*, (2017), mothers of children with ASD who lack sufficient social support are more likely to experience elevated stress, anxiety, and depression. While these studies provide valuable insights, there remains a gap in understanding how these dynamics specifically play out in Lagos, where cultural, economic, and social factors might influence the efficacy of available support systems. By examining the degree to which parental stress among mothers of children with ASD in Lagos is predicted by social support and support requirements, this study seeks to close this knowledge gap and provide localized data to guide focused interventions.

This study aims to bridge this gap by exploring the relationship between social support and parenting stress among mothers of children with ASD in Lagos. By examining how social support influences parenting stress, the research seeks to generate insights that can inform the development of targeted interventions and policies. These efforts would enhance the well-being of these mothers and strengthen their ability to provide quality care for their children.

The objective of the study is to:



- examined the extent to which social support and support needs predict parenting stress among mothers of children with Autism Spectrum Disorder (ASD) in Lagos, Nigeria

The following hypothesis guided the study:

Ho<sub>1</sub>: There is no significant relationship between social support and parenting stress of mothers of children with ASD

Ho<sub>2</sub>: There is no significant relationship between support need and parenting stress of mothers of children with ASD

## Methodology

In order to investigate the predicted associations between social support, support needs, and parental stress among mothers of children with autism spectrum disorder (ASD) in Lagos, Nigeria, the study used a descriptive survey approach. This design was chosen because it allows for the collection of data that can describe the current conditions and explore relationships between variables in a natural setting without any manipulation. The study population consisted of mothers residing in Lagos, Nigeria, who have children diagnosed with ASD. A sample of 100 families of children with ASD was selected using a purposive sampling technique to ensure participants met the study criteria. The mothers were recruited from special schools and inclusive schools in Lagos, where children with special needs learn alongside other students. Additionally, participants were drawn from therapy centers where children receive interventions such as physical and speech therapy. Data collection spanned approximately one month. In some cases, researchers engaged directly with the mothers to assist with questionnaire completion, while in others, schools facilitated the process by allowing the questionnaires to be distributed and later retrieved within 2–3 weeks. The selected sample size was deemed sufficient for the planned statistical analyses, given the study's focus on a specific subgroup within the population. Four standardized instruments were used to collect data for the study:

- **Social Support Scale (SSS):** This scale measures the perceived availability and adequacy of social support in the lives of the participants. It includes various dimensions of support such as emotional, informational, and practical support.
- **Family Needs Questionnaire (FNQ):** Families with children with ASD have unique support needs, which are evaluated by the FNQ. It addresses topics including respite care, educational services, healthcare access, and financial help.
- **Coping Health Inventory for Parents (CHIP):** The coping mechanisms used by parents to deal with the stress of raising a kid with ASD are assessed by this tool. It evaluates various coping techniques, such as those that are problem-, emotion-, and support-focused.
- **Parenting Stress Index-Short Form (PSI):** The PSI measures the level of stress experienced by parents in their role as caregivers. It provides a comprehensive assessment of the stressors related to parenting a child with ASD, including the child's demanding behaviors, difficulties in parent-child interactions, and the parent's perceived lack of competence or support. Examples of such stressors include managing challenging behaviors, balancing caregiving with other responsibilities, and feelings of isolation or inadequacy in the caregiving role.

Over the course of about a month, respondents were given standardized questionnaires to complete in order to gather data. The questionnaires were distributed in person at ASD support groups and special education centers in Lagos. Respondents were informed about the purpose of the study and assured of the confidentiality of their responses. In some instances, the research team sat with participants to assist with questionnaire completion, particularly for those who required clarification of certain questions. At some schools, the questionnaires were left with staff and collected after 2-3 weeks, allowing participants ample time to complete them at their convenience. Both descriptive and inferential statistical methods were used to analyze the gathered data. The demographic features of the individuals were compiled using descriptive statistics, such as frequency counts and percentages. To investigate the connections among parenting stress, support requirements, and social support, Pearson Product Moment Correlation (PPMC) was utilized. The predictive ability of social support and support requirements on parenting



stress was evaluated using multiple linear regression analysis. To guarantee that the results would be dependable and statistically sound, all hypotheses were examined at the 0.05 level of significance.

## Results

**Table 1**

### Demographic Information of Respondents

Variable	Frequency (n = 100)	Percentage (%)
<b>Age</b>		
20-30 years	25	25%
31-40 years	50	50%
41-50 years	20	20%
Above 50 years	5	5%
<b>Level of Education</b>		
Secondary School	40	40%
Tertiary Education	55	55%
Postgraduate	5	5%
<b>Marital Status</b>		
Married	80	80%
Single	10	10%
Divorced/Widowed	10	10%

**Table 2**

### Pearson Correlation Analysis Between Social Support, Support Needs, and Parenting Stress

Variables	Social Support	Support Needs	Parenting Stress
<b>Social Support</b>	1.00	-	<b>-0.31**</b>
<b>Support Needs</b>	-	1.00	-0.21*
<b>Parenting Stress</b>	<b>-.031**</b>	-0.21*	1.00

*\*Note:  $p < 0.05$  indicates statistical significance.*

The study's findings showed a substantial negative association (correlation coefficient of -0.31;  $p < 0.05$ ) between parenting stress and social support. This research suggests that moms' experiences of parental stress diminish as the amount of social support they have access to rises. Similarly, the study discovered a negative association between parenting stress and support needs, with a correlation coefficient of -0.21 ( $p < 0.05$ ). This implies that these moms' levels of parenting stress are decreased when their unique support needs are suitably met.

**Table 3**  
**Multiple Linear Regression Analysis for Predicting Parenting Stress**

Predictor Variables	B	SE B	Beta ( $\beta$ )	t	p
<b>Social Support</b>	-0.35	0.11	-0.30	-3.18	0.002**
<b>Support Needs</b>	-0.28	0.13	-0.25	-2.15	0.034*
<b>Constant</b>	5.21	0.45		11.58	0.000***

\*Note: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

With a beta coefficient of -0.30 ( $p = 0.002$ ), the research showed that social support is a significant predictor of parenting stress. This suggests that there is a considerable correlation between reduced parenting stress and more social support. Similarly, with a beta coefficient of -0.25 ( $p = 0.034$ ), support needs also showed up as a significant predictor. This implies that moms' stress levels are lowered when their unique support needs are better met. Overall, the model shows that moms of children with autism spectrum disorder (ASD) suffer varying degrees of stress depending on social support and meeting support needs.

### Discussion of Findings

The study's findings, which showed a strong positive relationship between parenting stress, support requirements, and social support, are in line with another research on the subject. According to the research, moms, who are frequently the primary caregivers, may experience a variety of pressures related to raising a child with autism spectrum disorder (ASD), which can negatively affect their wellbeing. The research highlights that social support plays a crucial role in mitigating these stressors by providing emotional, informational, and practical assistance, which can help mothers manage the challenges of caregiving. Such support may include emotional encouragement from family and friends, access to relevant information about ASD management, and practical help with daily caregiving tasks or respite care. McConnell, Savage, and Breitreuz (2019) found that these forms of support not only reduce feelings of isolation but also enhance mothers' capacity to cope with the demands of caregiving. This finding underscores the importance of a robust support system in promoting the well-being of mothers caring for children with ASD.

According to the study's literature analysis, which included studies highlighting the value of social support in lowering stress among parents of children with ASD, there is a strong negative association between social support and parenting stress ( $r = -0.31$ ,  $p < 0.05$ ). For example, the thesis cites research by Boyd (2002) and Lindsey and Barry (2018) that shows mothers of children with ASD who had greater social support have lower levels of stress and psychological discomfort. The current study's findings support this by showing that increased social support is linked to decreased parenting stress, underscoring the value of a robust support network for these mothers.

According to the results of the current study, these types of support are useful in reducing stress among mothers of children having ASD. This is probably because they offer both emotional and practical support, which makes mothers feel less alone and more equipped to handle their caregiving duties.

The research argues that unmet support needs significantly contribute to stress in mothers of children with ASD. This is reinforced by the study's finding of a negative correlation between parenting stress and support needs ( $r = -0.21$ ,  $p < 0.05$ ). The article cites research showing that mothers' stress levels rise when their unique support needs—such as access to specialist healthcare, educational opportunities, and financial aid—are not satisfied. This is supported by the current study, which shows that meeting these support requirements well is essential to lowering parenting stress.

This finding also ties into the challenges faced by mothers in Lagos, Nigeria, where resources for supporting children with ASD are often limited. The research emphasizes the critical need to enhance both informal support (such as family and community networks) and formal support systems (including healthcare, educational, and respite services) to address the diverse needs of these mothers. The significant correlation between support needs and parenting stress identified in this study underscores the importance of targeted interventions. By accurately identifying and addressing the specific support needs of these mothers, such interventions could significantly reduce their stress levels and enhance their overall well-being.

### Conclusion

In light of the results, policymakers and practitioners are advised to create focused interventions to improve social support systems and offer specialized resources and services. Support groups, training programs, and easier access to specialized medical and educational services are a few examples of initiatives that could successfully lower parenting stress and enhance the wellbeing of these mothers. Building a sustainable support framework requires cooperation between governmental organizations, nonprofits, and neighborhood associations.

### Recommendations

It is advised that policymakers and practitioners create focused interventions to improve social support systems and offer specialized resources and services in light of the findings. Parenting stress might be successfully decreased and these moms' wellbeing could be enhanced by initiatives like support groups, training programs, and easier access to specialist healthcare and educational facilities. To create a structure for long-term support, cooperation between governmental bodies, nonprofits, and neighborhood associations is crucial.

### References

- Abbeduto, L., Seltzer, M. M., Shattuck, P., Wyngaarden Krauss, M., Orsmond, G., & Murphy, M. M. (2004). Psychological well-being and coping in mothers of youths with autism, down syndrome, or fragile X syndrome. *American Journal on Mental Retardation*, 109(3), 237-254.
- Adebowale-Tambe, N. (2022). For families of people with autism in Nigeria, treatment therapy costs a nightmare. *Premium Times*, April 2, 2022.
- Al-Kandari, S., Alsalem, A., Abohalmed, S., Al-Orf, F., Al-Zoubi, M., & Al-Sabah, R. (2017). Brief report: Social support and coping strategies of mothers of children suffering from ASD in Kuwait. *Journal of Autism Developmental Disorders*, 47, 3311–3319.
- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders (DSM-V)* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Bakare, M. O., & Munir, K. M. (2011). Autism spectrum disorders (ASD) in Africa: A perspective. *African Journal of Psychiatry* (Johannesburg), 14(3), 208-210.
- Bakare, M. O., & Munir, K. M. (2011). Autism spectrum disorders in Nigeria: A scoping review of literature and opinion on future research and social policy directions. *Journal of Health Care for the Poor and Underserved*, 30(3), 899-909. doi: 10.1353/hpu.2019.0063.
- Boyd, B. A. (2002). Examining the relationship between stress and lack of social support in mothers of children with autism. *Focus on Autism & Other Developmental Disabilities*, 17(4), 208.
- Lindsey, R. A., & Barry, T. D. (2018). Protective factors against distress for caregivers of a child with autism spectrum disorder. *Journal of Autism Developmental Disorders*, 48, 1092–1107.
- Lindsey, R. A., & Barry, T. D. (2018). *Protective factors against distress for caregivers of a child with autism spectrum disorder. Journal of Autism and Developmental Disorders*, 48, 1092–1107.
- Boyd, B. A. (2002). *Examining the relationship between stress and lack of social support in mothers of children with autism. Focus on Autism and Other Developmental Disabilities*, 17(4), 208.

- Global Burden of Disease Study. (2024). *Global Epidemiology and Health Burden of Autism Spectrum: Findings from the Global Burden of Disease Study 2021*. Healthdata.org.
- Sun, X., Allison, C., Auyeung, B., & Baron-Cohen, S. (2022). *Global prevalence of autism spectrum disorder: A systematic review and meta-analysis*. *Journal of Autism and Developmental Disorders*. [PubMed](#).
- Centers for Disease Control and Prevention. (2025). *Why are autism rates rising?* Reuters.

# **An Exploration of the Legal Framework and Supervision of Preschool Institutions in Nigeria**

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## **Abstract**

*The regulation and supervision of preschool institutions in Nigeria play a crucial role in ensuring quality early childhood education. The aim of this paper was to examine the legal framework governing preschool institutions, focusing on the implementation and challenges of the Integrated Early Childhood Development (IECD) policy. Through a critical review of national policies, regulatory standards, and existing literature, the study highlights key gaps, including inconsistent government oversight, inadequate supervision, and the dominance of privately managed preschools. Findings revealed that while the National Policy on Education (NPE) provides a foundation for preschool governance, weak enforcement mechanisms and resource constraints hinder effective implementation. The study applied Bronfenbrenner's Ecological Systems Theory to analyze how interactions between policy, institutional actors, and social environments impact preschool education. Recommendations include strengthening supervision through periodic inspections, increasing government investment in infrastructure, and fostering community participation in preschool regulation. Addressing these gaps will enhance the quality and accessibility of early childhood education in Nigeria.*

**Keywords:** Preschool Education, Legal Framework, Supervision, Regulatory Compliance.

## **Introduction**

Preschool education in Nigeria has undergone significant evolution over the years, reflecting the country's changing social, economic, and educational landscape. The traditional forms of early childhood education have existed within Nigerian communities for centuries. The traditional societies had an informal setting which allowed children learn through play, storytelling and apprenticeships, (Omolewa, 2017). The formalized preschool education began to take shape during the colonial period.

During British colonial rule, missionaries and colonial administrators introduced Western-style education systems, including primary and secondary schools. However, formal early childhood education was not initially prioritized within this framework. Instead, informal and culturally rooted methods of childcare and early learning predominated, often within the family or community setting (Omolewa, 2017).

It was not until Nigeria gained independence in 1960 that efforts to establish formal preschool institutions gained momentum. The government recognized the importance of early childhood education in laying the foundation for future learning and development. The government then established the National Commission for UNESCO and the Federal Ministry of Education (UNESCO, 2015). In the following decades, various initiatives



such as National Universal Primary Education (UPE) scheme were launched to expand access to preschool education and improve its quality.

Early Childhood Care and Development (ECCD) Policy recorded that the Nigerian government adopted the World Declaration on Education for All (EFA) as part of their efforts towards recognizing and adopting ECE. The government also introduced the Early Childhood Care and Development (ECCD) Policy, focusing on children from birth to age 8.

One significant milestone was the adoption of the Universal Basic Education (UBE) programme in 1999, which aimed to provide free and compulsory education for all Nigerian children, including those at the preschool level. The UBE programme emphasized the importance of early childhood care and education (ECCE) as an integral component of the education system.

In terms of legislation, the National Policy on Education (NPE) has served as a guiding framework for preschool education in Nigeria. Initially formulated in 1977 and subsequently revised in 1981, 1998, and 2004, the NPE outlines the government's goals and objectives for education at all levels, including early childhood education.

In addition to national policies, individual states within Nigeria have enacted their own laws and regulations pertaining to preschool education (Sanni and Akinsanya, 2019). These include provisions for the registration, supervision, and quality assurance of preschool institutions, reflecting the diverse needs and contexts within the country.

Overall, the historical trajectory of preschool education in Nigeria reflects a gradual shift from informal, community-based approaches towards formalized, regulated systems. While challenges remain in terms of access, quality, and equity, ongoing efforts are being made to strengthen the legal and policy frameworks governing preschool education and ensure that all Nigerian children have the opportunity to receive a solid foundation for their future learning and development.

### **Research Questions**

This study aims to critically analyze the legal and policy frameworks governing preschool education in Nigeria, identify key implementation challenges, and provide policy recommendations. The research questions guiding this study include:

- What are the key legal frameworks governing preschool education in Nigeria?
- How effective is the implementation of these policies?
- What challenges hinder effective supervision and regulation of preschool institutions?
- What strategies can be adopted to improve preschool supervision and regulation?

### **Theoretical Framework**

This study adopted the Bronfenbrenner's Ecological Systems Theory (1979) to analyze how different environmental systems influence preschool education. Bronfenbrenner (1979) conceptualized human development as occurring within a nested arrangement of interconnected systems that shape an individual's growth and learning experiences. These layers include:

- a. **Microsystem:** The immediate environment of the child, including parents, caregivers, teachers, and peers, which directly impact early childhood education quality (Bronfenbrenner, 1979). In the Nigerian situation, parents constitute the first significant caregivers available to the child and they exert lots of influences on the overall development of the child. The socio-economic conditions of parents therefore often determine the equality of life available to the child. On enrolment in preschool environments especially daycares and later kindergarten classes, the child's development becomes deeply influenced by teachers and peers.
- b. **Mesosystem:** The interactions between different elements of the microsystem, such as the relationship between parents and teachers or between community organizations and schools also impact on the child's development (Bronfenbrenner, 2005).
- c. **Exosystem:** External environments that indirectly influence the child, such as parental workplaces, local education authorities, and government regulations (Bronfenbrenner, 1994).
- d. **Macrosystem:** The overarching cultural and societal influences, including national policies, economic conditions, and social norms that shape early childhood education (Bronfenbrenner, 1986).
- e. **Chronosystem:** The dimension of time, which includes historical events, policy changes, and the

evolving nature of preschool education over time (Bronfenbrenner & Morris, 2006).

With the application of this framework, this study evaluated how different systemic factors interact to influence the regulation and supervision of preschool education in Nigeria. Additionally, this theory is relevant in understanding how different elements within Nigeria's preschool system interact. Weak coordination among policy actors, funding agencies, and regulatory bodies can result in ineffective supervision, making a holistic systems approach necessary for sustainable improvements.

### **Legal Framework for Registration**

The registration of preschool institutions in Nigeria is governed by a combination of national laws, policies, and guidelines, as well as regulations established by state governments. These legal frameworks provide the basis for ensuring that preschools meet specified standards of quality, safety, and educational provision. The following are key components of the legal framework for registration:

- **National Policy on Education (NPE):** The NPE serves as a foundational document outlining the government's objectives and principles for education at all levels, including early childhood education. According to the NPE, (FRN, 2013 cited in Salami, 2016) there are three levels of ECE in Nigeria, each with its respective goals. The Early Child Care and Development Education spans over the period of (0-4 years) situated in daycare or crèches, fully in the hands of private sector and social development services. Secondly, the kindergarten education, a one-year education given to children between ages 4-5 years prior to their entry into primary school. Lastly, the lower primary classes (1-3) meant for ages 6 to 8 years plus. This official document also stated the teacher-pupil ratios for the above-mentioned classrooms.
- **Education (National Minimum Standards and Establishment of Institutions) Act:** This Act, also known as the National Minimum Standards for Education Act, provides guidelines for the establishment, registration, and operation of educational institutions at all levels, including preschools. It sets forth minimum standards for infrastructure, staffing, curriculum, and other aspects of educational provision.
- **State Laws and Regulations:** In addition to national legislation, individual states within Nigeria may have their own laws, policies, and regulations governing preschool education. These state-level frameworks may supplement national standards and address specific regional or local needs and priorities.

### **The National Policy of Education**

The preschool is recognized as the Early Child Care Development and Education (ECCDE) in the National Policy on Education, (FRN, 2014). It means the care, protection, stimulation and learning promoted in children between ages 0 and 4 years in a crèche or nursery. The operational objectives of the ECCDE are to:

- Effect a smooth transition from the home to the school.
- Prepare the child for the primary level of education
- Provide adequate care, supervision and security for the children while their parents are at work
- Inculcate social, moral norms and values
- Inculcate in the child the spirit of enquiry and creativity through the exploration of nature, the environment, art, music and the use of toys, etc.
- Develop a sense of co-operation and team spirit
- Stimulate in the child good habits, including good health habits; and
- Teach the rudiments of numbers; letters, colours, shapes, forms, etc., through play.

Technically, the preschools in Nigeria are aimed at preparing the child for the primary education and the rigours of the future. It helps to keep the child safe and adequately provided for while the parent is at work and unavailable. Preschools instills the sense of cooperation, team-spirit, social, moral and the ethics of the immediate environment into the child. The preschool arouses the interest of the child in making enquiry, exploring the nature and self-learning. Lastly, the preschool is supposed to stimulate good habits in the child, teach the basic rudiments needed for the primary schools through play.

### **Policy Guidelines and Regulations for Implementation**

The National Policy stated the guidelines for achieving the outlined objectives of the preschool. The stated guidelines by the government to achieve these objectives are to;

- Set and monitor minimum standard for ECCDE centres;
- Develop and disseminate curriculum materials such as the Integrated Early Child Care Development (IECD) Policy, National Minimum Standard for the established establishment of Early Child Care Education Centres, IECD Curriculum, IECD Implementation Guidelines and all other materials that will enhance the implementation of ECCDE;
- Encourage both community and private efforts in the establishment of ECCDE centers based on set standards.
- Make provision in teacher education programmes for specialization in early child care and education, and for retaining of teachers;
- Ensure that the curriculum of teacher education is oriented towards play-way method;
- Ensure that the ECCDE Centers adopt the following caregiver infant ratios: i. Crèche shall be 1:10 ii. Nursery 1:25
- Develop suitable curriculum for nationwide implementation;
- Supervise and control quality of ECCDE centers
- Make provision for the production and effective utilization of learning and instructional materials in adequate numbers; and
- Ensure that the medium of instruction is principally the mother-tongue or the language of the immediate community. This points to the need to continuously develop the orthography of more Nigerian languages and production of textbooks, supplementary readers and other instructional materials in Nigerian languages.

To regulate the ECCDE centres, the government shall develop suitable ECCDE curriculum for nationwide implementation, supervise and control quality of ECCDE centres, make provision for the production and effective utilization of learning and instructional materials in adequate numbers and ensure that the medium of instruction is principally the mother tongue or language of the immediate community. The guideline for the Early Child Care and Development Education according to the National Policy on Education, states that the centers are to adopt the caregiver infant ratios of 1:10 for the crèche and 1:25 for the nursery.

Obiweluzor, (2015) critiqued that the National Policy on Education, (2012) specified some guidelines for pre-primary education in Nigeria but it does not recognize the need for policy to guide the children of ages 0-3 years of age. However, the revised edition (6<sup>th</sup> edition) of the NPE, 2014 stated some guidelines for operations of ECCDE for children of ages 0-4 years a one-year education programme for ages 5 years.

Based on personal experience, majority of the ECE centers available for children are private establishments. A lot of these institutions are handled by individuals or an organization under a uniformed umbrella (i.e. as a subset of a school). Only a few of these institutions stand as a lone private preschool. Although, the government according to the policy takes responsibility for a one-year pre-primary education of the child but a lot of parents would prefer that their child continues to adapt to the private preschool the child has been acquainted to rather than disturbing the child's smooth transitioning from the home to the school. Therefore, the pre-primary preschool fails it function greatly.

In addition, the availability and the standards of these preschool centers seems to be in the policy alone without adequate provisions because no specific institute of such has been recognized in majority of our immediate community. From residual knowledge, government taxes are not paid on the preschool aged children and a uniformed curriculum is provided by the state ministries of education to be implemented by the institutions.

### **Standards and Criteria for Registration**

The registration of preschool institutions in Nigeria involves meeting specific standards and criteria to ensure quality, safety, and effectiveness (Fartro, 2020). These include:

- **Safety and Security:** Preschools must prioritize the safety of children, with furniture having rounded edges to prevent injuries and first aid materials kept out of children's reach.
- **Developmental Appropriateness:** Tables and chairs should be appropriately sized for children to ensure comfort and accessibility.
- **Accessibility:** The preschool environment should be child-centered, with resources easily accessible to foster independence and self-confidence.
- **Intellectual Stimulation:** The learning environment should encourage exploration, play, and communication, with didactic materials that promote experimentation and collaboration.

## **Registration Process and Regulations**

The Integrated Early Child Care Development (IECD) Policy outlines the registration process for preschools. Key steps include:

- Submission of an expression of interest and reference letters to the Regulator for Childminding Services.
- Completion of an application form and submission of required documents, such as pre-registration training certificates, first aid certificates, medical certificates, criminal records, and identity verification.
- Issuance of a valid certificate of registration by the Institute of Early Childhood Development (IECD).
- Display of the registration certificate in a visible and accessible manner.

The IECD policy mandates regular inspections to ensure that preschools conform to national standards. These inspections, conducted at least every six months, verify the quality of services and the availability of required documentation.

## **Inspection and Supervision of the Preschools according to the (IECD) Policy**

The preschool institute and the personnel who is in direct contact with the child is referred to as the Childminder in the Integrated Early Child Care Development (IECD) policy is expected to, in accordance with the Institute of Early Childhood Development Act 2014,

- be subjected to inspection to determine whether the quality of service that he or she renders conforms to the national standards stated under these regulations;
- be subject to inspection at least once every six months;
- in addition to the certificate of registration, have readily available during inspection, documents such as medical and criminal records.

The IECD which serves as the blueprint for the government on the preschoolers ensures that, according to the above stated policy, some government agencies are expected to carry out routine inspection at least every six months to oversee the quality of service the childminder renders to the children left in his/her care in line with the national standards. Also, during the inspection the childminder is expected to produce upon request the certificate of registration, his/her medical and criminal records. This is to ensure that the children in his care are from any health hazard that could be contracted from him as well as certify him medically fit for the job. The childminder should not be a criminal. Parents and guardians should be rest assured that no harm would come the way of their children from the childminder.

## **Challenges of Preschools in Nigeria**

Despite the established legal frameworks and policies, preschool institutions in Nigeria face several challenges:

- **Lack of Supervision and Inspection:** There is often inadequate supervision and inspection to ensure effective implementation of policies, leading to varying standards of preschool education (Obiweluzor, 2015).
- **Insufficient Government Support:** The reliance on private institutions for preschool education means that government support and funding are limited, affecting the quality and accessibility of services.
- **Poor Social Services:** Many Nigerian children suffer from poor nutrition, inadequate healthcare, and lack of access to safe water and sanitation, impacting their overall development.
- **Inconsistent Implementation:** The implementation of policies varies across regions, with some areas lacking adequate facilities and trained personnel.

## **Review of the Integrated Early Child Care Development (IECD) Policy in Nigeria Implementation Status**

The IECD policy in Nigeria represents a significant effort by the government to formalize and regulate early childhood care and education (ECCE) across the country. The policy aims to provide a structured framework for the establishment, operation, and supervision of early childhood care facilities, ensuring that children receive quality care and educational preparation before entering primary school.

The Guidelines for Implementing National Policy on Integrated Early Child Care Development (IECD) Policy in Nigeria was published in by the Federal Ministry of Education, 2013. The document contained guidelines on the provision of basic services to the child, support for socio-cultural development, quality assurance, monitoring and evaluation, funding, resources mobilization, etc. (Salami, 2016). These challenges and many more prompted the Federal Ministry of Education with the assistance of UNICEF to make provisions for children between 0-5 years.



**Progress and Achievements:** The following are some of the visible progress and achievements of the policy;

**Policy Framework:** The IECD policy outlines clear objectives and guidelines for ECCE, emphasizing the importance of early childhood development in preparing children for formal education (Federal Republic of Nigeria, 2014).

**Regulatory Standards:** It sets minimum standards for infrastructure, staffing, curriculum, and health and safety measures in ECCE centers, aiming to standardize practices across diverse socio-economic and regional contexts (Federal Republic of Nigeria, 2014).

**Implementation Efforts:** Government initiatives, such as training programs for ECCE educators and periodic inspections of facilities, demonstrate efforts to enforce compliance with the policy's standards (Federal Ministry of Education, Nigeria).

**Challenges and Lapses:** However, the following lapses are also observable;

**Inadequate Supervision and Monitoring:** Despite the policy's provisions for inspections, there are reports of inconsistent enforcement and inadequate monitoring of ECCE centers nationwide (Obiweluzor, 2015). This inconsistency leads to varying standards of care and educational quality.

**Resource Limitations:** Many ECCE centers, particularly in rural and underserved areas, lack adequate resources, including trained personnel, instructional materials, and infrastructure that meets the policy's standards (Obiweluzor, 2015; Sanni & Akinsanya, 2019).

**Funding Constraints:** The reliance on private institutions to provide ECCE services, coupled with limited government funding, restricts the expansion and improvement of ECCE facilities across the country (Sanni & Akinsanya, 2019).

### **Areas for Improvement**

To enhance the effectiveness and impact of the IECD policy in Nigeria, several areas require attention:

- **Enhanced Supervision and Compliance:** Strengthening the capacity for regular and rigorous inspections of ECCE centers to ensure adherence to established standards (Obiweluzor, 2015).
- **Investment in Infrastructure:** Increasing government investment in ECCE infrastructure, particularly in marginalized communities, to improve facilities and access to quality early childhood education (Sanni & Akinsanya, 2019).
- **Professional Development:** Providing continuous professional development opportunities for ECCE educators to enhance their skills and knowledge in line with modern pedagogical practices (Federal Ministry of Education, Nigeria).
- **Public Awareness and Participation:** Promoting community involvement and awareness of the importance of ECCE, encouraging partnerships between government, NGOs, and private stakeholders for sustainable development (Federal Ministry of Education, Nigeria).

### **Conclusion**

Pre-school is the education provided for children before the appropriate school age. It is the variety of active learning activities structured for children between the ages 0-5 years. In Nigeria, this level of education is recognized and adequately provided for in the National policy of education. One major objective of the preschool is to help ease the transition of the child from home to school before the appropriate school age. The child is also prepared for the rigors of the primary schools as well as the other levels of education. This policy however, has given the responsibilities of caring for the child to the private institutions. Although, it allocated some responsibilities to the government, a large portion of the job is left for private institutions which has made it very easy for these individuals run the preschools as they deem fit. It is however recommended that the government ensure the effective implementation of the policy by carrying out routine inspection as stated in the IECD policy, ascertain that the children placed in the preschools are properly taken care of for the period of being in the school and also, the mother tongue which has been slated as the medium of instruction in the policy should be well implemented. Adequate provisions should be made for the registration of the preschools by the appropriate ministries and departments as recommended by the IECD policy. This would give a control to the level of standards expected of a preschool and a regulated number of preschools that is suitable for the states and their local governments.



## References

- Ajayi, L.A., & Alabi, O.E. (2019). Quality Assurance and Supervision in Early Childhood Education: A study of Oyo State, Nigeria. *International Journal of Innovative Education Research*, 7(1), 17-28.
- Babalola, O.S., & Nwabueze, E. (2020). Challenges of Early Childhood Education in Nigeria: The Way Forward. *Journal of Education and Practice*, 11(3), 33-39.
- Bello, A. B. (2018). The Role of Regulatory Bodies in Ensuring Quality Early Childhood Education in Nigeria. *Journal of Educational Policies Studies*, 13(2), 45-55.
- Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Harvard University Press.
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22(6), 723-742.
- Bronfenbrenner, U. (1994). *Ecological models of human development*. International Encyclopedia of Education.
- Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. *Handbook of Child Psychology*, 1, 793-828.
- Federal Ministry of Education, Nigeria, (2013). Early Childhood Care and Development (ECCCD) Policy.
- Federal Republic of Nigeria. (2003). Child Rights Act. Retrieved from <https://www.nigeria-law.org/ChildRightsAct.html>.
- Federal Republic of Nigeria. (2004). National Policy on Education. Retrieved from <https://www.nigeria-law.org/National%20Policy%20on%20Education.html>.
- Ibrahim, S. (2017). Infrastructure Challenges Facing Early Childhood Education in Nigeria: A Case Study of Lagos State. *Journal of Early Childhood Education Research*, 5(1), 12-24.
- Institute of Early Childhood Development (National Standards on Childminding) Regulations, 2016. Supplement to Official Gazette. 307.
- Lawal, O. R., & Ajala, A. T. (2019). Compliance with Preschool Registration Requirements: A Case Study of Selected States in Nigeria. *Journal of Educational Research and Policy Studies*, 11(3), 78-89.
- Ministry of Education, Nigeria. (2018). Guidelines for the Registration of Early Childhood Education Centers. Retrieved from <https://www.education.gov.ng/resources/guidelines>.
- National Assembly, Nigeria. (2004). Education (National Minimum Standards and Establishment of Institutions) Act. Retrieved from [https://www.nigerialaw.org/Education%20\(National%20Minimum%20Standards%20and%20Establishment%20of%20Institutions\)%20Act.html](https://www.nigerialaw.org/Education%20(National%20Minimum%20Standards%20and%20Establishment%20of%20Institutions)%20Act.html).
- National Bureau of Statistics, Nigeria. (2019). Statistical Report on Early Childhood Education in Nigeria. Retrieved from <https://www.nigerianstat.gov.ng>.
- Nwafor, F. O., & Okeke, A. U. (2021). Emerging Trends and Challenges in Preschool Education in Nigeria: A review. *Journal of Early Childhood Education*, 9(2), 105-120.
- Ogunjimi, S. I., & Adeleke, S. S. (2018). The Impact of Preschool Infrastructure on Learning Outcomes in Nigeria. *Journal of Educational Research and Development*, 6(4), 67-78.
- Okafor, C. E., & Chukwuemeka, E. (2019). Legal Framework for Early Childhood Education in Nigeria: A Critical Appraisal. *Journal of Legal Studies in Education*, 14(1), 29-40.
- Okonkwo, C. O., & Uzoka, F. M. (2017). Challenges and Prospects of Early Childhood Education in Nigeria. *Journal of Childhood Education*, 5(2), 88-97.
- Oladeji, S. O., & Adegunle, A. O. (2020). Compliance with Preschool Registration Requirements in Lagos State, Nigeria: A Survey of Stakeholders' Perspectives. *Journal of Educational Administration and Planning*, 12(2), 55-68.
- Olatunji, O. R., & Adeyemi, O. A. (2018). Accreditation and Quality Assurance in Early Childhood Education: A Case Study of Selected Preschools in Nigeria. *Journal of Accreditation Studies*, 7(3), 40-52.
- Omolewa, (2017). Early Childhood Education in Nigeria: Historical Development and Current Trends. *Journal of Education and Human Development*, 6(1), 1-9.
- Onwuka, M. A., & Ukwuoma, P. (2019). Staffing Challenges in Preschool Education in Nigeria: A Qualitative Study. *Journal of Personnel Issues in Education*, 10(1), 17-29.
- Osuagwu, U. E., & Nwajiuba, C. A. (2020). Curriculum Development and Implementation in Preschool

- Education: A Case Study of Anambra State, Nigeria. *Journal of Curriculum Studies*, 8(2), 75-88.
- Population Council. (2016). Early Childhood Care and Development in Nigeria: Baseline Report. Retrieved from <https://www.popcouncil.org/research/early-childhood-care-and-development-in-nigeria>.
- Pratt-Fartro, T., (2020). Four Key Features of Early Learning Environments. *Schoolyard Powered by School Speciality*. [blog.schoolspecialty.com](http://blog.schoolspecialty.com).
- Sanni, I. A., & Akinsanya, S. K. (2019). Parental Involvement in Preschool Education in Nigeria: A Qualitative Study. *Journal of Parental Education*, 11(4), 45-58.
- Salami, I.A., (2016). Nigerian Early Childhood Education Policies and Practices for Sustainability
- UNESCO, (2015). Nigeria: Early Childhood Education. *European Journal off Research and Reflection in Educational Sciences*. Progressive Academic Publishing, UK. Vol. 4 No. 5. ISSN 2056-5852.
- United Nations Children's Fund (UNICEF), Nigeria. (2020). Early Childhood Development: Country Profile. Retrieved from <https://www.unicef.org/nigeria/early-childhood-development>.
- World Bank. (2018). Nigeria Early Childhood Development Project. Retrieved from <https://www.worldbank.org/en/projects/procurement-notice/procurement/ocds-b3wdp1-paln-ncb-niger-early-childhood-development-project>.
- World Health Organization. (2017). Early Childhood Development in Nigeria: Situation Analysis. Retrieved from <https://www.who.int/nigeria/activities/early-childhood-development-situation-analysis>.
- Yusuf, A. K., & Isiaka, A. A. (2021). Challenges of Early Childhood Education in Nigeria: The Role of Government and Stakeholders. *Journal of Public Policy and Governance Studies*, 13(2), 30-42.
- Zango, A. S., & Abdullahi, A. A. (2018). The Role of Community Engagement in Improving Preschool Education in Nigeria: A case study of Kano State. *Journal of Community Development Studies*, 6(3), 18-27.

## Attitude towards Mathematics and Academic Engagement as Predictors of Primary School Pupils' Achievement in Mathematics

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### **Abstract**

*Mathematics achievement of young children gives them the opportunity to advance in technology and science related courses later in life. However, many pupils are not enthusiastic and well-disposed to learning mathematics due to some factors such as teachers' attitudes, erroneous beliefs, teaching methods, learning environment, students' engagement among others. This study explored academic engagement and attitude towards mathematics to establish the influence of these variables on pupils' mathematics achievement. Two hundred and fifty Basic six pupils were randomly selected from ten randomly selected public primary schools in Ijebu North East LGA of Ogun State. Data were collected with the adapted version of Attitudes towards mathematics inventory (ATMI), student engagement in mathematics scale (SEMS) and the Mathematics Achievement Test (MAT). The reliability coefficient of ATMI and SEMS were 0.61 and 0.74 respectively while the reliability coefficient of the MAT was 0.55. Data were analysed using Pearson Product Moment Correlation Coefficient and Multiple Regression Analysis at 0.05 level of significance. The findings demonstrated a strong positive correlation between students' academic involvement and their proficiency in mathematics. Additionally, research demonstrated a positive correlation between mathematical achievement and attitude. It was recommended that primary school pupils should attend mathematics class regularly, this is because regular attendance at school will help pupils observe how mathematics questions are solved by teachers. Primary school teachers should relate mathematics to real life experiences so as to make the children note the connection between mathematics and their day-to-day activities.*

**Keywords:** Academic Engagement, Attitude towards Mathematics, Mathematics Achievement

Pupils' achievement in mathematics sets them in the right trajectory to succeeding in science related courses in secondary schools and higher institutions later in life. This is due to the significant role mathematics plays in the

scientific and technological advancement of an individual and the overall development of a nation. The Organization for Economic Co-operation and Development, or OECD, (2016) highlighted that a country's fiscal development and well-being are a direct outcome of its population's proficiency in mathematics. However, many pupils are of the opinion that mathematics is tedious and difficult (Burkett, 2002; Pope, 2002; Okafor & Uche, 2013; Otoo, Iddrisu, Kessie, & Larbi, 2018); thus, affecting the engagement (Advisory Committee of Mathematics Education, 2011) and the attitude of pupils towards the subject (Mohamed & Waheed, 2011; Mata, Monteiro & Peixoto, 2012) Ngussa and Mbuti, 2017. Teachers' attitudes (Uluget. *al.*, 2011), students' attitudes toward Mathematics (Mahanta, 2014, Hwang & Son, 2021), the learning environment (O'Hara *et. al.*, 2022), parent involvement, teacher encouragement, student engagement (Muller, Stage & Kinzie, 2001), governmental factors, infrastructure issues, class size, mathematics anxiety (Mohamed & Tarmizi, 2010), and other factors have all been identified by scholars as potentially influencing students' mathematical achievement. One of the most important strategies to improve students' academic performance in schools is to support their academic engagement (Dotterer, McHale, & Crouter, 2007; Guthrie, Wigfield, & VonSecker, 2000). Academic engagement are the activities that pupils partake in in relation to their education as well as behavioural activities (Mahboob & Saeed, 2021). Chapman (2003) and Skinner *et.al.*, (2009) asserted that academic engagement encompasses pupil's enthusiastic participation in academic undertakings, which includes regular attendance in school, the keenness demonstrated at teacher's instructions and completion of school work/assignments. Lee and Shute (2010) defined academic engagement as the degree of psycho-social drive a pupil devotes to completing an educational work. Additionally, students use behavioral, cognitive, and emotional engagement as the three components of academic engagement in order to learn. Engagement via behavior relates to class involvement by means of applying vigor, force, and persistence particularly constructive collaboration and communication in classroom activities (Northey *et. al.*, 2015). Emotional engagement refers to active emotional condition for instance, pleasure, enthusiasm and interest that is experienced in the classroom or in the teaching and learning process (Skinner *et. al.*, 2009). Costa and Farla (2020) averred that emotional engagement indicates the dedication or optimistic impact with regard to academic activities. While cognitive engagement entails self-regulating behaviours, keeping an eye on own learning, putting forth intellectual efforts, and aspiring to attain academic success (Uden, *et. al.*, 2014; Archambault & Dupéré, 2017).

It is impossible to overstate the value of academic engagement. For example, children who are emotionally engaged are more interested in learning mathematical concepts and will not see education as a fraud but rather as a way to get ready for adulthood. (Skinner & Belmont, 1993; Finn & Voelkl, 1993). Since mathematics is sometimes perceived as less exciting and enjoyable than other subject matters (Grootenboer & Marshman, 2016) and many schoolchildren experience anxiety when learning it (Jackson & Leffingwell, 1999; Radišić, Videnović, & Baucal, 2015), pupils' affective engagement is especially important for mathematics learning. According to Radišić *et. al.*, (2015), pupils who exhibit negative emotional states, such as anxiety during learning Mathematics, may receive low grades in the subject. On the other hand, pupils who are emotionally invested and have a positive outlook, such as joy and contentment in their Mathematical education (Frenzel, Pekrun, & Goetz, 2007; Pekrun, Frenzel, Goetz, & Perry, 2007), would perform better in Mathematics (Goldin, Epstein, Schorr, & Warner, 2011). Additionally, pupils' behavioral engagement reflects their actions during the learning process and in the classroom, as evidenced by their focus on Mathematics assignments and discussions of Mathematics problems with friends (Finn & Voelkl, 1993). According to the National Research Council and Institute of Medicine (2009), pupils who are more behaviorally engaged attend class more frequently and work harder throughout their courses. Additionally, they are more likely to overcome early learning difficulties and connect what they have learned to basic Mathematical concepts (VomHofe, 2001; Pierce & Stacey, 2004). As a result, their academic performance is exceptional (VomHofe, 2001; Klem & Connell, 2004; Pierce & Stacey, 2004; National Research Council and Institute of Medicine, 2009).

Moreover, pupils who persist in solving Mathematics problems and use cognitive approaches in the learning activity—such as processing a lot of data when solving a Mathematics problem—are more likely to be cognitively engaged (Fredricks, Blumenfeld, & Paris, 2004; Walker, Greene, & Mansell, 2006; Mahatmya, Lohman, & Matjasko, & Farb, 2012). Perhaps as a result of their greater motivation in learning mathematics (Thatcher, 2001; Bragg, 2007; Thiessen & Blasius, 2008; Bal, 2012; 2013), cognitively engaged students perform better academically (Green *et. al.*, 2004; Spanjers, 2007).

Previous research on the connection between academic engagement and achievement has not consistently



produced reliable findings. For example, research by Finn and Zimmer (2012), Deveci and Karademir (2019), and Finn and Voelkl (1993) have demonstrated that academic achievement is predicted by academic engagement. However, academic engagement did not significantly predict mathematics success, according to a study by Sunawanet. *al.*, (2017). In a similar vein, Wong, Lam, and Kong's (2003) study demonstrated that there was no connection between academic engagement and mathematical proficiency. It is suitable for this study to determine the association between primary school pupils' academic engagement and mathematics achievement based on the explanation above.

According to Sarmah and Puri (2014), attitude is the taught propensity of an individual to react either positively or negatively to an idea, a circumstance, an object, or a person. It is also regarded as a viewpoint that people have that reflects their feelings and convictions and is sometimes manifested in behavior (Joseph, 2013). Mohamed and Waheed (2011) opined that attitude is associated with evaluations of groups, people and other types of things in our community. They emphasized the importance of attitude since it affects both the way the natural world is perceived and the way actions are taken. The things individuals take pleasure in usually control their activities. Attitudes, likes and dislikes immensely have great influence on a person's disposition and comportment (Mohamed & Waheed, 2011). The idea of attitude towards mathematics originated from attitudes (Wang, 2017). Ajzen (1993) put forward the ABC Attitude Model in describing attitude towards Mathematics. In his conceptualization of attitudes, he distinguished three measurable combinations: affect (A), behavior (B), and cognition (C). In the model, affect refers to emotion, that is, the pleasure or nervousness that occurs when learning Mathematics as a subject matter that is difficult, dull, or interesting. Behaviour implies pupils' behavioural predispositions in Mathematics classes, which are linked to their enthusiasm to learn Mathematics. While, cognition refers to the consciousness of the utility of mathematics. In the same vein, Tapia and Marsh (2004) submitted that an individual's attitude towards mathematics has four subscales, which include enjoyment, value, self-confidence, and motivation. They further explained that enjoyment is the liking or disliking of mathematics; value is the conviction that mathematics is beneficial or not; self-confidence conveys the assurance that one is excellent at mathematics or not; and finally, motivation is the predisposition to participate in Mathematical activity or steer clear of Mathematics.

He (2007), expressed that pupils' attitudes towards Mathematics develop through motivation to participate in Mathematics activities, enjoyment of Mathematics, and the conviction that Mathematics is beneficial, significant and trustworthy. Attitude towards Mathematics refers to the positive or negative disposition of pupils to Mathematics learning. According to earlier research, pupils' attitudes toward Mathematics and their Mathematical accomplishments are positively correlated (Bramlett & Herron, 2009). Additionally, Hwang and Son (2021) demonstrated in their research that pupils' attitudes toward learning Mathematics have a significant impact on their academic performance; students with negative attitudes will hinder effective learning and, eventually, their success, while students with positive attitudes will also perform better in the subject (Joseph, 2013; Nusantara *et. al.*, 2020; Lelasari *et. al.*, 2021). Nevertheless, prior research on the connection between students' attitudes toward Mathematics and their mathematical achievement has been inconsistent (He, 2007; Haciomeroglu, 2017). For instance, Bouchy and Harter (2005), Foire (1999), Samuelsson and Granström (2007) discovered that negative attitudes towards Mathematics frequently give rise to poor engagement and low pupils achievement. On the contrary, Phan (2008), in his comparative study on the performance of students in the USA, Canada, Egypt and South Africa, established that Egyptian students had high positive attitudes in spite of their low point of performance. In the bid to justify this correlation, Phan revealed that such attributes may be linked to the culture of nationality, particularly in developing nations, if attitudes have a tendency to rise irrespective of the level of achievement. In a similar vein, Jaafari's (2010) study found a negative correlation between Saudi students' attitudes toward mathematics and their mathematical proficiency. Because of the disparity in previous research, this study is necessary to determine whether students' attitudes toward mathematics and academic engagement would predict their mathematical success.

### Objective of the Study

The objectives of this study are to:

- To determine the relationship between academic engagement and Mathematics achievement of primary school pupils.
- To ascertain the relationship between pupils' attitudes towards Mathematics and Mathematics achievement.



- To verify the combined influence of the independent variables (academic engagement and attitude towards mathematics) on the dependent variable (Mathematics achievement) of pupils.

The following hypotheses were proposed for the research:

**H<sub>0</sub>1:** There is no significant correlation between pupils' achievement in Mathematics and their level of academic engagement.

**H<sub>0</sub>2:** Pupils' attitudes toward Mathematics and their mathematical achievement are not significantly correlated.

**H<sub>0</sub>3:** There is no significant relationship of the combined influence of academic engagement and attitude on pupil's mathematics achievement.

### Methodology

For this study, a survey using a descriptive research design was employed. All Basic 6 pupils in Ogun State's Ijebu North East Local Government Area made up the population. Ten public primary schools were chosen using a simple random selection procedure, and twenty-five (25) pupils were chosen at random from each school. Two hundred and fifty Basic six pupils participated in the study. Three components make up the instrument used to gather data for the study. Section A comprises demographic data, such as age, gender, and class while the Section B consists of two sub-scales which are attitude towards Mathematics and student engagement in Mathematics scale (SEMS) and Section C entails Mathematics achievement Test. Attitudes towards mathematics inventory (ATMI) by Tapita (1996) was adapted in this study. Thirty-five items were adapted out of the original forty items to measure attitude/behaviour. A 4-point Likert scale, with "Strongly Agree" to "Strongly Disagree" as the extremes, was employed. Examples of attitudes items include "I wish to improve my mathematical abilities," "Mathematics does not scare me at all", "I really like mathematics", and "The challenge of Mathematics appeals to me". The student engagement in Mathematics scale (SEMS), (Leis, et.al., 2015) was adopted in this study. "Students in my class helped each other learn today," "I enjoyed thinking about mathematics today and "Today in math class, I had to think a lot." are samples of items for measuring student engagement in Mathematics. The instrument consists of 18 items, each of which is scored on a 4-point scale that goes from "No, not at all true" to "Yes, very true." Section C is the Mathematics Achievement Test. It has 20 items with multiple choice answers (a-d), it was used to assess pupils' achievement in Mathematics. The reliability coefficient of attitudes towards Mathematics and student engagement in Mathematics scale are 0.61 and 0.74 respectively using Cronbach Alpha method. The split-half method was used to determine reliability coefficient for the Mathematics achievement test which was 0.55.

Frequency counts, percentages, Pearson product moment correlation, and multiple regression analysis were used to analyze the study's data.

### Results

**Table 1**  
**Gender Frequency of Pupils**

Gender	Frequency	Percentage
Male	106	42
Female	144	58
Total	250	100

Table 1 shows pupils' distribution by gender. The table shows that only 106 (42%) of the pupils are male and 144 (58%) are females. This further implies that there are more females in the sample.

**Hypothesis 1:** There is no significant correlation between pupils' achievement in mathematics and their level of academic engagement.

**Table 2**  
**Relationship between academic engagement and pupil Mathematics achievement**

<b>Variables</b>	<b>Mean</b>	<b>Std</b>	<b>N</b>	<b>R</b>	<b>Sig</b>
<b>Academic engagement</b>	26.12	12.10	250	.139	.026
<b>Mathematics achievement</b>	24.22	12.03			

Table 2 shows measure of relationship between academic engagement and mathematics achievement. The two variables exhibit a strong positive correlation ( $r=.139$ ,  $P < 0.05$ ). It also shows mean score of 26.12 (Std = 12.10) for academic engagement and 24.22 (Std = 12.03) mean score for Mathematics achievement with relationship of 0.026. Thus, there is a strong correlation between pupils' academic engagement and their success in Mathematics.

**Hypothesis 2:** Pupils' attitudes toward mathematics and their Mathematical achievement are not significantly correlated.

**Table 3**  
**Relationship between pupils' mathematical achievement and attitudes about the subject**

<b>Variables</b>	<b>Mean</b>	<b>Std</b>	<b>N</b>	<b>R</b>	<b>Sig</b>
<b>Attitude towards Mathematics</b>	22.23	13.32	250	.188	.003
<b>Mathematics Achievement</b>	24.22	12.03			

Table 3 demonstrates the connection between mathematical achievement and attitude. It shows the two variables have a significant positive connection ( $r=.188$ ,  $P < 0.05$ ). The table shows mean score of 22.23 (Std = 13.32) for Attitude towards Mathematics and 24.22 (Std = 12.03) mean score for Mathematics achievement.

**Hypothesis 3:** There is no significant relationship of the combined influence of academic engagement and attitude on pupil's mathematics achievement.

**Table 4**  
**Regression Analysis of Combined Influence of Academic Engagement and Attitude Towards Mathematics on Pupil Mathematics Achievement**

<b>ANOVA</b>						
	<b>Model</b>	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig</b>
<b>R =0.216</b>	Regression	520.700	1	2805.603	2.173	.0000
<b>R<sup>2</sup> = 0.046</b>	Residual	76232.34	198	303.360		
<b>Adj. R<sup>2</sup> = .088</b>	Total	79038.57	199			
<b>Std Error=9.51291</b>						

Table 4 show the results of the regression of the predictor variables (academic engagement and attitude towards Mathematics) on pupils' Mathematics achievement. The outcome is significant ( $F = 2.173$ ,  $p < 0.05$ ), according to the results. This suggests that the variables that predict academic engagement and attitude towards mathematics, contribute significantly to the variance in pupils' mathematics achievement. With an  $R^2$  value of 0.46, an adjusted  $R^2$  value of 0.088, and a multiple correlation coefficient of 0.216, the results indicate that the predictor variables

explained 4.6% of the variance in the dependent variable. As a result, pupils' performance in Mathematics is greatly influenced by both their attitude toward Mathematics and their level of academic engagement.

### Discussion of Findings

The results of hypothesis one demonstrated a strong positive correlation between pupils' academic engagement and their proficiency in mathematics. The implication of this is that when there is an increase in academic engagement, there is also a significant increase in mathematics achievement. This outcome supports previous findings by Finn and Zimmer (2012), Deveci and Karademir (2019), and Finn and Voelkl (1993). This is probably because the pupils that participated in the study are in Basic six class and Basic six class is a transition class where the children will be proceeding to secondary school. All hands are on deck to ensure the children come out in flying colours so that they can gain admission into secondary schools of their choice. On the other hand, the result of this study negates the report of Sunawan, *et.al.*, (2017). They discovered that mathematical achievement was not strongly predicted by academic engagement. The conclusions of Wong *et. al.*, (2003) are likewise refuted by the results of this investigation. They found no connection between mathematical achievement and academic engagement.

The second hypothesis's conclusion showed a strong positive correlation between pupils' achievement in Mathematics and their attitudes about the subject. This suggests that there is a substantial rise in mathematical achievement together with an improvement in attitude toward the subject. This outcome is consistent with the research conducted by Hwang and Son (2021) and Bramlett and Herron (2009). A possible explanation for this result might be due to the preparation for external examination into secondary schools. This might have improved the pupils' attitude toward mathematics and, consequently, their performance in the subject. However, Phan (2008) and Jaafari (2010) found that learners' attitudes toward mathematics and their mathematical achievement were negatively correlated.

The third hypothesis's analysis revealed a significant result ( $F = 2.173, p < 0.05$ ). This suggests that the variables that predict academic engagement and attitude towards mathematics, play a major role in the variation in pupils' performance in mathematics. Accordingly, the combination of academic involvement and attitude toward mathematics has a considerable impact on pupils' mathematical achievement, which is consistent with the findings of Bouchy and Harter (2005), Foire (1999) and Samelsson and Granström (2007). The possible explanation for this result may be as a result of the engagement and positive attitude of the pupils towards Mathematics. Another possible reason for result, may be because experienced teachers are employed to handle the upper primary class and this might have increased the engagement of the children and make them have a positive attitude towards mathematics.

### Conclusion

As a result of these findings, it was concluded that academic engagement and attitude towards Mathematics influence pupils' Mathematics achievement. It is determined that pupils' attitudes and levels of participation in mathematics education are critical factors in determining their academic success.

### Recommendations

The study's conclusions led to the following suggestions being made.

- The primary school pupils should attend mathematics class regularly; this is because regular 'attendance at school will expose pupils to various ways mathematics questions could be solved by teachers.
- Mathematics has to do with problem solving therefore pupils should be resolute and determined in order not to develop academic disengagement which will affect their mathematics achievement in the long-run.
- Primary school teachers should relate mathematics to real life experiences so as to make the children see the connection between mathematics and their day-to-day activities thereby making the pupils to be well-disposed towards mathematics.
- Teachers should motivate pupils to learn mathematics by making it interesting and enjoyable by solving many problems, they can relate with and also giving them hands-on activities and manipulatives. The students' attitude toward mathematics will improve as a result of the approach.

- Teachers should encourage pupils to cultivate a favorable attitude toward mathematics as a subject through the use of reinforcements such as verbal praise, special privileges (choosing a classroom activity), tangible rewards (like stickers).

## References

- Ajzen, I. (1993). Attitude theory and the attitude-behavior relation. *New Directions in Attitude Measurement*, 41-57.
- Archambault, I., & Dupéré, V. (2017). Joint trajectories of behavioral, affective, and cognitive engagement in elementary school. *The Journal of Educational Research*, 110(2), 188- 198.
- Bal, A. P. (2013). Investigating undergraduate students' assessment preferences in mathematics course and learning strategies. *International Online Journal of Educational Sciences*, 5(1), 2242–257
- Bragg, L. A. (2007). Students' conflicting attitudes towards games as a vehicle for learning mathematics: A methodological dilemma. *Mathematics Education Research Journal*, 19(1), 29–44.
- Bragg, L. A. (2012). Testing the effectiveness of mathematical games as a pedagogical tool for children's learning. *International Journal of Science and Mathematics Education*, 10(6), 1445–1467.
- Bramlett, D., & Herron, S. S. (2009). A Study of African- American College students' attitudes towards mathematics. *Journal of Mathematical Sciences and Mathematics Education*, 4(2), 43– 51.
- Chapman, E. (2003). Assessing student engagement rates. *ERIC Digest*
- Costa, A. & Luísa Faria, L. (2020). The impact of implicit theories on students' emotional outcomes. *Current Psychology* 412354–63
- Dotterer, A.M., McHale, S. M. & Crouter, A. C. (2007). Implications of Out-of-School activities for school engagement in African American Adolescents. *Journal Youth Adolescence* 36, 391- 401.
- Deveci, O. & Karademir, C.A. (2019). Investigation of the 5th Grade Students' Engagements in Mathematics Course towards Student Opinions. *Eur. J. Educ. Res.* 8, 337–348.
- Finn, J. D. & Zimmer, K.S. (2012). Student Engagement: What Is It? Why Does It Matter? *In Handbook of Research on Student Engagement*; Springer: Boston, MA, USA, pp.97–131.
- Finn, J. D., & Voelkl, K. E. (1993). School characteristics related to student engagement. *Journal of Negro Education*, 62(3), 249–268.
- Fredricks, J. A., Blumenfeld, P. C & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research* 74: 59–109.
- Frenzel, A. C., Pekrun, R., & Goetz, T. (2007). Girls and mathematics - A "hopeless" issue? A control-value approach to gender differences in emotions towards mathematics. *European Journal of Psychology of Education*, 22(4), 497–514.
- Greene, B. A., Miller, R. B., Crowson, M., Duke, B. L., & Akey, K. L. (2004). Predicting high school students' cognitive engagement and achievement: Contributions of classroom perception and motivation. *Contemporary Educational psychology*, 29(4), 462–482.
- Goldin, G. A., Epstein, Y. M., Schorr, R. Y., & Warner, L. B. (2011). Beliefs and engagement structures: Behind the affective dimension of mathematical learning. *ZDM Mathematics Education*, 43(4), 547–560.
- Grootenboer, P., & Marshman, M. (2016). Chapter 2 -The Affective Domain, Mathematics, and Mathematics Education. *In Mathematics, Affect and Learning*. Springer: Science + Business Media Singapore.
- Guthrie, J.T., Wigfield, A. & VonSecker, C. (2000). Effects of integrated instruction on motivation and strategy use in reading. *Journal of Educational Psychology* 92(2), 331-341.
- Haciomeroglu, G. (2017). Reciprocal relationships between mathematics anxiety and attitude towards mathematics in elementary students. *Acta Didactica Napocensia*, 10(3), 59–68.
- He, H. (2007). Adolescents' perception of parental and peer mathematics anxiety and attitude toward mathematics: A comparative study of European-American and mainland-Chinese students (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (UMI No. 3264402)
- Hwang, S., & Son, T. (2021). Students' Attitude toward Mathematics and its Relationship with Mathematics Achievement. *Journal of Education and E-Learning Research*, 8(3), 272–280.



- Joseph, G. (2013). A Study on School Factors Influencing Students' Attitude Towards Learning Mathematics in the Community Secondary Schools in Tanzania: The case of Bukoba Municipal Council in Kagera Region. (Masters dissertation). Retrieved from [https://doi.org/10.30862/jri.v1i1.12](#)
- Lee, J. & Shute, V. J. (2010). Personal and social-contextual factors in K–12 academic performance: An integrative perspective on student learning. : 185–202.
- Lelasari, T., Yohanita, A. M., & Damopolii, I. (2021). Effect of inquiry science learning on students' metacognitive skill. *Journal of Research in Instructional*, 1(1), 53–60. <https://doi.org/10.30862/jri.v1i1.12>
- Jackson, C. D., & Leffingwell, R. J. (1999). The role of instructor in creating math anxiety in students from kindergarten through college. *Mathematics Teacher*, 92(7), 583–586.
- Jimerson, S. R., Campos, E. & Jennifer L. Greif. J. L. (2003). Toward an understanding of definitions and measures of school engagement and related terms. *The California School Psychologist* 8: 7–27
- Klem, A. M., & Connell, J. P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. *Journal of School Health*, 74(7), 262–273.
- Leis, M., Schmidt, K.M. & Rimm-Kaufman, S.E. (2015). Using the partial credit model to evaluate the student engagement in mathematics scale. *Journal of Applied Measurement*, 16(3), 251–267.
- Ma, L., & Bradley, K. D. (2002). The development of mathematics achievement in secondary school: Individual differences and school. *University of Kentucky*.
- Mahboob, M. K. S. & Saeed, J. (2021). Investigation of the Mediating Role of Academic Self- Efficacy in the Relationship of Social Adjustment with Academic Engagement and Achievement Goals Among High School Students. *Razavi International Journal of Medicine*, 9(3), 25–33. [Magiran.com/p2316652](http://Magiran.com/p2316652)
- Mahanta, D. (2014). “The role of home environment and mathematics achievement for students of secondary schools in Nagaon District,” 2, (1), pp. 105–115.
- Mahatmya, D., Lohman, B. J., Matjasko, J. J., & Farb, A. F. (2012). Engagement across developmental periods. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.). *Handbook of research on student engagement* (pp. 45–63). New York: Springer
- Mohamed, L., & Waheed, H. (2011). Secondary students' attitude towards mathematics in a selected school of Maldives. *International Journal of humanities and social science*, 1(15), 277–281. Retrieved from [https://doi.org/10.30862/jri.v1i1.12](#)
- Mata, M. D., Monteiro, V., & Peixoto, F. (2012). Attitudes towards mathematics: Effects of individual, motivational, and social support factors. *Child Development Research*, 2012. [https://doi.org/10.30862/jri.v1i1.12](#)
- Muller, P.A., Stage, F.K. & Kinzie, J. (2001). Understanding factors related to gender and racial-ethnic differences in Precollege science. *American Educational Research Journal* 38(4): 981–1012.
- National Research Council, & Institute of Medicine. (2009). Adolescent Health Services: Missing Opportunities. *Washington, DC: The National Academies Press*.
- Ngussa, B. M., & Mbuti, E. E. (2017). The influence of humour on learners' attitude and mathematics achievement: A Case of Secondary Schools in Arusha City, Tanzania. *Journal of Educational Research*, 2(3), 170–181. Retrieved from [https://doi.org/10.30862/jri.v1i1.12](#)
- Northey, G., Bucic, T., Chylinski, M. & Govind, R. (2015). Increasing Student Engagement Using Asynchronous Learning. *Journal of Marketing Education* 3: 171–80.
- Nusantari, E., Utina, R., Katili, A. S., Tamu, Y., & Damopolii, I. (2020). Effectiveness of environmentally-based science learning towards environmentally-friendly character of students in coastal area. *International Journal of Instruction*, 13(3), 233–246. <https://doi.org/10.29333/iji.2020.13316a>
- OECD (2016), “Who and where are the low-performing students?”, in low-performing students: Why they fall behind and how to help them succeed, OECD Publishing, Paris. DOI: [https://doi.org/10.30862/jri.v1i1.12](#)
- O'Hara, G., Kennedy, H., Naoufal, M. & Montreuil, T. (2022). The role of the classroom learning environment in students' mathematics anxiety: A scoping review. *British Journal of Educational Psychology*, 92(4), 1458–1486.
- Okafor, C. F., & Uche, S. A. (2013). "Nigerian school children and mathematics phobia: How the mathematics teacher can help". *American Journal of Educational Research*, 1(7), 247–251.



- Otoo, D., Iddrisu, W. A., Kessie, J. A & Larbi, E. (2018). Structural model of students' interest self-motivation to learning mathematics. *Hindawi Education Research International* <https://doi.org/10.1155/2018/9417109>
- Pekrun, R., Frenzel, A. C., Goetz, T., & Perry, R. P. (2007). The control-value theory of achievement emotions: An integrative approach to emotions in education. In P. Schutz & R. Pekrun (Eds.), *Emotion in education* (pp. 13–36). Burlington, MA: Academic Press.
- Pierce, R., & Stacey, K. (2004). A framework for monitoring progress and planning teaching towards the effective use of computer algebra systems. *International Journal of Computers for Mathematical Learning*, 9(1), 59–93
- Phan, H. T. (2008). Correlates of mathematics achievement in developed and developing countries: An HLM analysis of TIMSS 2003 eighth-grade mathematics scores (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global database. (UMI No. 3376214)
- Pope, D. (2002). *Doing school: How we are creating a generation of stressed-out, materialistic, miseducated students*. New Haven, CT: Yale University Press
- Radišić, J., Videnović, M., & Baucal, A. (2015). Math Anxiety – Contributing School and Individual Level Factors. *European Journal of Psychology of Education*, 30(1), 1–20.
- Sarmah, A., & Puri, P. (2014). Attitude towards mathematics of the students studying in diploma engineering institute (polytechnic) of Sikkim. *IOSR Journal of Research & Method in Education*, 4(6), 6–10. <https://www.iosrjournals.org/iosrjrme/papers/Vol-4 Issue-6/Version- 3/B04630610.pdf>
- Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology*, 85(4), 571–581.
- Skinner, E., Furrer, C., Marchand, G. & Kindermann, T. (2008). Engagement and disaffection in the classroom: Part of a larger motivational dynamic? *Journal of Educational Psychology* 100:765–81
- Skinner, E. A., Kinderman, T. A., & Furrer, C. J. (2009). A motivational perspective on engagement and disaffection: Conceptualization and assessment of children's behavioral and emotional participation in academic activities in the classroom. *Educational and Psychological Measurement*, 69, 493–525.
- Spanjers, D. M. (2007). Cognitive engagement as a predictor of achievement. Dissertation: University of Minnesota.
- Sunawan, Dwistia, H., Kurniawan, K., Hartati, S. & Sofyan, F. (2017). Classroom Engagement and Mathematics Achievement in Senior and Junior High School Students. *Advances in Social Science, Education and Humanities Research (ASSEHR)*, 158. *International Conference on Teacher Training and Education 2017 (ICTTE 2017)*. 929-935
- Thatcher, D. H. (2001). Reading in mathematics class: selecting and using picture books for math investigations. *Young Children*, 56(4), 20–21.
- Thiessen, V., & Blasius, J. (2008). Mathematics achievement and mathematics learning strategies: Cognitive competencies and construct differentiation. *International Journal of Educational Research*, 47(6), 362–371.
- Ulug, M., Ozden, M. S., & Eryilmaz, A. (2011). The Effects of Teachers' Attitudes on Students' Personality and Performance. *Procedia - Social and Behavioral Sciences*, 30, 738–742. <https://doi.org/10.1016/j.probs.2011.05.005>
- Van Uden, J. M., Ritzen, H., & Pieters, J. M. (2014). Engaging students: The role of teacher beliefs and interpersonal teacher behavior in fostering student engagement in vocational education. *Teaching and teacher education*, 37, 21-32. <https://doi.org/10.1016/j.tate.2014.08.005>
- VomHofe, R. (2001). Investigations into students' learning of applications in computer based learning environments. *Teaching Mathematics and its Applications*, 20, 109–119.
- Walker, C. O., Greene, B. A., & Mansell, R. A. (2006). Identification with academics, intrinsic / extrinsic motivation, and self-efficacy as predictors of cognitive engagement. *Learning and Individual Differences*, 16(1), 1–12.
- Wang L.Y. (2017). A study of middle school students' attitudes towards Mathematics. PhD Dissertaton, Ludong University
- Wong, N.Y., Lam, C.C., & Kong, Q.P. (2003). The Relationship between Student Engagement and Learning Outcome in Mathematics. *Curric. Teach.* 2003, 18, 81–95.

# Technology and Artificial Intelligence; a Tool for Transforming Early Childhood Education in Nigeria: Prospects and Challenges

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## **Abstract**

*Artificial intelligence (AI) is a veritable tool for transforming teaching and learning into the 21st-century novelty of educational pedagogy. Digital assistants such as chatbots, facial recognition apps, self-driving cars, robots, etc., which used to be considered science fiction and elements of the distant future, are now a part of our everyday lives. Therefore, Artificial Intelligence (AI) has ushered in a paradigm shift toward a more technologically driven landscape, demonstrating its efficacy as an emergent strategy in transforming knowledge and society. Despite these advancements in expertise, early childhood education (ECE) has yet to leverage AI technologies in Nigeria. Recognizing the expanding significance of AI in education, this paper examines artificial intelligence (AI) as a tool for transforming early childhood education by considering the benefits of AI apps and tools for children's learning and identifying ways to usher children into the world of AI, among others. The various ways of enhancing teaching using AI-driven tutoring systems, adaptive learning platforms, and intelligent classroom assistants were constructively considered. The study is centered on applying constructivist learning principles in leveraging AI to foster a dynamic, engaging, and deeply impactful educational environment. This theoretical approach advocates for active student engagement through direct interaction with AI technologies, bridging the gap between theoretical knowledge and practical application. The literature review showed ways artificial intelligence has been used in education by helping to mitigate learning disparities in diverse student populations, overcoming language barriers through AI translation, and bridging the digital divide. The challenges and ethical considerations in AI were identified, and the various strategies for overcoming these challenges were addressed. The outcome of the investigations in the literature showed that with the active collaboration of the major stakeholders in education (educators, students, parents, and government), artificial intelligence skills can upgrade and improve the quality of early childhood education in Nigeria. Conclusively, the paper recommends that government and school owners ensure teachers employ AI tools to support students' learning needs in ECE. Teachers should also leverage AI analytics to track and analyze student performance data. Likewise, the government and Early Childhood Association of Nigeria (ECAN) should enhance Teacher Professional Development through training and retraining on the use of AI Tools in ECE.*

**Keywords:** Technology, Artificial Intelligence, Early childhood education, To Transform.

## **Introduction**

In recent years, AI-driven technological advancement has emerged as a major disruptor in science, engineering, business, and marketing and has even transformed education with tools like Duolingo, Prodigy, Alexia, Robot Turtles, DALL·E, ChatGPT, Grammarly, Artbreeder, etc., thereby enhancing learning experiences. Organizations across the globe are moving towards automation as AI is transforming how education is accessed and information utilized; the ability to effectively prompt the use of AI tools will soon be a critical skill in the academic world, which ushers students into the brink of a new era where AI becomes the norm in academia. New technologies cannot be avoided as part of students' futures, and it is up to educators to ensure that AI is brought into the classroom as it is beneficial to all learners. Ignoring or failing to prepare children for AI classrooms means poor preparedness for future classrooms in an advancing world (UNICEF, 2022). Therefore, early childhood education must not be left behind. There is a need to embrace these technological advancements and

prepare children for the exciting opportunities ahead on the use and application of tech tools in learning to be at the forefront of societal changes.

With the rapid advancement of technology, AI devices such as voice-activated personal assistants, home robots, and smart connected toys are increasingly becoming a part of young children's daily lives. These AI tools are promising to enhance learning and developmental outcomes in early childhood. For example, Zhang and Chen (2020) developed an intelligent tutoring system for math instruction specifically designed for young children. Their study demonstrated that this AI-driven course not only improved children's math performance but also helped sustain positive attitudes toward the subject. The earlier learners are ushered into the wonderful world of AI, the easier it will be for them to comprehend and learn how to use it to their advantage. Interacting with AI at an early age will equip learners with an indistinguishable sense of curiosity for learning and enable them to develop advanced problem-solving skills. As a result, children will be prepared to make an impact in the tech-centric future that awaits them (Camesaria, Rigueira-Diaz, Janeiro, Torres, Prado & Kreibel, 2023). Similarly, incorporating AI into early childhood classrooms will present children with new opportunities for learning and challenge their curiosity or thirst for knowledge, leading to discoveries and ideas for educators and students. This paper underscores the need for collaborative efforts among educators and policymakers on how AI can help transform early childhood education in Nigeria.

Based on the foregoing, this paper set out to achieve the following objectives:

- Define the concept of artificial intelligence and give examples of AI-assisted tools for children;
- Identify how early childhood education can be transformed by AI;
- Explore the benefits of AI apps and tools for children's learning;
- Identify ways to usher children into the world of AI
- Examine challenges facing the use of AI

### **Concept of Artificial Intelligence (AI)**

Artificial intelligence has been a topic of interest and has raised curiosity in various disciplines and applications. Artificial intelligence (AI) is a branch of computer technology that uses algorithms and machine learning techniques to replicate or simulate human intelligence (Helm; Swiergosz; Heather; Karnuta; Jonatha; Viktor, *et. al.*, 2020). The Oxford Dictionary (2023) defines artificial intelligence as the theory and development of computer systems that can carry out tasks that normally require human intelligence, decision-making, and language translations. Artificial Intelligence (AI) is the ability of a computer, a computer-controlled robot, a machine, or software to think like the human mind and perform tasks that generally require human intelligence. It involves creating algorithms that allow computers to learn from and make decisions, predictions, or recommendations based on data rather than following only explicitly programmed instructions (Verma, 2023). Artificial intelligence is based on algorithms, a set of rules and instructions that computers follow while performing problem-solving operations to complete the final goal. AI algorithms analyze data to identify patterns and build a model and then calculate future values based on these models (Akgun and Greenhow, 2021). In general, the effectiveness of AI learning depends on the data and its characteristics, as well as the performance of the learning algorithms. Therefore, the final goal of different learning algorithms may differ. The outcomes of different learning algorithms in one subset may differ greatly because of the initial characteristics and input data (Sarker, 2021).

Artificial intelligence transforms all aspects of socio-economic life and integrates communication technology into virtual reality. Artificial intelligence in education has changed not only the education system but knowledge sharing approaches to learning, cognition and development of civilization (Kaur, 2021). Artificial intelligence creates new opportunities for education providers and bridges the gap between technological innovations and their implementation in education (Zhang & Aslan, 2021).

### **Theoretical Foundations**

The theoretical framework for the study is centered on the application of constructivist learning principles in leveraging AI to foster a dynamic, engaging, and deeply impactful educational environment. This theoretical approach advocates for active student engagement and the development of learning through direct interaction with AI technologies, bridging the gap between theoretical knowledge and practical application. The integration

of AI in education aligns seamlessly with constructivist learning theory, emphasizing the importance of active engagement and knowledge construction by learners (Blikstein & Worsley, 2016). AI effectively creates a dynamic educational environment that encourages students to construct meaning through hands-on experiences.

### **Artificial intelligence for children**

Artificial intelligence for children is the art of teaching computers how to "think" and how students can become the designers of the computer "brain" through coding and programming. It allows older students to become creators of the latest technology. AI systems are fundamentally changing the world and affecting present and future generations of children. Children are already interacting with AI technologies in different ways; they are embedded in toys, virtual assistants, video games, and adaptive learning software. Algorithms provide recommendations to children on what videos to watch next, what news to read, what music to listen to, and who to be friends with. Children today are growing up surrounded by applications of AI, from chatbots to virtual assistants, search engines, language translation services, autonomous vehicles. It is, therefore, imperative to equip children with Artificial Intelligence and Machine Learning skills (Bahroun, Anane, Ahmed, & Zacca, 2023). This way, they can understand how the technology works and be prepared for future usage.

According to UNICEF (2022), teaching AI to children is important because it is already a constant presence in their day-to-day activities. After all, children are frequently exposed to AI-powered technologies in many ways. Teaching children the principles of AI, its applications, and its limitations at an early age is a great way to kick-start their critical thinking and prepare them to become intelligent consumers of technology. By learning about AI at an early age, children can better understand how to apply AI tools to solve difficult problems and improve the world.

Several online platforms that teach children about AI start from 6 years of age and above. Studies show that by that age, abstract thinking develops, and they can grasp concepts more easily (UNICEF, 2022). AI is revolutionizing early childhood education, offering unprecedented opportunities for young learners to receive personalized, engaging, and effective educational experiences. By integrating AI into the learning environment, educators can tailor educational content to individual needs, enhancing language development through interactive tools that adjust to each child's speech patterns and learning pace. AI-driven robots and educational toys create dynamic, fun-filled learning environments that encourage active participation and sustained interest among young students. AI tutors extend learning beyond the classroom, providing accessible, personalized assistance that reinforces learning continuity. It equips children with the skills necessary to navigate the increasingly digital world, making it a crucial component of modern educational strategies (Holmes, Wayne, Maya Bialik, & Charles Fadel, 2023).

Children come from various linguistic backgrounds. AI supports children with speech difficulties by offering tailored exercises that meet their unique needs. Additionally, AI systems also support teachers by providing detailed insights into a child's progress and areas needing attention, facilitating more effective teaching strategies tailored to enhance language development (Mustafa, 2023).

These AI tools respond to voice commands, answer questions, and engage children in educational activities. Such interactions are designed to make learning more enjoyable and stimulating, which is crucial in maintaining young children's attention spans. Moreover, these robots can introduce basic concepts of mathematics, science, and literature in a playful context, making complex ideas more understandable for young minds. By transforming learning into a form of play, AI helps lay the groundwork for lifelong learning, ensuring children associate education with fun and creativity.

### **Transforming early childhood education through AI**

AI is revolutionizing early childhood education, offering unprecedented opportunities for young learners to receive personalized, engaging, and effective educational experiences. By integrating AI into the learning environment, educators can tailor educational content to individual needs, enhancing language development through interactive tools that adjust to each child's speech patterns and learning pace. AI-driven robots and educational toys create dynamic, fun-filled learning environments that encourage active participation and sustained interest among students (UNESCO, 2019). AI tutors extend learning beyond the classroom, providing



accessible, personalized assistance that reinforces learning continuity. It equips children with the skills necessary to navigate the increasingly digital world, making it a crucial component of modern educational strategies. Studies (Chen, Chen, & Lin, 2020) have shown that AI can be used to transform early childhood education in the following ways:

- **Personalized Learning Experiences**

Artificial Intelligence excels in delivering personalized education tailored to each child's unique learning styles and speeds. By utilizing AI, systems can track and analyze individual interactions and performance metrics in real time, adjusting the content and pacing accordingly. This ensures no child is left behind, making learning a more inclusive and individualized experience. Moreover, such personalized approaches help maintain children's interest and motivation (Conati, Barral, Putnam, & Rieger, 2021; Rane, Choudhary, & Rane, 2023).

- **Enhanced Language Development**

AI tools can transform language learning by providing young learners with immediate feedback and interactive experiences that adapt to their linguistic progress. These tools can analyze speech patterns and offer corrections, greatly benefiting pronunciation and grammar skills (Anis, 2023).

- **Interactive and Engaging Learning Environments**

AI technology helps in the creation of dynamic and interactive learning environments through smart educational toys and robots. These AI companions can respond to voice commands, answer questions, and engage children in educational activities. AI ensures that learners receive content that aligns with their current proficiency levels, preventing boredom or frustration and promoting optimal learning conditions (Anis, 2023; Khonturaev, 2023; Tapalova & Zhiyenbayeva, 2022).

- **Early Detection of Learning Disabilities**

AI systems analyze data from children's activities and recognize patterns that deviate from the norm, which might indicate dyslexia, dyscalculia, or other cognitive challenges. By catching these issues early, educators can intervene sooner, providing specialized support and adapting teaching methods to suit the needs of these children better.

- **Easy and accessible AI Tutors and Assistants at all Times**

AI tutors offer a personalized tutoring experience that is accessible anytime and anywhere, which is highly beneficial for reinforcing learning outside of traditional school hours. These systems can provide homework help, guide through problem-solving steps, and offer explanations for complex concepts, ensuring continual learning. This constant availability and personalized assistance help prevent learning loss, especially during breaks in the traditional school calendar, and support a seamless educational experience for every child.

- **Develops Critical Thinking and Problem-Solving Skills**

The incorporation of AI in education significantly enhances students' learning experiences, providing them with varied learning opportunities, enhancing their problem-solving skills, and equipping them with essential digital competencies. AI apps like coding use gamified learning to teach programming fundamentals through story-based missions and puzzles. This method encourages logical thinking and creativity as children learn to see problems as challenges to overcome through coding. By integrating these competencies early in education, AI helps build a foundation for advanced learning and effective problem-solving later in life.

- **Streamlining Teachers' Administrative Tasks**

AI frees teachers from the burdens of paperwork, such as attendance tracking, grade recording, and report generation. Thus allowing teachers to devote more time and energy to interacting with students. Similarly, this automation gives room for better accuracy and efficiency in teachers' administrative processes, thus reducing the likelihood of human error and ensuring that data management is handled proficiently. Anderson, Corbett, Koedinger, and Pelletier (2005) observed from their experiments using a computer-based instructional technology called Cognitive Tutor that the best tutorial interaction style for learners was the one in which the tutor provided immediate feedback with short and direct error messages.



- **Encouraging Parental Involvement**

AI facilitates a stronger partnership between educators and families, which is pivotal in fostering an educational environment that supports students' overall development and success. AI-driven platforms can significantly boost parental involvement in their children's education. These systems offer user-friendly interfaces that provide regular updates on children's academic progress and classroom activities.

- **Facilitating Inclusive Education**

There are learning software that adapt to various disability needs, and programmes which are designed to facilitate easier navigation of learning materials for physically challenged students. These tools help integrate students with special needs into regular classrooms and empower them by providing the means to participate fully in all educational activities. AI's ability to tailor learning experiences to fit various physical and cognitive abilities ensures that every child has the opportunity to achieve their educational potential (Anis, 2023). By leveraging AI technologies to tailor instruction, adaptive learning platforms can create more effective, engaging, and inclusive learning environments.

- **Addressing Educational Inequalities**

Warschaver and Matuchniak (2010) showed that new technologies and the digital world can be powerful tools for transforming learning and can be used in several ways to promote equality and justice in society by providing access to knowledge and improved communication to everyone, irrespective of their geographical location and socio-economic status.

## **AI Apps, Tools, and Resources for Children**

There are several examples of AI-powered websites/ resources that aid children's learning, a few of which are described below:

- **eCraft2Learn** is an AI resource which allows beginners to create AI programmes in Snap!, a visual programming environment similar to Scratch.
- **STEM Learning-** STEM learning resources include Machine Learning for Kids projects, supplemented with teaching notes, presentation materials, prompt cards, and practical "unplugged" activities
- **AI Family Challenge:** The AI Family Challenge is a free, hands-on AI education program for families. They use Machine Learning for Kids and supplement it with a lot of additional support, such as technical coaches and mentors, a structured lesson plan, and supporting videos. The programme is based around a competition that challenges children to think of their own AI project ideas with the support of their families and technical mentors.
- **Raspberry Pi-** The Raspberry Pi Foundation provides resources for Code Clubs, with step-by-step instructions for a variety of creative projects.
- **Google Experiments-** Simple online experiments to start exploring machine learning through pictures, drawings, language, and music.
- **ChatGPT-** ChatGPT helps students to find answers and inspiration and be more productive.
- **AI-in-a-Box-** AI-in-a-Box is a bundle of robots, accessories and teaching resources. The kit can be used to teach projects that cover topics like visual recognition, facial recognition, speech generation, and speech recognition.
- **Docebo:** This provides a variety of efficient and customized learning programmes with special features that permit learners to create audience-specific pages using drag-and-drop functionality. Docebo encourages customized learning experiences with virtual coaching, content suggestion, and auto-tagging, thereby encouraging personalized learning. These Learning Management Systems (LMS) offer gamification, and assignment of training depending on the required skills of the learners. It also helps learners to streamline non-formal learning and automates learning management.
- **Squirrel AI:** This is an adaptive learning platform that uses AI algorithms to personalize learning for each learner. It provides tailored recommendations and feedback to improve learners' understanding.
- **Edmodo:** Edmodo uses AI to provide learners with personalized learning experiences. It offers features such as quizzes, assignments, and collaborative tools to enhance student engagement and performance.
- **Brainy:** This is a community-driven assistant that can help learners ask and answer academic questions. It uses AI to match questions with relevant answers, helping them find solutions quickly and efficiently.

- **Cognii:** This is a virtual learning assistant that relies on conversational technology to assist learners from an open resource format. It is designed to provide instant feedback with written responses. It utilizes a Natural Language Processing algorithm to evaluate essays, giving personalized feedback and thereby improving learners' writing skills.
- **IBM Watson Education:** This assistant provides AI-powered solutions for classrooms. Its tools leverage AI to enhance individualized learning experiences, enhancing learning outcomes and optimizing teaching techniques. It provides virtual tutors and adaptive learning systems as analytic tools.

### Ways to Usher Children into the World of Artificial Intelligence

Several strategies engage children in realizing the countless applications of Artificial Intelligence in daily live activities, some of which are outlined below:

- **Include Hands-On Activities:** Make use of various interactive tools, software, and kits available that are designed to educate children on the basics of coding, robotics, programming, and other AI-related concepts. These resources give children a practical introduction to AI tools while also captivating their attention and igniting their curiosity.
- **Organize children's workshops and Camps:** Putting together workshops and camps specifically designed for younger learners. These events, which can either be in-person or online, focus on creating immersive experiences that encourage children to explore various AI concepts. Such programmes not only promote collaboration and teamwork but also foster a deeper understanding and appreciation of AI and other STEM-related subjects.
- **Find AI Examples in Everyday Life:** When introducing children to AI, it's important to clarify that it's not an abstract concept that does not affect them. Educators can help children realize how many times they interact with AI tools daily. How autonomous cars operate or how virtual assistants can answer any question asked. Helping children make these connections will increase their interest in AI and provide them with possible ways of expanding its capabilities.
- **Introduction to Coding:** Coding and programming can seem complicated to many, but they are essential skills for understanding AI. The sooner children are introduced to them, the easier it is for them to begin to understand coding and master the art. Numerous interactive platforms teach children coding by creating a child-friendly environment where they can explore and apply its fundamental principles. Children can use these platforms to experiment with the idea by giving machines specific instructions to complete tasks, such as building simple animations. Throughout these processes and assigned tasks, children push the boundaries of their imagination and hone their problem-solving skills.
- **Encourage Creativity:** The endless possibilities of AI make it a great tool with which children can expand their horizons and learn to think outside the box. So, after discussing the basic concepts and giving children a few initial instructions, the teacher must allow them to experiment with AI tools without limiting them. Art-related AI tools that produce music or poetry are perfect for this purpose. Additionally, educators should encourage questions and feed children's enthusiasm with age-appropriate resources that can be explored in their free time with or without the help of their parents. This way, the teacher can enhance children's understanding of AI and turn them into lifelong learners.

### Challenges/Potential dangers of AI for children

Though the integration of AI in education offers unprecedented opportunities, it is not devoid of challenges, a few of which are outlined below:

- **Data Privacy and Security:** As AI technology expands, it opens up many privacy concerns thereby putting the traditional norms of personal data protection to many challenges. The insatiable appetite of AI for extensive personal data to supply its machine learning algorithm has brought about serious concerns regarding data storage, usage, and access. These have raised questions regarding data sources, storage, and accessibility, which traditional data protection cannot provide answers to.
- **Algorithmic Bias:** The potential for bias and unfairness in AI algorithms is a critical concern. AI systems are trained on data, and if these datasets contain biases, the algorithms can perpetuate and even exacerbate existing disparities. Thus, AI can spread hate, bias, and stereotypes because it learns from data it finds on the internet.

- **Teacher Training and Support:** Implementing AI requires educators to understand and effectively use the technology, necessitating training and ongoing support. The importance of professional development programs that equip educators with the skills to leverage AI tools effectively, fostering a collaborative relationship between human teachers and AI systems to optimize learning outcomes is therefore very crucial.
- **Cost and Infrastructure:** AI-driven personalized learning platforms may require significant investment in technology and infrastructure, making accessibility challenging.
- It can flood children with negative messages. AI data is generated from the internet. Children's search history may make them the target of relentless advertisement campaigns and negative messages parents would prefer them not to see.
- AI can be used for bullying and fraud. Generative AI can be used to create false or distorted images of children or teenagers. For instance, Deepfake, fake nudes, and voice cloning apps can be used to shame, threaten, or attack children into taking actions they ordinarily would never consider, like giving private information or sending money.

### Summary and Conclusion

Since artificial intelligence is the way of the future, the best gift that government, parents, and teachers can give to children is ensuring that they know about AI technology from an early age. Integrating AI in early childhood education is paving the way for a future where learning is about experiencing and interacting with the world in novel ways. For educators, parents, and policymakers, embracing these technologies could be key to unlocking unprecedented opportunities that ensure young learners are not only consumers of information but are innovators and creators in their own right. By harnessing the power of AI, educators are on the cusp of nurturing a generation that is more knowledgeable, capable, and equipped to tackle future challenges.

### Suggestions

Based on the foregoing, the following suggestions are proffered:

- **Government should integrate AI for Professional Development:** Implement AI tools such as Teach FX to provide teachers with real-time feedback and insights on their teaching practices, helping them improve their instructional strategies and better cater to student needs.
- **Analyze Data for Personalized Interventions:** Teachers should leverage AI analytics to track and analyze student performance data, allowing educators to identify learning gaps and tailor interventions to address specific student needs.
- **Government and school owners should ensure and practice inclusive Education** By encouraging teachers to employ the use of AI tools to support students with diverse learning needs, such as those with disabilities or from underrepresented backgrounds, to provide equitable access to personalized learning resources and support.
- **Government and Early Childhood Association of Nigeria (ECAN) should enhance Teacher Professional Development** through training and retraining on the use of AI Tools in ECE: To integrate AI tools such as TeachFX to provide continuous feedback and professional development for educators, helping them refine their teaching strategies and better support personalized learning.
- **Teachers are to utilize AI tools for Efficient Assessment:** They should adopt AI-powered grading tools like Gradescope to automate and streamline the grading process, allowing teachers to focus more on instruction and personalized student support.
- **Teachers should adopt Adaptive Learning Technologies:** They can use AI-driven adaptive learning platforms like Brisk, Knewton, and DreamBox to customize educational content based on individual student performance, ensuring tailored support and challenges for each learner.

### References

- Anderson, J. R.; Corbett, A.T; Koedinger, K. R; and Pelletier, R. (2005). Cognitive Tutors: Lessons Learned. *The Journal of the Learning Sciences*. 4(2), 167-207
- Akgun, S. and Greenhow, C. (2021). Artificial intelligence in education: Addressing ethical challenges in K-12 settings. *AI and Ethics* <https://doi.org/10.1007/s00146-021-00096-7>.
- Anis, M. (2023). Leveraging Artificial Intelligence for Inclusive English Language Teaching: Strategies and

- Implications for Learner Diversity. *Journal of Multi-disciplinary Educational Research*, 12(6).
- Bahroun, Z., Anane, C., Ahmed, V., & Zacca, A. (2023). Transforming education: A Comprehensive review of generative artificial intelligence in educational settings through bibliometric and content analysis. *Sustainability*, 15(17), 12983.
- Blikstein, P., & Worsley, M. (2016). Multimodal Learning Analytics and Education Data Mining: Using Computational Technologies to Measure Complex Learning Tasks. *Journal of Learning Analytics*. 3(2), 220-238.
- Camesaria, M.; Rigueira-Diaz, X.; Janeiro, A.; Torres, J.; Prado, I. & Kreibel, D. (2023) Impact Of artificial intelligence on assessment methods in primary and secondary education: Systemic literature review. *Science Direct*. 2023; 28(2):93-103
- Chen, L.; Chen, P.; & Lin, Z. (2020). Artificial intelligence in education. A review. *Journal and Magazine*. 8:1-25. Available from: [https://doi.org/10.1016/j.jmag.2020.08.001](#)
- Conati, C., Barral, O., Putnam, V., & Rieger, L. (2021). Toward personalized XAI: A case study In intelligent tutoring systems. *Artificial intelligence*, 298, 103503.
- Helm, J. M; Swiergosz, A. M; Heather, H. S; Karnuta, J. M; Jonatha, L. S; Viktor, E. K, et al. (2020) Machine learning and artificial intelligence: Definition, application and future direction. *Current Reviews in Musculoskeletal Medicine*. DOI:10.1007/5/2178-020 09600-8
- Holmes, Wayne, Maya Bialik, and Charles Fadel (2023). "Artificial intelligence in education." pp. 621-653.
- Kaur, K., 2021. Role of artificial intelligence in education: Peninsula College Central Malaysia. *International Journal of Academic Research in Progressive Education and Development*, 10(2), pp. 1006–1016.
- Khonturaev, S. I. (2023). The Evolution of Artificial Intelligence: A Comprehensive Exploration For Higher Education. *Best Journal of Innovation in Science, Research and Development*, 2(11), 700-706.
- Mustafa, D. (2023). Smart Classrooms, Bright Minds: The Intersection of Education and Artificial Intelligence. *Journal Environmental Sciences and Technology*, 2(1), 150-158
- Rane, N., Choudhary, S., & Rane, J. (2023). Education 4.0 and 5.0: Integrating Artificial Intelligence (AI) for personalized and adaptive learning. Available at SSRN 4638365.
- Sarker, I.H., (2021). Machine learning: Algorithms, real-world applications, and research Directions. *SN Computer Science*, 2(3), p. 160. [https://doi.org/10.1007/978-98-98-98-98-9](#)
- Tapalova, O., & Zhiyenbayeva, N. (2022). Artificial Intelligence in Education: AIED for Personalised Learning Pathways. *Electronic Journal of e-Learning*, 20(5), 639-653.
- UNICEF (2022) AI for children/ Innocenti Global Office of Research and Foresight [https://www.unicef.org/research-and-foresight](#)
- UNESCO, (2019) Artificial Intelligence in Education: Challenges and Opportunities for Sustainable Development. 1-8
- Verma, N. (2023). How effective is AI in education? Ten case studies and examples, artificial intelligence research. Available from: [https://doi.org/10.1016/j.jmag.2023.08.001](#)
- Warschaver, M; & Matuchniak, T. (2010). New technology and digital worlds: Analyzing Evidence of equality in access, use, and outcomes. *Review of Research in Education*. 34 (1): 179-225. ISSN 0091-732. Available from: [https://doi.org/10.1016/j.jmag.2010.08.001](#)
- Zhang, K. and Aslan, A.B., 2021. AI technologies for education: Recent research & future Directions. *Computers and Education: Artificial Intelligence*, 2, p. 100025. [https://doi.org/10.1016/j.jmag.2021.100025](#)
- Zhang, S. & Chen, X. (2020) Applying artificial intelligence into early childhood math education: Lesson design and course effect. In: *IEEE International Conference on Teaching, Assessment and Learning for Engineering (TALE)*. pp. 635-638.



# **Influence of Parental Involvement on the Academic Achievement of Primary School Pupils in Basic Science in Lagos State**

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## **Abstract**

*This study investigated the influence of parental involvement on the academic achievement of Primary School Pupils in Basic Science in Lagos State. Three research questions and two hypotheses were formulated for this study; a descriptive survey research design was adopted in the study. Five (5) schools were selected using the simple random sampling techniques. From each selected primary school, twenty (20) pupils were selected randomly using simple random sampling technique. Therefore, the sample size is one hundred (100) pupils. A questionnaire containing 20 items was a major instrument used for data collection. The questionnaire was divided into two sections: A, and B. The method adopted in analyzing the data collected for this research work was Pearson's Product Moment Correlation coefficient analysis and three formulated hypotheses were tested at 0.05 level of significance.  $H_0$  revealed that significant relationship exists between the influence of the parent social economic class and academic achievement of primary school pupils in Basic science in Lagos State at a significance of  $r = .906$  and  $P < 0.5$ . and  $H_0$  indicated that significant relationship exists between the educational background of the parents and learning outcomes of primary school pupils in Basic science in Lagos State at a significance of  $r = .818$  and;  $p < .50$  and hypothesis and recommendations were made.*

**Keywords:** Academic attainment, Parental involvement, Basic Science, Parenting Style, Social Economic Class

## **Introduction**

Education is a process of developing individual's knowledge, information, beliefs, skills, attitudes, interests and abilities, so as to take such from the darkness of ignorance to the light of knowledge. Education is much more than an entry to the job market. The researcher observed that education is one of the key foundations to a nation's development, taking Nigeria for example, education has helped in the continuous shaping of our country into a better Nation not only economic wise but also through the moral attitude of educated individuals within the country. For an individual to become educated, the teacher is the key personnel who plays the important role to bring about transformation and is mainly responsible for implementation of the educational process at any stage. Durisic and Bunijevac (2017) opined that, parents' attitude towards education and learning outcome has a powerful impact on children's willingness to achieve. When parents show their interest and commitment to the success of their children, they will be more motivated to do their best. Durisic and Bunijevac (2017), further stated that responsibility for learning is an aspect of parenting that places emphasis on activities in their home and community that promote learning skills in the young child.

In Lagos State, there has been poor pupils' learning outcome in Basic Science in primary schools over the years and efforts are always undertaken to address the problem. Among the factors that are suspected associated with the pupils' learning outcome is lack of parental care and unfavorable home environments. Sequel, to the above the researcher deem it needful to undergo the research titled: the Influence of Parental involvement on the Academic Achievement of Primary School Pupils in Basic science in Lagos State.

Basic science education refers to teaching science by integrating multiple scientific fields in a unified manner rather than teaching them separately thus, basic science it see as the acquisition of knowledge and an approach to



the teaching of science in which the course is devised and presented in such a way that students gain the concept of the fundamental unity of science (NCCE,2020).

According to Ajewole (2016) this type of knowledge places the learner in a good position of being scientifically literate. Therefore integrated science is described as interdisciplinary subject which prepares the students for higher science discipline or career and most importantly the subject is intended to produce a course which:

- Is relevant to the pupils' needs and experiences.
- Stressed the fundamental unity of science.
- Provide adequate and solid foundation for subsequent specialist programme and
- Insert immediate environment cultural factors to science education.

In other words, basic science has been offered as a way to increase scientific literacy, understand the process of science, and increase interest in sciences, learner needs maintain flexibility and show the relationship of science to society.

However the Nigerian integrated science project emphasizing the learning process of science rather than acquisition of scientific knowledge in view of this, integrated science has been offered as a way to increase scientific literacy, understand the process of science, increase interest in science learner needs, maintain flexibility and show the relationship of science to society. According to Delphonsoet. *al.*, (2024) emphasized that a country cannot have a strong scientific and technology without a strong solid scientific foundation.

### Statement of the Problem

The pupils learning outcome is the result of what the pupils have been able to achieve or learn during a specific period of time either from parents, teachers or caregivers which has in one way or another contributing to the pupils development which can take different forms; personal, social, emotional, and physical. But as a result of poor parental perceptions on the academic achievement of primary pupils, there exist a poor academic performance of pupils during class assessment and examination which has resulted into a high rate of repetition in classroom.

Also, due to the poor type of parental style that is adopted by the parents, several pupils have been discouraged from going to school as a result of the negative impression they have been given by their parents or caregivers, some have drop out of school, while others are having difficulties progressing to the next class (educational background). It is as a result of this parenting background that there has been a poor academic achievement pupils due to their academic performance.

As long as there is inadequate monitoring of pupils academic achievement especially parents creating time to attend to the pupils academic needs definitely this in turn has enormously effect on the learning outcomes of pupils, because they have not been given proper attention and time to share their weaknesses. If more time is spent with the pupils, parents will get to understand their behaviour and know the weakness they are experiencing in their academic performance which in a way can help to improve pupils' learning outcomes in basic science.

### Purpose of the Study

The purpose is to examine the influence of parental involvement on the academic achievement of primary school pupils in Basic Science in Lagos State. Therefore, the specific objectives of this research are to:

- assess the influence of parents social economic class and academic achievement of primary school pupils in Basic science in Lagos State.
- evaluate the influence of the educational background of the parents and academic achievement of primary school pupils in Basic science in Lagos State.

### Research Questions

In the context of the above objectives, the following research questions were generated to guide the study;

- What is the influence of parental social economic class and academic achievement of primary school pupils in Basic science in Lagos State?
- What is the influence of the educational background of the parents and academic achievement of primary school pupils in Basic science in Lagos State?

### Research Hypotheses

**H<sub>0</sub>1:** There is no significant relationship between the influence of the parent social economic class and

academic achievement of primary school pupils in Basic science in Lagos State.

**H<sub>02</sub>:** There is no significant relationship between the educational background of the parents and academic achievement of primary school pupils in Basic science in Lagos State.

### Methodology

The study adopted a descriptive survey design on the influence of parental involvement on the academic achievement of primary school pupils in Basic science in Lagos State. Descriptive survey design was considered appropriate because it allows for collection of data from a group of people at the same time for the purpose of describing phenomena under study. The target population for this study consists of all pupils' in selected primary schools located in Lagos State. Five (5) schools were selected using the simple random sampling techniques. From each selected primary school, twenty (20) pupils were selected using simple random sampling technique. Therefore, the sample size is one hundred (100) pupils. The instruments used in this study for data collection was entitled- Academic Achievement on Basic Science Questionnaire (AABSQ), which was used to determine the influence of parental involvement on the academic achievement of primary school pupils in Basic science. The instrument was divided into two sections. The instrument was in a four-point rating scale of; Strongly Agree (SA) Agree (A) Disagree (D) Strongly Disagree (SD). The instrument was presented to the researcher's supervisor for face validity. This is important because it's a simple first step to measuring the overall validity of a test or technique, which is relatively intuitive, quick, and easy way to determine if there is a need for modification. The instrument was presented to the supervisor with the request that he reviews it to ensure it is relevant to the study. To ensure the reliability of the instrument, Cronbach Alpha test of reliability was used to determine the reliability of the instrument at 0.5 level of significant. The instrument was administered on face-to-face basis by the researchers. The respondents were briefed on the objectives of the study and assured that the information supplied was served for the research purpose only. They were allowed to fill out the instrument and return on the spot. The data collected was analysed using simple percentage, mean and standard coefficient deviation for descriptive analysis while statistics tool Pearson's Product Moment Correlation Coefficient (PPMC) was used to test the stated hypotheses through Statistical Package for Social Sciences (SPSS 23).

### Results and Discussion

#### Hypothesis one

**H<sub>01</sub>:** There is no significant difference between the influence of the parent social economic class and academic achievement of primary school pupils in Basic science in Lagos State.

**Table 1: Correlations of Significant difference between the influence of economic class and Academic Achievement**

Correlations			
		parental perceptions	Learning Outcomes
parental perception	Pearson Correlation	1	-.016
	Sig. (2tailed)		.906
	N	100	100
Learning Outcomes	Pearson Correlation	-.016	1
	Sig. (2tailed)	.906	
	N	100	100

## Results

There is no significant difference between the influence of the parent social economic class and academic achievement of primary school pupils in Basic science in Lagos State.

Results obtained from the analysis carried out on data collected on hypothesis one shows that significant relationship exists between the influence of the parent social economic class and learning outcomes of primary school pupils in Basic science in Lagos State at a significance of  $r = .906$  and  $P < 0.5$ . This is in agreement with Epstein (2001) who asserted that parents have their own perceptions regarding the degree to which they feel parental care due to their social status is important for their children's academic attainment. Aswani (1991) has argued that parental involvement is a function of a parent's beliefs about parental roles and responsibilities, a parent's sense that she or he can help her children succeed in school, and the opportunities for involvement provided by the school or teacher and the parent helping the child at home. Some of the previous studies done in the field of influence of parental involvement on academic performance of pre-school established that it is the role of parents to be initiators to their children. They are supposed to develop their learning outcome physically, cognitively and emotionally. This is in agreement with Kipkoech Tanui (2011) who reported that a large number of children who are having difficulties in their academic progress are not receiving adequate help at home. It appears that parent are not willing or are unavailable to devote much time to their children's academic performance and academic achievement. It is the duty of parents to spare much of their time to shoulder more responsibility towards their children's academic performance and learning, even if it just means to supervise homework. Muola (2010) summarize the activities that parents need to spare their children from home related activities that encourage children's academic performance and academic achievement. These activities include: parents working with children on their home works, Parents talking to children about school - related topics and parents sparing time to take their children on field trips. Therefore, the null hypothesis is therefore rejected.

**H<sub>02</sub>:** There is no significant difference between educational backgrounds of the parents on the academic achievement of Primary School Pupils in Lagos State.

Table 2: Correlations of Significant difference between educational background of the parents on the Academic Achievement			
Correlations			
		parenting style	Learning Outcomes
parenting style	Pearson Correlation	1	.047
	Sig. (2-tailed)		.818
	N	100	100
Learning Outcomes	Pearson Correlation	.047	1
	Sig. (2-tailed)	.818	
	N	100	100

## Discussion of Findings

Results obtained from the analysis carried out on data collected on hypothesis two shows that significant relationship exists between the educational background of the parents and academic achievement of primary school pupils in Basic science in Lagos State. at a significance of  $r = .818$  and;  $p < .50$ . This is in agreement with Delphonso(2004), who asserted that majority of the parents with low qualifications preferred their children to attend private. They look at it as a thing of a class and pride; hence they go all the way to strive in all possible means to send their children to private school. They concluded that since they were not given such quality educational background, they would like their children to obtain quality education. The quality of parenting can be determined based on their educational attainment and more essential than the quantity of time spent with the child. Hence the null hypothesis was therefore rejected.

## Conclusion

The study investigated the influence of parental involvement on the academic achievement of primary school pupils in Basic Science in Lagos State and three hypotheses were formulated and tested. Results obtained from the analysis carried out on data collected on hypothesis one shows that significant relationship exists between the influence of the parent social economic class and academic achievement of primary school pupils in Basic science in Lagos State. Results obtained from the analysis carried out on data collected on hypothesis two shows that significant relationship exists between the educational background of the parents and academic achievement of primary school pupils in Basic science in Lagos State.

Based on the findings of this study, it can be concluded that parents have their own perceptions regarding the degree to which they feel parental involvement is important for their children's academic attainment in Basic Science. Therefore, parents who believe in carrying out their parental roles and responsibilities effectively tend to improve the academic achievement of the primary school pupils in Lagos State and as such their children tends to have better academic performance thereby increasing the children's academic achievement compared to those whose parent perceptions are otherwise and do not carry out their role and responsibilities effectively.

## Recommendations

Based on the findings and conclusion of the study, the following recommendations were made:

- Parents should acquire adequate skills needed to improve their sense of perception in order to increase the academic achievement of primary school pupils in Lagos State.
- Parents should schedule more time for the development of their children's academic achievement.
- Parents should employ better parenting style that can foster the development of their pupil both physically, emotionally and mentally.
- Schools should organize parent meetings in order to encourage parents on how to increase their pupil's academic achievement.
- School management should create an effective communication system in order to keep in touch with parents and provide feedbacks on pupils' academic performance.

## References

- Ajewole, G.A. (2016). *History and Philosophy of Science and science technology*, Lagos Published by Piostcity.
- Aswani, J. (1991). Some of the Home Environment Factors that Influence Educational and Occupational Aspirations of Standard Eight Pupils. *Unpublished M.ED Thesis*. Kenyatta University.
- Delphonso, B.T, Osunloye, O.A, Sunday E. F. & Ajose, O. O. (2024). Quality Science And Technology Education as a Veritable tool for Eradication of Poverty in the face of gross National Unemployment. *LASU Educational Perspectives Faculty of Education Publication*, 12(1).
- Delphonso (2004), Parent Patronage of a Pragmatic Science Oriented UBE Scheme in Lagos Metropolis and their Choice of Primary School *MOCPED Journal of primary Science* 3(1), 87-99.
- Durisc & Bunijevac (2017). Parental Involvement as an Important factor for successful education *Varia C.E.P.S Journal* 7(3).

- Epstein, J. L. (2001). *School, Family, and Community Partnerships: Preparing Educators and Improving Schools*. Boulder, CO: Westview.
- Kipkoech T. (2011) Standard Newspaper, 24<sup>th</sup> August, 2011. [www.standardmedia.co.ke](http://www.standardmedia.co.ke). Published by the standard group Centre, Kenya.
- Muola, J. M. (2010). A study of the Relationship between academic achievement motivation and the home environment among standard eight pupils, *Educational Research and Reviews* Vol. 5 (5), 213-217.
- NCCE (2020). National Commission for College of Education 2020 Edition.
- Suminitino, B. (2017) Science Education Malaysia challenges in the 21<sup>st</sup> Century, *Journal Cakrah alappendidollan* vol. 3 pp 459 – 471.



## An Evaluation of School Resources in Pre-Primary Education: A Case Study of Badagry Local Government Education Authority of Lagos State

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### Abstract

*Education is the right of every child and must not be deprived for any reason. This assertion was made at the world Education summit. Early childhood care and Education therefore, has been discovered as foundation for learning throughout life and to promote holistic development in a child. The early life years of a child are very important for its later development, as the child grows his parents, peers and other members of the immediate environment influence his attitudes, habits and beliefs were also found in order to effectively and positively assist the child to develop properly, therefore there is need to truly knows and understand the child. This study evaluates the public pre-primary Education in Local Government Education Authority in Badagry. To find out whether or not the schools meet the guidelines as spelt out in the National minimum standard on Early Childhood Care and Education (ECCE) 2007. Four research questions were raised to guide the study. Descriptive survey research design was employed for the study, the samples design methods used comprises of 10 schools randomly selected from the LGEA in Badagry Local government Education. The instrument used was a checklist based on the content of the Environment model. Result of the finding revealed that the environment was not suitable for meaningful learning and instructional materials and facilities were inadequate. However, the teachers were qualified to teach the pupils. It was recommended that government should provide adequate toys, play materials and other instructional materials to meet the developmental needs of the children at this level of education.*

**Keywords:** School Resources, Pre-primary Education, Evaluation technique, Badagry LGEA.

### Introduction

Early Childhood Education is the foundation on which other forms of education are built i.e primary, secondary and tertiary education. As a foundation, it determines what the outlook of subsequent levels of education would be. Hence, it exposes the child to the outside world and trains the child to know their environment. Research evidences revealed that early childhood education has significant influence on all round development and the later life of a child (Agi &Ukoima 2018, Odiagbe 2015).

Early Childhood Education is a branch of education theory that relate to the teaching of children formally and informally from birth up to the age of eight years (National Association for the Education of Young Children 2018). It is described as an important period in a child's development. It refers to the development of a child's personality.

According to Oghogbo and Omonuwa (2017), the term early childhood education is often used to describe pre-school or baby/children programmes. They proceeded to say that psychologists and medical experts have since established that much of the first two years of life are spent in the creation of child's first sense of self or building of a first identity. It also refers to activities and experiences that are intended to effect developmental changes prior to their entry into primary school.

Elvis (2018), defined early childhood as the education given to children from birth through age six and focuses on the experiences of child in the age range. The early childhood years are more important than any other six years period in the life of human being in terms of the learning that occurs, the attitudes about learning and school that develop and the social skills that are acquired, to enables the individual to succeed in today's world.

Early childhood education according to Osanyin (2002), is synonymous to nursery, pre-school, pre-primary, kindergarten and so on. The early years are the formative period of a child's life when development is most

rapid. The justification for providing adequately for childhood years lies in the recognition and acceptance of the fact that early learning influences later learning.

Early Childhood Care and Education is an integrated holistic approach within a right perspective to ensure proper child care leading to the survival and maximum development and protection of the young child through child friendly, family focused and community based programme (UNICEF 1999). It has a global scope, and caring for and educating young children has always been an integral part of human societies.

Early childhood education often focuses on learning through play based on the research and philosophy of Jean Piaget which posits that play meets the physical, intellectual, emotional and social needs of (PILES) children. Children's curiosity and imagination naturally evoke learning when unfettered. Learning through play will allow developing cognitively (Early Childhood News 2016). This is the earliest form of collaboration among children. In this children learn through their interactions with others. Thus, children learn more efficiently and gain more knowledge through activities such as dramatic play, art and social games (Wunner Meinda 2009).

Learning resources are materials that can expedite learning through senses of hearing or seeing or both. They are anything that can be profitably employed to facilitate communication and learning.

The incessant increase and proliferation of pre-primary education in Nigeria society with high number of personnel as teaching and non teaching staff and some with adequate, not adequate, available and not available resources has become one of the major problems facing the early childhood education in Nigeria. The problem of resources in schools has been the focus of stakeholders in education. Under such condition, the caregivers/teachers have been finding it difficult to employ play way method and participatory learning method (PLM) which enhances positive learning skills and requires adequate resources such as toys, audio visual recorder, computer, books among others. This would discourage the use of conventional method which would not promote the development of the relevant skills.

Learning resources is likened to the working tools needed for specific learning skills. Learning and learning materials must be presented and used simultaneously. Learning is through the process of seeing, learning, listening, tasting and doing.

All these elements are so intricately interwoven and make learning become stimulating, natural and easy. Okonkwo (2022), quoted UNICEF (2009), observed that quality education is lacking in some primary schools in Nigeria. This is as a result of inadequate classroom, space, furniture, equipment, teaching, learning materials, inadequate water provision, inadequate health sanitation facilities and very limited community involvement in education.

Education for Early Childhood care and education started at the Jomtien World Conference on Education for All (March 1990). Affirmation was made at the conference that education begins at birth and that ECCE goes beyond pedagogy. They entails a lot more than educating the pre-school age child by also encompassing parenting and family life education.

In 2000, a world education forum was also held in Dakar Senegal. 164 countries including Nigeria pledged a global commitment to provide quality education for all children, youth and adult by 2015. Similarly, the first world conference on Early Childhood Care and Education took place in Moscow from 27-29 September 2010 jointly organized by UNESCO in the city of Moscow. The Federal Government of Nigeria through the Universal Basic Education Board act in the year 2009 gave directives to SUBEBS to establish the pre-primary schools in their respective states.

Evaluation as defined by Trava (1955) is a systematic process of determining what actual outcomes are but it also involves judgement of desirability of whatever outcomes are demonstrated to occur. Odiagbe (2015) quoted UNESCO ECCE unit (2002) asserted that evaluation involves assessing the strengths and weakness of programmes, policies, personnel products and organizations to improve their effectiveness. Generally, the purpose of evaluation is to provide information for decision makers, provide feedback to the relevant stakeholders in the education system i.e policy makers' curriculum developers and implementor, identify the potential problems in a programme for adequate modification and improvement and to provide comprehensive reports to funding agencies.

There are three major kinds of evaluation; these are formative, summative, and goal free evaluation that focuses on appraisal of quality that are still on course, summative evaluation which appraises the effect of a programme after some specific period of operation and Goal free evaluation that appraises both intended and unintended objectives of the programme. According to Smith (2006) when we evaluate we are saying that the process will

yield information regarding the worthiness, appropriateness, goodness, validity and legality of something for which a reliable measurement or assessment has been made.

Evaluation is one of the means or strategies to assess the effectiveness and efficiency of education. Therefore, the success of early childhood education in Nigeria school depends on the evaluation exercise carried out on the schools. Evaluation is therefore more demanding, it requires provision or valid information to justify effectiveness and suitability of a programme.

The need for adequate learning resources which pupils require to function to become active learners and to acquire relevant skills for their all round development is yet to be achieved in most of the Nigerian pre-primary schools. However, empirical evidence have shown that lack of these resources result to lack of quality education (UNICEF 2009, in Okonkwo 2022), since the formal integration of pre-primary education in public primary schools, most of the schools are still operating below the minimum standard as spelt out in the Federal Government National minimum standard on early child care centres ECCC of 2007 (Odiagbe2015).

This paper therefore focuses on the evaluation in terms of availability, adequacy, accessibility and usability in order to determine the strength and weakness of the public pre-primary schools in Badagry Local Government Education Authority based on the standard aspect out in the guidelines on ECCE.

### **Objectives of the study**

The purpose of this study is to evaluate the availability, accessibility, and utilization of school resources in pre-primary education in Badagry Local Government Education Authority. Specifically, the study sought to:

- assess the accessibility of school resources to pre-primary school pupils in Badagry Local Government Education Authority
- identify the types and quantity of school resources available in pre-primary schools in Badagry Local Government Education Authority.
- evaluate the utilization of school resources in promoting effective teaching and learning in pre-primary schools in Badagry Local Government Education Authority.
- provide recommendations for improving the availability, accessibility, and utilization of school resources in pre-primary education in Badagry Local Government Education Authority

### **Research Questions**

Four research questions were raised to guide the study

- Do the facilities and classroom furniture meet the standard set by Federal Government?
- Do the teachers qualifications meet the standard set by federal government?
- Does schools has the recommended curriculum for pre-primary programme?
- Do the instructional materials meet the standard recommended?

### **Methodology**

The research design employed for the study is survey type because some of the respondents were selected to represent the entire population. The population of this study consists of head teachers, teachers and pupils of the public primary schools with pre-primary education classes in Badagry Local Government Education Area of Lagos State. 10 schools were selected out of the public primary school in the Local Government Area using purposive random sampling techniques. The instrument used for the study was a checklist based on the content of the environment models as spelt out in the National Minimum Standard for ECCE in Nigeria (2007). It consists of Section A and B. in section A, the respondents were asked to fill their demographic data such as name of school, qualification and year of experience. While section B comprised of questions on organization of pre-school under the following sub-headings

- Classroom
- Play ground facilities
- Classroom furniture
- Teachers qualifications
- Availability of curriculum
- Instructional materials
- School records
- Teachers pupils ratio.

These eight headings were grouped under four research questions.

The method of data analysis for the study was descriptive statistics such as simple percentage and frequency counts. These were presented in a tabular form of three columns, the first column presented the observed environmental condition in the school and the third, the decisions on the availability whether the condition met the standard in the guideline or not.

### Research Question One

Do the facilities and classroom furniture meet the standard set by the federal? Government

**Table 1 showing play ground facilities and classroom furniture**

A well fenced & play ground	4 out of the 10 schools visited have no fence  7 schools have play ground while  3 did not	Not adequate	Not meet standard
Play ground grasses and installed with facilities such as  Swing  Slide  Sea-saw  Sand box	  None  None  None  None	Not available	Not available
Merry -go around  Beam	None  None	Not available	Not meet standard
Attract of hard surface for pushing along wheeled toys	None	Not available	Not meet standard
Facilities provided ensure safety of children	None	Not available	Not meet standard
Provision of chairs and tables suitable for children ages and carry no sharp edges	Most of the schools visited have long chairs and table but not adequate		
Large tables with drawers for teachers' use	All the schools have tables and chairs for teachers	Available	meet standard

### Result

The result of the study shows that the schools visited lack adequate facilities that will prepare the children for primary education. The walls of the classroom were not painted with attractive decoration and toys suitable for the pupils at this level.

## Research Question two

Does the school has the recommended curriculum for pre-primary education programme.

**Table II Showing Teachers Qualifications**

NCE is the least qualification recommended for preprimary education	All schools have qualified head teachers and teachers with at least national certificate of education	Meet standard
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## Result

The result is quite encouraging. It shows that the teachers in pre-primary education have the minimum qualification set by the Federal Government.

## Research Question Three

Does the school has the recommended curriculum for pre-primary education programme.

**Table III showing Availability of the Curriculum**

Have you seen a copy of ECCE curriculum	In all the school visited teachers have seen the copy of ECCE curriculum	Meet	Available
Do you have access to it	The teachers claimed to have access to it	Standard	Not accessible
Do you have a copy	They have no copy of it		

## Result

The result of the study on research question

III shows that the teachers have seen the copy of ECCE curriculum but have no copy. This is fair but when their inability to have copy of it is not impressive because curriculum that serve as road map or guide in education is very essential for teachers to have their copy.

## Research question four

Do the instructional materials meet the standard recommended by the federal government.

**Table IV Showing the Availability of instructional materials**

Picture roll	Not available	Do not meet standard
Toys	Not available	Do not meet standard
Television	Not available	Do not meet standard
Time book and visitor's book	Available	Do not meet standard

## Result

The result on the table above shows that the school lacked the instructional materials which are very essential for pupils at this level of education except time and visitor's book. This is not encouraging hence, the schools is yet to meet the standard set by the Federal Government.

## Discussion of Findings

The results indicate that since 2009 that Federal Government has joined other nation by establishing the ECCE in our existing primary Education in line with UBE Act of 2004. In terms of facilities and classroom furniture most schools in Badagry Local Government Education Area are yet to meet the standard. Though, the schools



have normal size of classroom but lacked good furnitures and well fascinating classroom environment suitable for pupils at this level of education. This corroborates the finding of Odiagbe (2015) the school room environment is far from being child friendly.

In all the sampled schools, the play facilities were not provided. This is not too encouraging because child's physical development is essential in pre-primary education. Similarly, picture roll, toys, television were not available in schools.

The result of the findings on research question II revealed that our public pre-primary schools have qualified teachers. This is also an expedient aspect of education because lack of skilled manpower would yield low quality. This is in line with Usman (2016) that they are the key factor that creates favourable teaching-learning nuclear and will make the instructional process easy, enthusiastically adapted and useful.

The result on research question IV shows that the sampled schools have copies of curriculum which the teachers claimed to have access to but do not have their personal copies. This is quite encouraging but government should endeavor to provide adequate copies for teachers because curriculum would always guide the teachers on what to teach, how to teach and when to teach and this will bring about an effective communication between teacher and learner.

On research question four (IV), it was discovered that the sampled schools lacked adequate instructional materials, no picture rolls, television and others. Verbal instruction without instructional materials would not yield good result because the popular chine thinker asserted that what I hear, I forget, what I see, I remember, what I do, I know.

Therefore, materials must be available for pupils to work with for better understanding. On a general note, the above findings revealed that the environment of pre-primary school in Badagry Local Government Education Area is not too attractive, suitable and fascinating or stimulating for the all round development of the pupils at this level of education, that is prepares the pupils for primary education. This implies that the government needs to brace up and double their commitment to this level of education in order to meet up with the set as stipulated by the universal basic education standard.

## **Conclusion**

In conclusion the availability of facilities, good classroom with play materials, playground with facilities such as slide, sea-saw, merry-go-round, instructional materials for learning among others, would enhance children's development and proximal learning. Therefore, the public pre-primary school requires government attention for improvement and this well in turn brings about good product in all its ramifications.

## **Recommendations**

- Government should give priority to education at this level, since it serves as the foundation on which other levels of education are built.
- Play way materials should be provided alongside a very good playground and other facilities as well as making provision for very conclusive learning environments as regards aesthetic and some other factors that will favour the learner's.
- The government should also look into the recruitment exercise and make sure that round peg is pushed in round hole by employing expert's professionals in the field of early childhood education.

## **References**

- Agi, W. C and Ukoima, N. R. (2018) Influence of Nursery Education on the Academic performance of primary school pupils in Rivers State: implementation for counselling international journal of education and evaluation ISSN 2489-0073 vol. 4 No 6 2018 [www.iardpub.org](http://www.iardpub.org)
- Early childhood news (2016) Article reading center <http://www.earlychildhoodness.com/early-childhood/articleview.aspx?articleID-591>) early childhoodness.com-retrieved 1 November 2016.
- Elvis, B. (2018) Overview of Early Childhood Education Retrieved 9/7/2018 from <http://edugist.org/overview-of-early-childhood-education/>.
- National Association for the Education of Young Children (2018) <http://www.naeyc.org/about.us>) About us Retrieved 12 July 2018.
- Odigbe, S. I. (2015). The National Minimum Standard on Early Child Care Centers ECCE in Nigeria and status

- of pre-primary education in Ujinnwode Local Government Area of Edo State American Journal of Educational Research 3.5 399 – 405.
- Oghogbo, G and Omonuwa, F. (2017). An assessment of the implement challenges and prospect of pre-primary education programmes in Nigeria.
- UNESCO (2006). EFA Global monitoring report 2007: Strong foundation-Early Childhood care and education ([http://unesdociunesco.org/images/0014/001477/147794e.pdf\(PDF\)](http://unesdociunesco.org/images/0014/001477/147794e.pdf(PDF).)). Paris UNESCO.
- Usman D. (2016). Why Teachers need Professional Development Daily Sun Newspaper.
- Okonkwo, S. (2022). Child Friendly School Environment and Social Relationship as a Correlate of Academic Achievement of Public Primary School Children in South East Nigeria, Academic Education.
- Wikipedia org (2021). <https://en.wikipedia.org/windex.php?title=Early childhood education and oldid= 1013547372>.
- Wunner, M. (2009). The serious need for play”( <http://www.Scientificamerian.com/article.ctm?id= the serious-need-for-play>) scientific American

# Enhancing Quality Early Childhood Education in Nigeria through Professional Development

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## Abstract

*Nations and international organizations around the world have put in place numerous measures to enhance the quality of early childhood education, a sector that is widely diverse both within and across countries. One of these measures has been providing in-service early childhood teachers opportunities to foster their learning and professional development. Presently in Nigeria, there is no national set of minimal qualifications for individuals working or serving as teachers of young children, whether this teaching takes place in child care in public or private care centres or schools. To enhance quality early childhood education in Nigeria, there is need for regular professional development. This paper focus on the need for professional development, features of effective professional development, approaches and principles of Professional development, Professional development needs of early childhood teachers and educators, and challenges facing early childhood teachers and educators' professional development. The paper recommends that early childhood education providers should organise regular professional development for their staff, and collaborate to promote good practices among their staff, early childhood teachers should endeavour to devote their resources to update their knowledge on current practices in early childhood education, while professional development of early childhood teachers and educators should be part of Ministry of Education quality assurance evaluation.*

**Keywords:** Quality. Early Childhood Teachers, Teacher Professional Development, Professional Development Needs, Collaboration.

## Introduction

The rich developmental growth that occur in early childhood makes providing young children with stimulating and developmentally appropriate early childhood education (ECE) environments an important target for promoting positive developmental trajectories. Evidence displaying the expansive developmental growth children experience in their first years of life has resulted in a large body of research examining pathways for augmenting and supporting beneficial child development. The richness of young children's growth increases the impact of supportive interventions, such as high-quality early childhood education (ECE), to facilitate optimal child development outcomes (Shonkoff, 2007). In nurturing dignified nations, the main pioneer is needed as the key successor in the education process itself (DiPaola & Walther-Thomas, 2003). In this case, teachers are considered as the main agent to guide the generation of a nation towards a better direction (Fullan, 2001). Besides, the success of an education system cannot be separated from the quality of the teachers themselves. In other words, the qualities of education process and outcomes are closely related to the qualities of teachers.

Teacher is a professional educator whose main duties include educating, teaching and counseling, guiding, training, appraising, and evaluating learners through formal education (Fullan, 2001). Teaching is a profession, and hence, a teacher is required to have academic qualification, competence, good physical and mental condition, as well as ability to achieve national education goals. Teachers' competences include pedagogical, personal, social, and professional competences acquired from professional education (Fullan, 2001). Certificate of educator is formal evidence serving as a declaration that a teacher is a professional worker (Sulistyaningrum Indrawati & Octoria, 2016). Stronge (2018) argued that the teachers' qualities should cover five specific characteristics of teacher responsibilities and behaviours as follows:

- (1) The teacher as a good personality representation
- (2) The teacher as a good classroom manager and organizer
- (3) The teacher as a good instructor
- (4) The teacher monitors students' progress and potential
- (5) The teacher possesses professionalism.

Besides, Goldberg (2003), mentioned that to be great teachers, certain qualities have to be possessed namely; willingness to put learning in the necessary time, love for the age group they teach effective classroom

management style, positive relationships with colleagues, consistent excellence, expert use of instructional methods, in-depth content knowledge, and steadiness for purpose of teaching personality.

These competencies have to be acquired by teachers updating their skills on a regular basis (Yong, Daud & Rahman, 2015). The teachers have to update their skills in classroom management, professional development (preparation of instructional documents), students' assessment skills, skills in pedagogy, skills in the human social dimension, and skills in professional ethics and morality. When teachers possess these kinds of skills and competencies through undergoing regular professional development programmes, their service delivery level will improve, resulting in improved performance of their pupils in the classroom (Padagas, 2019).

Teacher professional learning is of increasing interest as one way to support the increasingly complex skills pupils need to learn in preparation for the 21st century. Sophisticated forms of teaching are needed to develop student competencies such as deep mastery of challenging content, critical thinking, complex problem-solving, effective communication and collaboration, and self-direction. In turn, effective professional development (PD) is needed to help teachers learn and refine the pedagogies required to teach these skills (Darling-Hammond, Hyler & Gardner, 2017).

In recent years, nations and international organizations around the world have put in place numerous measures to enhance the quality of early childhood education (ECE), a sector that is widely diverse both within and across countries. One of these measures has been providing in-service early childhood education teachers with opportunities to foster their learning and professional development (PD). It is typically assumed that both formal (e.g., seminars, courses, programmes) and informal PD learning experiences (e.g., collaboration reflection, discussion groups) are relevant to promote the professional growth of these teachers, and in turn benefit the learning and development of children (Bautista & Ortega-Ruiz, 2015).

Ensuring that teachers enter the Early Childhood Education (ECE) field prepared to teach is one essential component for providing young children with effective educational experiences, but teacher training does not, and must not stop upon ECE preparation programme exit. Professional development represents an integral component to quality teaching, and offers teachers the opportunity to continually fine-tune and improve their teaching skills. Findings show that participation in specialized, intensive, multimodal PD improves teacher competency in the area of skill improvement targeted by the PD activity (Fukkink & Lont, 2007); Trost, 2006; Ingvarson, Meiers & Beavis, 2005).

For early childhood education programmes to achieve high quality, caregivers and teachers need professional development supports that enhance their actual effectiveness in the settings in which they practice. Understanding these needs shifts the debate from “should early childhood educators have a Bachelor of Arts/Science or not” to constructing and delivering at scale a set of proven-effective professional development supports that lead to improved outcomes for adults and children. With three quarters of children from birth to 5 years old spending more than 20 hours per week in an early education or care setting, it seems reasonable to focus on strengthening the skills of the many early childhood educators and caregivers who interact with them on a daily basis (Pianta, 2011).

Professional development plays a crucial role in the progression of educators as they strive to enhance their creativity and efficacy in their professional capacities. This platform provides educators with the chance to enhance their expertise, gain novel pedagogical techniques, and actively participate in cutting-edge methodologies (Nurhayati, 2024; Methlagl, 2022; Tjabolo & Ota, 2019). Educators can enhance their ability to remain adaptive in an ever evolving educational landscape by engaging in continuous professional development, which enables them to keep informed about current best practices. Professional development offers educators an opportunity to investigate and enhance their innovative instructional strategies (Rohman & Nurhayati, 2023; Musa, Nurhayati, Jabar, Sulaimawan & Fauziddin, 2022; Nurhayati, 2020).

Abidogun (2022) opined that the training and development of teachers are paramount in ensuring quality education for all. Teachers are not just purveyors of knowledge; they are mentors, guides, and role models who shape young minds into responsible citizens capable of contributing meaningfully to society and instilling values that will last a lifetime.

Effectively fostering development and learning in early childhood education and care settings requires precise and skillfully delivered blends of explicit instruction, sensitive and warm interactions, responsive feedback, and verbal engagement or stimulation intentionally directed to ensure children's learning while embedding these interactions in a setting that is not overly structured. Interaction that displays these features uniquely predicts



gains in young children's skills development and social competence all across the birth to 5 year period and closes gaps in performance at entry to school. To be effective, caregivers and educators of young children must intentionally and strategically weave instruction into activities that give children choices to explore and play, must engage them through multiple input channels, and should be embedded in natural settings that are comfortable and predictable. The best early childhood educators are opportunists—they know child development and exploit interests and interactions to promote it (Pianta, 2011).

Quality services for young children and their families are now aligned with the professionalization of staff in the early childhood education and care (ECEC) sector (Council of Australian Governments, 2009). Teacher professionalization is directly linked with the process of transforming an occupation into a profession, and the quality, autonomy and status of the job (Sockett, 1993), as cited in Nolan & Molla, 2019). To be able to successfully perform their roles, teachers need to be able to pursue what they value in their practice and 'make choices, take principled action and enact change. However, this is problematic due to the diversity of the ECEC workforce, and its ability to convert professionalization opportunities (physical, social and emotional resources) into achievements (Nolan & Molla, 2019).

It is not surprising that professional development programmes or initiatives vary in terms of the breadth of their goals. For example, some professional development programmes in early childhood focus on improving the observed quality of early childhood classrooms overall, whereas others aim to improve the stimulation children receive for development only in a specific domain, such as early language and literacy or early mathematics. There is evidence that professional development approaches with more specific and clearly articulated goals are more effective (Zaslow, 2014). Fukkink and Lont (2007), reviewed the evidence on professional development training approaches that focused on strengthening early educators' interaction skills

Fukkink and Lont (2007), review of meta-analysis examining effects of teacher participation in PD found that specialized trainings (that targeted specific teaching behaviours or practices) resulted in improved teacher pedagogical competency, attitude toward teaching, content knowledge, and skill when compared to participation in more generalized, broad brush trainings.

Collaborative teams also offer collegial support and knowledge sharing in an informal manner, as well as an opportunity for teacher reflection upon newly implemented practices or challenging classroom circumstances (Trost, 2006). Teachers who receive continued professional development support consistently report that the newly learned practices are more beneficial for meeting student needs, more easily integrated in current classroom practice, and find more satisfaction in using the materials, than teachers who receive the workshop training alone (Fukkink & Lont, 2007). Scholars have typically categorized PD under two broad types, namely formal and informal (Richter, Kunter, Klusmann, Lüdtke, & Baumert, 2011).

Formal PD, also referred to as 'traditional' by some scholars, tend to follow a specified curriculum. These are commonly delivered in structured learning environments by external PD providers, outside of the work place, and are often mandatory. Examples of these activities are structured seminars and workshops, graduate courses and programmes, or mandated staff development conferences and symposiums (Bautista, Cañadas, Brizuela, & Schliemann, 2015). Most formal PD utilizes face-to-face instruction, being therefore constrained to a specific time period and location, which inherently possess both temporal and geographic difficulties for teachers (Jones & Dexter, 2014).

Informal PD activities, in contrast, are generally teacher-led and work-embedded, which allows teachers to reflect on their teaching practices and to learn from their fellow colleagues (Borko, 2004). Unlike formal PD, informal PD activities can be planned or unplanned as well as structured or unstructured. In most cases, however, these activities do not follow a specified curriculum and are not constrained to specific learning environments or time periods (Jones & Dexter, 2014). Informal PD is commonly optional (not mandatory), emerging from teachers' own initiatives (Eraut, 2004). Examples of informal PD include collaborative activities (peer-observation, mentoring and coaching, teacher networks, professional learning communities, communities of practice, action research, study groups) as well as individual activities (reading books, browsing the internet, experimenting with new techniques in the classroom) (Lohman, 2009).

Moreover, there is too little agreement on the performance standards and metrics for those standards, and the preparation and supports that should align with performance standards are woefully out of synchrony. Child care providers and teachers play an essential role in fostering high-quality learning opportunities for young children, but children passing through early childhood education and care settings in the birth to 5-year period can expect



a stunning level of variation from year to year and setting to setting even the most basic qualifications of those providers (Pianta, 2011).

### **Features of an Effective Professional Development**

Teachers' professional development programme is considered to play an important role in enhancing teacher competencies. These are features of an effective professional development:

**Content Focused:** Professional Development that focuses on teaching strategies associated with specific curriculum content supports teacher learning within teachers' classroom contexts. This element includes an intentional focus on discipline-specific curriculum development and pedagogies in areas such as Mathematics, Science, or literacy (Darling-Hammond, Hyler & Gardner, 2017).

Professional learning that has shown an impact on student achievement is focused on the content that teachers teach. Content-focused PD generally treats discipline-specific curricula such as mathematics, science, or literacy. It is most often job embedded, meaning the PD is situated in teachers' classrooms with their students, as opposed to generic PD delivered externally or divorced from teachers' school or district contexts. This type of PD can provide teachers the opportunity to study their students' work, test out new curriculum with their students, or study a particular element of pedagogy or student learning in the content area (Antoniou & Kyriakides, 2013; Heller, Daehler, Wong, Shinohara & Miratrix, 2012; Penuel, Gallagher & Moorthy, 2011).

**Incorporates active learning:** Active learning engages teachers directly in designing and trying out teaching strategies, providing them an opportunity to engage in the same style of learning they are designing for their learners. Such PD uses authentic artifacts, interactive activities, and other strategies to provide deeply embedded, highly contextualized professional learning. This approach moves away from traditional learning models and environments that are lecture-based and have no direct connection to teachers' classrooms and students. The design of PD experiences must address how teachers learn, as well as what teachers teach (Darling-Hammond, Hyler & Gardner, 2017). Trotter (2006) outlines several theories of learning and adult development and identifies principles that are relevant for designing teacher PD.

- i. Early childhood educators come to learning with experiences that should be utilized as resources for new learning.
- ii. Early childhood educators should choose their learning opportunities based on interest and their own classroom experiences/needs.
- iii. Reflection and inquiry should be central to learning and development (Trotter, 2006).

**Uses models of effective practice:** The use of curricular models and modeling of instruction provide teachers with a clear vision of what best practices look like. Teachers may view models that include lesson plans, unit plans, sample student work, observations of peer teachers, and video or written cases of teaching. Professional development that utilizes models of effective practice has proven successful at promoting teacher learning and supporting student achievement. Curricular and instructional models help teachers to have a vision of practice on which to anchor their learning and growth. The various kinds of modeling can include:

- i. video or written cases of teaching,
- ii. demonstration lessons
- iii. unit or lesson plans,
- iv. observations of peers, and
- v. curriculum materials including sample assessments and pupils work samples

**Provides coaching and expert support:** Coaching and expert support involve the sharing of expertise about content and evidence-based practices, focused directly on teachers' individual needs.

**Offers feedback and reflection:** High-quality professional learning frequently provides built-in time for teachers to think about, receive input on, and make changes to their practice by facilitating reflection and soliciting feedback. Feedback and reflection both help teachers to thoughtfully move toward the expert visions of practice.

### **Approaches and principles of Professional Development**

Given the central role of teacher-child interactions in children's developmental and skill gains, one approach to professional development (Domitrovich et al., 2009; Mashburn et al., 2008; Raver et al., 2008) focuses on changing teachers' classroom behaviours. A variety of projects and models attempt to do this. Some focus on producing effective interactions across a wide range of developmental domains and activities (Pianta,

Mashburn, Downer, Hamre, & Justice, 2008), some focus on high-quality implementation of instruction and interactional support for literacy and language (Landry, Swank, Smith, Assel & Gunnewig, 2006; Neuman & Cunningham, 2009; Pianta, Mashburn, et al., 2008; Powell, Diamond, Burchinal, & Koehler, 2010), and still other models focus on Mathematics (Clements & Sarama, 2008; Ginsburg et al., 2005).

### **Professional Development needs of early childhood teachers and educators**

Below are some cardinal professional development needs and prerequisites.

**Setting training standards and strategies:** Institutionalizing standards and policies is the key to constant and up-to-date professional development. Setting up and governing standards for teachers, teaching methodology and quality can be a game changer in the teaching and learning culture. Strategies should enhance educational coordination between different entities and enable fitting teacher training into staff calendars and university budgets (Kraft & Papay, 2014).

**Curriculum review:** To adopt and implement the student-centered teaching approach, there is a need to transform from a traditional to a competence-based curriculum (Bergsmann *et. al.*, 2015). This process can improve professional development by improving communication and collaboration among the university community, decreasing teachers' frustration.

**Opportunities for teacher collaboration:** Collaborating with colleagues has been linked to increased teacher effectiveness and improved student performance (Kraft & Papay, 2014). Collaboration increases teachers' willingness to adopt innovations. Building up a collaborative team spirit will improve the working environment and provide a platform for peer-support and sharing.

**Digital competencies:** Digital learning and teaching are necessities in today's world. Teachers need constant support and opportunities to gain new competences in the digital era: how to use different digital tools, utilize learning with smartphones and social media, and how to accommodate the student-centered approach in these (Gikas & Grant, 2013; Cochrane & Bateman, 2010).

### **Challenges facing early childhood teachers and educators' professional development**

The followings identified challenges hindering early childhood teachers and educators' professional development.

**Limited knowledge of opportunities:** Teachers may not be aware of the professional development opportunities available within their working environment. Professional development is more than specific training programmes. It also includes peer classroom observation, coaching, discussions, networking and classroom-based action research.

**Difficult working conditions:** Insufficient remuneration, overcrowded classrooms, lack of materials, unsafe working environment and lack of respect are some of the reasons that demotivate teachers, subsequently decreasing their performance and willingness to develop.

**Lack of support:** The lack of teacher professionalism is often a reflection of the lack of professionalism in the education system. Hierarchical and rigid education systems demotivate teachers (Gemedda & Tynjälä, 2015). Worn-out teachers may resist attempts to enhance their professional abilities, especially when professional development does not result in improvements in classroom practices or career.

**Lack of teacher identity:** Many teachers become teachers, not by will, but by necessity, and may thus, lack professional identity or desire to strengthen that identity.

**Lack of confidence:** Teachers' believing in themselves is positively correlated with teacher performance (Akyeampong, 2003). Teachers with low confidence resulting from inadequate professional support get frustrated. This in turn undermines teacher-student relationships, the quality of teaching, and the notion of teaching as a desirable profession. Teachers may not engage in professional development if they think nothing will change.

**Poorly designed professional development:** Professional development opportunities are often episodic, lack qualified facilitators and learning strategies, reflect budget constraints and face logistical challenges (Darling-Hammond, 2000). Not surprisingly, this causes teachers to perceive development programmes as low quality and irrelevant, demotivating participation.

**Insufficient policies and budget for professional development:** The lack of robust policies and strategies leads to poorly organized training for teachers. This shows up as difficulties in timetabling, lack of harmonized schemes and insufficient budget (Darling-Hammond, 2000).

## Conclusion

It could be concluded that the roles of teacher's professional development cannot be overemphasized in early childhood education as such it should be part of school development programmes.

## Suggestions

Based on the conclusion, the following suggestions were made:

1. Early childhood education providers should organize regular professional development for their staff.
2. Early childhood teachers and educators should endeavor to devote their resources to updating their knowledge of current practices in early childhood education
3. Early childhood education providers should collaborate to promote good practices among their staff
4. Professional development of early childhood teachers and educators should be part of the Ministry of Education's quality assurance evaluation.

## References

- Abidogun, B. G. (2022). "Teachers' Training and Development: A Panacea for Quality Education." *Journal of Educational Excellence*, 13(2), 1-20. doi: 10.5897/JEE2022.0385.
- Antoniou, P., & Kyriakides, L. (2013). A dynamic integrated approach to teacher professional development: Impact and sustainability of the effects on improving teacher behavior and student outcomes. *Teaching and Teacher Education*, 29, 1–12;
- Bautista, A., Cañadas, M. C., Brizuela, M. B., & Schliemann, A. D. (2015). Examining how teachers use graphs to teach mathematics in a professional development programme. *Journal of Education and Training Studies*, 3(2), 91-106.
- Bergsmann, E., Schultes, M. T., Winter, P., Schober, B., & Spiel, C. (2015). Evaluation of competence-based teaching in higher education: From theory to practice. *Evaluation and Program Planning*, 52, 1–9. <https://doi.org/10.1016/j.evalprogplan.2015.03.001>
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3-15.
- Clements, D. H., & Sarama, J. (2008). Experimental evaluation of the effects of a research-based preschool mathematics curriculum. *American Educational Research Journal*, 45(2), 443–494
- Cochrane, T., & Bateman, R. (2010). Smartphones give you wings: Pedagogical affordances of mobile Web 2.0. *Australasian Journal of Educational Technology*, 26(1), 1–14. <https://doi.org/10.1016/j.aject.2010.01.001>
- Council of Australian Governments, (2009). Investing in the Early Years: A national early childhood development strategy. Canberra: Council of Australian Governments
- Damasio, A. (2010). *Self comes to mind: Constructing the conscious mind*. New York: Random House.
- Damasio, A. (2010). *Self comes to mind: Constructing the conscious mind*. New York: Random House.
- Darling-Hammond, L. (2000). Solving the Dilemmas of Teacher Supply, Demand, and Standards: How We Can Ensure a Competent, Caring, and Qualified Teacher for Every Child (p. 44). National Commission on Teaching & America's Future. <https://doi.org/10.1016/j.aject.2010.01.001>
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective Teacher Professional Development*. Palo Alto, CA: Learning Policy Institute.
- DiPaola, M. F., & Walther-Thomas, C. (2003). *Principals and Special Education: The Critical Role of School Leaders*. Routledge.
- Domitrovich, C. E., Gest, S. D., Gill, S., Bierman, K. L., Welsh, J. A., & Jones, D. J. (2009). Fostering high quality teaching with an enriched curriculum and professional development: Head Start REDI. *American Educational Research Journal*, 46, 567–597
- Eraut, M. (2004). Informal learning in the workplace. *Studies in Continuing Education*, 26(2), 247-273.
- Fukkink, R. G. & Lont, A. (2007). Early Childhood. *Research Quarterly*, 22:294-311.
- Fullan, M. (2001). *The New Meaning of Educational Change*. Routledge.
- Gemeda, F. T., & Tynjälä, P. (2015). Exploring Teachers' Motivation for Teaching and Professional Development in Ethiopia: Voices from the Field. *Journal of Studies in Education*, 5(2), 169–186. <https://doi.org/10.1016/j.aject.2010.01.001>
- Gikas, J., & Grant, M. M. (2013). Mobile computing devices in higher education: Student perspectives on learning with cellphones, smartphones & social media. *The Internet and Higher Education*, 19, 18–26. <https://doi.org/10.1016/j.aject.2010.01.001>

- Ginsburg, H., Kaplan, R., Cannon, J., Cordero, M., Eisenband, J., & Galanter, M., et al. (2005). Helping early childhood educators to teach mathematics. In M. Zaslow & I. Martinez-Beck (Eds.), *Critical issues in early childhood professional development* (pp. 171–202). Baltimore: Brookes.
- Goldberg, M. F. (2003). The Qualities of Great Teachers. Dalam M. Scherer, *Keeping Good Teachers* (hal. Chapter 26). VA: ASCD.
- Gopnik, A. (2009). *The philosophical baby: What children's minds tell us about truth, love, and the meaning of life*. New York: Farrar, Straus, & Giroux
- Heller, J. I., Daehler, K. R., Wong, N., Shinohara, M., & Miratrix, L. W. (2012). Differential effects of three professional development models on teacher knowledge and student achievement in elementary science. *Journal of Research in Science Teaching*, 49(3), 333–362;
- Howes, C., & Oldham, E. (2001). Processes in the formation of attachment relationships with alternative caregivers. In A. Goncu & E. Klein (Eds.), *Children in play, story and school*. New York: Greenwood
- Ingvarson L, Meiers M, & Beavis A. (2005). Factors affecting the impact of professional development programs on teachers' knowledge, practice, student outcomes, & efficacy. *Education Policy Analysis Archives*;13(10):1-26.
- Jones, W. J., & Dexter, S. (2014). How teachers learn: the roles of formal, informal, and independent learning. *Educational Technology Research & Development*, 62(3), 367- 384.
- 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. [https://doi.org/10.1080/01623762.2014.941111](#)
- Landry, S. H., Swank, P. R., Smith, K. E., Assel, M. A., & Gunnewig, S. B. (2006). Enhancing early literacy skills for preschool children: Bringing a professional development model to scale. *Journal of Learning Disabilities*, 39, 306–324
- Lohman, M. C. (2009). A survey of factors influencing the engagement of information technology professionals in informal learning activities. *Information Technology, Learning and Performance Journal*, 25(1), 43-63
- Mashburn, A. J., & Pianta, R. C. (2007). Opportunity in early education: Improving teacher-child interactions and child outcomes.:1-42.
- Mashburn, A. J., Pianta, R. C., Hamre, B. K., Downer, J. T., Barbarin, O., Bryant, D., & Burchinal, M. (2008). Measures of classroom quality in prekindergarten and children's development of academic, language, and social skills. *Child Development*, 79(3), 732–749
- Methlagl, M. (2022). Patterns of teacher collaboration, professional development and teaching practices: A multiple correspondence analysis of TALIS 2018. *International Journal of Educational Research Open*, 3, 100137. [https://doi.org/10.1016/j.ijeropen.2022.100137](#)
- Musa, S., Nurhayati, S., Jabar, R., Sulaimawan, D., & Fauziddin, M. (2022). Impact of professional development among early childhood educators. *Obsesi*, 6(5), 4239–4254.
- National Commission on Teaching and America's Workforce. (2016). *What matters now: A new compact for teaching and learning*. Arlington, VA: National Commission on Teaching and America's
- National Research Council & Institute of Medicine, (2000). *From neurons to neighborhoods: The science of early childhood development*. In J. P. Shonkoff & D. A. Phillips (Eds.), *Board on Children, Youth, and Families; Commission on Behavioral and Social Sciences and Education*. Washington, DC: National Academy Press, 2000.
- Neuman, S. B., & Cunningham, L. (2009). The impact of professional development and coaching on early language and literacy instructional practices. *American Educational Research Journal*, 46(2), 532–566.
- Nolan, A. & Molla, T. (2019) 'Supporting teacher professionalism through tailored professional learning. *London Review of Education*, 17 (2): 126–140. DOI [https://doi.org/10.1080/17513758.2019.1644441](#)
- Nurhayati, S. (2020). Improving teachers' entrepreneurship skills in the industry 4.0 through online business workshops. In *Teacher Education and Professional Development in Industry 4.0*. Taylor & Francis.
- Nurhayati, S. (2022). Strategies to improve teachers' competences in early childhood education. In Y. Suharyat (Ed.), *Professional development*. Media Sains Indonesia.
- Nurhayati, S. (2024). Digital literacy in adult continuing education: implementation, best practices, and emerging trends. In *Lifelong Education, Adult, and Continuing* (pp. 9–18)



- Ochshorn, S. (2011). Forging a new framework for professional development: A report on “The science of professional development in early childhood education: A national summit.” Washington, DC: ZERO TO THREE.
- Padagas, R. C. (2019). Pre-service teachers' competencies in a work-based learning environment. *African Educational Research Journal*, 7(3), 130–142. DOI: 10.30918/AERJ.73.18.076.
- Penuel, W. R., Gallagher, L. P., & Moorthy, S. (2011). Preparing teachers to design sequences of instruction in Earth systems science: A Comparison of three professional development programs. *American Educational Research Journal*, 48(4), 996–1025.
- Pianta, R. C. (2011). Individualized and Effective Professional Development Supports in Early Care and Education Settings. *Journal of ZERO TO THREE: National Center for Infants, Toddlers, and Families*. Volume 32 No. 1, Pp 4-9
- Pianta, R., Mashburn, A., Downer, J., Hamre, B., & Justice, L. (2008). Effects of web-mediated professional development resources on teacher-child interactions in pre-kindergarten classrooms. *Early Childhood Research Quarterly*, 23(4), 431–451.
- Powell, D. R., Diamond, K. E., Burchinal, M. R., & Koehler, M. J. (2010). Effects of an early literacy professional development intervention on head Start teachers and children. *Journal of Educational Psychology*, 102(2), 299–312
- Random House. Gebhard, B., Ochshorn, S., & Jones, L. (2010). Toward a brighter future for our youngest children: Building a strong infant-toddler workforce. Washington, DC: ZERO TO THREE.
- Raver, C. C., Jones, A. S., Li-Grining, C. P., Metzger, M., Smallwood, K., & Sardin, L. (2008). Improving preschool classroom processes: Preliminary findings from a randomized trial implemented in head Start settings. *Early Childhood Research Quarterly*, 23(1), 10–26.
- Richter, D., Kunter, M., Klusmann, U., Lüdtke, O., & Baumert, J. (2011). Professional development across the teaching career: Teachers' uptake of formal and informal learning opportunities. *Teaching and Teacher Education*, 27(1), 116-126
- Rogoff, B. (2003). The cultural nature of human development. New York: Oxford University Press
- Rohman, D., & Nurhayati, S. (2023). Collaborative Supervision Strategy Integrated with Sispna Application for Improving Early Childhood Institution's Accreditation. *Jurnal Inovasi Pendidikan Guru RaudhatulAthfal*, 11(2). <https://doi.org/10.21043/thufula.v11i2.22521>
- Sadowski M. (2006). Core knowledge for PK-3 teaching: Ten components of effective instruction; 5:1-9.
- Sheridan, S. M., Edwards, C. P., Marvin, C. A., & Knoche, L. L. (2009). Professional development in early childhood programs: Process issues and research needs. *Early Education and Development*, 20(3), 377-401.
- Shonkoff, J. P. (2007). The science of early childhood development.:1-13.
- Stronge, J. H. (2018). Qualities of Effective Teachers. ASCD
- SulistyaningrumIndrawati, C. D. Octoria, D. (2016). Continuous Professional Development to Improve the Teachers' Competencies. Proceeding The 2nd International Conference on Teacher Training and Education. *Sebelas Maret University* 656 Volume 2 Number 1 25002–4124
- Tjabolo, S. A., & Ota, L. G. (2019). The evaluation of islamic education teachers' performance. *Jurnal Pendidikan Islam*, 5(1), 25–38.
- Trost, C. (2006). Ready to teach? providing children with the teachers they deserve. :1-26.
- Trotter, Y. D. (2006). Adult learning theories: Impacting professional development programsme. *Delta Kappa Gamma Bulletin*, 72(2), 8
- Wagner, B. D., & French, L. (2010). Motivation, work satisfaction, and teacher change among early childhood teachers. *Journal of Research in Childhood Education*, 24(2), 152-171.
- Yong, M., Daud, K. & Rahman, A. (2015). Competence of Pre-service preschool teachers at Teacher Education Institute of Malaysia. *International Educative Research Foundation and Publisher*, 3(5), 46–57
- Zaslow, M. (2014). General Features of Effective Professional Development. Brookes Publishing.



Artificial Intelligence (AI) as Teaching Assistant for Effective Early Childhood Care Development  
Education Stimulations

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**Abstract**

*This study investigates the use of Artificial Intelligence (AI) as Teaching Assistant for Effective Early Childhood Care Development Education (ECCDE) in public ECCDE centres in Pankshin Local Government Area of Plateau State. The study was guided by 2 research questions, which explores caregivers' background knowledge on AI and the extent of AI tool utilization in the centres. Adopting a survey research design, data were collected from 15 caregivers using a structured questionnaire. Data collected were analyzed using mean scores to answer the research questions, with a threshold of 2.50 for acceptance. The findings revealed that caregivers have limited background knowledge on AI, with an overall mean of 2.03, signifying a need for significant improvement in their understanding and proficiency. The utilization of AI tools in teaching was also found to be inadequate, with a mean of 2.32. To address these challenges, comprehensive training programmes enhanced technological infrastructure, clear guidelines for AI integration, and incentive programmes be recommended to improve caregivers' knowledge and the effective use of AI tools, in Pankshin LGA.*

**Keywords:** Artificial Intelligence tools, Teaching Assistant, Stimulations, Education technology.

**Introduction**

Early Childhood Care Development Education (ECCDE) encompasses the educational experiences provided to children in the early years of their lives. This holistic approach is essential for supporting children's early cognitive, physical, social, and emotional development. Moreover, ECCDE introduces young children and organizes them outside the family context, aiming to cultivate the necessary skills for academic readiness and to prepare them for primary education (UNESCO, 2019). In Nigeria, the Federal Republic of Nigeria (FRN, 2013), in its National Policy on Education, defines ECCDE as the care, protection, stimulation, and learning promoted for children aged 0-4 years in crèches or nurseries. The objectives of ECCDE, as outlined in the National Policy on Education (FRN, 2013), include ensuring a smooth transition from home to school, preparing children for primary education, providing adequate care, supervision, and security for children while their parents are at work, inculcating social and moral norms and values, and fostering a spirit of inquiry and creativity through the exploration of nature, the environment, art, music, and the use of toys.

However, the realization of these ECCDE objectives relies heavily on the effective implementation of teaching strategies by caregivers. One promising strategy that has gained significant attention is the use of Artificial Intelligence (AI) as a teaching assistant. AI can transform teaching and learning, making them more engaging, enticing, and enjoyable in ECCDE centres. As AI technology becomes increasingly prevalent in society, there will be a growing demand for AI-literate caregivers. In light of this, as our society confronts major public policy issues related to AI technologies, it is crucial for informed citizens to understand the fundamentals of AI. To prepare children with competencies needed to navigate the rapidly transforming and tech-driven world, they

must be adequately educated to work with and utilize AI effectively (Touretzky *et. al.*, 2017).

Furthermore, AI has emerged as a transformative force across various sectors, offering innovative solutions to complex problems. In the field of education, AI holds the potential to revolutionize traditional teaching methods and streamline research processes. While the importance of AI development has primarily been emphasized in secondary and higher education (Su *et. al.*, 2022), there is a growing recognition of its potential at the kindergarten level. Notably, today's younger generation often interacts with advanced technologies, including robots and intelligent agents, having access to computing power that far exceeds that of personal computers from just a decade ago (Williams, Park, Oh, & Breazeal, 2019). Recently, there has been a surge in studies focused on early childhood AI education (Prentzas, 2013; Williams, Park, Oh, & Breazeal, 2019; Kewalramani *et. al.*, 2021; Su & Yang, 2022). For example, educators can teach children AI concepts using tools such as PopBots, knowledge-based systems, supervised machine learning, and generative AI (Williams, Park, Oh, & Breazeal, 2019).

Ultimately, AI holds significant potential in ECCDE, enhancing children's interest and retention in learning, thereby improving their academic performance. For instance, AI-powered tools can provide personalized learning experiences, adapt to individual learning paces, and offer interactive and engaging educational content. Additionally, AI can assist teachers with administrative tasks, allowing them to devote more time to direct interactions with children. By incorporating AI into ECCDE, we can support the holistic development of children through diverse and adaptive learning experiences. This integration can help meet the objectives outlined in the National Policy on Education by fostering an environment that nurtures creativity, inquiry, and social cooperation, ultimately preparing children for a successful transition into primary education.

### **Statement of the Problem**

Despite the significant potential of Artificial Intelligence (AI) to enhance teaching and learning, its application in Early Childhood Care Development Education (ECCDE) is still in its infancy, particularly in developing regions. The integration of AI in ECCDE can provide personalized learning experiences, foster engagement, and streamline administrative tasks. However, the adoption of AI in ECCDE centres faces several challenges, including lack of infrastructure, insufficient knowledge among caregivers, and limited access to technology. In Pankshin Local Government Area (LGA) of Plateau State, these challenges are particularly acute. ECCDE centres in this region often suffer from outdated teaching methods, inadequate learning materials, and a general lack of technological integration. Caregivers in Pankshin LGA typically lack the training and resources necessary to effectively incorporate AI tools into their teaching strategies. As a result, children in these centres may not receive the full benefits of a modern, engaging, and holistic early childhood education. There is a pressing need to assess the current state of AI integration in ECCDE centres in Pankshin LGA, identify the barriers to its effective use, and explore strategies for overcoming these obstacles. By focusing on the specific challenges faced in this region, this study aims to provide actionable insights and recommendations for leveraging AI to improve ECCDE instruction. Addressing these issues is crucial for enhancing the quality of early childhood education and ensuring that children in Pankshin LGA are well-prepared for their future academic endeavors.

### **Purpose of the Study**

The objective of this study is to assess the use of Artificial Intelligence (AI) as a Teaching Assistant for Effective Early Childhood Care Development Education Stimulations in public ECCDE centers in Pankshin Local Government Area of Plateau State. Specifically, the study aims to:

- assess caregivers background knowledge on use of AI as teaching assistant in ECCDE centres in Pankshin Local Government Area of Plateau State.
- assess the extent to which artificial intelligence-based tools are utilized for teaching in ECCDE centres in Pankshin Local Government Area of Plateau State.

### **Research Questions:**

Based on the study's objectives, the following research questions have been formulated:

- What is the level of caregivers' background knowledge on the use of AI as teaching assistant in ECCDE centres in Pankshin Local Government Area of Plateau State?

- To what extent are AI based tools utilized by caregivers in teaching at the ECCDE centres in Pankshin Local Government Area of Plateau State?

## Methodology

The research design employed in this study was a survey research design, aimed at gathering insights from teachers in public Early Childhood Care Development and Education (ECCDE) centres in Pankshin Local Government Area of Plateau State, Nigeria. The target population consists of 25 ECCDE centres in Pankshin Local Government Education Authority (LGEA). The sample size for this study comprised of 15 caregivers, selected using simple random sampling techniques from the selected 5 ECCDE centres across the study area. The researcher developed a twenty (20) item structured questionnaire titled "Caregivers Background Knowledge and Teaching Tools Utilization on Artificial Intelligence Questionnaire (CBKTTUAIQ)" to assess caregivers background knowledge on AI and tools utilized by teachers in ECCDE centres in Pankshin LGA. The instruments were validated using face and content validity by experts, in the Department of Early Childhood Care and Education, Measurement and Evaluation unit. Reliability test was conducted using Cronbach Alpha to ascertain the internal consistency of the instruments. Therefore, reliability index of 0.78 and 0.74 were obtained. A four-point rating scale of Strongly Agree, Agree, Disagree and Strongly Disagree rated as 4, 3, 2, and 1 respectively were used. The data were analyzed using Mean score to answer the research questions. The threshold of 2.50 was adopted.

## Results

**Research Question One:** What is the level of caregivers' background knowledge on the use of AI as teaching assistant in ECCDE centres in Pankshin Local Government Area of Plateau State?

**Table 1**

Caregivers' background knowledge on the use of AI as teaching assistant in ECCDE centres in Pankshin Local Government Area of Plateau State

S/N	Item	SA	A	D	SD	MEAN	DECISION
1.	I am familiar with the concept of Artificial Intelligence (AI).	4	3	5	3	2.5	Agreed
2.	I have heard about AI being used as a teaching assistant in ECCDE.	5	4	3	3	2.8	Agreed
3.	I have received formal training on AI tools for teaching.	2	2	4	7	1.8	Disagreed
4.	The training I received on AI tools for teaching was adequate.	1	2	6	6	1.6	Disagreed
5.	I understand the basic functions of AI tools used in ECCDE.	2	1	4	8	1.7	Disagreed
6.	I am confident in my ability to use AI tools for teaching	1	2	5	7	1.6	Disagreed
7.	I use AI-based tools in my teaching frequently.	0	1	3	11	1.2	Disagreed
8.	I am knowledgeable about different types of AI tools available for ECCDE	3	2	5	7	1.9	Disagreed
9.	Integrating AI tools in early childhood education is important.	6	4	3	2	3.1	Agreed
10.	I have used AI based tools in learning things	3	3	4	5	2.1	Disagreed
<b>Weighted average</b>						<b>2.03</b>	

Table 1 above reveals the assessment of caregivers' background knowledge on the use of AI as a teaching assistant in ECCDE centres in Pankshin Local Government Area of Plateau State. The results show that caregivers were familiar with the concept of AI (mean = 2.5) and recognize the importance of integrating AI tools in early childhood education (mean = 3.1), among others. However, aspects such as formal training on AI tools (1.8), the adequacy of training received (1.6), confidence in using AI tools (1.6), and the frequency of AI tool usage in teaching (1.2) are all below 2.50 and thus rejected. Consequently, the weighted average of 2.03, falling below 2.50, indicates that the overall level of caregivers' background knowledge on AI in these centres is inadequate and requires significant improvement.

**Research Question Two:** To what extent are AI based tools utilized by caregivers in teaching at the ECCDE centres in Pankshin Local Government Area of Plateau State?

**Table 2**

Utilization of AI based tools by caregivers in teaching at ECCDE centres in Pankshin Local Government Area of Plateau State

S/N	Item	SA	A	D	SD	MEAN	DECISION
1.	AI-based tools are regularly used for teaching practice at the ECCDE centre.	0	2	5	8	1.67	Disagreed
2.	I have access to a variety of AI -based tools for teaching.	1	2	5	7	1.87	Disagreed
3.	The use of AI -based tools has enhanced the learning experience for children.	7	4	2	2	3.07	Agreed
4.	Training on how to use AI -based tools is provided regularly at the ECCDE centre.	2	4	5	4	2.13	Disagreed
5.	The administration supports the integration of AI -based tools in teaching.	4	5	4	2	2.73	Agreed
6.	AI-based tools are easy to integrate into the existing curriculum.	3	4	3	5	2.20	Disagreed
7.	I feel comfortable using AI -based tools in my daily teaching activities	1	3	6	5	1.87	Disagreed
8.	AI-based tools can be used for personalized learning in the ECCDE centre.	6	4	2	3	2.87	Agreed
9.	The use of AI -based tools has improved the overall teaching quality at the ECCDE centre	5	6	3	1	3.00	Agreed
10.	There is a clear policy on the use of AI -based tools in the ECCDE centre.	2	1	5	7	1.80	Disagreed
	Weighted average					2.32	

Table 2 above reveals the extent to which AI-based tools are utilized by caregivers in teaching at the ECCDE centres in Pankshin Local Government Area of Plateau State. The results indicate that AI-based tools are not regularly used for teaching practice (mean = 1.67), caregivers do not have adequate access to a variety of AI-based tools (1.87), and regular training on AI tools is lacking (2.13), among others. However, certain positive aspects were noted, such as the enhancement of the learning experience for children (3.07), administrative support for the integration of AI tools (2.73), the potential for personalized learning (2.87), and the improvement in overall teaching quality (3.00). Despite these positive aspects, the overall weighted average of 2.32, which falls below the threshold of 2.50, suggests that the extent of AI-based tool utilization by caregivers in these centres is insufficient and requires significant enhancement.



## **Discussion of Findings**

The study indicates that caregivers' knowledge about AI and its tools is significantly lacking. Addressing this issue requires a multifaceted approach involving education, training, infrastructure enhancement, and institutional support. Encouraging a culture of innovation and providing the necessary resources can significantly contribute to integrating AI in ECCDE. Improving training programmes for caregivers and ensuring access to AI tools can enhance the overall quality of early childhood education, ensuring that children in Pankshin LGA receive a modern, engaging, and holistic education. Khan et al. (2023) emphasize the importance of improving training programs for caregivers and ensuring access to AI tools to enhance the overall quality of early childhood education, thereby ensuring that children in Pankshin LGA receive a modern, engaging, and holistic education.

Additionally, study reveals the extent of utilization of Artificial Intelligence (AI) as a Teaching Assistant for Effective Early Childhood Care Development Education (ECCDE) instruction among caregivers in Pankshin Local Government Area of Plateau State is very low. This insight highlights the current state of technology adoption in ECCDE, indicating a need for further exploration and strategies to enhance AI integration in ECCDE centres. These results align with previous studies by Thomas and Gambari (2021) and Tella (2022), who also reported low levels of AI tool utilization in teaching.

## **Conclusion**

The findings of the study reveal a shortfall in knowledge about AI and the utilization of AI tools among caregivers in Early Childhood Care Development Education (ECCDE) centres in Pankshin Local Government Area of Plateau State. This gap highlights a critical challenge in the adoption and effective integration of AI technologies within early childhood education settings. The study shows that while caregivers recognize the potential benefits of AI, such as enhancing learning experiences and improving teaching quality, practical application and familiarity with these tools are notably insufficient. To address these challenges, targeted interventions are necessary, including comprehensive training programmes, improved infrastructure, and stronger institutional support. Embracing AI tools can transform early childhood education by making teaching more engaging and adaptive. Moving forward, it is essential for stakeholders to foster a culture of innovation and invest in resources that will enable caregivers to effectively integrate AI into their teaching practices. Continued research and strategic initiatives will be vital to bridging the current gaps and optimizing the benefits of AI in ECCDE.

## **Recommendations**

Based on the findings of this study, the following recommendations are made to enhance caregivers' knowledge and the utilization of artificial intelligence (AI) tools in Early Childhood Care Development Education (ECCDE) centres in Pankshin Local Government Area of Plateau State:

- The government and educational authorities should organize comprehensive training programmes for ECCDE caregivers to improve their understanding and proficiency in using AI tools. These programmes should cover basic AI concepts, practical applications, and hands-on experience with various AI-based educational tools.
- Investments should be made in upgrading the technological infrastructure of ECCDE centres. This includes providing necessary hardware, software, and reliable internet connectivity to facilitate the effective use of AI tools in teaching and learning processes.
- Local and regional educational policymakers should develop clear guidelines and policies regarding the integration of AI tools in ECCDE centres. Supportive policies will help in setting standards for AI tool usage, ensuring that these technologies are effectively incorporated into the curriculum and teaching practices.
- Incentive programmes should be introduced to encourage ECCDE centres to adopt and utilize AI tools. This could include grants, awards, or recognition for centres that effectively implement AI-based tools in their teaching practices, thereby fostering a culture of innovation and commitment to technological advancement.
- Establish platforms for collaboration and knowledge sharing among ECCDE centres, technology providers, and educational researchers. Regular workshops, conferences, and online forums can



facilitate the exchange of best practices, experiences, and innovations related to AI tools in early childhood education.

## References

- Federal Republic of Nigeria (FRN). (2013). *National Policy on Education* (6th Edition). Nigerian Educational Research and Development Council (NERDC) Press.
- Kewalramani, S., Arnott, L., & Danby, S. (2021). Developing young children's AI literacies through play-based learning. *Learning, Media and Technology*, 46(4), 386-400.
- Khan, M., Riaz, S., & Ahmed, F. (2023). Challenges and policy recommendations for AI integration in early childhood education. *Journal of Digital and Social Sciences*, 10(4), 78-95.
- Prentzas, J. (2013). A framework for the adoption of artificial intelligence in K-12 education. *Journal of Educational Technology Systems*, 42(3), 325-339.
- Su, M.-H., & Yang, S. (2022). Teaching artificial intelligence to young children: A review of literature. *Journal of Research on Technology in Education*.
- Su, M.-H., Yang, S., & Chen, H. (2022). The role of artificial intelligence in promoting teaching effectiveness: A review. *Computers & Education: Artificial Intelligence*, 3, 100069.
- Thomas, M. A., & Gambari, I. A. (2021). Adoption of artificial intelligence in Nigerian educational institutions: Challenges and prospects. *African Journal of Educational Management*, 22(1), 23-36.
- Tella, A. (2022). The role of AI in transforming educational practices in Nigerian schools. *Journal of Educational Technology Development and Exchange*, 15(2), 101-115.
- Touretzky, D. S., Gardner-McCune, C., Martin, F., Seehorn, D., & Wolz, U. (2017). Envisioning AI for K-12: What should every child know about AI? *Proceedings of the 2017 AAAI Conference on Artificial Intelligence*.
- UNESCO. (2019). *Early childhood care and education: Global report*. United Nations Educational, Scientific, and Cultural Organization.
- Williams, R., Park, H. W., Oh, J., & Breazeal, C. (2019). PopBots: Designing an artificial intelligence curriculum for early childhood education. *Proceedings of the 18th ACM International Conference on Interaction Design and Children*, 79-90.

# Navigating Parental Engagement and Lower Basic School Success in Nigeria: Insights from Recent Research and Effective Practices

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## **Abstract**

*The role of parents in supporting their children's learning is fundamental in shaping not only the academic outcomes but also the overall development of basic school pupils. Thus, if it is not taken seriously or neglected, can have adverse consequences on children and their future. This research is aimed at advocating for sustained parental engagement for basic school pupils, as it has been revealed to be a treasure, a hidden driver and a key catalyst that shapes and directs children towards a balanced positive future. The study used an extensive literature search to elucidate the concept of parental engagement, explored the various facets of parental engagement, and analysed four theories that correlate with parental engagement, specifically attachment theory, ecological systems theory, social capital theory, and modelling theory. Further literature search was carried out to enunciate key factors of parental engagement and academic achievement which revealed that pupils who feel supported by their parents are more likely to develop positive relationships with peers and teachers, exhibit fewer behavioural problems, and demonstrate higher levels of self-esteem. The study concluded that parental engagement is a powerful driver of success in primary education, influencing not only academic outcomes but also the social and emotional development of pupils. Some recommendations were made including that schools should strive to establish and use multiple effective channels of communication between the school and parents, including digital platforms, to keep parents informed and engaged in their pupils' progress; the government should strengthen its backup plans and allocate more resources to lessen the impact of global crises on parental engagement and pupils' academic performance.*

**Key Words:** Academic outcomes, Attachment, Ecological, Lower basic school, Parental engagement

## **Introduction**

Basic education aims to equip pupils with fundamental life skills, including responsibility and an appreciation for diverse perspectives. However, the landscape of basic education has undergone significant changes due to various factors. Researchers have identified a wide range of influences on educational outcomes, including parental engagement, teacher effectiveness, teacher-student relationships, available resources, stress and stability, school climate, peer relationships, intrinsic motivation, intelligence, and cognitive and emotional factors (Hattie, 2009; World Bank, 2018; American Psychological Association, 2019). Among these, parental engagement stands out as a critical factor, especially in the context of the evolving role of parents in their children's education (Nakada *et. al.*, 2020).

Although often overlooked, the role of parents in supporting their pupils' learning is fundamental, shaping not

only academic outcomes but also the overall development of pupils in basic education. A study in the United Kingdom (UK) revealed that parental engagement became a cornerstone of primary pupils' academic success following a paradigm shift in educational approaches (Krishnan *et. al.*, 2020). This shift underscores the significant impact of parents who create a supportive and productive learning environment, challenging the traditional view that education occurs solely within the confines of the school.

Historically, parental involvement in education was often limited to attending meetings, conferences, and participating in extracurricular activities, which was considered sufficient for engagement (Avezova, 2023). This limited view suggested that further parental involvement in their pupils' schooling was unnecessary (Pardi *et al.*, 2020). However, the unpredictability and rapidly changing dynamics of the postmodern world have led to new educational theories, emphasising that a child's optimal development requires a sustained partnership between home and school (Pardi *et. al.*, 2020).

Research has shown that consistent and sustained parental engagement significantly influences the academic trajectory of basic school pupils (Hill & Tyson, 2009; Eccles & Harold, 2013). Parents are increasingly recognized not just as observers but as active participants in their children's education (Whalley & Chandler, 2017; Kent *et. al.*, 2022). For instance, studies indicate that primary school pupils in African nations like Nigeria and the UK benefit substantially from parental involvement in their education (Adewusia *et. al.*, 2024). Moreover, research and policy initiatives have highlighted that pupils' home environments, shaped by their health, happiness, and parental engagement, play a crucial role in their academic success (Van *et. al.*, 2020).

As more studies link parental engagement with educational success, many schools have begun to adapt their policies to reflect this understanding (Smith *et. al.*, 2021). This aligns with Whalley and Chandler's (2017) concept of parents as co-educators, transforming their children's learning into an interactive, collaborative experience.

Considering this evolving understanding, this discourse seeks to:

- Clarify the concept of parental engagement;
- Explore the various dimensions of parental engagement; and
- Analyse four theories that correlate with parental engagement.

### **The Concept of Parental Engagement**

Parental engagement refers to the active and meaningful involvement of parents in their children's education. This engagement extends beyond attending parent-teacher meetings; it includes helping with homework, participating in school events, maintaining regular communication with teachers, and creating a supportive learning environment at home (Epstein, 2011). The concept also involves setting expectations for academic performance and fostering a positive attitude towards education. Parental engagement, encompassing both involvement and participation, connects extracurricular activities and interests that traditional field trips often miss, demonstrating the multifaceted ways in which parents contribute to their children's schooling (Emerson *et. al.*, 2012; Goodall, 2021).

In primary schools, parental engagement typically involves a collaborative effort between parents and the school, both working towards the shared goal of the child's success. While some schools may encourage more active involvement from parents, the essence of parental engagement lies in this partnership, which often manifests as a healthy dialogue between the two parties (Hussain *et. al.*, 2021). Research by Dumay *et. al.*, (2014) shows that parental engagement in early schooling positively impacts academic performance. Gonzalez *et. al.*, (2018) further highlights that students whose parents place a high value on education tend to achieve better academic outcomes than those whose parents do not. The quality of parent-child interaction, especially when parents are actively involved in their children's education, is a significant factor in academic success (Hussain *et. al.*, 2021). Recognizing this, policy developers increasingly integrate parental engagement into educational policies to enhance student academic progress (Bunijevac, 2017).

Epstein (2024) defines and quantifies parental engagement as the positive attitudes parents hold towards their children's education and the activities they engage in, both at home and in the classroom. Multiple studies have explored the different effects of these attitudes and activities. For instance, Utami (2022) found that parental involvement in schoolwork, extracurricular activities, and communication with teachers is linked to improved academic performance. Additionally, Guzikova and Mendelova (2022) observed that parents' attitudes toward their children's academic success are influenced by their level of education and the value they place on education.

within the family, with a higher correlation seen in families with higher socioeconomic status. However, Bodur and Aktan (2021) and Chen *et. al.*, (2023) note that there is still limited understanding of how parents' values towards their children's education impact academic outcomes. This suggests that parental values, socioeconomic status, and education level are important factors that contribute to a child's academic success.

Gonzalez *et. al.*, (2018) underscore the importance of further research into parental engagement activities and other parenting behaviours that influence children's learning and academic performance. This research could inform the development of programmes aimed at supporting children's academic success. Although Hill and Craft (2003) point out that the precise relationship between parental engagement and a child's academic outcome remains unclear, gaining a deeper understanding of these mechanisms could lead to more effective intervention programmes that improve student performance. The forgoing discourse suggests that parental engagement is a critical factor in achieving positive academic outcomes, fostering social engagement, and supporting overall child development.

### **Facets of Parental Engagement**

Parental engagement in primary education encompasses a variety of activities that extend beyond traditional roles and involvement (Emerson *et. al.*, 2012; Abella *et. al.*, 2024). One key facet is effective communication between parents and teachers, which aims to bridge the gap between school and home. According to Tan *et. al.*, (2020), this communication is crucial for breaking down barriers and fostering a collaborative relationship. Kincade (2020) emphasises that when parents and teachers share information about a pupil's strengths and areas for improvement, it builds a strong partnership that keeps parents informed and involved in their pupil's education.

Another important aspect of parental engagement is homework assistance. Froiland (2021) describes this as a direct contribution to a child's learning experience. This facet involves not only helping pupils complete their assignments but also creating a supportive classroom-like environment at home (Froiland, 2021). Parents who assist their primary pupils with homework typically exhibit a positive attitude toward learning and a commitment to their pupils' academic success (Yahaya, 2020). However, Anwar *et. al.*, (2022) challenge this as overloaded homework and insufficient support from schools can hinder effective parental involvement.

Active participation in extracurricular activities is another significant facet of parental engagement. Oh and Pomerantz (2022) highlight how parents' involvement in activities such as sports events, parent-teacher conferences, and school-related gatherings demonstrates their understanding of the importance of holistic education. These activities positively influence children's development during their early years in school (Otani, 2020). Additionally, parents' participation in school decision-making processes by offering insights and feedback can provide valuable support and resources to schools (Kubin, 2021; Tamboto *et. al.*, 2024; Kong & Yasmin, 2022). However, Oh and Pomerantz (2022) caution that parent-teacher conferences often focus more on academic performance than on discussing parents' roles in their children's education, which can affect the level of parental engagement.

Another facet of parental engagement involves creating an optimal learning environment at home tailored to a child's unique educational needs. Piliyes *et. al.*, (2020) emphasize that personalizing the learning atmosphere helps acknowledge each child's unique learning style (Dutsinma *et. al.*, 2018). However, Sujarwo *et. al.*, (2020) note that socioeconomic status can impact a parent's ability to provide such an environment.

The advent of technology has also introduced new facets of parental engagement. Digital communication methods, such as email and online platforms, have enhanced the way parents, students, and teachers communicate about school events (Ewin *et. al.*, 2021). Bendig *et. al.*, (2020) highlight that technology allows parents to engage with school activities remotely, overcoming geographical and time constraints. These virtual mediums have enabled schools to interact with parents in innovative and inclusive ways, further broadening the scope of parental engagement (Ewin *et. al.*, 2021). Collectively, these various facets of parental engagement illustrate how parents contribute to their children's academic success through diverse means, leveraging their individual strengths and resources. Each facet plays a vital role in ensuring that children receive the support they need to thrive in their educational journey.

### **Correlating Theories of Parental Engagement**

Several theories offer insights into the mechanisms and reasons behind parental engagement in children's lives



(Lawrence & Fakuade, 2021). Such theories include attachment theory, ecological systems theory, social capital theory, and modelling theory. Together they provide a comprehensive understanding of how and why parents are involved in their children's primary education (Tan *et.al.*, 2020). This research explores three of these theories: ecological systems theory, modelling theory, and attachment theory,

### Ecological Systems Theory

Urie Bronfenbrenner's ecological systems theory presents a nuanced view of human development by recognising the multiple layers of influence that shape a person's growth (Hayes *et. al.*, 2022). The theory emphasises the importance of the relationships between children and their immediate environments, particularly how these interactions impact their development during the early years of school (Guy-Evans, 2020). According to Gao *et. al.*, (2023), the microsystems within this theory, such as the family and school environments, form the foundation of a child's sense of value. Kitson *et. al.*, (2022) further note that these microsystems can be used to understand a child's initial engagement with their surroundings and how this engagement influences their development. As part of the family microsystem, parents play a direct role in shaping their child's development through various forms of engagement (Faraz & Ahmed, 2021). This includes creating a supportive home environment that fosters learning (Piliyesiet. *al.*, 2020). Granlund and Roll-Pettersson (2001) add that teachers, who are integral to the school microsystem, also have a significant influence on a child's daily experiences.

Beyond the microsystem, the mesosystem in Bronfenbrenner's theory describes the interactions among different microsystems, such as the family and school. Daradkeh (2023) explains that the mesosystem captures how parental engagement is facilitated through these interactions (Hogberg *et. al.*, 2020). When parents and teachers maintain strong communication and collaboration, it creates an optimal environment for the child's development (Otani, 2020).

Ecological systems theory highlights the complex and interconnected factors that influence parental engagement. By recognising the roles of different systems - from the immediate family to broader cultural contexts - this theory provides a comprehensive framework for understanding how parents contribute to their child's educational journey. This theory underscores the importance of understanding the dynamic and evolving nature of these environments, particularly in the context of technological advancements. Nobre (2020) argues that parents who adapt to these changing environments can significantly enhance their engagement in their child's education. Thus, effective collaboration between parents, schools, and policymakers, as suggested by Martinello (2020), can greatly improve the outcomes of this engagement. This diagram visually represents the various components of Bronfenbrenner's ecological systems theory.

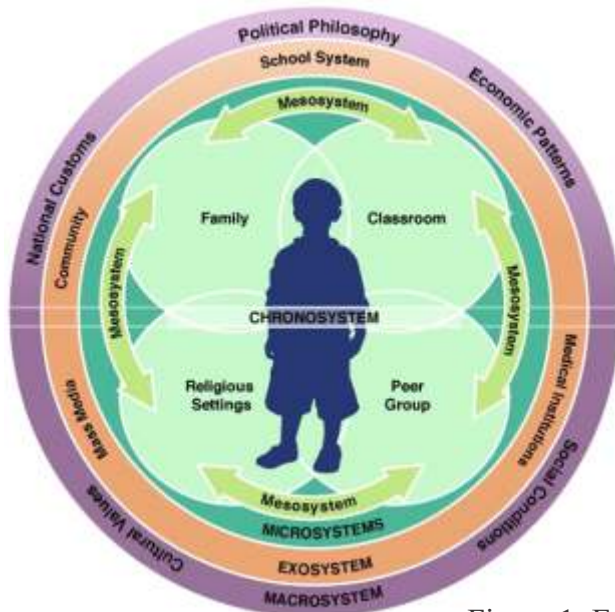


Figure 1: Ecological systems theory

Source: [M03: WRAP-Up: Making Access Happen \(ctejhu.org\)](https://www.ctejhu.org/)



### Modelling Theory in Parental Engagement

Modelling Theory, rooted in social learning principles, provides a valuable framework for understanding the dynamics of parental engagement and its impact on children's development (Bandura, 2021). Central to this theory is the idea that children learn by observing and imitating the behaviours, attitudes, and beliefs of significant adults, particularly their parents (Hoover-Dempsey & Sandler, 1995). According to Bandura (2021), parents serve as primary role models, shaping how children perceive and approach various aspects of life, including education. When parents exhibit enthusiasm for learning, demonstrate a strong work ethic, and value education, their children are more likely to develop a lifelong love of learning and adopt similar attitudes toward their own education (Galanaki&Malafantis, 2022). This modelling of problem-solving strategies, work habits, and socio-emotional skills profoundly influences children's own approaches to challenges, social interactions, and ethical development (Bandura, 2021).

In practice, Modelling Theory highlights the importance of parental involvement in schools. Parents who actively engage, show interest, and model resilience during challenges help foster positive attitudes towards learning in their children (Bandura, 2021). Furthermore, the theory emphasizes that the interactions between parents and children are reciprocal; parents are also influenced by their children's responses and actions. This dynamic reinforces the idea that parental engagement not only aids in academic success but also contributes to the overall personal and social development of children (Galanaki&Malafantis, 2022). By acknowledging the profound influence parents have as role models, Modelling Theory underscores the broader role of parental engagement. This role extends beyond academics to include the cultivation of values, principles, and habits that prepare children to thrive in a complex and evolving world (Hoover-Dempsey & Sandler, 1995).

### Attachment Theory

John Bowlby's Attachment Theory explores the crucial role of early emotional bonds and their long-term effects on development (Jarvis *et. al.*, 2022). The theory posits that an individual's social and emotional growth is profoundly influenced by early interactions with caregivers, emphasizing the evolutionary significance of these bonds for survival and well-being (Lockyer, 2022; Walsh *et. al.*, 2023). Attachment Theory identifies four primary attachment styles, each linked to different patterns of parental engagement:

- **Secure Attachment:** This style emerges from consistent and responsive caregiving, which fosters a foundation of trust and security (Girmeet. *al.*, 2020). According to Bretherton (2014), parents who are reliably supportive and provide guidance contribute to their children's academic motivation and success.
- **Insecure-Avoidant Attachment:** Characterized by a lack of responsiveness from parents, this style results in emotional independence and a diminished ability to view parents as role models (Jarvis *et. al.*, 2022). Bretherton (2014) notes that such disengagement can negatively impact a child's perception of parental support and involvement in their education.
- **Anxious-Preoccupied Attachment:** This style is marked by over-involvement and excessive concern from parents regarding their child's performance, often leading to a controlling approach (Odenweller *et. al.*, 2014). While intended to support, this can hinder a child's autonomy and foster resistance, which may affect the effectiveness of parental engagement (Odenweller *et. al.*, 2014).
- **Disorganized Attachment:** Resulting from inconsistent and unpredictable parenting, this style is characterized by confusion and uncertainty in the child's relationships (Bretherton, 2014). Parents with this attachment style struggle to respond coherently to their child's needs, impacting the child's ability to form stable and trusting relationships (Jarvis *et. al.*, 2022).

The attachment Theory underscores the significance of early relationships in shaping a child's future interactions and educational experiences. The attachment style formed in childhood influences how individuals relate to others throughout their lives, including their ability to engage in educational settings (Jarvis *et. al.*, 2022).

According to O'Connor *et. al.*, (2020), Attachment Theory serves as a fundamental concept that links humanity's complex web of relationships. The influence of early positive emotional interactions extends profoundly across all stages of human development, from infancy to adult interpersonal relationships (Jarvis *et. al.*, 2022).

Below graphic illustrates these attachment styles and their implications for parental engagement.



Figure 3: Attachment Theory

Source: The Most Basic Concept of Attachment Theory

Exploring these three theories - Ecological Systems Theory, Modelling Theory, and Attachment Theory - reveals their diverse impacts on parental engagement in children's education. These theories highlight the various dimensions and degrees of influence that affect parental involvement, demonstrating their crucial role in shaping educational outcomes. Understanding these theories' nuances is essential for comprehending how they contribute to or detract from effective parental engagement and, consequently, students' success.

### Key Factors of Parental Engagement and Academic Achievement

Research consistently underscores the significant role of parental engagement in predicting academic success. Active involvement by parents typically leads to better academic performance, higher motivation, and improved study habits among children (Henderson & Mapp, 2002). For example, Fan and Chen (2001) demonstrated a strong positive relationship between parental involvement and students' academic achievement across different grade levels, a connection that persists irrespective of socioeconomic status, highlighting that the benefits of parental engagement extend beyond economic constraints.

In Nigeria, key factors influencing parental engagement in education include parents' socio-economic status, education level, and familiarity with technology (Owolaye-Abdulganiyu & Olokooba, 2024; Eden *et al.*, 2024). Open communication between home and school is crucial, as emphasized by Anierobi and Unachukwu (2020) and Adimora, Onyishi, and Ucheaga, (2019). Evidence suggests that students perform better academically when their parents participate in extracurricular activities and maintain regular communication with teachers (Anierobi & Unachukwu (2020). Nudging interventions, such as sending text message reminders, have proven effective in encouraging parents to set goals for their children, leading to increased engagement and improved academic outcomes (Owolaye-Abdulganiyu & Olokooba, 2024; Eden *et al.*, 2024).

Support networks for parents and schools' commitment to inclusive education also play a vital role (Brydges & Mkandawire, 2020; Eze *et al.*, 2021). Inclusive education ensures that a diverse range of students, including those with special needs, have access to quality educational opportunities. The quality of the home environment – encompassing resources, guidance, and support – is a critical factor affecting academic achievement (Eze *et al.*, 2021).

The COVID-19 pandemic highlighted the challenges of parental disengagement and its adverse effects on

students' learning (Bubb & Jones, 2020; Azubuike *et. al.*, 2021). Disruptions in school routines underscored the need for continued access to educational resources like the internet and ICT gadgets. Addressing these challenges requires collaboration among the community, schools, parents, and government to support students' learning and well-being during crises (Eze *et. al.*, 2021). Beyond academic achievement, parental engagement significantly impacts children's social and emotional development. Engaged parents foster a sense of security and self-worth in their children, which contributes to positive peer and teacher relationships, fewer behavioural issues, and higher self-esteem (Hill & Tyson, 2009). This comprehensive development is essential for success both in school and in life.

## Conclusion

Parental engagement is a crucial driver of success in primary education, shaping not just academic outcomes but also the social and emotional growth of children. To unlock the full potential of students and set them on a path to lifelong success, schools must actively engage and empower parents as key partners in education. This study indicates that socio-economic factors significantly hinder parental participation in Nigeria, resulting in poor learning outcomes. Parents with higher education levels or even basic subject knowledge tend to be more involved, assisting with homework and ensuring their children understand classroom concepts. However, not all families have equal access to the necessary tools, such as educational resources and digital literacy, to support their children's success. Given the growing evidence of the impact of parental engagement, educators, policymakers, and communities must unite to support and equip parents. Lasting academic improvements hinge on strong school-family partnerships that amplify parents' voices in their children's education.

## Suggestions

From the foregoing, it is expedient to note that schools must collaborate with government to close socio-economic gaps and ensure that all families engage effectively in their children's education. To this end, the following recommendations were made:

- Schools should ensure the establishment of diverse, effective communication channels between parents and the school like phone messaging, Whatsapp group messaging, and other digital platforms. This will help to keep parents informed, engaged, and feeling a sense of ownership over their children's progress.
- Government, the school and other non-government organisations should learn to offer some targeted support programmes, particularly during crises like COVID-19, to enhance families' proficiency in using digital tools and resources, thereby reducing disparities in parental engagement.
- The school should develop and offer training programmes annually for new educators and parents on effective communication strategies to foster collaboration, which is essential to help them be effectively engaged and can boost their pupils' achievement.
- The school and parents' representatives should actively encourage parental involvement through flexible meeting times and workshops that educate parents on supporting their children's learning, and creating a school environment that values and incorporates parental input.
- The government and other non-governmental organisations should work towards strengthening government backup plans and allocating resources to mitigate the impact of global crises on parental engagement and student outcomes, thereby ensuring that educational disruptions are minimised.

## References

- Adewusia, O.E., Al Hamadb, N.M., Adeleke, I.J., Nwankwod, U.C. & Nwokochoe, G.C., (2024). A comparative review of early childhood education policies in Nigeria and the UK. *Education, Sustainability & Society (ESS)*, 7(1), 01-11.
- Adimora, D.E., Onyishi, C.N., & Ucheaga, N.H. (2019). Parental Involvement as a Correlate of Academic Self-Efficacy of Secondary School Students. *International Journal of Secondary Education*, 7(3), 69-76.
- American Psychological Association. (2019). *The Achievement Gap: Social, Emotional, and Cognitive Factors in Closing the Gap*. Washington, DC: American Psychological Association. ISBN: 978-1433830929
- Anierobi, E. I & Unachukwu G. C. (2020). Parental home-based involvement and academic self-efficacy as correlates of academic engagement among secondary school students in Nnewi North LGA, Anambra State, Nigeria. *UNIZIK Journal of Educational Management and Policy*, 4(1), 1-13.

- Anwar, S., Khan, S.I. & Fazal, S. (2022). Homework as an Assignment: Parents' Perceptions and Involvement. *sjesr*, 5(4), 29-39.
- Avezova, M., (2023). Duties of Teachers and Parents in Inclusive Early Childhood Education. *Science and innovation*, 2(B6), 210-217.
- Azubuike, O.B., Adegboye, O. & Quadri, H. (2021). Who gets to learn in a pandemic? Exploring the digital divide in remote learning during the COVID-19 pandemic in Nigeria. *International Journal of Educational Research Open*, 2, 100022.
- Bayrakdar, S. & Guveli, A., (2020). *Inequalities in home learning and schools' provision of distance teaching during school closure of COVID-19 lockdown in the UK* (No. 2020-09). ISER Working Paper Series.
- Bodur, Z.Y. & Aktan, S., (2021). A Research on the Relationship between Parental Attitudes, Students' Academic Motivation and Personal Responsibility. *International Journal on Social and Education Sciences*, 3(4), 636-655.
- Bourdieu, P., & Coleman, J. S. (2019). Families, childrearing, and education. In *Social theory for a changing society* (pp. 189-205). Routledge.
- Bretherton, I., (2013). The origins of attachment theory: John Bowlby and Mary Ainsworth. In *Attachment theory* (pp. 45-84). Routledge.
- Brydges, C. & Mkandawire, P., (2020). Perceptions and experiences of inclusive education among parents of children with disabilities in Lagos, Nigeria. *International Journal of Inclusive Education*, 24(6), 645-659.
- Bunijevac, M., (2017). Parental involvement as a important factor for successful education. *Center for Educational Policy Studies Journal*, 7(3), 137-153.
- Chen, X., Chen, Y., Wang, H. & Yang, X., (2023). How do parental attitudes influence children's learning interests through parental practices? Evidence from literacy and numeracy perspectives. *European Journal of Psychology of Education*, 1-20.
- Damgaard, M.T. & Nielsen, H.S., (2018). Nudging in education. *Economics of Education Review*, 64, 313-342.
- Daradkeh, M., (2023). Navigating the complexity of entrepreneurial ethics: A systematic review and future research agenda. *Sustainability*, 15(14), 11099.
- Day, C., Sammons, P. & Gorgen, K., (2020). Successful School Leadership. *Education development trust*.
- Di Pietro, G., Biagi, F., Costa, P., Karpiński, Z. & Mazza, J., (2020). *The likely impact of COVID-19 on education: Reflections based on the existing literature and recent international datasets* (Vol. 30275). Luxembourg: Publications Office of the European Union.
- Dumay, X., Coe, R. & Anumendem, D.N., (2014). Stability over time of different methods of estimating school performance. *School Effectiveness and School Improvement*, 25(1), 64-82.
- Dutsinma, F.L., Chaising, S., Srimaharaj, W., Chaisricharoen, R. & Temdee, P., (2018). Identifying child learning style by using human physiological response and Vark model. In *2018 Global Wireless Summit (GWS)* (pp. 304-308). IEEE.
- Eccles, J.S. & Harold, R.D., (2013). Family involvement in children's and adolescents' schooling. In *Family-school links* (pp. 3-34). Routledge.
- Eden, E., Smith, J., & Adeyemi, K. (2024). The Influence of Parental Involvement on Student Academic Success in Nigerian Schools. *International Journal of Educational Research*, 15(3), 45-62.
- Emerson, L., Fear, J., Fox, S. & Sanders, E., (2012). Parental engagement in learning and schooling: Lessons from research. *A report by the Australian Research Alliance for Children and Youth (ARACY) for the Family-School and Community Partnerships Bureau: Canberra*.
- Epstein, J. L. (2011). *School, family, and community partnerships: Preparing educators and improving schools*. Westview Press.
- Epstein, J.L. (2018). School, family, and community partnerships in teachers' professional work. *Journal of Education for Teaching*, 44(3), 397-406.
- Ewin, C.A., Reupert, A.E., McLean, L.A. & Ewin, C.J. (2021). The impact of joint media engagement on parent-child interactions: A systematic review. *Human Behaviour and Emerging Technologies*, 3(2), 230-254.
- Eze, U.N., Sefotho, M.M., Onyishi, C.N. & Eseadi, C. (2021). Impact of COVID-19 Pandemic on Education in Nigeria: Implications for Policy and Practice of e-Learning. *Online Submission*.
- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13(1), 1-22.



- Faraz, N.A., Ahmed, F., Ying, M. & Mehmood, S.A. (2021). The interplay of green servant leadership, self-efficacy, and intrinsic motivation in predicting employees' pro-environmental behaviour. *Corporate Social Responsibility and Environmental Management*, 28(4), 1171-1184.
- Flynn, S., (2020). Ecosystems of educational disadvantage: Supporting children and young people receiving child protection and welfare services in Ireland. *Social Work & Social Sciences Review*, 21(3).
- Froiland, J.M. (2021). A comprehensive model of preschool through high school parent engagement with emphasis on the psychological facets. *School Psychology International*, 42(2), 103-131.
- Galanaki, E. & Malafantis, K.D., (2022). Albert Bandura's experiments on aggression modelling in children: A psychoanalytic critique. *Frontiers in psychology*, 13, 988877.
- Gao, T., Liang, L., Su, Y., Li, M., Mei, S., Zhou, C. & Meng, X., (2023). Longitudinal Transition Patterns of Peer Attachment and Parent-Child Relationships among High School Students. *Journal of Child and Family Studies*, 1-11.
- Goodall, J., (2021). Parental engagement and deficit discourses: Absolving the system and solving parents. *Educational Review*, 73(1), 98-110.
- Granlund, M. & Roll-Pettersson, L., (2001). The perceived needs of support of parents and classroom teachers a comparison of needs in two microsystems. *European Journal of Special Needs Education*, 16(3), 225-244.
- Guy-Evans, O., (2020). Bronfenbrenner's ecological systems theory. *Simply Psychology*.
- Guzikova, L. & Mendelova, E., (2022). Parental attitudes and expectations as a determinant of children's success in school. *Proceedings of CBU in Social Sciences*, 3, 35-42.
- Hayes, N., O'Toole, L. & Halpenny, A.M., (2022). Introducing Bronfenbrenner: A guide for practitioners and students in early years education. *Taylor & Francis*.
- Hill, N.E. & Craft, S.A., (2003). Parent-school engagement and school performance: Mediated pathways among socioeconomically comparable African American and Euro-American families. *Journal of Educational Psychology*, 95(1), 74.
- Hill, N.E. & Tyson, D.F., (2009). Parental involvement in middle school: a meta-analytic assessment of the strategies that promote achievement. *Developmental psychology*, 45(3), 740-763
- Hogberg, B., Strandh, M. & Hagquist, C., (2020). Gender and secular trends in adolescent mental health over 24 years—the role of school-related stress. *Social science & medicine*, 250, 112890.
- Hussain, S., Riad, A., Singh, A., Klugarová, J., Antony, B., Banna, H., & Klugar, M. (2021). Global prevalence of COVID-19-associated mucormycosis (CAM): living systematic review and meta-analysis. *Journal of Fungi*, 7(11), 985.
- Iruka, I.U., DeKraai, M., Walther, J., Sheridan, S.M. & Abdel-Monem, T., (2020). Examining how rural ecological contexts influence children's early learning opportunities. *Early Childhood Research Quarterly*, 52, 15-29.
- Jarvis, P., (2022). Attachment theory, cortisol and care for the under-threes in the twenty-first century: constructing evidence-informed policy. *Early Years*, 42(4-5), 450-464.
- Karakose, T., Yirci, R. & Papadakis, S., (2021). Exploring the interrelationship between COVID-19 phobia, work-family conflict, family-work conflict, and life satisfaction among school administrators for advancing sustainable management. *Sustainability*, 13(15), 8654.
- Kent, C., du Boulay, B. & Cukurova, M., (2022). Keeping the Parents outside the School Gate—A Critical Review. *Education Sciences*, 12(10), 683.
- Kincade, L., Cook, C. & Goerdt, A., (2020). Meta-analysis and common practice elements of universal approaches to improving student-teacher relationships. *Review of Educational Research*, 90(5), pp.710-748.
- Kitson, A., Feo, R., Lawless, M., Arciuli, J., Clark, R., Golley, R., Lange, B., Ratcliffe, J. & Robinson, S., (2022). Towards a unifying caring life-course theory for better self-care and caring solutions: A discussion paper. *Journal of Advanced Nursing*, 78(1), e6-e20.
- Krishnan, R., Sanjay, J., Gnanaseelan, C., Mujumdar, M., Kulkarni, A. & Chakraborty, S., (2020). *Assessment of climate change over the Indian region: a report of the Ministry of Earth Sciences (MOES), government of India* (p. 226). Springer Nature.
- Martinello, E., (2020). Applying the ecological systems theory to better understand and prevent child sexual abuse. *Sexuality & Culture*, 24(1), 326-344.



- McKenna, M.K. & Millen, J., (2013). Look! Listen! Learn! Parent Narratives and Grounded Theory Models of Parent Voice, Presence, and Engagement in K-12 Education. *School Community Journal*, 23(1), 9-48.
- Nakada, L.Y.K. & Urban, R.C., (2020). COVID-19 pandemic: Impacts on the air quality during the partial lockdown in São Paulo state, Brazil. *Science of the Total Environment*, 730, 139087.
- Nobre, F.S.S., Valentini, N.C. & Rusidill, M.E., (2020). Applying the bioecological theory to the study of fundamental motor skills. *Physical Education and Sport Pedagogy*, 25(1), 29-48.
- Odenweller, K.G., Booth-Butterfield, M. & Weber, K., (2014). Investigating helicopter parenting, family environments, and relational outcomes for millennials. *Communication Studies*, 65(4), 407-425.
- Oh, D.D. & Pomerantz, E.M., (2022). Parent-Teacher Conferences: Teachers' Information Provision and Parents' Involvement in Children's Schooling. *Merrill-Palmer Quarterly*, 68(2), 179-213.
- Otani, M., (2020). Parental engagement and academic achievement among elementary and middle school students. *Asia Pacific Education Review*, 21(1), 1-25.
- Owolaye-Abdulganiyu, I. S. & Olokooba, I. N. (2024). Parental Engagement in Children's Education: A Key Factor in Academic Achievement and Learning Motivation. *MimbarIlmu*, 29(3).
- Pardi, N., Hogan, M.J. & Weissman, D., (2020). Recent advances in mRNA vaccine technology. *Current opinion in immunology*, 65, 14-20.
- Piliyesi, S.D.E., Ogada, E.O. & Ochieng, R.J., (2020). Practical approaches to parental engagement and resource provision in curriculum implementation. *African Journal of Emerging Issues*, 2(2), 70-95.
- Samuel, A.I., (2020). Coronavirus (COVID-19) and Nigerian education system: impacts, management, responses, and way forward. *Education Journal*, 3(4), 88-102.
- Smith, T.E., Reinke, W.M., Herman, K.C. & Sebastian, J., (2021). Exploring the link between principal leadership and family engagement across elementary and middle school. *Journal of School Psychology*, 84, 49-62.
- Stevenson, D.L. & Baker, D.P., (1987). The family-school relation and the child's school performance. *Child development*, 1348-1357.
- Sujarwo, S., Kusumawardani, E., Prasetyo, I. & Herwin, H., (2021). Parent Engagement in Adolescents' Education: A Case Study of Partnership Models. *Cypriot Journal of Educational Sciences*, 16(4), 1563-1581.
- Tamboto, H., Tambingon, H.N., Lengkong, J.S. & Rotty, V.N.J., (2021). The Engagement of Students' Parents in Organizing the Learning from Home at Elementary Schools in Tomohon City. *Asia Pacific Journal of Management and Education (APJME)*, 4(1), 35-51.
- Tan, C.Y., Lyu, M. & Peng, B., (2020). Academic benefits from parental engagement are stratified by parental socioeconomic status: A meta-analysis. *Parenting*, 20(4), 241-287.
- Thorell, L.B., Skoglund, C., de la Peña, A.G., Baeyens, D., Fuermaier, A.B., Groom, M.J., Mammarella, I.C., Van der Oord, S., van den Hoofdakker, B.J., Luman, M. & de Miranda, D.M., (2021). Parental experiences of homeschooling during the COVID-19 pandemic: Differences between seven European countries and between children with and without mental health conditions. *European child & adolescent psychiatry*, 1-13.
- Utami, A.Y., (2022). The role of parental involvement in student academic outcomes. *Journal of Education Review Provision* 2(1), 17-21.
- Van L.K., Van Houtte, M. & Vandenbroeck, M., (2020). Would it really matter? The democratic and caring deficit in 'parental engagement'. In *Working with Parents and Families in Early Childhood Education* (pp. 31-44). Routledge.
- Walsh, G. & Zadurian, N., (2023). Exploring the links between parental attachment style, child temperament and parent-child relationship quality during adolescence. *Journal of Child and Family Studies*, 32(9), 2721-2736.
- Whalley, M. & Chandler, T., (2017). Parents and Staff as Co-educators. *Involving Parents in Their Children's Learning: A Knowledge-Sharing Approach*, 84-115.
- Yahaya, A., Maakip, I., Kiong, P.V.S., Yusuf, M.Y.M. & Ramli, N.K.B.A., (2020). Effects of self-regulated learning, parental engagement and homework on academic achievement of school students. *International Journal of Academic Research in Progressive Education and Development*, 9(2), 380-397.

# Exploring the Influence of Recess and Diverse Play Environment Resources on Primary School Pupils Behaviour in Eti-Osa Primary Schools

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## Abstract

*Recess is a special time to free the learners' minds from the burden of learning. It is a critical period in the school timetable as it aids the learner's ability to comprehend. Thus, if it is not effectively utilised, there is the tendency of it having a ripple effect in the pupils' behaviour and performance. This study examined the influence of recess and play environment on primary school pupils' behaviour in Eti-Osa Local Government Area. Two research questions were raised and their corresponding hypotheses tested for the study. The descriptive survey research design was adopted and a sample size of 103 teachers in the selected five schools in Eti-Osa Local Government Area, Lagos State was drawn out of the 1,500 teachers target population, using a simple random sampling technique. Descriptive analysis (percentages, and frequencies tables) and inferential analysis (Pearson Correlation) were used to analyse the data. Findings revealed that pupils' readiness for recess time have significant influence on primary school pupils behaviour in Eti-Osa Local Government Area; and play environment have no significant influence on primary school pupils behaviour in Eti-Osa Local Government Area. The study concluded that recess time is essential, and pupils should never be alienated from it. Recommendations were made amongst which are that recess should be taken seriously like other academic programmes as it has great influence on the pupils' behaviour in general including academic performance; parents should encourage and supervise their wards' play environment to ensure safety, a positive mindset and mental balance among learners.*

**Keywords:** Academic performance, Play environment, Pupils' readiness, Recess period.

## Introduction

It is natural that children should play because play as well as learning are natural components of children's daily lives. Play is truly a universal phenomenon because it exists in different forms in every society (Ushang, *et. al.*, 2020). When you ask children of what they like to do best, the response would usually be that they like to play. Play is, therefore, considered to be a practice initiated by children, while learning is seen as a result of a practice initiated by adults. Play is any activity that children are engaged in, for the enjoyment it provides without necessarily thinking of the product. Egaga and Arikpo (2015) noted that a child who does not play is a sick child. A child who is prevented by his teacher or guardian from playing will be sick physically and mentally. Children all over the world have play at the very heart of their learning and development because it keeps them happy. It is on this basis that UNESCO in its Article 31 of the United Nations Convention on the Rights of the Child (UNCRC,) recognises the preeminent right of the child to engage in play and recreational activities (United Nations General Assembly, 1989).

Everyone, regardless of their age and field of work, needs a break/recess during routine activities. Given their nature, children cannot sit or engage in learning activities for extended periods. Therefore, at schools, pupils need a break/recess after classes in which cognitive and social activities are performed (Beard, 2018; Grevengoed, 2017). These breaks at schools are provided for pupils as "recess". Recess is one of the most important times of the school day for pupils who spend an important part of their days at school. Pupils wait for it in anticipation as a time to take fresh air off the normal teaching routine. Parrish, et al, (2013) define recess as an extra-curricular time between classes set by school authorities for pupils to participate in physical and leisure activities.

In the global context, Holmes, Pellegrini and Schmidt (2016) define recess as an important period of a school day in which children can have conversations and physical activities with their peers. Pupils usually engage each other relatively

independent of adult interventions while finding within this period alternative education opportunities. Similarly, in literature, recess is regarded as a scheduled period between school hours in which students can do physical activities and play games in an unstructured manner without adult intervention (Beard, 2018; Ramstetter & Murray, 2017). The American Academy of Pediatrics (AAP) (2013) defines recess as a necessary break aimed at optimising a child's social, affective, physical and cognitive development. When students take breaks between mentally challenging tasks, they focus on understanding better what is offered (Sohn, 2015).

In an experimental study with younger primary school pupils, it was found that they became more careless as the lesson hours extended compared with those that had recess in between. This shows that recess had positive contributions to classes in terms of both attention and classroom management (Pellegrini, *et. al.*, 2015). Recess provides students with opportunities to have social interactions with each other. Learning is a social and collaborative activity where people create meaning through interactions with each other and with objects around them. During recess, children interact through play activities which has direct impact on their social development and learning. With an entertaining and fun socialisation process, the child learns the basic rules such as sharing, helping, respecting the rights of others and taking responsibility (Unal, 2016).

Erin-Vaantaja (2016) shows that play has cognitive benefits for children and young people. Burriss and Burriss (2015) found that during play, children can negotiate, communicate and compromise, and that play helps them interpret the signals and clues offered by others. Therefore, during recess, playing offers pupils stimulating cognitive activities both inside and outside the classroom. The cognitive processes used by pupils to play are very similar to the processes used by pupils who participate in learning activities. Thus, recess periods provide opportunities for pupils to learn how to manage their unstructured time and how to use their time well during breaks. Activities performed during recess provide pupils with skills to help with time management (Beard, 2018). Therefore, play activities that are performed during recess contribute to both social development and cognitive development of children.

Recess offers children an opportunity to physically engage with each other and with other objects around them (Grevengoed, 2017). Today, childhood obesity rates are regarded as one of the significant public health problems in the world. Lack of physical activity remains one of the factors responsible for the high rate of obesity among children (Massey, *et al*, 2018; Skinner & Skelton, 2014). Research conducted over a four-year period in French and Canadian schools shows the positive effects of time spent on physical activities. The results demonstrated that time spent on physical activity increased fitness, developed positive attitudes and improved test scores (Trudeau & Shephard, 2008). These results are also consistent with the findings of the meta-analysis about 200 studies on the effect of exercise on cognitive functionality, which suggests that physical activity improves learning (Jarrett, 2015).

Pupils need to do physical activities. Their active participation in adequate physical activities positively affects cognitive skills, attention, behaviour, affective and social development, and is instrumental in the prevention of obesity. Recess periods at schools are time frames in which pupils participate in physical activities (Frank, *et. al.*, 2018). Recess not only enables pupils to improve themselves physically, cognitively and socially, but also affectively by improving their self-esteem and self-confidence. Recess improves pupils' ability to overcome negative peer pressure and increases their general public acceptance (Beard, 2018). Recess is an institutional environment that ensures safe positive relationships at school with peers and adults, learning support and school engagement and participation (Parker, 2015). During recess, pupils are given the chance to control their own movements and activities; not being controlled by others makes the recess periods fun. Hence, recess also reduces stress which negatively affects not only health but also learning. During breaks, unstructured physical play acts as a mediating force in reducing stress (Pica, 2016).

Just like recess, the influence of the play environment on academic performance in Eti-Osa primary schools has garnered attention, reflecting broader educational trends. There appears to have been a decrease in exercise and physical activity in most schools due to lack of good and spacious play environment. Whereas various studies suggest that a well-structured play environment contributes positively to cognitive development and academic success in children. Akinbode and Adeyemi (2021) observed that enriched play areas have shown higher student engagement, which is linked to improved performance in subjects like mathematics and language arts. Furthermore, the availability of diverse play resources has been found to enhance creativity and problem-solving skills, crucial for academic achievement (Ogunleye & Olabisi, 2020). These findings underscore the importance of integrating quality play environments into the educational framework to foster better academic outcomes.

Beard (2018) and Chen (2017) refer to the cognitive, social, affective and physical benefits of recess and play environment, yet it is still thought by some people that recess is a waste of time. Thus, at schools, there are times when people choose to devote more time to a subject that has not been sufficiently accomplished or to reduce the time reserved for another activity for this reason. Teachers may think that engaging in academic activities during recess periods will increase achievement and some countries have discussed shortening or even taking away recess (Salberg, 2018).

In the context of primary school, play and learning are often separated in terms of time and space. Pupils are highly motivated to play, though adults may not understand why they play. Bodrova and Leong (2013) observed that play is both fun and developmentally valuable. Schools have been reducing the amount of time students have for recess or physical

activity during the school day. Recess, a period when pupils can play freely, positively impacts pupils' creative, social, and emotional development. During recess, pupils often participate in physical activity, which has been shown to increase participants' memory and executive function (Hall-Lopez *et. al.*, 2017; Becker *et. al.*, 2014).

Despite these benefits, recess time is often removed, reduced, or moved to the end of the school day. The prolonged expectation for students to engage and process new academic information, while staying seated, is a direct result of high stakes testing and accountability (Medina, 2014). The problem is, rather than strategically scheduling recess before instruction, recess is often not prioritized and is being removed from primary schools or reduced in length. The problem may be that some schools are built without playgrounds, while some may have no recess time, because they may only be concerned with academic content at the expense of recess. Even those schools that observe recess seem to have reduced the time from what it used to be.

Increasing the pupils' positive behaviours in the classroom should be as paramount as increasing their learning and achievement. How can this be possible when recess time has been limited, and in some cases eliminated, in some schools. Some scholars attributed this to the overemphasis on standardized testing. Thus, David (2018) has observed that standardized testing has decreased the amount of time pupils spent for physical activities, including recess/ play time, throughout their day because of the increased time used for instruction.

A decrease in exercise and physical activity both in and out of the school setting has been seen to be the cause of some increasing negative behaviours such as inattention, lack of focus, impulsivity and fidgeting in the classroom, all of which could be disruptive to other pupils' learning and the teacher who is attempting to teach (Stapp & Karr, 2018). These behaviours have also been linked to poor learning and lack play environments resources. Furthermore, Massey and Geldhof (2019) have shown that decreasing recess/ play time negatively impacted pupils by decreasing their time to socialise with peers, decreasing physical outlets that would allow their brains to reset, and limiting their time to learn important social-emotional skills. This worrisome scenario prompted the researchers to ascertain the influence of recess and play environment resources on primary school pupils' behaviour in the Eti-Osa Local Government Area.

The objectives of the study are to:

- assess the influence of primary school pupils' readiness for recess on their behaviour in Eti-Osa Local Government Area. D
- determine the influence of diverse play resources on the behaviour of primary school pupils in Eti-Osa Local Government Area.

The following research questions were formulated for the study:

- What is the influence of primary school pupils' readiness for recess on their behaviour in Eti-Osa Local Government Area?
- What is the influence of the diverse play environment resources on the behaviour of primary school pupils in Eti-Osa Local Government Area?

The following hypotheses were tested for the study:

- Ho1: Primary school pupils' readiness for recess will have no significant influence on their behaviour in Eti-Osa Local Government Area.
- Ho2: Diverse play environment resources will have no significant influence on the behaviour of primary school pupils in Eti-Osa Local Government Area.

## Methodology

The descriptive survey research design was adopted for the study. Five schools were selected out of the 57 primary schools using the simple random sampling technique and a sample size of one hundred and twenty-five (125) teachers were selected from the five schools in Eti-Osa Local Government Area, Lagos State, out of the 1,500 teachers that made up the target population, using simple random sampling technique. A researcher designed questionnaire tagged "Recess, Play Environment Resources and Pupils' Behaviour Questionnaire" (RPERPBQ) which had a reliability value of 0.78 using Cronbach Alpha reliability test was used to collect the data. The returned valid instrument for the study was one hundred and three (103) in this order: School 1 – 21, School 2 – 18, School 3 – 19, School 4 – 22, and School 5 – 23. The collated data were analysed using descriptive analysis (percentages and frequencies count) and inferential analysis (Pearson Correlation) at 0.05 level of significance.



## Results

The tables below bearing items in the questionnaire were analysed as the data indicated:

**Table 1:** Readiness for Recess and Pupils' Behaviour

S/N	STATEMENTS	SA	A	D	SD
1.	Pupils who look forward to recess tend to exhibit better classroom behaviour after returning from playtime	71 68.9%	24 23.3%	7 6.8%	1 1.0%
2.	Readiness for recess helps pupils develop self -regulation skills, leading to improved discipline in the classroom	73 70.9%	24 23.3%	6 5.8%	0 0.0%
3.	Pupils who anticipate recess are more likely to engage in positive social interactions with their peers	64 62.1%	28 27.2%	6 5.8%	5 4.9%
4.	The excitement of recess encourages pupils to follow school rules and routines more effectively	46 44.7%	50 48.5%	0 0.0%	7 6.8%
5.	Pupils who transition smoothly from recess back to class tend to be more attentive and cooperative in lesson	12 11.7%	77 74.7%	7 6.8%	7 6.8%

**Source:** Online Survey, 2024

In Table 1, item one indicates that 68.9% of teachers strongly agree that pupils who look forward to recessing tend to exhibit better classroom behaviour after returning from playtime, 23.3% agree, 6.8% disagree while 1.0% strongly disagree. Item two shows that 70.9% of teachers strongly agree that readiness for recess helps pupils develop self-regulation skills, leading to improved discipline in the classroom, 23.3% agree, 5.8% disagree while none strongly disagrees. Item three also shows that 62.1% teachers strongly agree that pupils who anticipate recess are more likely to engage in positive social interactions with their peers, 27.2% agree, 5.8% disagree while 4.9% strongly disagree. Item four shows that 44.7% teachers strongly agree that the excitement of recess encourages pupils to follow school rules and routines more effectively, 48.5% agree, none disagree while 6.8% strongly disagree. Item five shows that 11.7% teachers strongly agree that pupils who transition smoothly from recess back to class tend to be more attentive and cooperative in lesson, 74.7% agree, 6.8% disagree while 6.8% strongly disagree.

**Table 2:** Diverse Play Environment Resources for Recess and Pupils' Behaviour

S/N	STATEMENTS	SA	A	D	SD
1.	Access to diverse play resources inspires pupils to engage in cooperative play that promotes positive social behaviour	82 79.6%	21 20.4%	0 0.0%	0 0.0%
2.	Pupils who have a variety of play equipment tend to show improved problem-solving skills during group activities	53 51.5%	50 48.5%	0 0.0%	0 0.0%
3.	Well-equipped playgrounds help pupils develop patience and turn-taking skills while reducing disruptive behaviours	56 54.4%	40 38.8%	0 0.0%	7 6.8%
4.	Diverse play resources provide occasions for pupils to burn out energy, making them more focused and less restless in class	67 65.0%	32 31.1%	1 1.0%	3 2.9%
5.	Exposure to different types of play resources helps pupils build self-confidence and develop leadership qualities	13 12.6%	56 54.4%	24 23.3%	10 9.7%

**Source:** Online Survey, 2024

In Table 2, item one indicates that 79.6% of teachers strongly agree that access to diverse play resources inspires pupils to engage in cooperative play that promotes positive social behaviour, 20.4% agree, while none disagree and strongly disagree. Item two shows that 51.5% of teachers strongly agree that pupils who have a variety of play equipment tend to show improved problem-solving skills during group activities, 48.5% agree, while none disagree and strongly disagree. Item three also shows that 54.4% of teachers strongly agree that well-equipped playgrounds help pupils develop patience and turn-taking skills while reducing disruptive behaviours, 38.8% agree, none disagree while 6.8% strongly disagree. Item four shows that 65.0% of teachers strongly agree that diverse play resources provide occasions for pupils to burn out energy, making them more focused and less restless in class, 31.1% agree, 1.0% disagree while 2.9% strongly disagree. Item five shows that 12.6% of teachers strongly agree that exposure to different types of play resources helps pupils build self-confidence and develop leadership qualities, 54.4% agree, 23.3% disagree while 9.7% strongly disagree.



**Test of Hypotheses**

Ho1: Primary school pupils' readiness for recess will have no significant influence on their behaviour in Eti-Osa Local Government Area.

**Table 3****Pearson Correlation for Pupils Readiness for Recess and Behaviour**

Independent Variable	Dependent Variable	Correlation Coefficient (r)	p-value	Decision on Null Hypothesis
Readiness for Recess	Pupils' Behaviour	0.824	0.086	Rejected

The p-value (0.086) is slightly above 0.05 but below 0.10, meaning we can reject the null hypothesis at a 90% confidence level. This suggests that primary school pupils' readiness for recess significantly influences their behaviour in Eti-Osa Local Government Area.

Ho2: Diverse play environment resources will have no significant influence on the behaviour of primary school pupils in Eti-Osa Local Government Area.

**Table 4****Pearson Correlation for Diverse Play Resources and Behaviour**

Independent Variable	Dependent Variable	Correlation Coefficient (r)	p-value	Decision on Null Hypothesis
Diverse Play Environment Resources	Pupils' Behaviour	0.939	0.018	Rejected

The p-value (0.018) is less than 0.05, so the null hypothesis is rejected and the alternative hypothesis accepted. Therefore, diverse play environment resources show a statistically significant influence on primary school pupils' behaviour in Eti-Osa Local Government Area.

**Discussion of Findings**

The result from research question one and hypothesis one revealed that the majority of teachers agree that pupils' readiness for recess contributes to their positive social interactions with their peers. It further shows that it helps them to exhibit better classroom behaviour which eventually will lead to better classroom outcome. This was in line with the study by Holmes, Pellegrini and Schmidt (2016) that the attention of students increased after experiencing outdoor activities, contributing to better classroom engagement and outcome. Ta'sdemir and Sargin (2015) proposed in their study that such students experienced a sense of freedom during their free period, and thus their creativity was enhanced. Several other studies support the idea that pupils' readiness for recess plays a crucial role in enhancing pupils' self-discipline and learning outcomes. For instance, Pellegrini and Bohn (2005) argue that recess provides necessary breaks that help pupils to refresh and refocus, leading to improved attention and better performance in subsequent lessons. They noted that physical activity during recess stimulates cognitive functioning, which is essential for learning. Similarly, Barros *et al.*, (2009) found that pupils who look up to their recess and have it regular tend to exhibit better classroom behaviour and higher levels of engagement, which directly contribute to their academic success. These studies show that recess is particularly beneficial for pupils, as it provides them with opportunities to develop social skills and manage stress. The readiness for and positive experiences during recess time can help pupils to better handle classroom demands, thereby positively influencing their classroom behaviour. These findings suggest that when pupils are ready and eager for recess, they are likely to benefit from the break, returning to class more prepared to learn.

On the other hand, some research suggests that the relationship between recess readiness and pupils classroom behaviour is not straightforward and may depend on various factors, including the structure of recess and individual differences among pupils. For example, a study by Erwin, Fedewa, and Ahn (2012) found that while recess can have benefits, it may also lead to overstimulation in some children, particularly those who struggle with transitions or who have high energy

levels. These pupils may find it difficult to settle back into academic tasks after recess, leading to unsettled behaviour and reducing their learning outcomes. Additionally, Holmes (2011) argues that for some pupils, readiness for recess might be a sign of restlessness or disengagement from classroom activities, which could negatively impact their learning if not properly managed.

Overall, this finding and other research have shown that the influence of pupils' readiness for recess time on primary school pupils' behaviour is complex and multifaceted. While there is significant evidence supporting the positive influence of pupils' readiness for recess on cognitive functioning, social skills, and classroom behaviour, these outcomes are not universally guaranteed. Factors such as the structure of recess, individual differences, and the quality of the recess experience play critical roles in determining whether or not pupils' readiness for recess translates into positive classroom behaviour and learning outcomes. Therefore, educators must carefully consider these factors when designing recess policies to maximise their positive impact on pupils' learning.

The results from research question two and hypotheses two indicate that the diverse play environment resources for recess is a significant factor that inspires pupils to engage in cooperative play that promotes positive social behaviour. Again, the quality and characteristics of the play environment enhance the educational experiences of children as it supports their physical, social, and cognitive development. In line with this it is pertinent to state from this research that diverse play resources provide occasions for pupils to burn out energy making them more focused and less restless in class. Also, exposure to different types of play resources helps pupils build self-confidence and develop leadership qualities. In line with this, Martlew *et al.*, (2010) found that children who have access to diverse and challenging play equipment are more likely to engage in creative and imaginative play, which is linked to improved problem-solving skills and cognitive flexibility. These skills are enduring students' behaviours needed in the postmodern world and crucial for academic success, as they enable children to approach learning tasks with greater creativity and persistence. Following this, a study by Pellegrini and Holmes (2006) emphasises that diverse play resources that promote active physical play, such as those with open spaces and playground equipment, are associated with helping pupils pay better attention and develop positive behaviour in the classroom. After engaging in physical activity during recess, pupils tend to return to class more focused and ready to learn, which can lead to improved academic performance. This suggests that the design and quality of the playground can help pupils develop patience and turn-taking skills while reducing disruptive behaviours and increasing positive learning outcomes.

Despite these positive findings, some research suggests otherwise. For instance, Ramstetter *et al* (2010) argue that simply having a well-equipped playground does not guarantee better learning outcomes as too stimulating or poorly supervised play environment can lead to conflicts among students or injuries, which may disrupt learning and negatively impact classroom behaviour. Again, Brussoni *et al.*, (2015) noted that overly structured or risk-averse play environments may limit children's opportunities to engage in free play and take manageable risks, which are important for developing resilience and independence. These researchers argue that environments that are too controlled may stifle creativity and problem-solving abilities, thereby reducing the potential cognitive and affective benefits of recess. This position was furthered by Mullan (2012) who highlighted that the effectiveness of diverse play environment is also influenced by individual differences among pupils. Thus, pupils who are less physically active or who prefer solitary activities may not benefit as much from a diverse playground designed primarily for active play. For such pupils, a lack of appropriate play options could lead to disengagement during recess, which might be carried into the classroom and results in less positive learning outcomes.

These varied positions have gone to show that diverse play resources for recess can have a significant influence on the pupils behaviour and learning outcomes, but this influence is shaped by a variety of factors. While a well-designed, stimulating play environment can enhance cognitive, social, and behavioural outcomes, leading to better academic performance, the benefits are not universally guaranteed. The effectiveness of diverse play resources depends on their alignment with students' needs, the quality of supervision, and the balance between structure and freedom. Educators and school administrators must consider these factors before creating a diverse play environment that support optimal learning outcomes for all pupils.

## Conclusion

This study examined the influence of readiness for recess and play resources on the behaviour of primary school pupils in Eti-Osa Local Government Area. Evidence shows that pupils can benefit from being prepared for recess as it will predispose them towards being active and following school rules and routines more effectively. The present results revealed that pupils should be prepared to engage in recess as it contributes to their emotional stability and well-being as well as increase their knowledge of other things around them.

In conclusion, while a diverse play resource that is well-designed for recess has the potential to significantly enhance primary school pupils' cognitive, social, and behavioural outcomes, leading to improved academic performance, these benefits are not universally assured. The effectiveness of readiness for recess and its resources are contingent upon careful consideration of factors including the individual needs of students, the quality of supervision, and the balance between

structured and unstructured play. To maximise the positive impact on pupils' learning, educators and school administrators must thoughtfully design and manage recess and its resources to align with these critical factors.

## Recommendations

To optimise the impact of recess and diverse play resources on pupils' behaviour, the following recommendations are proposed:

- School administrators should ensure they design a structured recess policy that is flexible enough to consider pupils' readiness levels, ensuring that transitions from recess to the classroom are smooth. Thus, implementing brief cooldown activities or mindfulness exercises before returning to lessons can reduce overstimulation while improving focus.
- Teachers should learn to incorporate pre- and post-recess classroom routines to help pupils regulate their energy levels. Also integrating brief discussion about conflict resolution and teamwork can enhance the social benefits of recess.
- Curriculum planners and policy makers should ensure that diverse play resources are included in school development plans by making funding and policy provisions for well-equipped playgrounds. The design of these play environments should balance structured and unstructured activities to cater to different pupil preferences, promoting creativity, problem-solving, and cooperative play.
- Parents and guardians should encourage active play and social skills development at home by providing children with opportunities to engage in both structured and free play. Parents can reinforce positive playground behaviour by discussing the importance of cooperation, patience, and turn-taking, which will translate to better behaviour in school settings.
- Government education authorities should mandate effective supervision and training for recess coordinators to ensure that playgrounds are safe, inclusive, and beneficial for all pupils. Authorities should conduct periodic evaluations of recess environments, ensuring that schools provide diverse play opportunities, and that staff are trained to manage recess effectively, preventing conflicts and injuries.

## References

- Akinbode, S., & Adeyemi, A. (2021). *The impact of play environments on academic performance in Nigerian primary schools*. *Nigerian Journal of Educational Research*, 15(3), 145-160.
- American Academy of Pediatrics. (2013). The crucial role of recess in school. *Pediatrics*, 131(1), 183-188.
- Barros, R. M., Silver, E. J., & Stein, R. E. K. (2009). *School recess and group classroom behavior*. *Pediatrics*, 123(2), 431-436.
- Beard, V. (2018). *A study of the purpose and value of recess in elementary schools as perceived by teachers and administrators*. (Unpublished Doctoral Dissertation) East Tennessee State University. Retrieved from <https://dc.etsu.edu/cgi/viewcontent.cgi?article=4883&context=etd>
- Becker, D. R., McClelland, M. M., Loprinzi, P., & Trost, S. G. (2014). Physical activity, self-regulation, and early academic achievement in preschool children. *Early Education & Development*, 25(1), 56-70.
- Bodrova, I. E., & Leong, D. J. (2013). The importance of being playful. *Educational Leadership*, 60(7), 50-54.
- Brussoni, M., Gibbons, R., Gray, C., Ishikawa, T., Sandseter, E. B. H., Bienenstock, A., & Tremblay, M. S. (2015). What is the relationship between risky outdoor play and health in children? A systematic review. *International Journal of Environmental Research and Public Health*, 12(6), 6423-6454.
- Burriss, K., & Burriss, L. (2015). Outdoor play and learning: Policy and practice. *International Journal of Education Policy & Leadership*, 6(8), 1-12.
- Chen, G. (2017). Who killed recess? The movement to resuscitate recess. *Public School Review*. Retrieved from - the-movement-to-resuscitate-recess
- Egaga, P. I., & Arikpo, I. A. (2015). *Dance play method: A strategy for teaching emotionally challenge primary school children in Cross River State*. Retrieved from [commons.org/licenses/by-nc/3.0/](https://commons.org/licenses/by-nc/3.0/)
- Erin-Vaantaja, B.A. (2016). *Southern ontario principals' perspectives on recess in low-income neighbourhoods*. (Unpublished Master Thesis) Brock University, St. Catharines, Ontario. Retrieved from <https://dr.library.brocku.ca/bitstream/handle/10464/10411/Brock?>
- Erwin, H. E., Fedewa, A. L., & Ahn, S. (2012). Student academic performance outcomes of a classroom physical activity intervention: A pilot study. *International Electronic Journal of Elementary Education*, 4(3), 473-487.
- Erwin, H. E., Ickes, M., Ahn, S., & Fedewa, A. (2014). Impact of recess interventions on children's physical activity: A meta-analysis. *American Journal of Health Promotion*, 28, 159-167.
- Frank, M. L., Flynn, A., Farnell, G. S., & Barkley, J. E. (2018). The differences in physical activity levels in preschool children during free play recess and structured play recess. *Journal of Exercise Science & Fitness*, 16, 37-42.
- Grevengoed, G. (2017). Exploring the effects of recess on academic performance. *Selected Honors Theses*. 87.

- Southeastern University - Lakeland Retrieved from <https://firescholars.seu.edu/cgi/viewcontent.cgi?article=1079&context=honors>
- Hall-Lopez, J. A., Ochoa-Martinez, P. Y., Zuniga Burrue, R., Monreal Ortiz, L. R., & Saenz-Lopez Bunuel, P. (2017). *Moderate-to-vigorous physical activity during recess and physical education among Mexican elementary school students*. 31, 137-139.
- Holmes, R. M. (2011). The effects of recess timing on children's playground and classroom behaviours. *Journal of Educational Research and Reviews*, 6(6), 156-165.
- Holmes, R. M., Pellegrini, A. D., & Schmidt, S. L. (2016). The effects of different recess timing regimes on preschoolers' classroom attention. *Early Child Development and Care*, 176(7), 735-743.
- Jarrett, O.S. (2015). Recess in elementary school: What does the research say? ERIC Digest. *ERIC Clearing house on Elementary and Early Childhood Education Champaign IL.*, 1-7.
- Massey, W. V., Thalken, J., Szarabajko, A., Neilson, L., & Geldhof, J. (2021). Recess quality and social and behavioral health in elementary school students. *Journal of School Health*, 1-11
- Massey, W., Neilson, L., & Salas, J. (2020). A critical examination of school-based recess: what do the children think?. *Qualitative Research in Sport, Exercise and Health*, 12(5), 749-763.
- Massey, W.V., Stellino, M. B., Claassen, J., Dykstra, S. & Henning, A. (2018). Evidence-based strategies for socially, emotionally and physically beneficial school recess. *Journal of Physical Education, Recreation & Dance*, 89(5), 48-52.
- McNamara, L. (2013). What's getting in the way of play? An analysis of the contextual factors that hinder recess in elementary schools. *Canadian Journal of Action Research*, 14(2), 3-21.
- McNamara, L., Franklin, N., & Colley, P. (2015). School recess, social connectedness and health: A Canadian perspective. *Health Promotion International*, 32(2), 392-402.
- McNamara, L., Lakman, Y., Spadafora, N., Lodewyk, K., & Walker, M. (2018). Recess and children with disabilities: A mixed-methods pilot study. *Disability and Health Journal*, 11(4), 637-643.
- McNamara, L., Vantaaja, E., Dunseith, A., & Franklin, N. (2014). Tales from the playground: Transforming the context of recess through participatory action research. *International Journal of Play*, 4(1), 49-68.
- Medina, J. (2014) *Brain rules: 12 principles for surviving and thriving at work, home, and school*. Seattle, WA; Pear Press
- Mullan, K. (2012). Children's time use and academic achievement: Does timing of activities matter? *British Educational Research Journal*, 38(4), 681-703.
- Ogunleye, A., & Olabisi, O. (2020). Play and academic achievement: A study of primary schools in Lagos State. *Lagos Educational Review*, 22(1), 90-105.
- Parker, C. B. (2015). *School recess offers benefits to student well-being, Stanford educator reports*. Retrieved from -
- Parrish, A., Okely, A.D., Stanley, R.M. & Ridgers, N.D. (2013). The effect of school recess interventions on physical activity. *A Systematic Review Sports Medicine*, 43, 287-299.
- Pellegrini, A. D. (2005). *Recess: Its role in education and development*. New York, NY: Routledge.
- Pellegrini, A. D., & Bohn, C. M. (2005). The role of recess in children's cognitive performance and school adjustment. *Educational Researcher*, 34(1), 13-19.
- Pellegrini, A. D., & Holmes, R. M. (2006). The role of recess in primary school. *Educational Psychologist*, 41(1), 35-44.
- Pellegrini, A. D., & Smith, P. K. (2015). School recess: Implications for education and development. *Review of Educational Research*, 63(1), 51-67.
- Pellegrini, A., & Blatchford, P. (2002). The developmental and educational significance of recess in schools. *Early Report Newsletter*. Retrieved from .
- Pica, R. (2016). *Why kids need recess. Pathways to family wellness*. Retrieved from <http://pathwaystofamilywellness.org/Children-s-Health-Wellness/why-kids-needrecess.html>
- Ramstetter, C., & Murray, R. (2017). Time to recognizing the benefits of recess. *American Educator Spring*, 17-43.
- Ramstetter, C.L., Murray, R., & Garner, A.S. (2010). The crucial role of recess in schools. *Journal of School Health*, 80(11), 517-526.
- Skinner, A. C., & Skelton, J. A. (2014). Prevalence and trends in obesity and severe obesity among children in the United States, 1999-2012. *JAMA Pediatrics*, 168, 561-566. . 2014.21
- Sohn, E. (2015). *Recess: It's important. Does your child get enough of it?* *The Washington Post*. Retrieved from -
- Stapp, A. C., & Karr, J. K. (2018). Effect of recess on fifth grade students' time on-task in an elementary classroom. *International Electronic Journal of Elementary Education*, 10(4), 449-456.
- Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research*, 83, 357-385.
- Trudeau, F. & Shephard, R. (2008). Physical education, school physical activity, school sports and academic performance. *International Journal of Behavioral Nutrition and Physical Activity*, 5(10), 1-12. doi:10.1186/1479-5868-5-10



- United Nations General Assembly. (1989). *Convention on the Rights of the Child*. United Nations, Treaty Series, 1577, 3.  
Retrieved from
- Ushang, I. G., Anyikwa, N.E., & Enemuo, J.O. (2020). Recess practices and pupils engagement with physical play activities in primary schools in Cross River State, Nigeria. *International Journal of Research*, 7(4), 343-360



# Integrating Artificial Intelligence into Early Childhood Care Curriculum in Nigeria: Benefits and Challenges

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## **Abstract**

*Artificial Intelligence (AI) holds significant promise in revolutionizing education, including early childhood care. AI can analyse students' learning styles, preferences, and performance data to tailor learning experiences to individual needs. However, its integration into the Nigerian curriculum for early childhood care presents numerous challenges. This study explores these challenges and their implications. The primary obstacle lies in the lack of infrastructure and resources necessary for implementing AI-driven educational tools and methodologies. Nigeria faces disparities in access to technology and internet connectivity, particularly in rural areas where early childhood care centres are often located. Additionally, there is a shortage of trained educators equipped to leverage AI effectively in teaching and nurturing young children. Cultural and societal factors also influence the adoption of AI in early childhood care. Traditional pedagogical approaches may conflict with the introduction of AI-based learning tools, leading to resistance from parents, educators, and policymakers. Concerns about privacy, data security, and the ethical use of AI further complicate its integration into the curriculum. Furthermore, there is a gap in research and evidence-based practices regarding the efficacy of AI in early childhood education specific to the Nigerian context. Limited studies exist to guide policymakers and educators in implementing AI responsibly and ensuring its alignment with cultural norms and educational goals. Addressing these challenges requires a multifaceted approach. Investments in infrastructure, teacher training programs, and research initiatives are essential to build the necessary foundation for AI integration. Collaboration between government agencies, educational institutions, and technology developers can facilitate the development of culturally relevant AI solutions tailored to the needs of Nigerian early childhood care settings.*

**Keywords:** Artificial Intelligence, Early childhood care Curriculum, Benefits and Challenges, Nigeria

## **Introduction**

The integration of Artificial Intelligence (AI) into educational systems has become a global trend, driven by the need to enhance learning outcomes, personalize education, and prepare students for a technology-driven future (Honghu, Ting & Gongjin, 2023). In developed countries, AI is being increasingly used to support various aspects of education, from personalized learning systems and intelligent tutoring to administrative tasks and predictive analytics. However, the application of AI in education, particularly in early childhood care, is still in its nascent stages in many developing countries, including Nigeria.

Nigeria, as the most populous country in Africa, faces unique challenges and opportunities in its educational sector. The country has made significant strides in expanding access to education, particularly at the primary and secondary levels, but early childhood education remains underdeveloped and underfunded. Despite the growing recognition of the importance of early childhood care and education (ECCE) in laying a strong foundation for lifelong learning, the sector faces numerous challenges, including inadequate infrastructure, lack of trained teachers, and limited learning resources.

According to Su *et. al.*, (2023), understanding AI concepts at such an early stage of development is difficult to achieve due to its complexity. In order to make the concepts readily accessible to children, play based learning techniques and methods are deployed through the use of robots such as "popbots".

Ng *et.al.*, (2022), on the other hand sought to overcome the challenge of understanding AI at an early age by carrying out what they call AI literacy using digital stories. Digital stories are inquiry based pedagogical approach used in demystifying the technologies behind AI concepts.

### **Benefits of Introducing Ai to Pre-Schoolers**

Introducing Artificial Intelligence (AI) to pre-schoolers offers several potential benefits that can enhance early childhood education. These benefits span cognitive, social, and educational domains, contributing to a more engaging and personalized learning experience. According to Ani-Rus *et. al.*, (2023) some of the key advantages include:

#### **1. Personalized Learning:**

**Tailored Educational Experiences:** AI can analyse individual learning patterns and preferences, allowing for the customization of educational content to suit each child's unique needs. This personalized approach helps children learn at their own pace, ensuring that they fully grasp foundational concepts before moving on to more advanced material.

**Adaptive Learning Paths:** AI systems can adjust the difficulty level and type of activities based on a child's performance, providing challenges that are neither too easy nor too difficult. This helps to maintain engagement and prevent frustration (Ani-Rus *et. al.*, 2023).

#### **2. Engaging and Interactive Learning**

**Interactive Learning Tools:** AI-driven educational apps and games can make learning more engaging by incorporating interactive elements such as voice recognition, gestures, and touch. These tools can turn learning into a playful and enjoyable experience, which is especially important for pre-schoolers'.

**Multisensory Learning:** AI can facilitate multisensory learning experiences that involve visual, auditory, and kinesthetic elements. This approach can help reinforce concepts and cater to different learning styles, making education more inclusive.

#### **3. Early Detection of Learning Difficulties**

**Identification of Learning Challenges:** AI can analyse a child's performance data to detect early signs of learning difficulties, such as dyslexia or speech delays. Early detection allows for timely interventions, which can significantly improve long-term educational outcomes.

**Customized Support:** Once learning difficulties are identified, AI can provide customized support and resources tailored to the child's specific needs, helping them overcome challenges more effectively.

#### **4. Enhanced Creativity and Problem-Solving Skills**

**Creative Play and Exploration:** AI tools can encourage creative thinking and problem-solving through open-ended activities, such as drawing, building, and storytelling. These activities allow children to experiment and explore different solutions, fostering creativity from a young age.

**Simulated Environments:** AI can create simulated environments where children can engage in role-playing and imaginative scenarios. These environments can help develop critical thinking and decision-making skills in a safe and controlled setting.

#### **5. Language Development and Literacy**

**Language Learning Apps:** AI-powered language learning apps can support early literacy by offering interactive reading experiences, vocabulary building exercises, and speech recognition tools that help children practice pronunciation and language skills.

**Real-Time Feedback:** AI can provide real-time feedback on language use, helping children correct mistakes and improve their language proficiency more quickly than traditional methods.

#### **6. Increased Access to Quality Education**

**Remote Learning Opportunities:** AI-powered platforms can provide access to quality educational content even in remote or underserved areas. This can help reduce disparities in early childhood education and ensure that more children have access to high-quality learning experiences.

**Multilingual Support:** AI tools can support multiple languages, making it easier for children from diverse linguistic backgrounds to access educational content in their native language.

#### **8. Social and Emotional Learning**

**Emotional Recognition and Response:** Some AI systems are designed to recognize and respond to children's

emotions, helping them develop emotional intelligence. For example, an AI tool might detect when a child is frustrated and offer encouragement or suggest a break (Neugnot-Cerioli & Laurenty, 2024).

**Collaborative Learning:** AI can facilitate collaborative learning activities where children work together on tasks, helping them develop social skills such as communication, cooperation, and empathy.

### **Challenges of Introducing Ai to Pre-Schoolers**

Introducing Artificial Intelligence (AI) to pre-schoolers presents a unique set of challenges. These challenges span technological, educational, developmental, ethical, and social dimensions (Su, Ng & Chu, 2023). Below are some of the key challenges:

#### **1. Developmental Appropriateness**

**Cognitive and Emotional Development:** Pre-schoolers are in the early stages of cognitive and emotional development, which makes it difficult to design AI tools that are both engaging and developmentally appropriate. There is a risk that AI tools may not align with the developmental needs of young children, potentially leading to frustration or disengagement.

**Attention Span:** Pre-schoolers typically have short attention spans. AI tools must be designed to capture and maintain their attention without overwhelming them. Striking this balance can be challenging.

#### **2. Limited Digital Literacy**

**Basic Technology Skills:** Many pre-schoolers have limited experience with technology. Introducing AI tools requires a certain level of digital literacy, which may not yet be developed in very young children. This can limit their ability to interact effectively with AI-driven educational tools.

**Reliance on Adults:** Because of their limited digital literacy, preschoolers often need significant guidance from parents or teachers to use AI tools. This reliance can reduce the potential benefits of AI by making it less accessible to children who do not have consistent adult support.

#### **3. Technological Barriers**

**Access to Devices and Connectivity:** In many regions, particularly in developing countries, access to digital devices and reliable internet connectivity is limited. This technological gap can hinder the widespread adoption of AI in early childhood education.

**Usability of AI Tools:** Designing AI tools that are intuitive and easy for young children to use is a significant challenge. Interfaces must be simple, engaging, and error-tolerant to accommodate the learning styles of preschoolers.

#### **4. Teacher Training and Support**

**Lack of Training:** Many early childhood educators may not have the necessary training or experience to effectively integrate AI into their teaching practices. This lack of training can lead to underutilization of AI tools or ineffective implementation.

**Resistance to Change:** Educators may also be resistant to adopting new technologies, particularly if they are accustomed to traditional teaching methods. Overcoming this resistance requires significant support, training, and evidence of the benefits of AI in early childhood education.

#### **5. Ethical and Privacy Concerns**

**Data Privacy:** AI tools often require the collection of data on children's learning behaviors, preferences, and progress. Ensuring the privacy and security of this data is a major concern, particularly given the vulnerability of young children.

**Bias in AI Algorithms:** AI systems can inadvertently reinforce biases if they are not properly designed and tested. This can result in unequal learning opportunities or reinforce stereotypes, which is particularly problematic in early childhood education.

#### **6. Social and Emotional Impact**

**Reduced Human Interaction:** There is a concern that increased use of AI in early childhood education could reduce the amount of human interaction that children experience. Human interaction is crucial for social and emotional development, and over reliance on AI could negatively impact these areas.

**Dependence on Technology:** Introducing AI at an early age could lead to an over-dependence on technology, potentially hindering the development of important skills such as critical thinking, creativity, and social interaction.

#### **7. Cultural and Contextual Relevance**

**Cultural Sensitivity:** AI tools must be culturally sensitive and relevant to the diverse backgrounds of pre-schoolers. Developing AI systems that can adapt to different cultural contexts and languages is challenging and requires careful design and localization.

**Contextual Adaptation:** AI tools must be adaptable to different educational contexts, including varying levels of resources, educational philosophies, and parental involvement. This adaptability is often difficult to achieve with standardized AI solutions.

#### 8. Cost and Resource Allocation

**High Costs:** The development, implementation, and maintenance of AI tools can be expensive. Schools, particularly in low-income areas, may struggle to allocate the necessary resources to adopt AI technologies in early childhood education.

**Equity and Access:** There is a risk that AI tools could exacerbate existing inequalities in education, particularly if only well-funded schools or families can afford the latest technologies. Ensuring equitable access to AI tools is a significant challenge.

#### 9. Measuring Effectiveness

**Assessing Impact:** It can be difficult to measure the effectiveness of AI tools in early childhood education. Traditional metrics of academic success may not apply to pre-schoolers, and there is a need for new methods of assessment that consider the holistic development of young children.

**Long-Term Outcomes:** The long-term impact of AI on early childhood education is not yet fully understood. More research is needed to determine how AI influences cognitive, social, and emotional development over time.

#### 10. Parental Concerns and Acceptance

**Parental Scepticism:** Parents may be sceptical or concerned about the use of AI in early childhood education, fearing that it could replace human teachers or negatively impact their child's development. Gaining parental trust and acceptance is crucial for the successful integration of AI.

**Balancing Screen Time:** Parents are often concerned about the amount of screen time their children are exposed to. Introducing AI tools, which typically require screen interaction, can exacerbate these concerns, making it important to balance AI use with other activities.

Addressing these challenges requires a comprehensive approach that includes careful planning, ongoing research, collaboration between educators, technologists, and policymakers, and a focus on the holistic development of pre-schoolers.

### **Conceptual Framework**

Two theories guiding this research are constructivism and constructionism. Constructionism as an educational theory is student-centered and emphasizes discovery learning, where students are encouraged to work with tangible objects in the real world and use what they already know to gain more knowledge. Constructivism Theory states that knowledge constructed by connecting new experience to existing ideas. This aptly applies to the design of AI using educational robots and curriculum as tangible technology to create new knowledge. The concept of educational robotics in this study is the use of robots and robotics-related activities in a play-based learning environment to promote learning in areas such as science, technology, engineering, and mathematics (STEM) and ultimately AI.

### **Possible Ways for the Inclusion of Ai in Early Childhood Care Curriculum**

Developed countries have taken a strategic and phased approach to introducing Artificial Intelligence (AI) into early childhood care curricula (Su & Zhong, 2022). Their efforts have been shaped by a combination of technological advancement, robust educational frameworks, and a focus on research and development (Kontkanen *et. al.*, 2023). Below are some of the key strategies and methods that developed countries have used to integrate AI into early childhood education:

#### 1. Research and Development

**Pilot Programs and Studies:** Developed countries often begin by conducting pilot programs and research studies to understand the impact of AI on early childhood education. These studies help in assessing the effectiveness of AI tools in enhancing learning outcomes and understanding the potential challenges.

**Collaborations with Universities and Tech Companies:** Partnerships between educational institutions, tech



companies, and government bodies are common. These collaborations foster innovation and provide the necessary resources for the development and testing of AI-driven educational tools.

## 2. Curriculum Design and Adaptation

**Incorporation into Existing Frameworks:** AI is gradually integrated into existing educational frameworks. For instance, AI-driven tools are used to complement traditional teaching methods, such as using AI-powered educational apps to reinforce learning through interactive play.

**Personalized Learning Paths:** AI is employed to create personalized learning experiences for children. By analysing data on each child's learning style, pace, and preferences, AI tools can tailor educational content to meet individual needs.

## 3. Teacher Training and Professional Development

**Training Programs:** Developed countries invest heavily in training educators to use AI tools effectively. This includes professional development courses that equip teachers with the skills needed to integrate AI into their classrooms.

**Support Systems for Educators:** Ongoing support and resources are provided to educators, including access to AI specialists and continuous professional development opportunities to keep pace with technological advancements.

## 4. Development of AI-Powered Educational Tools

**Interactive Learning Apps:** AI is used in developing interactive apps that engage young children in learning through play. These apps often feature adaptive learning algorithms that adjust the difficulty level based on the child's performance.

**AI Tutors and Assistants:** AI-driven virtual tutors and assistants are introduced to help children with tasks such as reading, counting, and problem-solving. These tools provide instant feedback and allow children to learn at their own pace.

## 5. Ethical and Inclusive Practices

**Data Privacy and Security:** Developed countries emphasize the importance of protecting children's data. AI systems are designed with stringent data privacy measures to ensure that children's information is safeguarded.

**Focus on Equity:** Efforts are made to ensure that AI tools are accessible to all children, regardless of their socioeconomic background. This includes providing schools with the necessary digital infrastructure and ensuring that AI tools are designed to be inclusive of diverse learning needs.

## 6. Government Policies and Funding

**Government Initiatives:** Many developed countries have national policies or initiatives aimed at integrating AI into education. These initiatives often include funding for research, development of AI tools, and infrastructure improvements in schools.

**Public-Private Partnerships:** Governments often collaborate with the private sector to bring AI into early childhood education. These partnerships can involve funding, resource sharing, and the development of AI tools tailored for educational purposes.

## 7. Parental Involvement and Community Engagement

**Raising Awareness:** Efforts are made to educate parents and communities about the benefits and potential risks of AI in early childhood education. This helps to build trust and support for the integration of AI in schools.

**Parental Controls and Involvement:** AI tools often include features that allow parents to monitor their child's progress and set limits on the use of technology, ensuring that AI complements, rather than replaces, traditional parenting and teaching.

## Examples from Specific Countries

**United States:** AI has been integrated into early childhood education through initiatives like the "Read With Me" programme (Arnold, 1997), which uses AI to support early literacy development. Additionally, AI-driven educational platforms like ABCmouse and Khan Academy Kids are widely used in preschools.

**United Kingdom:** The UK has incorporated AI into its early childhood curriculum through tools like interactive robots and AI-driven storybooks that adapt to a child's reading level. The government has also invested in AI research specific to early education (Crompton, Gregory & Burke, 2018).

**Finland:** Known for its progressive education system, Finland has introduced AI in early childhood education by using adaptive learning environments and AI-assisted teaching methods, which are designed to foster creativity and problem-solving skills in young learners (Kontkanel *et. al.*, 2023).



These strategies highlight the importance of a comprehensive approach that includes technology, teacher training, curriculum adaptation, ethical considerations, and stakeholder engagement. By following these steps, developed countries have been able to successfully introduce AI into early childhood care, creating a more personalized, efficient, and engaging learning environment for young children.

### Conclusion

Su, Ng and Chu (2023) specifically mentioned lack of a curriculum design as a challenge hindering the adoption of AI in ECCE. By addressing these challenges, AI can play a crucial role in enhancing early childhood education, making learning more personalized, engaging, and effective for pre-schoolers. However, these benefits must be balanced with careful consideration of the challenges and ethical implications of using AI in early childhood settings.

### References

- Ani-Rus, A., Catalano, C., Mestic, G., & Catalano, H. (2023). A Study Regarding Early Teacher'S Perception Toward the Introduction of Artificial Intelligence Applications and the Use of Educational Robots in the Teaching Process. *Educatia* 21, (25), 336-346.
- Arnold, C. (1997). *Read with me: A guide for student volunteers starting early childhood literacy programs*. US Department of Education, Office of Educational Research and Improvement.
- Crompton, H., Gregory, K., & Burke, D. (2018). Humanoid robots supporting children's learning in an early childhood setting. *British Journal of Educational Technology*, 49(5), 911-927.
- Honghu, Y., Ting, L., & Gongjin, L. (2023). The Key Artificial Intelligence Technologies in Early Childhood Education: A Review. *arXiv preprint arXiv:2401.05403*
- Kontkanen, S., Pöntinen, S., Kewalramani, S., Veresov, N., & Havu-Nuutinen, S. (2023). Children's digital competence in early childhood education: A comparative analysis of curricula. *Eurasia Journal of Mathematics, Science and Technology Education*, 19(1), em2215.
- Ng, D. T. K., Luo, W., Chan, H. M. Y., & Chu, S. K. W. (2022). Using digital story writing as a pedagogy to develop AI literacy among primary students. *Computers and Education: Artificial Intelligence*, 3, 100054.
- Su, J., Ng, D. T. K., & Chu, S. K. W. (2023). Artificial intelligence (AI) literacy in early childhood education: The challenges and opportunities. *Computers and Education: Artificial Intelligence*, 4, 100124.
- Su, J., & Zhong, Y. (2022). Artificial Intelligence (AI) in early childhood education: Curriculum design and future directions. *Computers and Education: Artificial Intelligence*, 3, 100072.

# Impact of Nature-Based Experiences on Children's Cognitive Development and Environmental Awareness from Caregivers' Perception in Lagos State Early Childhood Education Care Centres

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## Abstract

*This study investigated on the impact of nature-based experiences on children's cognitive development and environmental awareness from caregivers' perception in early childhood education care centers in Lagos State. To achieve this purpose, a descriptive survey design was employed, with data collected from 75 caregivers randomly selected from 25 public preschools in 5 purposively selected Local Government Areas. A self-designed questionnaire, titled "Nature-based Experiences, Children's Cognitive Development, and Environmental Awareness Questionnaire (NECCDEAQ)," was developed and demonstrated high reliability with a Cronbach's Alpha score of 0.89. Findings revealed that nature-based experiences, such as outdoor play, gardening, and exploring natural environments, significantly contribute to children's cognitive development in early childhood education care centers in Lagos State. Caregivers perceived these activities as beneficial for enhancing children's environmental awareness. Specific nature-based activities considered most beneficial included gardening and exploring natural environments. Furthermore, caregivers expressed support for incorporating nature-based experiences into the curriculum of early childhood education care centers. Factors influencing caregiver support included the educational benefits of nature-based activities and their positive impact on children's well-being. Overall, the findings concluded that nature-based experiences play a crucial role in promoting children's cognitive development and environmental awareness in early childhood education settings in Lagos State. Caregivers reported a positive correlation between these experiences and children's learning outcomes. The study recommended that nature-based activities should be integrated into daily routines and curriculum, promoting environmental stewardship. The study also recommended the need for provision of training for caregivers to effectively implement these practices.*

**Keywords:** Nature-Based Experiences, Children, Cognitive Development, Environmental Awareness and Caregivers

## Introduction

Early childhood education plays a crucial role in shaping a child's cognitive development and environmental awareness. Cognitive development, as defined by Piaget (1952), involves the growth of mental processes such as perception, memory, language, problem-solving, and reasoning. Environmental awareness, on the other hand, encompasses an individual's understanding of the natural world and their role in preserving it (Chawla, 2016).

In recent years, there has been growing interest in the potential benefits of nature-based experiences for young children. Nature-based experiences refer to activities and learning opportunities that occur in natural outdoor environments, allowing children to interact directly with nature (Louv, 2015). These experiences can include outdoor play, gardening, nature walks, and exploration of local ecosystems. Nature-based experiences have been shown to offer numerous benefits for children's overall development. Research suggests that exposure to nature can enhance cognitive functioning, improve attention span, reduce stress, and promote physical activity (Taylor & Kuo, 2019; Wells, 2020). Additionally, nature-based experiences have been linked to increased environmental awareness and pro-environmental behaviours in children (Cheng & Monroe, 2022).

Proponents of nature-based experiences argue that they provide a rich, multisensory learning environment that stimulates children's curiosity and imagination. Kellert (2005) suggests that direct contact with nature is

essential for children's cognitive, emotional, and moral development. Studies have shown that nature-based experiences can improve children's attention, working memory, and problem-solving skills (Dadvand *et al.*, 2015; Schutte *et al.*, 2017). Furthermore, nature-based experiences have been associated with increased environmental stewardship and conservation attitudes in children. Wells and Lekies (2016) found that childhood experiences in nature were positively correlated with pro-environmental attitudes and behaviours in adulthood. This suggests that early exposure to nature can have long-lasting effects on environmental awareness and concern.

Critics of nature-based experiences in early childhood education argue that they may pose safety risks and logistical challenges. Some researchers have raised concerns about potential hazards such as insect bites, allergic reactions, and exposure to harmful plants or animals (Little & Wyver, 2018). Additionally, there are concerns about the feasibility of implementing nature-based programs in urban areas with limited access to natural spaces (Ernst, 2014). Another argument against nature-based experiences is the potential for reduced focus on academic skills traditionally emphasized in early childhood education. Some educators and policymakers worry that time spent outdoors may come at the expense of structured learning activities aimed at developing literacy and numeracy skills (Maynard *et al.*, 2023).

Despite these concerns, the potential benefits of nature-based experiences for cognitive development and environmental awareness are compelling. Research has shown that nature-based learning can enhance executive functioning skills, which are crucial for academic success and overall cognitive development (Bourrier *et al.*, 2018). These skills include attention, working memory, and cognitive flexibility, all of which are essential for problem-solving and critical thinking.

Moreover, nature-based experiences provide opportunities for children to develop a sense of connection with the natural world, fostering environmental awareness from an early age. Chawla (2017) argues that direct experiences in nature during childhood are crucial for developing environmental sensitivity and a lifelong commitment to environmental stewardship. Several empirical studies have explored the impact of nature-based experiences on children's cognitive development and environmental awareness. For example, a study by Ulset *et al.* (2017) found that outdoor time in preschool was positively associated with children's cognitive and behavioral development. The researchers observed improvements in attention and reduced hyperactivity symptoms among children who spent more time outdoors.

In another study, Collado *et al.* (2023) investigated the effects of a nature education program on children's environmental attitudes and behaviors. The results showed that participation in the programme led to increased environmental awareness and pro-environmental behaviours among the children. A longitudinal study by McCree *et al.* (2018) examined the impact of forest school experiences on children's development over three years. The findings revealed improvements in children's confidence, social skills, language and communication, motivation and concentration, and physical skills.

The absence of nature-based experiences in early childhood education may have several negative consequences. Louv (2015) coined the term "nature-deficit disorder" to describe the potential developmental and health issues that can arise from a lack of connection with nature. These issues include attention difficulties, higher rates of physical and emotional illnesses, and a diminished use of the senses. Furthermore, limited exposure to nature may result in reduced environmental awareness and concern among children. This could lead to a generation less equipped to address pressing environmental challenges and less likely to engage in pro-environmental behaviors (Chawla, 2016).

The lack of nature-based experiences may also deprive children of important opportunities for physical activity, sensory stimulation, and social interaction. These elements are crucial for holistic development and may be more difficult to replicate in indoor, structured learning environments (Fjørtoft, 2021). Given the potential benefits of nature-based experiences and the risks associated with their absence, it is crucial to investigate their impact on children's cognitive development and environmental awareness. This study therefore seeks to investigate the impact of nature-based experiences on children's cognitive development and environmental awareness from caregivers' perception in Lagos State early childhood education care centres.

### Statement of the Problem

Early childhood is a critical period for cognitive development and environmental awareness. While research suggests potential benefits of nature-based experiences (outdoor play, gardening, exploring natural

environments) for children's cognitive skills and environmental connection (Fjørtoft, 2019; Wells & Evans, 2023), limited research has explored these experiences within the context of Early Childhood Education and Care (ECEC) centers in Lagos State, Nigeria. Urbanization in Lagos has led to a decrease in green spaces and limited opportunities for children to connect with nature. Additionally, the curriculum in many ECEC centers may not prioritize nature-based activities (Akinbile & Alabi, 2022).

This research focuses on the explored area of caregiver perceptions in Lagos. While some studies have explored the benefits of nature-based experiences for children (Fägerström *et. al.*, 2019), there is a dearth of research on how Lagos caregivers perceive the impact of such experiences on children's cognitive development and environmental awareness within ECEC settings. Understanding these perceptions is crucial for designing effective nature-based learning programme and promoting their integration into Lagos preschool curriculums. It is against this background that this study examines the impact of nature-based experiences on children's cognitive development and environmental awareness from caregivers' perception in Lagos state early childhood education care centres.

### **Purpose of the Study**

The main purpose of this study is to examine the impact of nature-based experiences on children's cognitive development and environmental awareness from caregivers' perception in Lagos State early childhood education care centres.

Specifically, the study seeks to:

- examine the extent to which nature-based experiences, such as outdoor play, gardening, and exploring natural environments, contribute to children's cognitive development in early childhood education care centers in Lagos State;
- assess caregivers' perceptions on the impact of nature-based experiences on children's environmental awareness in early childhood education care centers in Lagos State;
- identify the specific nature-based activities that caregivers believe are most beneficial for enhancing children's cognitive development and environmental awareness in early childhood education care centers in Lagos State and
- explore the factors that influence caregivers' support for incorporating nature-based experiences into the curriculum of early childhood education care centers in Lagos State.

### **Research Questions**

The following questions were raised and answered:

- To what extent do nature-based experiences, such as outdoor play, gardening, and exploring natural environments, contribute to children's cognitive development in early childhood education care centers in Lagos State?
- What are the caregivers' perceptions on the impact of nature-based experiences on children's environmental awareness in early childhood education care centers in Lagos State?
- What are the specific nature-based activities that caregivers believe are most beneficial for enhancing children's cognitive development and environmental awareness in early childhood education care centers in Lagos State?
- What are the factors that influence caregivers' support for incorporating nature-based experiences into the curriculum of early childhood education care centers in Lagos State?

The study is hinged on Nature-based experiences (NBEs) encompass a range of activities that connect children with the natural world. These include:

- Outdoor play in parks, forests, or schoolyards (Fägerström *et. al.*, 2019)
- Gardening activities where children plant, care for, and harvest (Graça *et. al.*, 2018)
- Nature exploration walks, hikes, or field trips (Stenhouse, 2019)

These experiences provide opportunities for sensory engagement, exploration, and discovery, fostering a connection with nature.

Research suggests a positive link between NBEs and cognitive development. Studies by Kuo and Barnes (2019) indicate that exposure to green spaces can enhance attention, working memory, and cognitive function in children. Time spent outdoors fosters opportunities for problem-solving, critical thinking, and creativity as



children navigate the natural environment (Fägerström *et. al.*, 2019). Additionally, NBEs provide opportunities for unstructured play, which allows children to explore their curiosity and develop independent learning skills (Graça *et. al.*, 2018). NBEs can play a vital role in cultivating environmental awareness in children. Engaging with nature allows them to experience the beauty and complexity of the natural world firsthand (Sobel, 2018). Activities like gardening foster an understanding of ecological processes like plant growth and the interconnectedness of living things (Graça *et. al.*, 2018). Exposure to nature can also foster a sense of stewardship, encouraging children to care for the environment (Kahn & Kellert, 2022).

### Methodology

A descriptive research design was employed to investigate the impact of nature-based experiences on children's cognitive development and environmental awareness from caregivers' perspectives in Lagos State. This design allows for the collection of data on current perceptions and practices within early childhood education care (ECEC) centers. A multistage sampling procedure was employed for the study. First, five Local Government Areas (LGAs) were purposively selected within Lagos State to ensure geographic diversity. Second, a random sample of 25 public preschools was chosen from the selected LGAs. Finally, from each preschool, three caregivers were randomly selected to participate, resulting in a total sample size of 75 caregivers. A self-designed questionnaire titled "Nature-based Experiences, Children's Cognitive Development and Environmental Awareness Questionnaire (NECCDEAQ)" was developed to collect data. The questionnaire content and construct validity were ensured by experts in early childhood education and environmental psychology. The instrument demonstrated high internal consistency with a Cronbach's Alpha score of 0.89, indicating reliable measurement. Data collected were analysed using descriptive statistics, frequency and simple percentages.

### Results

#### Research Question 1:

To what extent do nature-based experiences, such as outdoor play, gardening, and exploring natural environments, contribute to children's cognitive development in early childhood education care centers in Lagos State?

**Table 1**  
**Respondents' response with respect to the extent to which nature-based experiences contribute to children's cognitive development**  
**Frequently (F) = 4    Sometimes (S) = 3, Rarely (R) = 2. Never (N) = 1**

S/N	Statement	F	S	R	N	X
1.	How frequently do children engage in outdoor play at the early childhood education care centers in Lagos State?	20	25	5	25	3.17
2.	How often do children participate in gardening activities at the early childhood education care centers in Lagos State?	30	20	15	10	3.67
3.	To what extent do children explore natural environments at the early childhood education care centers in Lagos State?	23	32	15	5	3.18
4.	How often do children have the opportunity to interact with nature-based experiences at the early childhood education care centers in Lagos State?	10	12	20	33	2.48
5.	How frequently are nature-based experiences incorporated into the curriculum at the early childhood education care centers in Lagos State?	20	20	15	20	2.17
Grand Mean =		2.93				

Source: Field 2024



A score of 2.50 on a rating scale served as the threshold for agreement (above 2.50) or disagreement (below 2.50). The data in Table 2 suggests that respondents generally agreed with 3 items on the questionnaire, but disagreed with 2 other items which are (2.17 and 2.48) lower than the threshold of agreement. The grand Mean is 2.93 which is higher than the threshold of agreement (2.50), hence it shows that nature-based experiences, such as outdoor play, gardening, and exploring natural environments, contribute significantly to children's cognitive development in early childhood education care centers within the study area.

**Research Question 2:** What are the caregivers' perceptions on the impact of nature-based experiences on children's environmental awareness in early childhood education care centers in Lagos State?

**Table 2**

**Analysis on caregivers' perceptions on the impact of nature-based experiences on children's environmental awareness**

Strongly Agree (SA)=4, Agree (A)=3, Disagree (D)=2, Strongly Disagree (SD)=1

S/N	Statement	SA	A	D	SD	X
1.	I believe naturebased experiences positively impact children's environmental awareness.	22	27	7	19	3.37
2.	Nature-based experiences play an important role in developing children's appreciation for the environment.	20	25	5	25	3.17
3.	I think children are more likely to learn about the environment through naturebased experiences.	18	24	6	27	3.05
4.	I strongly agree that naturebased experiences should be integrated into early childhood education programs.	12	15	18	30	2.65
5.	I strongly disagree that traditional classroom activities are more effective than naturebased experiences in fostering environmental awareness in children.	10	5	30	30	2.42
Grand Mean =		2.93				

**Source: Field 2024**

A score of 2.50 on a rating scale served as the threshold for agreement (above 2.50) or disagreement (below 2.50). The data in Table 3 suggests that respondents generally agreed with 4 items on the questionnaire, but disagreed with the fifth item which is (2.42) lower than the threshold of agreement. The grand Mean is 2.93 which is higher than the threshold of agreement (2.50), hence it shows that there is significant impact of nature-based experiences on children's environmental awareness in early childhood education care centers from caregivers' perceptions.

**Research Question 3:** What are the specific nature-based activities that caregivers believe are most beneficial for enhancing children's cognitive development and environmental awareness in early childhood education care centers in Lagos State?

**Table 3**  
**Rank Order Analysis on the specific nature-based activities that caregivers believe are most beneficial for enhancing children's cognitive development and environmental awareness**

S/N	Statement	Means	X	Remarks
1.	<b>SENSORY EXPLORATION</b> Nature walks	1.67	0.47	Available
2.	Nature treasure hunts	1.88	0.33	Available
3.	Sensory bins	1.50	0.50	Available
4.	Barefoot walking	1.80	0.40	Available
5.	<b>CREATIVE PLAY</b> Nature art	1.78	0.41	Available
6.	Mud art	1.91	0.29	Available
7.	Storytelling in nature	1.94	0.23	Available
8.	Building with natural materials	1.97	0.18	Available
9.	<b>SCIENCE EXPLORATION</b> Planting seeds and observing growth	1.59	0.50	Available
10.	Collecting and identifying leaves and rocks	1.70	0.46	Available
11.	Weather observation and experiments			Available
12.	Animal tracking and identification	1.18	0.38	Not Available
13.	<b>PHYSICAL ACTIVITY</b> Nature obstacle courses	1.12	0.39	Not Available
14.	Nature yoga and mindfulness	1.08	0.27	Not Available
15.	Nature scavenger hunts	1.56	0.54	Available
16.	Ball games in nature	1.64	0.48	Available

**Source: Field 2024**

Caregivers believe that the nature-based activities which are most beneficial for enhancing children's cognitive development and environmental awareness are those with a mean score of 1.80 and above. Activities with a mean score below 1.80 are not considered as effective for achieving these outcomes. Based on the rank order analysis, the following activities are considered the most beneficial for enhancing children's cognitive development and environmental awareness: Storytelling in nature; Building with natural materials; Mud art; Nature treasure hunts and Barefoot walking. Activities such as animal tracking and identification, physical activity like nature obstacle courses and nature yoga, and mindfulness are not considered as effective for enhancing children's cognitive development and environmental awareness.

**Research Question 4:** What are the factors that influence caregivers' support for incorporating nature-based experiences into the curriculum of early childhood education care centers in Lagos State?

Table 4

**Rank Order Analysis on the factors that influence caregivers' support for incorporating nature-based experiences into the curriculum of early childhood education**

S/N	Statement	SA	A	D	SD	X
1.	I believe there is positive impact of nature-based experiences on children's cognitive development, physical health, social skills, and environmental awareness	15	30	5	35	3.25
2.	I believe nature-based experiences align with the overall educational goals of the ECEC center	18	20	22	15	3.18
3.	Caregivers' own comfort level with spending time outdoors and their personal connection to nature can influence their support	29	22	15	9	3.68
4.	Cultural values regarding outdoor play and interaction with nature might influence caregiver perspectives	10	12	15	43	2.48
5.	Compatibility of nature-based experiences with existing curriculum standards can influence support.	22	25	13	15	3.40
Grand Mean =		3.20				

**Source: Field 2024**

A score of 2.50 on a rating scale served as the threshold for agreement (above 2.50) or disagreement (below 2.50). The data in Table 4 suggests that respondents generally agreed with 4 items on the questionnaire, but disagreed with the fifth item which is (2.48) lower than the threshold of agreement. The grand Mean is 3.20 which is higher than the threshold of agreement (2.50), hence it shows that there are significant factors that influence caregivers' support for incorporating nature-based experiences into the curriculum of early childhood education care centers.

**Discussion of Findings**

Based on the data presented in Table 1, it can be inferred that nature-based experiences, including outdoor play, gardening, and exploring natural environments, contribute significantly to children's cognitive development in early childhood education care centers in Lagos State. For example, a study by Wells and Evans (2023) found that exposure to natural environments can enhance children's cognitive abilities, such as attention and problem-solving skills. Similarly, Louv (2015) emphasizes the importance of nature-based experiences in promoting creativity and reducing stress in children.

The data from table 2 on caregivers' perceptions of the impact of nature-based experiences on children's environmental awareness in early childhood education care centers in Lagos State indicates that the majority of participants agree that nature-based experiences have a positive impact on children's environmental awareness. Specifically, respondents strongly agreed or agreed with statements indicating that nature-based experiences are important in developing children's appreciation for the environment and that children are more likely to learn about the environment through such experiences. This aligns with previous research by Chawla (2018), who found that nature-based experiences can enhance children's cognitive and emotional connection to the environment.

The data from table 3 suggests that caregivers believe certain nature-based activities are more beneficial for enhancing children's cognitive development and environmental awareness in early childhood education care centers in Lagos State. Specifically, activities such as storytelling in nature, building with natural materials, mud art, nature treasure hunts, and barefoot walking were identified as the most effective in achieving these

outcomes, as they all had mean scores of 1.80 and above. This finding is consistent with previous research by Chawla (2017), who emphasized the importance of storytelling in connecting children with nature and fostering an understanding of the environment. Similarly, Kytta (2022) highlighted the benefits of hands-on activities such as building with natural materials and mud art in promoting cognitive development and environmental awareness among children.

On the other hand, activities such as animal tracking and identification, physical activities like nature obstacle courses and nature yoga, and mindfulness were not considered as effective for enhancing children's cognitive development and environmental awareness, as they had mean scores below 1.80.

The data from table 4 suggest that there are several factors that influence caregivers' support for incorporating nature-based experiences into the curriculum of early childhood education care centers in Lagos State. Firstly, the belief in the positive impact of nature-based experiences on children's cognitive development, physical health, social skills, and environmental awareness was found to be a significant factor influencing caregivers' support. This finding is supported by previous research by Chawla (2015) who argued that exposure to nature in early childhood can enhance cognitive and social development.

Secondly, the alignment of nature-based experiences with the overall educational goals of the ECEC center was also identified as an important factor influencing caregivers' support. This finding is consistent with the work of Bell and Dymont (2024) who emphasized the importance of integrating nature-based experiences into curriculum planning to meet educational objectives. Additionally, caregivers' own comfort level with spending time outdoors and their personal connection to nature were identified as influential factors in supporting nature-based experiences. This finding is in line with the research of Sobel (2018) who highlighted the significance of caregivers' attitudes and beliefs in shaping children's experiences with nature. On the other hand, cultural values regarding outdoor play and interaction with nature were found to be a factor that influences caregiver perspectives. This finding aligns with the work of Zelenski *et al.*, (2015), who emphasized the need to consider cultural beliefs and values when promoting nature-based experiences in early childhood education.

Lastly, the compatibility of nature-based experiences with existing curriculum standards was also identified as a factor influencing caregivers' support. This finding is consistent with the research of Ernst (2022) who argued that nature-based experiences can be integrated into curriculum standards to enhance learning outcomes. The findings suggest that there are significant factors that influence caregivers' support for incorporating nature-based experiences into the curriculum of early childhood education care centers in Lagos State. Future studies could delve deeper into the specific ways in which these factors can be addressed to promote the integration of nature-based experiences in early childhood education.

## **Conclusion**

Based on the findings of the research study, the research findings suggest that nature-based experiences play a crucial role in enhancing children's cognitive development and environmental awareness in early childhood education care centers in Lagos State, according to the perceptions of caregivers. The study revealed that outdoor play, gardening, and exploring natural environments are significant activities that contribute to children's cognitive development. Caregivers also believe that these nature-based experiences are beneficial for enhancing children's environmental awareness. It was also found that certain factors such as the availability of resources and training influence caregivers' support for incorporating nature-based experiences into the curriculum of early childhood education care centers. Overall, the research highlights the importance of incorporating nature-based activities in early childhood education to foster children's cognitive development and environmental awareness.

## **Recommendations**

The following recommendations were made based on the findings of the study:

- There is need to encourage early childhood education care centers in Lagos State to prioritize nature-based experiences, such as outdoor play, gardening, and exploration of natural environments, to enhance children's cognitive development.
- There is need to provide training and resources for caregivers in early childhood education care centers in Lagos State to support and facilitate nature-based activities that promote children's environmental awareness.

- There is need to incorporate specific nature-based activities that caregivers believe are most beneficial for enhancing children's cognitive development and environmental awareness into the curriculum of early childhood education care centers in Lagos State.
- There is urgent need to identify and address the significant factors that influence caregivers' support for incorporating nature-based experiences into the curriculum of early childhood education care centers in Lagos State, such as lack of resources or knowledge.
- There is need to foster partnerships and collaborations between early childhood education care centers, community organizations, and local authorities in Lagos State to create opportunities for children to engage in nature-based experiences that support cognitive development and environmental awareness.

## References

- Akinbile, C. A., and Alabi, M. O. (2022). Environmental education in early childhood care and education (ECCE) curriculum in Nigeria: Issues and challenges. *International Journal of Educational Development Using Information and Communication Technology*, 4(1), 181- 188.
- Bell, A. C., and Dymont, J. E. (2024). Grounds for health: The intersection of green school grounds and health-promoting schools. *Environmental Health Perspectives*, 122(3), A73-A79.
- Chawla, L. (2015). Benefits of nature: What we are learning about why people respond positively to nature. *Journal of the American Planning Association*, 81(4), 394-402.
- Chawla, L. (2017). Childhood experiences associated with care for the natural world: A theoretical framework for empirical results. *Children, Youth and Environments*, 17(4), 144-170.
- Chawla, L. (2018). Significant life experiences revisited: A review of research on sources of environmental sensitivity. *The Journal of Environmental Education*, 29(3), 11-21.
- Diamond, A. (2017). The temporal dimension in pre-frontal cortex underlies executive functions in children. *Annals of the New York Academy of Sciences*, 1124(1), 113-130.
- Dymont, J. (2017). Nature-based learning for young children: Possibilities and limitations. *Canadian Journal of Environmental Education*, 12(1), 73-83.
- Ernst, J. (2022). Preschool teachers' attitudes, beliefs, and use of outdoor play and outdoor environments. *Early Childhood Education Journal*, 40(4), 227-235.
- Fägerström, A., Kärnä, A., Eriksson, M., Frykman, M., and Oja, P. (2019). Nature-based preschool education: A systematic review of health, learning, and development outcomes. *Journal of Environmental Psychology*, 65, 103-115. <https://systematicreviewsjournal.biomedcentral.com/articles/10.1186/s13643-020-01489-1> <https://doi.org/10.1186/s13643-020-01489-1>
- Fjørtoft, I. (2019). The nature of play: Nature as a playground. *International Journal of Play*, 1(1), 71-91.
- Graça, M. P., Coelho, P. C., and Jardim, A. (2018). Nature-based learning for young children: Exploring caregivers' perceptions and practices. *International Journal of Early Childhood*, 50(1), 107-124.
- Kahn, P. H., and Kellert, S. R. (2022). *Children and nature: Psychological, sociocultural, and evolutionary investigations*. MIT Press.
- Kytta, M. (2022). Affordances of children's environments in the context of cities, small towns, suburbs and rural villages in Finland and Belarus. *Journal of Environmental Psychology*, 22(1-2), 109-123.
- Louv, R. (2015). *Last child in the woods: Saving our children from nature-deficit disorder*. Algonquin Books.
- Sobel, D. (2018a). *Place-based education: Connecting classrooms and communities*. Great Barrington, MA: Orion Society.
- Sobel, D. (2018b). *Childhood and nature: Design principles for educators*. Stenhouse Publishers.
- Sutter, K. I., and Twardowski, C. (2021). Children's attitudes toward nature: A case study of environmental awareness among preschool children. *Early Childhood Education Journal*, 39(4), 265-271.
- Wells, N. M., and Evans, G. W. (2023). Nearby nature: A longitudinal study of residence environment and children's cognitive development. *Environmental Science and Technology*, 37(2), 365-371.
- Zelenski, J. M., Dopko, R. L., and Capaldi, C. A. (2015). Cooperation is in our nature: Nature exposure may promote cooperative and environmentally sustainable behavior. *Journal of Environmental Psychology*, 42, 24-31.



# **Influence of Leadership and Governance on Moral Value of School Children's Social Development amidst Insecurity in Mangu Zone of Plateau State**

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## **Abstract**

*Leadership and governance of today has been influenced due to high increase in insecurity, and other social vices to an alarming rate, especially in Nigeria and other parts of Africa also due to decadence in moral values. It is a phenomenon which spans the physical, psychological, economical and other aspects of the individual and extends to social circle. Leadership and governance if not given appropriate attention will yield into a national problem of enormous proportion; as well creates fear in educating children in Nigeria and no place for moral value to an extent. Absence of good leadership and good governance has given rooms for insecurity in the country which has made parents to withdraw their children and wards from schools due to negligence in leadership and good governance, while affected children have social imbalance to pursue their education. Therefore, this study examined the causes of bad leadership and good governance as it influence the moral value of school children in Mangu zone of Plateau state. The population for this study was 120 early childhood professionals from 10 districts in Mangu Area council of Plateau state. Simple random sampling was adopted to select the target population of 70 early childhood education professionals in Mangu Area council of Plateau State. A 70 self designed questionnaire was designed as an instrument to obtain information from the selected respondents: Influence of leadership and governance strategies on Moral Value of School Children Social Development Inventory. (ILGSMVSCSDI). Two research questions guided the study and research questions were analyzed using frequency, percentage and mean, as well, hypotheses were analyzed using t-test and analysis of variance (ANOVA) at 0.05 level of significance. Therefore, it was recommended that Nigerians should avoid tribalism, nepotism, ethnic jingoism in other to elect credible leaders. Community leaders should collaborate with the school authority, government and significant others in adopting the current and effective strategies in maintaining peace and instilling moral value which will help to reduce insecurity and improve good leadership and good governance in the country, as well teachers should inculcate acceptable values to the children.*

**Keywords:** Leadership, Governance, Moral Value, School Children, Social Development

## **Introduction**

Childhood education is aimed at promoting the holistic development of children from birth to adolescent stage. It prepares the children well to face the challenges at adolescent to adulthood. Childhood education is any programme that is designed to promote children's intellectual development, socio-emotional

development, language development, physical development and literacy from birth to adolescent (Adebanjo & Amusan 2023). This simply implies that childhood education paves way for over all development of the child from birth to maturity. This cannot be true if the environment is not conducive for proper training and upbringing and of which could be attributed to leadership and governance of the country.

The issue of leadership and governance in Nigeria has caused a general problem of enormous. Addressing this issue of management of safety in Nigerian schools is quite germane giving growing incidence of bad leadership and bad governance resulting in kidnapping across Nigerian schools at all levels and destruction of lives and properties Nzewi (2014). Leadership is a matter of intelligence, trustworthiness, humanness, courage, and discipline (Igbo, 2023). Governance is the act or process of governing and overseeing the control and direction of a country. Leadership worthiness and good governance are two identity and they are pragmatic strategies aimed at accomplishing a country desired goals economically, socially, politically and otherwise. Absence of quality leadership and good governance attracts insecurity, social and economic instability thereby creating negligence on moral values and influences social development of the school children in the environment.

Morality as a concept is elusive and highly nebulous to give a particular definition to. the descriptive definition of morality is that morality is a set of conduct put forward by any actual group and acceptable by the members of that group or the society Gert, in Adedigba and Wahab (2015). This is in line with Akande and Jawondo (2008) that morality is referred to as behaviours or actions that are considered by most members of a group to be right. This simply clarified that morality is the principles concerning right and wrong or good and bad behaviours. Despite the difference in the ways of life of the people of Nigeria, there are some standards or principles which are considered desirable by every Nigerian. Such standards may be moral or ethical. For example, honesty, hardworking, tolerance, respect for others, cooperation, justice, trust-worthiness, prudence, integrity, fairness, patriotism, unity, obedience to the laws, etc. are usually thought of by many as principles or standards that Nigerian society, collectively, holds as valuable, and therefore wants her members to imbibe (Ajiboye, 2003). Moral values however, can be described as the upholding and displaying of certain beliefs, ideas, rules and regulations or behaviours which are generally considered good, right and accepted by the society and to which every member of that society is bound. When this moral values are out of place in the society it tends to generate social vices such as insecurity, this insecurity has caused a lot of damages to the populace in Mangu. Schoolchildren have become victims of circumstances which have affected their behaviours and social interactions also as a result of decadence in moral values.

For moral values to be uphold all hands must be on deck especially in the area of governance and leadership of the country because when there is total breakdown of law and order at the top of affairs of the nation, injustice, discrepancies in the sharing of democratic dividends which tends to affects the moral standard. These can lead to series of social unrest and being victims of unknown circumstances. School Children who are victims and live in an insecurity prone environment as a result bad leadership and bad governance face many challenges and risks that can last throughout their lives. Leadership and governance have been recognized as imperative for the attainment of the political, economic and social objective of any political institution. It is a truism that the quality of leadership and overall governance in a country directly affects the level of political stability and development that such country enjoys. Bad governance and poor leadership only result in underdevelopment and political instability (Ologbenla, 2007). It is on the recognition of the imperative of leadership and governance to a country that Nnabulife (2010) avers that the survival of a system rests with leadership community.

So, leadership and governance works together to averts social unrest. Perhaps, Maserumule and Gutto (2008) define governance as the process of decision or policy making, and the process by which decisions and policies are implemented. Although, Kaufmann, Kray, and Mastruzzi (2006) offers a comprehensive definition of governance, according to them, governance is the traditions and institutions by which authority in a country is exercised which include the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions, economic and social interactions among them. With that, Governance and leadership have been identified as indispensable for social change, economic growth and human development of a country (Mangu, 2008). Leadership in its simplest form is the ability to inspire, direct, motivates and encourages others positively to targeted ends. Quality leadership and governance promote national security; preserve core values of society, the territorial integrity and physical wellbeing of the citizen. Therefore, leadership and governance

are seen as a road map for peaceful coexistence and absence of it or low quality leadership and bad governance affects the general populace, thereby causing serious problems. These, problems that emanates from leadership and governance styles ranges from insecurity, destruction of public properties, in sighting violence, moral decadence and affects social development of the child.

The people of Mangu zone of Plateau state has been in such ugly trend for a decade now and it has created rooms for social menace in the zone and it could be attributed to negligence in good qualities of leadership and governance. This chronicle of low quality leadership and low quality governance level has resulted to protest, attacks on educational institutions which has become a major setback to achieving Nigeria educational goals and children social development. (Anyagwu & Onuoha, 2021). In line with Nzewi (2014) that highlighted various activities of societal unrest in country in the last five years stated that more than 29 school children and teachers was killed in Baja community secondary school in Borno State as a result of attack by gunmen in 2013. In 2021, over 100 school children, mostly girls were kidnapped by bandits at the federal government college Birnin – Yaur, Kebbi state. Over eight hundred (800) classrooms in Yobe State were destroyed leading to the closure of all schools across the State. Recently, twelve (12) boys were abducted in a private school in Lagos and ransom were paid before they were released and federal Government College Kwale, Abuja were forced to close because of attack on presidential security advance team in June, 2022 as they were on transit to Daura in Katsina. Recently in Mangu zone of Plateau state the bandits and armed herdsmen invaded the zone killed about 120 people including children as well rendering them homeless. Over 30 persons were killed between 21<sup>st</sup> January, 2024 to 25 January 2024 with many injured and many houses burnt when assailants attacked Kwahaslalek village, a community in the Mangu Local Government Area. Governor Caleb Mutfwang has since imposed a curfew in the LGA within that time which lasted for a month. Plateau State has been badly hit by blood-thirsty marauders and over 200 killed during Christmas Eve 2024 in attacks in the Bokkos and the Barkin Ladi local government areas. Many houses and farm produce were also burnt in the overnight attacks and scores were injured (Obewo-Isan, 2024). Indigenes of the zone has been denied the opportunity to carry out farm work due to fear of being attacked and has resulted to people fleeing from that zone despite of Nigeria army presence and hunger. This is a desperate embarrassment to the leadership and governance of the country.

The leadership and governance in the country has attracted social unrest and issues in Plateau state particularly in Bokkos, Bassa, Jos north, Wasse and especially in Mangu, all in Plateau state which are affecting the academic activities and introducing the incidence of moral value decadence. Oku (2016) further buttress that there are several related incidences in the North but not only in the north west, but especially in the north east, and north central Nigeria, there are violent agitations, oil bunkering, cultism and kidnapping related issues in the south-east and south-south Nigeria which have instilled justifiable fears on the safety of children, and their social development. Perhaps, these could be attributed to the impact of leadership and governance. This is because leadership and governance encompasses the ability of a state to protect its internal values from violence, financial pressures, religious conflicts and crime (Dambazu & Igbo, 2015). Leadership and governance are the critical issue bedeviling the Nigerian democratic experiment. The crisis of leadership is a big minus for the democratic project. The two major sides of the leadership and governance are freedom from want and freedom from fear. These include conducive learning environment, economic, food, health, environment, personal, community and political security. Leadership and governance have severe adverse impacts on physical, psychological, health and social development of children as well can affect moral values. There are many consequences which often reflect on the lives of children who are victims of insecurity due to bad governance Akintude and Selzing (2016). These consequences of low quality leadership and inconsistency in governance could lead to decadence in moral values, poor academic performances, drug abuse, imitating wrong models, affects social development of the child etc.

The result of the above situation has made parent to be more concerned about the social development of their children and safety of sending their children to school and affect the teachers who are care givers because of unsafe environment. Educating children and impacting of moral values requires perfectly safe environment when there are quality leadership and good governance to ensure that effective learning is achieved because It is universally believed that Education is a powerful weapon which can be used to correct decadence especially moral and values decadence in the society through re-orientation of the people, most especially youths. Nzewi (2014) assert that the perception or fear of insecurity influences children social development and balance. This perception can affect children social development, learner's school attendance, cause poor performance and

affect general wellbeing of learners. For these reasons, failure to research into this problem may result in serious emotional, behavioral, developmental, or academic problems owing to the danger insecurity poses on daily basis and the development of children, this could be attributed to decadence in moral values in Nigeria which has actually put a stop or slow down nation Building in Nigeria (Mbaba, Odo & Omabe, 2021).

Children's daily activities include playing, reading, eating and sleeping among others, and they need to interact and communicate with parents, siblings, teachers and peers as well as others in the society as explained in kids matter. Social development involves learning and values, knowledge and skills that enable children to relate to others effectively and to contribute in positive ways to family, school and the community (Alamike, 2015). Social development enables the children to interact freely and acquires moral values in order to become well adjustable individual. This method of acquiring new knowledge and acquisition of moral values is often pass on to children directly by those who cares and teach them, although indirectly through social relationships within the family, friends as well as through the children participation in the culture around them ( Ezulike, Ukeje & Ughasoro,2023). As children develop socially, they actually respond to the influence around them and play an active role in adjusting the relationship pattern. Friendship and relationships with others become more important to children as they grow and begin to learn, getting along with others but when there is existence of insecurity in a settlement or environment then the social development is endangered. Also when there is adequate security and conducive environment as a result of the impact of good leadership and governance the children will learn positive friendship skills that will improve better relationships with others of which will benefits their mental health and wellbeing.

With the above, Hartup (1992)claims that the single best childhood predictor or adult adaptation is not intelligent quotient IQ, school grades and not classroom behavior but, rather, the adequacy with which the child get along with other children. The moral values and socialization process of children can seriously be affected by insecurity both at home and in school. This is supported by Pelton in Ahmed (2017), which states that being a victim of insecurity or being residing in insecurity prone environment can terrorize children and significantly disrupt child socialization but when there are good leadership and governance of the country the incidence of insecurity will not emerge. This is because when there is quality leadership and governance there are high possibility that moral values of school children will be maintained to achieve social development. Some scholars have started to consider the exposure to insecurity and hostile environment due to the state of leadership and governance as a form of psychological maltreatment which can significantly affects the moral values of school children and society in general because children born in a hostile and un-conducive environment will grow up thinking that such behaviors seen in that locality is a way of life. Although, Clara in Ahmed (2017) averts that victims and children found in insecurity prone locality is more likely to end up in violent or abusive relationships as an adult and the destructive cycle continues. This indicate that many children who grow up in such locality because, bandits, kidnappers, rapist, school dropout and always ready to hurt their own partners or children, pass on violence from one generation to another end as well become depressed and have low self-esteem and negative high self-esteem as well as depriving them from upholding moral values. This moral values is cherished and acceptance standard of behaviour Amadi (2016). This simply implies that moral values are a principle, a standard or a quality that is considered worthwhile desirable. Therefore, moral values are standard used to judge behaviour and choose among various goals that will allow children attain their potentials and improve their social development. But if the insecurity is not properly put on hold it may go a long way on improving decadence in moral values because children and adolescent will see it a part of life.

Many studies have been carried out to know the causes of insecurity and its effects among children and adolescents for example; Anyaogu and Onuoha earned out research on educating children amidst insecurity and Covid-19 Pandemic in Nigeria: the management best practices and Oyibe, Nwafor and Chukwu (2021) achieving sustainable national security through effective social studies pedagogies and related study and Ahmed (2017) on perception of childhood education professionally on the causes of domestic violence and its effects on pupils' social development, insecurity and its effects on school children's social development: perception of early childhood education professionals (Ezulike, Ukeje & Ughasoro, 2023).But none has been carried out on Influence of Leadership and Governance on Moral Value of School Children's Social Development amidst insecurity In Mangu Zone of Plateau **state** there is needforjustifiable need for the study.



### **Statement of the problem**

In Nigeria today leadership and governance have another dimension especially in Plateau state where many families have abandoned their ancestral home, schools' activities affected and particularly affect their moral values and social development. Children are now afraid to go to school this has implored them into indoors which is capable of putting them into psychological trauma and capable of affecting their social development. Most children have seen these as normal way of life since is often happens at times join the hoodlums at younger age this could have resulted in the decadence of moral values among the school children. Teachers and care givers which aims at assisting the individual regain their psychological trauma and inculcating children to adopt good moral standards are being affected because of the leadership and governance styles which has resulted in insecurity situation has not given the schools a conducive atmosphere for teaching and learning. The children social development has been a source of concerns to teachers, care givers, parents and public in general. The leadership and governance of Plateau state if not properly handled, will generate problems to children's not only their social development but generally. Therefore, this study seeks to determine the influence of leadership and governance on moral values of school children's social development in Mangu Local Government of Plateau State.

### **Purpose of the study**

The purpose of this study is to examine the influence of leadership and governance on moral values of school children social development amidst insecurity in Mangu Zone of Plateau State.

The study specifically sought to:

- ascertain the leadership and governance strategies of which may result to insecurity in Plateau state.
- obtain the influence of leadership and governance which may results in decadence of moral value on school children social development.
- examine the leadership and governance strategies on maintaining the moral values on school children social development.

### **Research questions**

- What are the leadership and governance strategies of which may results to insecurity?
- What are the influences of leadership and governance strategies may results to decadence in moral value on children's social development.
- What are the leadership and governance strategies on maintaining the moral values on school children social development?

### **This study tested the following hypothesis:**

H<sub>0</sub>1: there is no significant difference in perception of early childhood education professionals on the leadership and governance strategies which may cause insecurity in Manguzone of plateau state.

H<sub>0</sub>2: there is no significant difference in leadership and governance strategies which may cause decadence in moral value on school children social development.

### **Methodology**

The deceptive survey design was adopted in this study for the investigation on the influence of leadership and governance strategy on moral value of school children social developmental single self designed instrument on influence of leadership and governance strategies on moral value of school children social development (ILGSMVSCSD) was adopted for the study. The total population for the study was 120 education professionals in 10 districts in Mangu district of plateau state.. Simple random sampling were utilized to obtain 70 early childhood education professionals as a respondents for the study in each of the 10 district in Mangu district with a total 70 respondents. Three research questions were used for the study. Face and content validation of .the instrument was done by two expert one from measurement and evaluation unit of the educational psychology of the federal college of education, Pankshin and one from early childhood and primary education department of the federal college of federal college of education, Pankshin for clarity and appropriateness. The corrected version of the validated instrument was tested for reliability using test and re-test method. The data from the test re-test was analyzed using Alpha which determines the reliability index of the



instrument at 0.08 consistency in measuring what is supposed to measure because of a coefficient of 0.08 is high and accepted. The data were also analyzed using mean and standard deviation. The results were presented below.

### Results

- Research question one: **Table 1:** What are the leadership and governance strategies that will results to insecurity which affects moral value of school children social development?

S/N	ITEMS	SA	A	D	SD	MEAN	Remark
1	Poor of accountability	7(10.0)	25(35.7)	32(45.7)	6(8.6)	2.45	Accepted
2	The level of Poverty	23(32.9)	21(30.0)	2(2.9)	2(2.9)	3.49	Accepted
3	Inability of government to settle tribal differences among the inhabitants	12((17.1)	31(44.3)	34(48.6)	6(8.6)	2.70	Accepted
4	Poor provisions of basic amenities.	11(15.7)	36(51.4)	17(24.3)	6(8.6)	2.74	Accepted
5	Poor implementation of reliable policies that will promote peaceful coexistence.	40(57.1)	26(37.1)	2(2.9)	2(2.9)	3.49	Accepted
6	Political differences among the politicians	11(15.7)	36(51.4)	17(24.3)	6(8.6)	2.74	Accepted

### Weighted mean 2.897

The table above clearly shows the indicates the leadership and governance strategies that may results to insecurity.

The respondents agreed that following are the causes of insecurity as a result of poor leadership and bad governance; poor accountability (2.45), poverty level (3.49), inability of the government to settle tribal conflicts on time (2.70), poor provision of basic amenities by the Government (2.47), poor implementation of reliable policies that will promote peaceful coexistence in plateau (3.49), political differences among the politicians (2.74). The implication of the above happenings is that early childhood education professional believes that poor accountability), poverty level (3.49), inability of the government to settle tribal conflicts on time, poor provision of basic amenities by the Government, poor implementation of reliable policies that will promote peaceful coexistence in plateau, political differences among the politicians.. it is apparent that poverty had the highest mean indicating the numeric strength that the professionals believed that poverty is the major cause of insecurity in Nigeria which is in line with Obi (2022) that bringing people out of poverty will improve the leadership and governance which will drastically reduce the insecurity level in Nigeria thereby making the school conducive for academic activities. Perhaps, it is further explained that, generally, that good leadership and governance brings security of lives and property which in turns improves socio- economic activities as well affects positively moral values of school children, sustains classroom instructions and improves children social development

**Research question two; Table 2;** what are the influences of poor leadership and governance negligence which will result in effect of moral value on school children social development

S/N	ITEMS	SA	A	D	SD	MEAN	Remark
7	Killings of parents with their innocents children	27(38.6)	28(40.0)	12(17.1)	3(4.3)	3.13	Accepted
8	Corruption	25(37.7)	27(38.6)	14(20.0)	4(5.7)	3.04	Accepted
9	Illiteracy	5(7.1)	23(32.4)	34(48.6)	8(11.4)	2.36	Accepted
10	Insensitive to religious sentiment	11(15.7)	36(51.4)	17(24.3)	6(8.6)	2.74	Accepted
11	Poor remuneration of security personnel	25(37.7)	27(38.6)	14(20.0)	4(5.7)	3.04	Accepted
12	Exposing the children to acquire arms	40(57.1)	26(37.1)	2(2.9)	2(2.9)	3.49	Accepted

This implied that the above item are the influences of poor leadership and governance negligence that can cause decadence in moral value on school children social development insecurity on children social development which is in line with Ezulike, Ukeje and Ughasoro (2023) that being a victim of insecurity or residing in insecurity prone environment due to poor leadership and governance strategies can terrorize children and significantly disrupt child's socialization.

Therefore, it significantly shows that the above reflects the effects of insecurity and decadence in moral values on children social development.

**Table 3. Research question 3:**What are the leadership and governance strategies on maintaining the moral values on children social development?

S/N	Items	SA	A	D	SD	Mean	Remark
13	Improve on the creating of the enabling environs teaching and learning.	10(14.3)	27(38.6)	22(31.4)	11(15.7)	2.51	Accepted
14	Educating children and residents on religious, ethnic and political tolerance.	15(21.4)	33(47.1)	14(20.0)	8(11.4)	2.79	Accepted
15	imple.	29(41.4)	36(51.4)	3(4.3)	2(2.9)	3.31	Accepted
16	Implementation of proactive government strategies that will facilitate the development of communities.	8(11.4)	33(47.1)	20(28.6)	9(12.9)	2.57	Accepted
17	Employment of security personnel to safeguard all the schools.	7(10.0)	37(52.9)	18(25.7)	8(11.4)	2.61	Accepted
18	Equal and equity in distributions of democracy dividends.	26(37.1)	33(47.1)	8(11.4)	3(4.3)	3.17	Accepted

Table 1 above presents the mean rating of the respondents in respect to the leadership and governance strategies in maintaining and improving the leadership and governance strategies in promoting moral values of school children's social development educating a amidst insecurity in Pankshin. From the above table item 13 to 18 scored above the mean score of 2.5 which are accepted. This indicates that the respondents all agreed that all the strategies presented can be adopted by to allow sensitive government to improve moral value of school children and accelerate their social development in the society. Therefore, it significantly shows that the above reflects the influence of leadership and governance on in moral values on children social development in Pankshin.

**Table 5:** Male and female professionals' perception on the influence of poor leadership and governance strategies that may cause insecurity that may affects moral values of school children's social development in Mangu zone of Plateau state.

Gender	N	Mean	Std deviation	t	Df	Sg	Remark
Male	28	29.96	7.6	995	68	0323	Not significant
Female	44	28-41	6.12				

The table above shows no significant difference in male and female professionals' perceptions of the influence of leadership and governance on moral values of school children social development amidst insecurity in Mangu ( $t = 995$ ,  $df = 68$ ,  $p > 0.05$ ). It reveals the differences in male and female professional perception on the influence of leadership and governance on moral values on school children's social development amidst insecurity.

### **Hypothesis two**

There is no significant difference in male and female perceptions of the influence of leadership and governance on moral values of school children's social development

### **Discussion of The Findings**

Based on the mean scores of the findings, it revealed that leadership and governance strategies have impacts on moral value development and sustainability among the school children in Mangu Zone of Plateau state. Efforts should be intensified and strategized on security to avoid incessant attacks to communities which has resulted to loss of their ancestral home to herders as well disrupt academic activities and social development of the children. This is as a result of leadership and poor governance. Based on the findings, leadership and governance in the state should aim at bringing people out of poverty and providing an enabling environment for communities to embark on farming and academic activities by intensifying on security apparatus. There should be programmes from time to time to educate people on tolerance and dangers of causing social menace to the society such as kidnapping, killings etc. Similarly, government should also improve on economic policies and counseling adolescents and residents on security tactics this will help to improve moral values of school children.

Therefore, it becomes necessary that teachers and care givers in schools should adopt more strategies to improve and impact good morals at early age. The findings are in line with Ikwumelu, Oyibe and Eluu (2013) who state that and maintain that sustainable national security could be maintained through effective orientation and re-orientation of the populace to maintain peace, tolerance and love by the National Orientation Agency and professional counselors and psychologists, teachers, care, counselling group, individual and peer education as identified by the study, can be used to maintain peace and change the individual from undesirable to desirable behaviours. This is in agreement with Okeke (2009) who said that guidance is a variable tool used to change the undesirable behavior of the individual into the acceptable behavior. The implications of findings are not in isolation to other findings.

### **Implications for early childhood education professionals**

The remains of this ugly scenario and all the issues associated with the influence leadership and governance strategies on moral values of school children has ugly consequences not on moral values but as well on psychological and emotional effects. Later in life children who are victims of insecurity or grew up in an insecurity prone locality tend to behave in undesirable manner thinking that is a way of life. Inability to resolve conflict in Mangu zone of plateau leads to killings, burning of shops, destructive protest, people houses, destruction of farms, exposes children to social vices and have difficulty in establishing close relationship among the community dwellers..

Consequently, Good leadership and governance, social support, psychotherapeutic strategies are required for social and psychological adjustment. Care givers with the Guidance counselor in their schools should try to be more active by organizing talks and give sensitization to the people through mass media and school programme.

Therefore, the role of early childhood professionals in this aspect is to ensure that schools environment is child friendly and children's are taken care of, as well employs preventing measures either through their school authority, parents, government, communities and security agency especially in this era of security challenges and decadence in moral values. Counselling can assist in this area by helping the school authority in organizing programmes, giving advice, counselling in order to save lives and make future of education in Nigeria great as well to uphold the moral values of African society.

### **Conclusion**

Leadership and governance strategies in Nigeria has become a formidable challenge for the economic sustainability and peace in various community in Nigeria, this is because non existence of conflicts provides

avenue for sustainable economic activities, school programmes and other social activities in the country. This has become one of the reasons while early childhood education or care givers should catch them young by inculcating good morals using appropriate teaching pedagogies. This will help maintain moral values among the people later in life. Good leadership and good governance pave way for democratic dividends and when this dividends are appropriately provided their will be less conflicts among the people in communities as well provides a conducive environment for care givers to carry out their programmes in school. Good leadership and governance strategies such as Provision of basic amenities, good accountabilities, adequate security strategies etc. and implementation of skill programme are of benefits for economic sustainability and conflicts free environment. But if these are not properly checked it will creates enabling environment for conflicts as well makes children and women to be a target to be abducted from school either to be used as Boko Haram, bandits, for ransom, or informants etc. perhaps, this enamors challenge has caused children a lot of set back and their social development being affected living them traumatized.

Operationally, good leadership and good governance provides enabling environment for Children growth and development, conflicts free environment and help to improve economic sustainability, as well improves security architectures in Mangu zone of Plateau state.

### Recommendations

With the view of the effects of insecurity and decadence in moral values on children's' social development it requires

- Urgent attention and interception from leadership circle of Nigeria and trusted foreign countries in order to ensure the total development of children.
- Nigeria Government should eschew ethnic, political and religion jingoism and put a stop to the political and ethnic quagmires in the country so that children will be free to study in their various schools.
- Teachers should learn how to model, healthy relationship with their pupils and organize re-orientation program and rehabilitation exercise in collaboration with the host community and government to change the psychology of the victims and children affected with the security situation.
- Government should improve economic standard of the country to remove people out of poverty as well improve security architecture of the country so as to enforce disciplinary measures on terrorists, bandits and improve moral values on the entire citizens and Communities in Mangu should not take laws into their hands, issues with the herders should be reported to the community leaders first for them to communicate to appropriate quarters.

### References

- Adedigba, T. A & Wahab, E. I. (2015). Degenerated moral values in Nigeria: challenges of social studies education. *Nigerian Journal of Social Studies*, Vol. Xviii (1) April, 246-259.
- Adebanjo, I. M & Amusan, B. K. (2023). Perceived influence of insecurity on childhood education development in Ogun State, Nigeria. *Journal of early childhood association of nigeria JECAN*. Vol 12 (), 153-166
- Ahmed, T. A. (2017). Perception of early childhood education professionals on the causes of domestic violence and its effect on pupils social development. *Journal of early childhood association of Nigeria JECAN* vol. 6 (2), 90-103
- Ajiboye, J. O. (2003). Introduction to Social Studies: *A Basic Text for Tertiary Institution Students*. Ibadan: GAB Educational Printers.
- Akande, F. F. and Jawondo, A. S. (2008). Moral Education for Nigeria Schools. Ilorin: Integrity Publications.
- Amadi, I. G & Echendu, I. O (2016). School climate, advertisement and addictive behaviour among secondary school adolescent in Rivers state. *Journal of educational psychology* 1 (10) 67-
- Anyaocha R. & Onuoha K (2021). Education children Amidst insecurity and COVID Pandemic in Nigeria: the management best practices; *Educational Trends Journal of the Association for promotion of Educational Trends in Nigeria* 16(12) 142-149
- Akintude, O & Selzing – Musa G (2016). Environmental insecurity and the Nigerian child's learning coping strategies *Asia Pacific Journal of Multi-disciplinary Research* 4 (1) 13-17 February 2016 P-ISSN 2350-7756 ESSN 250-5442. [www. Apjwr.com](http://www.Apjwr.com)
- Akinade, E, A (2012). Modern behaviour modification, principles and practice: Ibadan: Bright Way Publishers.



- Alamike, E.E.O (2015). Security challenges and the University System in Nigeria. [www.irepos.unijos.edu.ng/jspul](http://www.irepos.unijos.edu.ng/jspul)
- Beland D. (2005). The political Constitution of collective insecurity: from Moral Panic to Blame Avoidance and organized irresponsibility centre for European Studies working paper Series 128
- Ezulike, C.C, Ukeje L.C & Ughasoro, J.I (2023). Insecurity and its effect on school children social development: perception of early childhood professionals. *Journal of Gender and Youth development. Maiden vol (1) 108-115.*
- Hartup, W .W. (1992). Having friends, making friends, and keeping friends: relationships as educational context. Eric digest. *Campaign, IL: Eric Clearing house on elementary and early childhood education. ED 345-854*
- Mangu, André Mbata B. (2012). "Good governance and democratic leadership for an African Renaissance: A reflection on AU member states' compliance with the AUCPCC." *International Journal of African Renaissance Studies. Vol. 7 (2). pp. 18–37.*
- Maserumule, Mashupye Herbert and Gutto, Shadrack B.O. (2008) "A critical understanding of good governance and leadership concepts written in the context of the New Partnership for Africa's Development (NEPAD) and the challenges to contextual discourse on Africa's development paradigms." *International Journal of African Renaissance Studies Vol. 3. No.2.pp:63-101*
- Mbaba, J. O, Odo, S. O & Omabe, C.C (2021). Values and Value System- Sources and Platforms for Nation Building in Nigeria. *A journal of the Association for the Promotion of Educational Trends in Nigeria, 16 (12), 30-36.*
- Meziobi K.A & Ukeje L.C (2021). The need for good learning environment in childhood education and development. *Journal of the Association for Promotion of Educational Trends in Nigeria 16(12) 1-8*
- Meziobi, K.A, Fubara, VR. & Meziobi, S.A (2005). Social studies in Nigeria teaching methods, Instructional methods and resources (1<sup>st</sup> ED), Owerri Acadapcak
- Nnabuike, N. K. E. (2010). "Defining and enforcing *Journal of Economic and Management Studies. Vol.1. No.1. pp: 25-41.*
- Nzewi, U.M (2014). Ethical leadership in Nigeria." African Stan Memorial Lecture, July 23, 2014 – Assessed 30<sup>th</sup> October 2017
- Obowo, I (2024). Killing of Mangu man, cattle rustling, others caused fresh plateau crisis – military, [www.chaneltv.com/2024/01/25](http://www.chaneltv.com/2024/01/25)
- Oku, O.O (2010). Management safety and health in school Service Delivery at the early childhood and primary levels of Education in Nigeria in the century in NM Abraham et al (eds) *A publication of Nigeria Association for educational Administration and Planning (NAEAP)*, University of Porthacourt
- Oyibe, O.A, Edinyang, SD & Effiom, V.W (2015). Self-directed instructional strategy as a tool for promoting criteria thinking and problem-solving skills among social studies IOSR *Journal of Research and methods in education, 5(3) 52-58*
- Obi, P (2022). Lagos public lecture at Nigeria Bar Association Annual conference 2022
- Ukeje, A.I (2017). Social studies in a changing Society. Umunze; Annyco Press.

## **Evolving Capacities of Children: A Practical Demonstration of its Classroom Workability**

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### ***Abstract***

*Children need protection to enhance autonomy and allow their capacities to evolve. This term has been given many definitions, diverse perspectives, its challenges and limitations to children especially very young children who were seen as too young to exercise their rights in making decision on what pertains to them. Ever since the ratification of evolving capacities of children by the UN, little or nothing has been done in putting this principle into practice in the classroom of young children especially in Nigeria. This could be as a result the concept not having a particular definition that underpins it. This paper therefore analyses a practical demonstration of this concept using a privately-owned early Childhood Education School in Portugal as a case. The paper adopted an analytical method. The data was gathered through direct observations. The study concluded that teachers should not only read or memorise the rights of the child as it regards the evolving capacity of a child but should also put into practice in the classroom. The study concluded that teachers should demonstrate practically the act of the rights of the child by making pupils regardless of their ages or sex to be part of classroom decision making especially on things that affect the children in the classroom. However, teachers were encouraged to collaborate with the children making this a success, embark on different projects using different scenarios or events that could facilitate learning. School owners were encouraged to fund such projects and supervise teachers while embarking on such projects.*

**Keywords:** Children, Classroom, Demonstration, Evolving capacity, Workability

### **Introduction**

The new norm nowadays is that children should be heard and not to be seen alone. This advocates for series of development in ascertaining children being able to exercise their rights especially in matters that concern them. On this note, the convention on the rights of the child came up with an international termed evolving capacity of the child. This law allows children to be actively and democratically involved in all that concern them both in the schools and in the community. The concept of evolving capacities could be termed to be child and youth development (Henderson-Dekort, Smits & Heading (2021)).

Evolving capacities is referred to the education, child and youth development programmes to be anchored by adults taking into account the capacities of the child or youth to exercise rights on their own behalf. In the same vein, it is process of making a child to be heard through the help of adults at the same time respect their rights, protect them from harm and provide opportunities that can enable children exercise their rights (Brando, 2020).

Furthermore, evolving capacities could be seen as a limitation of the rights exercised by children or as a

way of recognising special abilities and promotion in children. On the other hand, it also involves recognising childhood is not a single, fixed, universal experience and that their lives require degrees of protection, provision prevention and participation at different stages of their lives. Article (5) five of the Convention speaks about evolving capacities that "States Parties shall respect the responsibilities, rights and duties of parents or, where applicable, the members of the extended family or community as provided for by local custom, legal guardians or other persons legally responsible for the child, to provide, in a manner consistent with the evolving capacities of the child, appropriate direction and guidance in the exercise by the child of the rights recognized in the present Convention". In addition, article twelve also addresses evolving capacities, stated that "States Parties shall assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child. For this purpose, the child shall in particular be provided the opportunity to be heard in any judicial and administrative proceedings affecting the child, either directly, or through a representative or an appropriate body, in a manner consistent with the procedural rules of national law".

Moreover, evolving capacities recognise that as children acquire enhanced competencies there is less need for protection and a greater possibility that require them to take responsibility for decisions affecting their lives. It is assumed that by the [gradualist conception](#) of children's rights, which suggests that children move progressively from a situation which allows their rights to protect their interests to one in which their rights primarily protect their choices (Lansdown, 2002).

Consequently, the convention allows for the recognition that children from different backgrounds, environments and cultures are faced with diverse life experiences and they will acquire competencies at different ages. This is the reason why the [Committee on the Rights of the Child](#) has sought information on minimum legal ages for legal and medical [counselling](#) or medical treatment without parental consent, creating and joining associations, and participating in administrative and judicial proceedings when it developed the guidelines relating to Article 1 of the Convention on the Rights of the Child (Brando, 2020).

According to Wikipedia, the [Canadian International Development Agency](#) reports that there are three primary points to consider regarding evolving capacities:

- evolving capacities should be understood in the context of where children grow;
- evolving capacities should grow out of respect for the competencies young people already have, and;
- adults should protect young people from experiences and decisions they have not yet acquired the capacity to take responsibility for.

Interactive-participatory method is a way of providing pupils with the ability to influence some of the things that affect them, learn new skills, have fun, and develop a closer connection to their community and at the same time help adults understand children's issues through their lens (Aileen, 2000). The process of participation helps in acquiring different skills and strengthens capacities. Through participation, children are empowered to take greater responsibility as they gain confidence and competence in the acquisition of skills. Therefore, providing children with interaction, participation, intellectual and environmental stimulation, opportunities to play and interact socially foster cognitive, affective and psychomotor skills acquisition in children if employed by teachers in the class.

Moreover, according to Rogoff (2011), he opined that children serve a sort of apprenticeship in thinking through interactive-participation which he refers to as guided participation in social and cultural activities. Guided participation occurs when adults and children share activities. Parents could also broaden or limit children's opportunities through their decisions about how much and when to expose children to books, television and child-care. They may give children opportunities to learn about cultural traditions and practices through routines and play. For instance, in Zimbabwe as well as in Nigeria, children play numerous games such as hide and seek, guessing games, complex sand drawing games, imaginative games representing local work and family routines, skill games like jacks and a rule game requiring considerable strategic planning and numerical calculations and constructing models of wire or clay.

Rogoff (2003) further stressed that children adopt values, skills and mannerisms by simply watching and listening to peers and adults, this is called learning by osmosis. Guided interactive- participation is widely used around the world, but cultures may differ in the goals of development- what content is to be learnt and the means

of providing guided participation (Rogoff, 2007). Around the world, caregivers arrange children's activities and revise children's responsibilities as they gain skill and knowledge. With guidance, children participate in cultural activities that socialize them into skilled activities. In Guatemala as a country, Mayan mothers help their daughters learn to weave through guided participation. Throughout the world, learning occurs, not just by studying or by attending classes but also through interaction with knowledgeable persons. Steinert and Snell (1999) stated that the use of interactive techniques and strategies help the pupils to become more engaged in learning and retain more information, thus giving them satisfaction.

Evolving capacities as an enabling principle in article 5 draws on the concept of "evolving capacities" to refer to processes of maturation and learning whereby children progressively acquire knowledge, competencies and understanding, including acquiring understanding about their rights and about how they can best be realized. (Varadan, 2019). Rogoff, Correa-Chavez, and Silva (2011) in their study on cultural variations in children's attention and learning through interactive-participation in a wide variety of family and community activities revealed that in the United States, children's out-of-school times provide limited opportunities to learn by observing and participating in a variety of valued family and community activities. Involving children in meaningful community activities helped them to better understand valued work and other activities in their culture.

Gratien, Adriam and Bartha (2019), in a study on a tale of two capacities including children and decisionally vulnerable adults in biomedical research argued that the best interests is to develop a guiding principle for representatives of individuals who lack legal capacity to make decisions on their own, for children, it is the primary criterion for courts, health care providers, and parents, though the latter are typically extended substantial discretion to decide what is best for the child. He further opined that a child's best interests may be broken down into a hierarchy including individual medical benefit, familial medical benefit (which could indirectly benefit the child), and benefitting other paediatrics patients and that the most difficult aspect for parents is to balance the best interests and evolving capacity of children to make their own decisions.

Varadan (2019) in a study the principle of evolving capacities under the UN convention on the rights of the child What then is the role and function of "evolving capacities" within the framework of the UNCRC? concluded that a child's capacity, or perceived lack thereof, will undoubtedly play a role in the child being able to secure the enjoyment of rights under international law and that children have historically been defined by their vulnerability, and generally presumed to be incompetent under the law. He further claimed that studies however, amongst others, has convincingly shown that even at a very young age, children are able to express agency and autonomy over their lives, and are often capable of decision-making much earlier than the legally prescribed age of competency (Alderson, 1990; Alderson, 1993; Alderson, 1996 in Varadan 2019). Yet, the capacity of children continues to be undervalued and overlooked in all areas of life (Freeman, 2007; Tobin, 2013 in Varadan, 2019).

Ojo (2016), in a study where lower primary school pupils were engaged in Basic science learning through the use of interactive-participatory (a method adopted in evolving capacity of children) and mind-mapping instructional strategies revealed the effectiveness of interactive-participatory instructional compared to mind-mapping instructional strategy in developing the cognitive, psychomotor and attitudes of primary school pupils in Basic science. This study allowed primary school pupils to be taught without considering some other factors that underpin evolving capacities of children, ranging from considering their rights, choice, opinion and interest. It only showed the effectiveness of one of the methods used in the evolving the capacities of children. This study is also limited to lower primary school level, the convention of rights of the child expects the capacities of the children to evolve as early as possible, meaning that evolving capacities can take place among pre-primary school learners. Evolving capacity could be seen as a strategy that can support teacher in determining how learners' capacities evolve over time and develop necessary interventions and responses to meaningfully address individual children's right to development. Little or nothing have been done in Nigeria in terms of the practicability, adaptability and domestication of the concept, hence the need for this study.

## **A PRACTICAL APPLICATION OF EVOLVING CAPACITY OF A CHILD: A CASE STUDY OF PRE-PRIMARY SCHOOL CHILDREN (MULTIAGE CLASS OF 3-5YEARS) IN PORTUGAL**

### **A. Celebration of 2024 Mother's Day in Portugal**

**Step 1:** Teacher informs the children about the coming of the Mother's Day celebration. She asks each child



some questions about their mothers. The questions are (but not limited to):

Mention the name of your mother?

Why is she special to you?

What does she do for you everyday?

**Step 2:** The teacher asks each of the children what could be done for mothers to celebrate them. The children gave different suggestions and agreed presenting their mothers with their pictures drawn by them. So, the task began.

**Step 3:** Each of them was given a plain sheet to draw their mothers and colour as appropriate. They are allowed to pick the colour of their choice.

Collaboration by the school

**Step 4:** These pictures were printed and put on a big board in the class with the names of the child under the pictures. This is done by the school.

**Step 5:** The school printed the pictures on a foamy material that makes it looks like teddy and were kept in the classroom for sight seeing.

**Step 6:** The school printed each picture on a key holder and the key holders were designed by the teachers and the children. Each child is called upon to come and pick the colour of bead he or she would like to use in designing the key holder while the teacher helps them in fixing the beads to the key holders. The children were happy to see their handiwork through the choice they made, their rights and interests were sought and promoted. There was this partnership and collaborative work between the teachers and the children.

**B. Visitation to old and aged people**

Children were allowed to sit round while the teacher ask them some of the following questions:

1. Who has a grandma or grandpa at home?
2. How are they to you?
3. What are the things they do for young children?
4. Who can say something about his or her grandma?
5. Is there any need for them to be celebrated by going to old people to greet them?
6. What can you do or give to them?

It was agreed upon to make a drawing of coloured beautiful paintings for them.

**Step 1:** The teacher provided a big long white thick paper for the children

**Step 2:** Each of them was making his or her painting giving chance for others too. The painting was done by all of them on a single sheet. Each draw what he or she likes and paint as desired.

**Step3:**The painting was taken to the aged people, they sang for them and presented to them.

There are many projects that can be worked upon in the classroom based on the available resources which can allow for children capacities to evolve gradually at the same time taking into consideration the interest, choice and rights of the children.

## **IMPLICATIONS ON THE NIGERIA'S PRE-PRIMARY CLASSROOM PRACTICES**

- The teacher and or the helpers did not laugh at whatever the child draws but different types of colouring devices were provided for them to work with.
- The children worked together in joy, happiness, they take turns and accept each other's opinions on issues discussed.
- Children on their own learn how to agree to go with a particular suggestion without quarrelling or disagreeing. Repeated activities helped them to speak up and accept other people's opinion.
- This method made use of collaboration, interaction, active participation, openness, honesty with the teacher as a mere guide in helping the children achieve their goals, thereby making their capacities to evolve as teaching learning progresses.

- Children made unimaginable brilliant but relevant and useful suggestions in making the project come out fine.
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### PICTURES: THE PROCCESS



### SCHOOLAND PARENTS COLLABORATION AS A SUCCESS

Parents especially mothers made the collaboration work a lot. Mothers came around to see their pictures displayed and the key holders were presented by each child to his or mother on the mothers' day. The school provided fund to provide the materials needed for the board where the pictures were printed, the foam productions and also the key holders. The beads and other accessories were picked by each child and assisted by the teachers in finishing or coupling it.

Parents accepted the key holders with joy and the type of pictures on it whether it resembles them or not. The old people visited by the children were happy and gladly collect the drawings from the children. The children were happy with the expression of love displayed by the elderly people seeing the paintings presented to them by the children. Children were happy seeing their handiwork being displayed in school and with the elders. The were part of the decision making and they presented what they jointly agreed upon in the classroom and the art works were actively done by them. This involves a lot of funds by the school.

The questions are:

- i. How many private schools in Nigeria are ready for this let alone the public schools?
- ii. How many Parents or mothers would create time to visit school for programmes like this every

term? Parents visit schools to come and assist their children in completing tasks like drawing or painting given to their children as directed by the school.

## CONCLUSION

The study concludes that teachers should not only read or memorise the rights of the child but should also put into practice in the classroom and also make children's capacity regardless of their ages, exposures, backgrounds to evolve in learning new things through participation and collaboration.

## SUGGESTIONS

- Teachers are encouraged to demonstrate the act of the rights of the child by making them to be part of decision making especially on things that affect children in the classroom.
- They should read and learn about evolving the capacity of children as it touches the rights of the child by making them do things on their own while the teacher collaborates with them in making it a success.
- Teachers should also embark on different projects using different scenarios or events that could facilitate learning. School owners are encouraged to fund such projects and supervise teachers while embarking on such projects.
- Parents are also encouraged to be part of their children's learning by regular visits to schools and not only on open-days.
- Government should also fund public schools so that projects that involve fund could be planned and effectively executed.

## References:

- Aileen, A. (2000). *Involving children in decision making. Commissioner for children's strategic plan: Practical Guide*. Hobart City: Tasmanian publishers.
- Adequate and systematic documentation is an example of initiatives that integrate the concept of evolving capacities in education. Online publication retrieved on the 30th July, 2024 from .
- Gratien, D., Adrian, T. & Bartha, M. K. (2019). A tale of two capacities: including children and decisionally vulnerable adults in biomedical research. Published online 2019 April 5. doi: [10.3389/fgene.2019.00289](https://doi.org/10.3389/fgene.2019.00289).
- Henderson-Dekort, E., Smits, V. and Heading, V. B. (2021). The meaning participation and complex capacities of children in family law. *The International Journal of Children's Rights*, 29(78-98).
- Lansdown, G. (2002). *The Evolving Capacities of Children: Implications for the Exercise of Rights*, Florence, UNICEF Innocenti Research Centre.
- Rogoff, B. (2003). *The cultural nature of human development*. New York: Oxford University Press.
- Rogoff B. (2007). Children's development of cultural repertoires through participation in every day routines and practices. In J.E. Grusec & E. Hastings (Eds.), *Handbook of Socialization*. (pp. 44). New York: Guilford.
- Rogoff B. (2011). *Developing destinies: A Mayan midwife and town*. New York: Oxford University Press.
- Rogoff, B., Correa-Chavez, M. and Silva, K. (2011). Cultural variation in children's learning and attention. In M.A. Gernsbacher (Eds.), *Psychology and the Real World*. New York: Worth.
- Steinert, Y. and Snell, L. S. (1999). Interactive lecturing strategies for increasing participation in large group presentations. *Medical Teacher*, 21 (1), 37-42.
- Veradan, S. (2019). The Principle of Evolving Capacities under the UN Convention on the Rights of the Child. *The Netherlands International Journal of Children's Rights* 27 (306-338).

## Intelligence and Early Childhood Care in Nigeria: Challenges and Gaps

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### Abstract

*This study explores the potential applications and implications of Artificial Intelligence (AI) in early childhood care within the Nigerian context. AI tools are becoming increasingly popular for analyzing and addressing issues in various industries, including early childhood care. In the case of Nigeria, a country facing numerous challenges and gaps in this area, artificial intelligence can play a crucial role in identifying and addressing these issues. One of the most significant challenges in early childhood care in Nigeria is lack of access to quality education and healthcare. This information can then be used to prioritize resource allocation and ensure that children in the most vulnerable areas receive the necessary support. Moreover, AI tools can also be used to predict and prevent potential health issues in children. In conclusion, artificial intelligence can play a significant role in addressing challenges and filling gaps in early childhood care in Nigeria. The AI tool will also be able to update its analysis as new data becomes available, ensuring that the report is always up-to-date and accurate. Its advanced capabilities will save time and resources for stakeholders in the field, allowing them to make informed decisions and implement effective strategies for the betterment of early childhood care in Nigeria. The study suggests among others that AI should be used in educating early childhood learners for unique insights from a developing country perspective.*

**Keywords:** Artificial Intelligence, Early Childhood Care, Stakeholder, Innovation

### Introduction

In recent years, the rapid advancement of Artificial Intelligence (AI) has sparked discussions about its potential applications across various sectors. One area of particular interest is early childhood care, where AI technologies could potentially revolutionize how we approach education, health monitoring, and administrative tasks. Artificial Intelligence (AI) has evolved significantly since its inception in the 1950s. Artificial intelligence is a branch of Computer science that is concerned with the design of intelligent devices that displays features or characteristics related with Human intelligence. Artificial intelligence can simply be defined as designing machines to make them behave like humans, i.e., reason and process. They have the power to go as far as spatial processing; language processing and even image processing. AI in decision support systems has gained traction across various industries. These systems use AI algorithms to analyze complex data sets and provide insights to aid human decision-making. In healthcare, for instance, AI-powered systems are being used to assist in diagnosis and treatment planning (Topol, 2019). In finance, AI algorithms are employed for fraud detection, risk assessment, and algorithmic trading.

Today, AI is broadly understood as the development of computer systems capable of performing tasks that typically require human intelligence (Russell & Norvig, 2020). These tasks include visual perception, speech recognition, decision-making, and language translation. The field has seen rapid advancements in recent years, driven by increases in computational power, the availability of big data, and breakthroughs in machine learning algorithms. Machine Learning (ML), a subset of AI, has become a cornerstone of modern AI technologies. ML algorithms enable systems to improve their performance on a specific task through experience, without being explicitly programmed (Mitchell, 1997). Deep Learning, a subset of ML, has gained prominence. Based on artificial neural networks inspired by the human brain, deep learning has achieved remarkable results in areas such as image and speech recognition, natural language processing, and game playing (LeCun *et. al.*, 2015).

Natural Language Processing (NLP) represents another significant area of AI development. NLP focuses on the interaction between computers and human language, enabling machines to understand, interpret, and generate human language in a valuable way. Recent advancements in NLP, particularly with the development of transformer models like BERT and GPT, have led to significant improvements in machine translation, sentiment analysis, and text generation (Devlin *et. al.*, 2018). Computer Vision is another field that has seen remarkable



progress due to AI. This technology enables machines to gain high-level understanding from digital images or videos. Applications range from facial recognition and autonomous vehicles to medical image analysis. The development of Convolutional Neural Networks (CNNs) has been particularly influential in this domain (Krizhevsky, *et. al.*, 2012). Robotics and AI have become increasingly intertwined, leading to the development of intelligent robots capable of learning and adapting to their environment. This convergence has applications in manufacturing, healthcare, and even space exploration. Reinforcement learning, a type of machine learning where agents learn to make decisions by taking actions in an environment, has been particularly useful in robotics (Kober *et. al.*, 2013).

The concept of Explainable AI (XAI) has emerged as a crucial area of research and development. As AI systems become more complex and are deployed in critical applications, there's a growing need for these systems to be transparent and interpretable. XAI aims to create AI models that can explain their decisions in ways that humans can understand, which is particularly important in fields like healthcare and criminal justice (Gunning & Aha, 2019). Ethical AI has become a significant focus as the societal implications of AI become more apparent. Researchers and policymakers are grappling with issues such as bias in AI systems, privacy concerns, and the potential impact of AI on employment. There's a growing consensus on the need for responsible AI development that considers these ethical implications (Floridiet. *al.*, 2018).

The integration of AI with other emerging technologies like the Internet of Things (IoT) and blockchain is opening new possibilities. AI can process and analyze the vast amounts of data generated by IoT devices, while blockchain can provide a secure and transparent way to store and share AI models and data. This convergence is expected to drive innovations in areas like smart cities, supply chain management, and personalized healthcare (Xu *et. al.*, 2019).

Despite these advancements, it's important to note that current AI technologies are still considered "narrow" or "weak" AI, designed to perform specific tasks. The concept of Artificial General Intelligence (AGI) – AI that can match or exceed human intelligence across a wide range of cognitive tasks – remains a long-term goal. While there's ongoing research in this direction, most experts believe that AGI is still many years, if not decades, away (Goertzel & Pennachin, 2007). Enhanced Learning Experiences: AI technologies could provide personalized learning paths, interactive educational contents, and adaptive assessments to support children's cognitive development. Improved Health Monitoring: AI-powered tools could assist in early detection of developmental issues, track children's health metrics, and provide timely alerts to caregivers and healthcare providers. Streamlined Administrative Tasks: AI could automate routine administrative processes, allowing childcare professionals to focus more on direct interactions with children.

### **AI in Early Childhood Education**

Artificial Intelligence has penetrated and influenced growth in education through the invention of educational applications, web searches and several learning platforms with several features they can perform. Based on the branches of AI explained above, the below examples are AI in education categorized under these branches.

Expert system- Educational AI's that function like this include Intelligent Virtual Reality.

A few examples under this category include:

ChatGPT: is a chatbot launched by OpenAI, it is built on a GPT-3 which has a large language model, it is also finetuned (an approach to transfer learning) with both supervised and reinforcement learning techniques.

Teal: is a one place to organize & manage your job search. It's like having your own personal ATS or CRM for the job search. Calendly- streamline scheduling and eliminate 'back & forth'. It increases the likelihood of getting a meeting booked with someone

ResyMatch: match your resume with any job description to increase your chances of landing an interview. Machine Vision- Examples of AI's that have the capacity to carry out these features include Automated facial recognition and Gradescope. Natural Language processing- Examples of Educational AI's categorized under this branch include Presentation translator- has features that lets you add live subtitles to your presentations in PowerPoint, as you are speaking. Presentation Translator can display subtitles directly on your PowerPoint presentation in any one of more than 60 supported text languages. This feature can also be used for

audiences who are deaf or hard of hearing.

**Grammarly:** This is an artificial intelligence-based solution that help user with correct grammar usage. Grammarly goes well beyond the standard word processor grammar and spelling checks. Instead of simply flagging glaring errors, Grammarly can also offer style and usage suggestions. It helps users finetune their writing style to fit into the context to which their writing is targeted. It also helps present idea in a simpler yet communicating.

**Twitter Bot:** a twitter bot is a type of software bot that controls a twitter account via the Twitter API. This software bot can autonomously perform actions such as tweeting, re-tweeting, liking, following, unfollowing, or direct messaging other accounts. Proper usage includes broadcasting helpful information, automatically generating interesting or creative content, and automatically replying to users via direct message.

**Speeko:** can help user practice interviewing with an AI speech coach. Also helps user get better at public speaking

**Robotics:** some educational AI's that have the functions to perform like a robot are Padlet and smartboards.

### **Machine learning- Educational AI's that function like this include**

**Turn-it-in:** is an Internet-based plagiarism detection carrier run through the American enterprise Turnitin, LLC, a subsidiary of Advance Publications. Founded in 1998, it sells its licenses to universities and high colleges who then use the software as a service (SaaS) website to test submitted documents towards its database and the content of other web sites with the goal of figuring out plagiarism. Results can become aware of similarities with present sources and can also be used in formative evaluation to assist students examine to avoid plagiarism and improve their writing. Turnitin, LLC additionally runs the informational internet site plagiarism.org and presents a comparable plagiarism-detection carrier for newspaper editors and book and magazine publishers referred to as authenticate. Other tools covered with the Turnitin suite are GradeMark (online grading and corrective feedback) and PeerMark (student peer-review service).

**Research gate:** is a social networking site for scientists and researchersto share papers, ask and answer questions, and find collaborators.

**Scopus:** Scopus uniquely combines a comprehensive, expertly curated abstract and citation database with enriched data and linked scholarly literature across a wide variety of disciplines.

Scopus quickly finds relevant and authoritative research, identifies experts and provides access to reliable data, metrics and analytical tools. Be confident in progressing research, teaching or research direction and priorities — all from one database and with one subscription.

**Gooru:** Gooru is an online "GPS for learning" tool for material exploration, which allows the instructor dashboard includes a number of choices for quickly gauging student progress. Gooru compiles data from many sources and applies AI to calculate traits across various dimensions, including knowledge, mindsets, and talents.

**Web of science-** is a paid-access platform that provides access to multiple databases that provide reference and citation data from academic journals, conference proceedings, and other documents in various academic disciplines.

### **Challenges and Concerns**

Recent systematic reviews show that AI in Education has been a field of research concentrated in developed countries (Roll & Wylie, 2016). AI in Education is a topic that is under-discussed in the developing world but is an important component of a discussion about advanced technology that is built upon well-established infrastructure and knowledge ecosystems.

This presentation seeks to bring the conversation to the least developed and emerging nations, recognizing the many obstacles these nations must overcome while illuminating the need for structural innovation to advance education as a human right on a large scale in new learning scenarios.

This section of this presentation explains some challenges regarding the incorporation of AI in education as a

way to improve the equity and quality of learning and to promote education. It answers a part of the title of this presentation namely, AI in Education:

### **Challenges and Solution**

The fear of AI replacing humans in their various fields: Every new technology just like Artificial intelligence assures in some good benefits and some grave risks. Over the years, of the major challenges of AI is the fear it will replace humans and make many people lose their jobs in future. There are different schools of thought about this feeling. And these set of people with this phobia can be categorized into the following

**The Dystopians:** The dystopian school of thought believes that humans and machines will go through a darwinian battle which will be won by intelligent machines. The dystopians see primarily the negative implications of AI and robotics. They envision that robots will take on repetitive tasks which are monotonous for people and necessitates little intelligence. On the other hand, the AI will be able to take on jobs which need high intelligence.

**The Sceptics:** Their affirmation is that the productivity growth will not result in growth of profit or national GDPs especially in the context of aging populations and income inequality. The sceptics believe that turnover growth does not necessarily mean growth in benefit. They are also calling for more lucidity because they believe that the productivity growth will not be at the expected level and this may lead to a stagnant economy or even loss compared to the investments made in AI.

**Privacy Issue:** As AI continues to grow, several organizations have committed to ethical standards to raise the importance of data protection and data privacy. These privacy concerns have been aggravated due to the AI capability to scale and automate everything at high-speed and due to the fact that especially young people (the majority of students) are not even aware or interested to know how much data their devices are shared for free. In this new context, people become vulnerable to data exploitation by identification, tracking and monitoring their entire lives, not just their education path.

This simply makes it possible for your personal data to become a part of a large data set after being anonymized. AI is capable of de-anonymizing this data based on inferences from other devices. AI can utilize sophisticated machine learning algorithms to infer or predict sensitive information from non-sensitive forms of data. For instance, someone's keyboard typing patterns can be utilized to know their emotional states such as nervousness, confidence, sadness, and anxiety. Even more alarming, a person's political views, ethnic identity, sexual orientation, and even overall health can also be determined from data such as location and activity.

**Digital Divide:** Although AI has opened numerous possibilities, it has also been a disruptive technology and may worsen the existing inequalities and divides as the marginalised and disadvantaged population are more likely to be excluded from AI-powered education. AI is capable of worsening digital divide in our society and this will put a wider gap in between developed education areas and education less developed area.

**Poor Data system:** The quality of any AI-enabled system is directly proportional to its database. A fully functional data analytics system with comprehensive and up-to-date data opens possibilities for AI-enabled predictive and machine learning algorithms. Without the needed data, no sort of algorithm, no matter how sophisticated, can function properly. However, data availability is a necessity but currently in an insufficient condition. After all, inaccurate data are likely to make machine learning algorithms generate incorrect outputs. Indeed, predictive algorithms can only make complete and accurate predictions if the data they are handling are complete and accurate. However, a lot of nations still have trouble gathering fundamental but important educational statistics. The UNESCO Institute for Statistics (UIS) lists numerous obstacles to effective statistical and effective data gathering, use, and analysis of educational data (UIS, 2018b). At the school level, educational data should be accessible and usable. In addition to being able to aggregate data to highlight trends that might guide policy development, a functioning data system should be able to produce studies that are detailed enough to aid educators in understanding the major problems.

Furthermore, data must also account for inequities, providing insights, for example, on learning outcomes disaggregated according to demographic factors such as age, gender and socio-economic background (UNESCO, 2018). Education systems can identify the educational disadvantage that marginalized or

disadvantaged communities face by producing such evaluations. However, information on underprivileged populations still has a history of being spotty or nonexistent. For instance, a 2016 UNICEF study found that, of the 40 countries surveyed, 19 lacked any information at all on children with disabilities. In many of the countries that did have data, the information only mentioned the child's participation in a special needs program without mentioning the nature of the child's disability. Despite the potential benefits, stakeholders expressed several apprehensions.

**Data Privacy:** There are concerns about the collection, storage, and use of sensitive data related to young children.

**Digital Divide:** The uneven access to technology and internet connectivity across Nigeria could exacerbate existing inequalities in early childhood care. **Loss of Human Touch:** Some stakeholders worried that over-reliance on AI might reduce essential human interactions crucial for children's social and emotional development.

### **Knowledge Gap**

A significant finding of the study was the considerable knowledge gap among stakeholders regarding AI capabilities and limitations. This highlights the need for educational initiatives to inform decision-makers, educators, and parents about AI technologies and their potential applications in early childhood care. Stakeholders and policy makers who design policies in AI in education are meant to ask some key questions when preparing these policies.

### **Conclusion**

Artificial Intelligence (AI) presents transformative potential in early childhood care, offering opportunities for personalized learning, improved health monitoring, and streamlined administrative tasks. However, significant challenges exist, including a substantial knowledge gap among stakeholders regarding AI capabilities, concerns about data privacy and the digital divide, and apprehensions about the potential loss of essential human interactions in childcare. The effectiveness of AI systems is heavily dependent on data quality, which remains a challenge in many nations, particularly in the developing world. Moreover, as AI becomes more prevalent in education, ethical considerations such as bias in AI systems and the potential impact on employment need careful attention.

### **Suggestions**

To harness the benefits of AI in early childhood care while mitigating risks, several key actions are recommended. These include developing AI literacy programs for stakeholders, implementing strategies to ensure equitable access to AI technologies, establishing robust data protection measures, and maintaining a human-centered approach in care and education. There's a need to improve data systems, develop contextually relevant AI solutions, and establish clear ethical guidelines for AI use in early childhood settings. Promoting research into the long-term impacts of AI on child development, fostering collaboration between technologists, educators, and child development experts, and implementing systems for continuous evaluation of AI technologies in childcare settings are also crucial. By addressing these recommendations, stakeholders can work towards an inclusive, ethical, and effective integration of AI that truly benefits the development and well-being of all children.

### **References**

- Chu, Zi; Gianvecchio, Steven; Wang, Haining; Jajodia, Sushil (2012). ["Detecting Automation of Twitter Accounts: Are You a Human, Bot, or Cyborg?"](#) (PDF). *IEEE Transactions on Dependable and Secure Computing*. **9** (6): 811–824. doi:10.1109/TDSC.2012.75. ISSN 1545-5971. S2CID 351844. Archived from [the original](#) (PDF) on 28 March 2018. Retrieved 1 August 2014.
- David Daw (October 23, 2011). ["10 Twitter Bot Services to Simplify Your Life"](#). *PCWorld*. Retrieved May 31, 2012.
- Doyle, Alison (October 3, 2020). ["What Is Grammarly?"](#). *The Balance Careers*. Archived from the original on February 28, 2021. Retrieved March 17, 2022.



- [Grammarly Inc](#)". [Bloomberg](#). n.d. [Archived](#) from the original on January 30, 2022. Retrieved March 17, 2022.
- [Grammarly](#)". [Forbes](#). n.d. [Archived](#) from the original on November 12, 2019. Retrieved March 17, 2022.
- Lardinois, Frederic (July 16, 2019). "[Grammarly goes beyond grammar](#)". [Techcrunch](#). [Archived](#) from the original on January 15, 2021. Retrieved June 3, 2021.
- Martin Bryant (2009). "[12 weird and wonderful Twitter Retweet Bots](#)". TNW. Retrieved August 1, 2014.
- Moore, Ben (2020). "[Grammarly Review](#)". PCMag. [Archived](#) from the original on April 10, 2021. Retrieved March 17, 2022.
- Protalinski, Emil (2013-03-08). "[Dear Assistant: A Twitter bot that uses Wolfram Alpha to answer your burning questions](#)". The Next Web, Inc. Retrieved 1 August 2014.
- Moore, B. (2020). Grammarly Review. PCMag. Archived from the original on April 10, 2021. Retrieve March 17, 2022.

# **Influence of Teachers' Technological Pedagogical Content Knowledge (Tpck) and Artificial Intelligence on Pupils' Performance in Computer Studies in Osun State**

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## **Abstract**

*The study concentrated on the pedagogical, technological, and content knowledge of teachers in utilising AI to teach computer studies and how it affects students' academic achievement. The research design used in the study was a descriptive survey. Three hundred primary school students and fifteen teachers made up the sample, which was chosen using a multistage selection process. To gather data, two research tools were employed. Questionnaire on the Assessment of Pupils' Performance in Computer Studies (QAPPCS) and Questionnaire for Evaluating Teachers' Pedagogical and Content Knowledge in the Use of AI in Primary Schools (QA'PCK'CSPS). The findings indicated a strong correlation between pupils' academic achievement in computer studies in the study area and teachers' technological knowledge in the field.  $p < 0.05$ ,  $F(1, 298) = 7.596$ . The result also presented that there was no significant relationship between teachers' content knowledge in computer studies and pupils' academic performance in computer studies in the study area  $F(1, 298) = 0.564$ ,  $p > 0.05$ . The study concluded that there was a significant relationship between teachers' technological, pedagogical and content knowledge (TPCK) and the use of AI in computer studies on pupils' academic performance in computer studies in primary schools in Osun state.*

**Keywords:** Teacher Technological Pedagogical Content Knowledge (Tpck), Artificial Intelligence (Ai), Pupils, Performance, Computer Studies

## **Introduction**

National growth and development improvement is driven by Education being seen as the tool. Education encompasses just numeracy and literacy. It a extensiveseries of basic information and skills vital for an individual to live a meaningful life as well as contribute to the environment development and growth also serve as a role model to young children, ability to communicate effectively, skill to think on time forecast, ability to think on issues and value, ability to separate values, quality, quantity, and numbers, ability to work intimately with additionalpersons, and the capacity to use these processes, inquiries, knowledge, connection, judging, valuing, selecting, acting and the size to grow an artisticreply to the atmosphere.

In the educational process, different subjects such as Mathematics, English, Sciences and many more cannot be overlooked as well as computer studies. Education has improved over the years, causing massive changes to the educational sector in which new development has been introduced to the educational system, instructional materials and activities are included in the curriculum used for development, aid the use of effective teaching for teachers, improve their pedagogical knowledge of the teachers, through the use of Artificial Intelligence which was introduced within recent times in computer studies and this has helped aid teaching pedagogical knowledge of the teachers.

Computer studies is sometimes defined as technology which is a medium (media) for inquiry, communication, construction and expression (Bruce & Levin, 2001). A computer teacher is a practical educator who protect and teaches scholars in thefundamentals of computer hardware and software. They toil in the fields of computer science and related skill. These software help students to acquire knowledge and competences with the adoption of the most suitable teaching method. Artificial Intelligence (AI), a rapidly advancing field in computer study, is having a profound impact across multiple sectors, including business, economic, healthcare, and education.

In business and healthcare, AI is transforming processes and services, leading to significant advancements and increased efficiency. In education, AI is reshaping the learning experience by offering personalized learning opportunities and innovative tools that boost student engagement and enhance academic outcomes.

Teachers are central to this educational transformation, playing an important role in assimilating AI technologies into their classrooms. To support this integration, the TPACK framework has been extended to include ethical considerations, guiding educators in the responsible and moral use of AI. Critical issues such as transparency, fairness, inclusiveness, and answerability in AI-driven decision-making are emphasized, highlighting the importance of ethical AI use in education. Scholarly references provide a vigorous groundwork for assimilating AI's implications in education and underscore the critical role teachers' play at the intersection of technology and pedagogy. Overall, AI's influence as a burgeoning force in computer study is transformative, impacting education in a profound way.

AI significantly affects education, particularly through tools like intelligent tutoring systems that offer personalized instruction and automated grading systems that streamline the assessment process (Lin *et al.*, 2021). The methods of teaching are determined by the subject to be taught such as computer studies and the best teaching method that suits the learning of pupils. Hence, to aid the process of impartation of knowledge at the early childhood stage of kindergarten to primary three classes, teachers should therefore apply the most suitable methods that will meet the learning needs and suit specific objectives and to aid teaching the use of AI base tool comes in to help, (López-Pernas *et al.*, 2019).

Previously known as Technological, Pedagogical, Content-Knowledge TPCK (Koehler, *et al.*, 2013), the instructor information framework for skill integration is technology, pedagogical, and content knowledge (TPACK). Teachers' understanding of how to teach their subjects is guided by the TPACK framework. A seven-factor concept known as TPACK has been proposed by Ching *et al.*, (2011) to explain how instructor use information and communication technology (ICT) into their lessons. Technological Knowledge (TK), Content Knowledge (CK), Pedagogical Knowledge (PK), Technological Content Knowledge (TCK), Pedagogical Content Knowledge (PCK), Technological Pedagogical Knowledge (TPK), and Technological Pedagogical Content Knowledge (TCK) are some of these structures.

Therefore, teaching is a procedure that includes bringing about the wanted changes in pupils so as to achieve specific outcomes (Ayeni, 2011). Effective teaching is primarily saddled with the setting up of learning activities to bring about the desired learning results in the learner. Oftentimes, low academic performance by children has been related to unsuccessful teaching approaches used by instructors to influence knowledge to beginners (Adunola, 2011). The selection of teaching methods to be implemented depends on the pupils to be taught and the subject to be taught.

The list of teaching methods that could be used with elementary-aged pupils is a long one. With basic knowledge of each method, teachers can merge two or more methods and experiment with any teaching style to meet every pupil's unique needs. TPACK refers to the ways in which instructors use technology to assist children learn subject-matters, to identify possessions and undertake scientific investigation. Henceforth, TPACK was envisioned to address the problems often encountered by instructors in assimilating technology into the program (Sahin, 2011). TPACK plays a vital character to the primary instructors since they are the upcoming instructors that will mould the upcoming group. Numerous education presented that request of TPACK in the schoolrooms still needs to be given attention for operative distribution of lessons. Very slight consideration is exactly given to the information that instructors need to stand-in early literacy through the use of technology and instructor themselves contest with actual use of skill in their own subject (Hong & Stonier, 2014).

Along with digital technology, rendering to Qasem and Viswanathappa (2016) as cited in Antony *et al.*, (2019), practical abilities have similarly become as an important part of teachers' qualifications. These technical competences should be refined among pupils in accumulation to their information and services in using technology or Technological Knowledge (TK), to offer a whole knowledge. This illustrates that instructor will have more work to do as instructors. There is an educator's aptitude to achieve lessons, specifically mastery of Content Knowledge (CK), and the rank of mastering Pedagogical Knowledge (PK) and alongside Technological Knowledge (TK), all of which were integrated into Technological, Pedagogical, and Content Knowledge or TPACK (Antony *et al.*, 2019). In order for instructors to incorporate ICT into their instruction, they believe that their technological, pedagogical, and content knowledge should be combined to create

TPACK. Mishra and Koehler (2006) also propose that the interactions between these three types of knowledge can yield three extra sources of knowledge. However, remark and research studies showed that most instructors in Nigerian schools, counting lower primary school teacher of Education, are not capable in using technologies to teach. Thus, there is a need to assess the teachers' technological pedagogical content knowledge (TPACK) and the impact of artificial intelligence on pupils' performance in computer studies in Osun State.

Technologies in school make teaching and learning relaxed. Every country capitalises deeply in inculcating AI into teaching and learning procedures in schools but yet to be introduced in Nigeria. In Nigeria, teachers are believed to be jack of all trades and masters of all, meaning it doesn't matter the area of discipline of the teacher when it comes to teaching in lower primary school and thus he carries out activities in class which are unethical and speak in the native language in the classroom when carry out the lessons, as they teach in the primary school, he/she has to teach all subjects including computer studies. Teacher organizations internationally must make in-service instructors who are complete in assimilating technologies into teaching (Omoso & Odindo, 2020). For teachers in schools to attain brilliance in education and knowledge depends on their usage of ICT in the classroom (Surahman, *et. al*, 2020). Though, the condition in Nigerian institutes is dissimilar since most instructors do not have passable information of integrating technologies into learning. Research studies show insufficient I.C.T. strategies and a low usage level among teachers in Nigeria schools (Oyediran, 2018). Teaching Computer studies in lower primary schools is essential because it prepares the pupils with the necessary knowledge about computing that will aid them to identify those problems that can be resolved by means of computer systems, use of AI to design and implement effectively. However, there is dearth of information on the application on teachers' technological, pedagogical content knowledge on how pupils are being taught and the use of AI to improve pupils' academic performance in computer studies in Osun State. Hence, there is a need to assess the teachers' technological pedagogical content knowledge (TPACK) and impact of AI on pupils' performance in computer studies in Osun State, hence this study.

### **Purpose of the Study**

The main purpose of this study is to assess teachers' technological pedagogical content knowledge (TPACK) and the impact of artificial intelligence on pupils' performance in computer studies in Osun State. The specific objectives of the study are to:

- assess teachers' Technological Knowledge (TK) of AI in relation to pupils' academic performance in computer study in lower primary schools in Ife Local Government area;
- determine the teachers' Content Knowledge (CK) in the use of AI in relation to pupils' academic performance in computer study in lower primary schools in the study area;

### **Hypotheses**

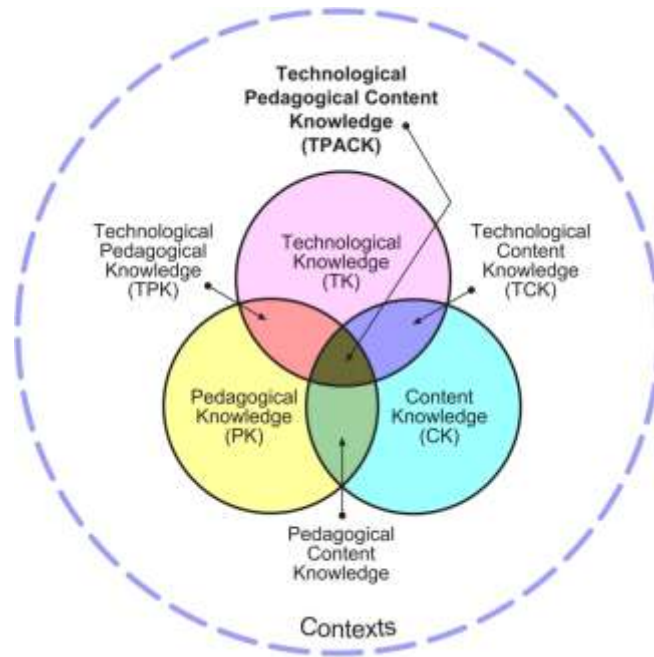
Two hypotheses were formulated for the study:

H<sub>0</sub>1: There is no significant relationship between teachers' Technological Knowledge (TK) of AI and pupils' academic performance in computer study in lower primary schools in the study area.

H<sub>0</sub>2: There is no significant relationship between teachers' Content Knowledge (CK) in the use of AI and pupils' academic performance in computer study in lower primary schools.

Conceptual Structure as Technological Pedagogical Content Knowledge (TPCK), a theoretical framework for understanding teacher skills obligatory for positive technology integration, was obtainable to the educational research community (Mishra & Koehler, 2006). The acronym for the TPCK framework was adapted to TPACK (pronounced "tee-pack") to make it easier to recall and to make the three groups of knowledge addressed—technology, pedagogy, and content—a more coherent whole (Thompson & Mishra, 2007-2008). Shulman's concept of Pedagogical Content Knowledge (PCK) is prolonged upon by the TPACK framework to incorporate.





Source:

Figure 1: The components of the TPACK framework

Knowledge of technology in relative to content and pedagogy. Though the period "TPACK" is new, the impression behindhand it has been about for a extended. A forerunner to the TPCK notion was Mishra's (1998) brief discussion of the triad of content, theory (as opposed to pedagogy), and technology in the context of educational software design. Keating and Evans (2001), Zhao (2003) Others, such as Hughes (2004), McCrory (2004), Niess (2005), and Slough and Connell (2006), have exposed an consciousness of the influences among content, pedagogy, and technology. A framework known as TPACK presents the connections and intricacies among the three fundamental elements of knowledge—content, pedagogy, and technology (Mishra & Koehler, 2006; Koehler & Mishra, 2008). An intuitive grasp of how to impart content using suitable pedagogical techniques and technologies lies at the nexus of these three skills kinds. The TPACK structure consists of seven parts (see Figure 1). They are described as:

1. Technology knowledge (TK): Knowledge of numerous technologies, from low-tech ones like pencil and paper to numerical ones like the Internet, digital video, interactive whiteboards, and software applications, is referred to as technology knowledge (TK).
2. Content Knowledge: about real subject matter that is to be deliberate or trained is known as content knowledge (CK), according to Misra and Koehler (2006) (p. 1026). Teachers must understand the subject substance they will be teaching as well as the various kinds of expertise needed in various subject areas.
3. Pedagogical knowledge (PK): Pedagogical knowledge refers to the methods and processes of teaching and involves knowledge in classroom management, assessment, lesson plan construction, and pupils learning.
4. Technological content knowledge (TCK): The understanding of how technology can grow new representations for assumed material is known as technological content knowledge.
5. Technological pedagogical knowledge (TPK): Understanding how dissimilar technologies can be utilised in the schoolroom and realising that employing technology may alter the method instructors instruct are both considered aspects of technological pedagogical expertise.
6. Technological pedagogical content knowledge (TPCK): Technological pedagogical The skill to assimilate technology into courses in any subject is mentioned to as "content knowledge" by educators. The multifaceted relations between the three rudimentary components of knowledge (CK,

PK, and TK) are instinctively unspoken by teachers who use the appropriate pedagogical approaches and technological gears to teach content. The framework's growth and valuation of teacher skills are centered on promoting effective student learning across a diversity of topic areas (AACTE Committee on Innovation and Technology, 2008). Thus, TPCK is a valuable framework for thoughtful about the information that instructors need to provide AI to enhance students' computer-study comprehension in their lectures.

## **Methodology**

The study adopted descriptive survey research. The population of the study consisted of all primary school teachers and pupils' in Ife East, Ife Central and Ife North. of Osun State. Multi-stage sampling procedure was used. Osun State has 30 local government areas that were geographically stratified into three senatorial districts in which one of this senatorial district was selected using simple random sample technique. From the selected senatorial district, three local government areas (LGAs) were selected using a simple random sampling technique these include Ife East, Ife Central and Ife North. Five primary schools were selected from each local government using simple random sampling technique making a total of 15 schools. In each school, one teacher was selected using a convenient sampling technique and twenty pupils were selected using simple random sampling technique, in each of the schools across the three LGAs, giving a total of 15 primary school teachers and 300 pupils. In each school, 15 pupils will be selected from primary three using simple random sampling technique. Two instruments were used for this study titled Teachers Technological Content Knowledge in the use of AI (on pupils' academic performance in Computer Studies in lower Primary Schools) (QA'TTCKA-CSPS) and (Pupils Performance in Computer Studies in Primary Schools in Osun State) (QA-PPCSPS). QATPCKCSPS was used to elicit information about Teacher's knowledge on TPACK. The instrument is divided into sections: Section A contained items on personal data of respondents while Section B contains items on the technological knowledge TK) of teachers. Section C contains items on the perception of pedagogical knowledge (PK) of teachers Section and D contains items on content knowledge (CK) subject teachers. Section E contains items on Technical Pedagogical Content Knowledge (PACK) of teachers. The second instrument elicited information on pupils' performances in computer studies. The instrument comprises 25 test items that were used for primary three pupils, comprising twenty- five (25) computer studies questions that have been carefully compiled using the curriculum and scheme of work. The instruments were given to the supervisor and experts in test and measurement for review. Their observations and suggestions were used for the final preparation of the instruments. Field testing was used to check the reliability of the instrument using Kuder-Richardson reliability test within the population but outside the sample area. Data collected were analyzed with the aid of Kuder-Richardson. The Teachers Technological Content Knowledge in the use of AI on pupils' academic performance in Computer Studies in lower Primary Schools (QA'TTCKA-CSPS) and of Pupils Performance in Computer Studies in Primary School in Osun State (QA-PPCSPS) and QATPCKCSPS had a coefficient value of 0.71 and 0.72 respectively which showed that the instruments were reliable. The Quantitative data collected were analyzed using inferential statistics of and multiple regressions.

## **Results**

The data collected for this study were analysed using frequency count and percentage to find out the demographic statistics of the participants. The result of the analysis is as presented in Table 1.

**Table 1****Demographic Information of the Participants**

S/N	Variables	Frequency (F)	Percentage (%)
1	Gender		
	Male	4	26.7
	Female	11	73.3
2	Qualifications		
	SSCE	2	13.3
	OND/NCE	8	53.3
	BSCed./BSc./B.Ed.	5	33.3
	M.Sc. Ed./MSc./M.Ed.	0	0.0
3	Teaching?		
	1-5 years	3	20.0
	6-10 years	5	33.3
	11-15 years	5	33.3
	16-20 years	2	13.3
	21 years and above	0	0.0

N=15

Table 1 showed the descriptive analysis of socio-demographic information of the teachers in primary schools in the study area. It can be inferred from Table 1 that 26.7% of the leader teachers are males while the majority (73.3%) are females even as 13.3%, 53.3% and 33.3% had SSCE, OND/NCE and B.Sc. Ed. / B. Sc. / B. Ed academic qualifications respectively. Considering years of teaching experience, 20.0%, 33.3%, 33.3%, and 13.3% of the respondents have been teaching for 1-5 years, 6-10 years, 11-15 years, and 16-20 years correspondingly in primary schools in the study area.

**H<sub>0</sub>1: There is no significant relationship between teachers' Technological Knowledge (TK) of AI and pupils' academic performance in computer study in lower primary schools in Ife Local Government Area.**

In order to test this hypothesis, data collected on teachers' Technological Knowledge (TK) of AI and pupils' academic performance in computer studies in primary schools were subjected to linear regression analysis and the results are presented in Table 2.

**Table 2**

Regression analysis of the Relationship between Teachers' Technological Knowledge (TK) of AI and Pupils' Academic Performance in Computer Studies

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	120.469	1	120.469	7.596	.006%
Residual	4726.488	298	15.861		
Total	4846.917	299			
	R = 0.158a	R Square = 0.025	Adjusted R Square = -0.022		

(F = 7.596,  $p > 0.05$ )

The null hypothesis that there is no significant relationship between teachers' Technological Knowledge (TK) of AI in computer studies and students' academic performance in computer studies is rejected by the results in Table 2, which show a significant relationship between teachers' TK of AI and students' academic performance in computer studies in the study area (F = 7.596,  $p < 0.05$ ). A significant correlation between teachers' knowledge of artificial intelligence (AI) in computer studies and students' academic performance in the same arena was demonstrated by the R Square value of 0.158<sup>a</sup>, while a high variation of 2.5% between instructors' TK of AI in computer studies and students' academic performance in computer studies was explained by the R Square value of 0.025.

**Ho2: There is no significant relationship between teachers' Content Knowledge (CK) in the use of AI and pupils' academic performance in computer studies in lower primary schools.**

In order to test this hypothesis, data collected on teachers' Content Knowledge (CK) in the use of AI and pupils' academic performance in computer studies in lower primary schools were subjected to linear regression analysis and the results are presented in Table 1.3.

**Table 3**

Regression analysis of the relationship between teachers' Content Knowledge (CK) in the use of AI and Pupils' Academic Performance in Computer Study in lower primary schools

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	9.157	1	9.157	0.564	.453b
Residual	4837.760	298	15.861		
Total	4846.917	299			
	R = 0.043a	R Square = 0.002	Adjusted R Square = -0.001		

(F = 0.564,  $p > 0.05$ )



The null hypothesis, which states that there is no significant relationship between teachers' content knowledge (CK) in the use of AI and students' academic performance in computer studies, is hereby accepted. A R Square value of 0.002<sup>^</sup> indicates that there is no significant relationship between teachers' CK in the use of AI and students' academic performance in computer studies in the study area ( $F = 0.564, p > 0.05$ ).

showed a weak relationship between students' academic achievement in computer studies in the research area and teachers' topic knowledge in using AI. Additionally, a little variation of 0.01% in instructors' Content Knowledge (CK) in the usage of AI and students' academic achievement in computer study in lower primary schools was explained by the R Square value of -0.001.

## Discussion of Findings

The findings indicated a strong correlation between students' academic achievement in computer studies and teachers' technological knowledge (TK) of artificial intelligence. The results go beyond those of Santos and Castro (2021), who believed that ICT-based activities made students more conscious of the need to be more creative and effective thinkers while handling their lectures, as well as to make conversations easily accessible and to include them more in the teaching and learning process. They further stated that pre-service teachers' experience to a variety of ICT-based activities in equally their academic and personal lives had given them a hard groundwork in technology. Furthermore, other study has established that educating teachers' technological proficiency increases the likelihood that they will use ICT in the classroom to recover student performance. These findings further corroborate the work of Ghora and Bhati (2016), who stated that technological knowledge is unquestionably one of the foundations for ICT integration.

Additionally, the results demonstrated no significant correlation between teachers' content knowledge in the use of AI and students' academic performance in computer studies in the study area. These findings contradict Heggart (2016), who claimed that expert teachers can use their subject knowledge to organise and use content knowledge more effectively for their students to understand, as well as Santos and Castro (2021), who found that an instructor's content knowledge is crucial to their ability to respond to the needs of any given classroom, identify struggling students, and modify the way the information is presented to make it easier for students to understand.

## Conclusion

The study found that students' academic performance in computer studies with the use of AL in teaching in Ife East Senatorial District of Osun State was significantly correlated with the technological and pedagogical knowledge of primary school instructors. Furthermore, the study found a substantial correlation between the impact of AI on students' academic performance in computer studies in the study region and teachers' technological, pedagogical, and content knowledge (TPCK) computer study.

## References

- Antony, M. K. (2019). Teacher's TPACK Profile: The effect of teacher qualification and teaching experience. J. Phys. Conf. Ser. 1397 012054.
- Ayeni, A.J. 2011. "Teachers professional development and quality assurance in Nigerian Secondary Schools," *World Journal of Education*, 12:143-14
- Adunola, O. 2011. "The Impact of Teachers' Teaching Methods on the Academic Performance of Primary School Pupils in Ijebu-Ode Local cut Area of Ogun State," Ego Booster Books, Ogun State, Nigeria.
- Bruce, B., & Levin, J. (2001 in press). Roles for new technologies in language arts: Inquiry, communication, construction, and expression. In J. Jenson, J. Flood, D. Lapp, & J. Squire (Eds.), *The handbook for research on teaching the language arts*. NY: Macmillan.
- Chen, X., Zou, D., Xie, H., & Cheng, G. (2021). Twenty years of personalized language learning: Topic modeling and knowledge mapping. *Educational Technology & Society*, 24(1), 205–222.
- Hong, J. E., & Stonier, F. (2014). GIS In-Service Teacher Training Based on TPACK. *Journal of Geography*, 114(3), 108-117. doi:10.1080/00221341.2014.947381.
- Hughes, J. (2004). Technology learning principles for pre-service and in-service teacher education. *Contemporary Issues in Technology and Teacher Education*, 4(3), 345-362.
- Keating, T., & Evans, E. (2001). Three computers in the back of the classroom: Pre-service Keating, teachers'

- conceptions of technology integration. In R. Carlsen, N. Davis, J. Price, R. Koehler, M. J., Mishra, P., & Yahya, K. (2007). Tracing the development of teacher knowledge in a design seminar: Integrating content, pedagogy, and technology. *Computers and Education*, 49(3), 740-762.
- Koehler, M. J., & Mishra, P. (2008). Introducing TPCK. AACTE Committee on Innovation and Technology (Ed.), *The handbook of technological pedagogical content knowledge (TPCK) for educators* (pp. 3-29). Mahwah, NJ: Lawrence Erlbaum Associates.
- Koehler, (2012).TPACK: Intro and in-depth. Retrieved
- Koehler, M. J., Mishra, P., Kereluik, K., Shin, T. S., & Graham, C. R. (2014). The technological pedagogical content knowledge framework. In J.M. Spector, M.D. Merrill, J. Elen, & M.J. Bishop (Eds.), *Handbook of research on 89 educational communications and technology* (pp. 101-111). Springer New York. DOI: DOI 10.1007/978-1-4614-3185-59
- Koehler, M. J., Mishra, P., Kereluik, K., Shin, T. S., & Graham, C. R. 2013). The technological pedagogical content knowledge framework. In M. Spector, M. D. Merrill, J. Elen, & M. J. Bishop (Eds.), *Handbook of Research on Educational Communications and Technology* (pp. 101-111). Springer.
- Koehler, M. J., Mishra, P., Kereluik, K., Shin, T. S., & Graham, C. R. (2014). The technological pedagogical content knowledge framework. In J.M. Spector, M.D. Merrill, J. Elen, & M.J. Bishop (Eds.), *Handbook of research on 89 educational communications and technology* (pp. 101-111). Springer New York. DOI: DOI 10.1007/978-1-4614-3185-59.
- Koehler, M. J., Mishra, P., Kereluik, K., Shin, T. S., & Graham, C. R. 2013). The technological pedagogical content knowledge framework. In M. Spector, M. D. Merrill, J. Elen, & M.
- Lin, H. C., Tu, Y. F., Hwang, G. J., & Huang, H. (2021). From precision education to precision medicine. *Educational Technology & Society*, 24(1), 123–137.
- López-Pernas, S., Gordillo, A., Barra, E., & Quemada, J. (2019). Analyzing Learning Effectiveness and Students' Perceptions of an Educational Escape Room in a Programming Course in Higher Education. *IEEE Access*, vol. 7, pp. 184221-184234, doi: 10.1109/ACCESS.2019.2960312
- McCormy, R. (2004). A framework for understanding teaching with the Internet. *American Educational Research Journal*, 41(2), 447-488.
- Mishra, P. 1998). Flexible learning in the periodic system with multiple representations: The design of a hypertext for learning complex concepts in chemistry. (Doctoral dissertation, University of Illinois at Urbana-Champaign). Dissertation Abstracts International, 59(11), 4057. (AAT 9912322).
- Mishra, P. & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*. 108(6), 1017-1054.
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for integrating technology in teachers' knowledge. *Teachers College Record*, 108(6), 1017-1054. *National Information and Communication Infrastructure (NICI Plan 2016) Implementation Plan 2012-2016*.
- Niess, M. L. (2005). Preparing teachers to teach science and mathematics with technology: Developing a technology pedagogical content knowledge. *Teaching and Teacher Education*, 21(5), 509-523.
- Omoso E, & Odindo F. (2020). TPACK in teacher education: Using pre-service teachers' self-reported TPACK to improve pedagogic practice. *International Journal of Education and Research*, 8(5), 125-138.
- Oyediran, W. O. & Dick, T. T. (2018). Use of Information Communication Technology (I.C.T.) in teaching profession in Ogun State, Nigeria. *International Journal for e-Learning Security (IJeLS)*, 7(1), 549-555.
- Pierson, M. E. (1999). Technology integration practice as a function of pedagogical expertise Doctoral dissertation, Arizona State University). Dissertation Abstracts International, 60(03), 711. (AAT 9924200).
- Pierson, M. E. (2001). Technology integration practice as a function of pedagogical expertise. *Journal of Research on Computing in Education*, 33(4), 413-429.
- Santos, J. M. & Castro, R. DR. (2020). Technological pedagogical content knowledge (TPACK) in action: Application of learning in the classroom by pre-service teachers (PST). Available at:
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14.
- Slough, S., & Connell, M. (2006). Defining technology and its natural corollary, technological content

- knowledge (TCK). In C. Crawford, D. Willis, R. Carlsen, I. Gibson, K. McFerrin, J. Price, & R. Weber (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference*, 2006 (pp. 1053-1059). Chesapeake, VA: AACE.
- Surahman. E., Thaariq, Q. & Setiawan, A. (2020). Investigation of the high school teachers TPACK competency in South Garut, West Java, Indonesia. *Advances in Social Science, Education and Humanities Research*, 501(2020), 461-466.
- Wang, Y., & Zhao, P. (2020). A probe into spoken English recognition in English education based on computer-aided comprehensive analysis. *International Journal of Emerging Technologies in Learning (iJET)*, 15(3), 223–233.
- Wang, Y., Liu, C., & Tu, Y. F. (2021). Factors affecting the adoption of AI-based applications in higher education. *Educational Technology & Society*, 24(3), 116–129.
- Thompson, A., & Mishra, P. (2007-2008). Breaking news: TPCK becomes TPACK! *Journal of Computing in Teacher Education*, 24(2), 38-64.
- Zhao, Y. (2003). *What teachers should know about technology: Perspectives and Practices*. Greenwich, CT: InformationAg.

# Unlocking the Power of Community Engagement and Partnerships in Promoting Early Childhood Education Programs in Nigeria

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## **Abstract**

*Enhancing early childhood education (ECE) in Nigeria hinges significantly on fostering community engagement and partnerships. This abstract explores strategies to unlock the potential of community involvement in promoting ECE programmes across the nation. Nigeria faces numerous challenges in ECE, including accessibility, quality assurance, and socio-economic disparities. Effective community engagement can mitigate these challenges by mobilizing local resources, knowledge, and support networks. Partnerships between government agencies, NGOs, educational institutions, and community leaders are crucial for implementing sustainable ECE initiatives. This paper underscores the importance of tailored approaches that respect local cultures and traditions while integrating global best practices. Key components include sensitizing communities about the benefits of ECE, involving parents in educational processes, and creating supportive environments that prioritize child development. In conclusion, harnessing community strengths and fostering collaborative partnerships, Nigeria can significantly improve the reach and impact of its ECE programmes, laying a foundation for lifelong learning and socio-economic development.*

**Keywords:** *Community Engagement, Partnerships, Early Childhood Education, Nigeria, Sustainable Initiatives, Parental Involvement*

## **Introduction**

Early Childhood Education (ECE) is a critical foundation for lifelong learning and development (UNESCO, 2017). In Nigeria, ECE is crucial for addressing the country's developmental challenges, including poverty, inequality, and poor educational outcomes (World Bank, 2018). However, ECE in Nigeria faces numerous challenges, including inadequate infrastructure, poorly trained teachers, and limited access to quality education (UNICEF, 2019). To address these challenges, community engagement and partnerships are essential for unlocking the power of ECE programs in Nigeria (Okeke, 2018).

Community engagement and partnerships can foster social capital, cultural capital, and economic capital, all of which are vital for promoting ECE (Bourdieu, 1986). In Nigeria, community engagement and partnerships can help build trust, foster collaboration, and mobilize resources for ECE programs (Adeyemi, 2017). Furthermore, partnerships between public and private sectors can leverage resources, expertise, and funding to support ECE



programs (Arikewuyo, 2019).

This paper explores the potential of community engagement and partnerships in promoting ECE programs in Nigeria. By examining current initiatives, challenges, and best practices, we aim to identify strategies for unlocking the power of community engagement and partnerships in ECE. Our goal is to inform policy and practice, ultimately improving access to quality ECE for all Nigerian children.

In Nigeria, community engagement and partnerships are crucial for addressing the challenges facing ECE programs. According to Okeke (2018), community involvement in ECE can improve access to quality education, enhance parental engagement, and foster community ownership. Similarly, Adeyemi (2017) notes that partnerships between public and private sectors can leverage resources, expertise, and funding to support ECE programs.

However, challenges persist. UNICEF (2019) reports that only 24% of Nigerian children aged 3-5 have access to ECE, with significant disparities across regions and socio-economic groups. Moreover, inadequate infrastructure, poorly trained teachers, and limited access to quality education hinder the effectiveness of ECE programs (World Bank, 2018).

To address these challenges, innovative approaches to community engagement and partnerships are necessary. This paper explores the potential of collaborative initiatives, capacity building, and resource mobilization to unlock the power of community engagement and partnerships in promoting ECE programs in Nigeria.

By examining best practices and lessons learned from successful initiatives, we can identify strategies for improving access to quality ECE, enhancing community engagement, and fostering effective partnerships. Our goal is to inform policy and practice, ultimately improving the lives of Nigerian children and their communities.

### **Theoretical Framework**

Social Capital Theory, founded by Pierre Bourdieu in 1986, posits that social relationships and networks have value and can be leveraged to achieve individual and collective benefits. In the context of unlocking the power of community engagement and partnerships in promoting Early Childhood Education (ECE) programs in Nigeria, Social Capital Theory offers a robust framework for understanding the dynamics of community engagement, partnerships, and their impact on ECE outcomes.

#### **The Key tenets of Social Capital Theory:**

- Social capital refers to the resources and benefits that arise from social relationships and networks.
  - 2. Social capital can be mobilized to achieve individual and collective benefits.
3. Social capital has three forms:
- Bonding capital (within-group relationships)
  - Bridging capital (between-group relationships)
  - Linking capital (relationships between individuals and institutions)

#### **Educational implications for stakeholders:**

##### **1. Community members:**

- Bonding capital: Strong relationships within the community can foster trust, cooperation, and collective action, leading to improved ECE outcomes.
- Bridging capital: Relationships with other communities and organizations can provide access to resources, expertise, and support, enhancing ECE programs.

##### **2. Educators and teachers:**

- Linking capital: Relationships with community members, organizations, and institutions can facilitate access to resources, training, and support, improving teaching practices and ECE outcomes.

##### **3. Institutions and organizations:**

- Linking capital: Partnerships with communities, organizations, and institutions can leverage resources, expertise, and funding, enhancing ECE programs and outcomes.

##### **4. Children and families:**

- Bonding capital: Strong relationships within families and communities can provide emotional support, leading to improved early childhood development and education outcomes.

In Nigeria, Social Capital Theory can inform strategies for unlocking the power of community engagement and

partnerships in promoting ECE programs. By fostering bonding, bridging, and linking capital, stakeholders can:

1. Build trust and cooperation within and across communities.
2. Mobilize resources, expertise, and support from diverse stakeholders.
3. Enhance ECE programs and outcomes through collaborative efforts.

Therefore, recognizing the value of social capital in ECE, stakeholders can harness the power of

community engagement and partnerships to improve early childhood education in Nigeria.

### **Strengths of Social Capital Theory:**

1. Highlights the importance of social relationships and networks in achieving individual and collective benefits.
2. Emphasizes the value of community engagement and partnerships in promoting Early Childhood Education (ECE) programs.
3. Encourages collective action and cooperation among stakeholders.
4. Recognizes the role of institutions and organizations in supporting ECE programs.
5. Provides a framework for understanding the dynamics of social capital in ECE contexts.

### **Limitations of Social Capital Theory:**

1. Overemphasizes the role of social capital in achieving outcomes, potentially overlooking other important factors.
2. Can be difficult to measure and quantify social capital.
3. May not account for power imbalances and inequalities within communities and networks.
4. Can be challenging to mobilize and sustain social capital over time.
5. May not be applicable in all cultural and contextual settings.

In the context of unlocking the power of community engagement and partnerships in promoting ECE programs in Nigeria, the strengths of Social Capital Theory can be leveraged to:

1. Foster collaborative relationships among stakeholders.
2. Build trust and cooperation within and across communities.
3. Mobilize resources and support for ECE programs.

However, the limitations of Social Capital Theory should also be acknowledged and addressed, such as:

1. Ensuring equitable distribution of resources and benefits.
2. Addressing power imbalances and inequalities.
3. Developing culturally sensitive and context-specific strategies.
4. Establishing sustainable and long-term partnerships.
5. Integrating social capital with other theoretical frameworks to provide a more comprehensive understanding of ECE programs in Nigeria.

The following are five guided questions raised to discuss the study :

1. What specific strategies can be implemented to foster community engagement and partnerships in promoting Early Childhood Education programs in Nigeria, and how can these strategies be sustained over time?
2. How can social capital be leveraged to mobilize resources, support, and expertise for Early Childhood Education programs in Nigeria, and what are the potential challenges and limitations of this approach?
3. What role can community-based organizations and institutions play in promoting Early Childhood Education programs in Nigeria, and how can they be supported and empowered to do so effectively?
4. How can partnerships between public, private, and civil society sectors be fostered and strengthened to promote Early Childhood Education programs in Nigeria, and what are the key factors that contribute to successful partnerships?
5. What are the key barriers and challenges that hinder community engagement and partnerships in promoting Early Childhood Education programs in Nigeria, and how can these be addressed and overcome to unlock the full potential of community engagement and partnership?

What specific strategies can be implemented to foster Community Engagement and partnerships in promoting Early childhood education program in Nigeria and how can these strategies be sustained over time ?

Fostering community engagement and partnerships is crucial for promoting Early Childhood Education (ECE) programs in Nigeria. Several strategies can be implemented to achieve this, including:

1. Building relationships and trust with community members (Okeke, 2018).
2. Establishing community-based committees to oversee ECE programs (UNICEF, 2019).
3. Providing training and capacity building for community members and ECE providers (Adeyemi, 2017).
4. Encouraging community participation in ECE program planning and decision-making (World Bank, 2018).
5. Leveraging technology to enhance community engagement and partnerships (OECD, 2020).

To sustain these strategies over time, the following approaches can be adopted:

1. Establishing a framework for community engagement and partnerships (Bourdieu, 1986).
  2. Providing ongoing support and resources for community members and ECE providers (Coleman, 1988).
  3. Encouraging community ownership and leadership of ECE programs (Putnam, 1995).
  4. Fostering collaboration among community members, ECE providers, and other stakeholders (Wagner, 2018).
  5. Continuously monitoring and evaluating the effectiveness of community engagement and partnerships (Katz, 2019).
- Implementing these strategies and approaches, community engagement and partnerships can be fostered and sustained, leading to improved outcomes for ECE programs in Nigeria.

How can social capital be leveraged to mobilize resources, support, and expertise for Early Childhood Education programs in Nigeria, and what are the potential challenges and limitations of this approach?

Leveraging social capital to mobilize resources, support, and expertise for Early Childhood Education (ECE) programs in Nigeria can be a powerful strategy. Social capital refers to the networks, relationships, and norms of trust and cooperation within and between communities (Bourdieu, 1986). By tapping into these social networks, ECE programs can access resources, expertise, and support that might otherwise be unavailable.

One way to leverage social capital is through community engagement and participation. When community members are engaged in ECE programs, they are more likely to invest time, resources, and expertise in the program's success (Coleman, 1988). This can lead to increased access to resources, such as funding, materials, and facilities (Putnam, 1995).

Another way to leverage social capital is through partnerships with community-based organizations and institutions. These partnerships can provide access to expertise, resources, and support, as well as help build trust and credibility within the community (Wagner, 2018).

However, there are also potential challenges and limitations to leveraging social capital for ECE programs in Nigeria. One challenge is the potential for unequal distribution of resources and support, with some communities having more access to social capital than others (Okeke, 2018). Another challenge is the potential for conflicts and power imbalances within and between communities, which can hinder effective collaboration and resource mobilization (Adeyemi, 2017).

Furthermore, social capital can be context-dependent, and what works in one community may not work in another (Katz, 2019). Additionally, social capital can be influenced by broader structural factors, such as poverty, inequality, and political instability, which can impact its effectiveness (UNICEF, 2019).

Therefore, leveraging social capital can be a powerful strategy for mobilizing resources, support, and expertise for ECE programs in Nigeria. However, it is important to be aware of the potential challenges and limitations, and to approach social capital leveraging in a thoughtful and context-sensitive manner.

What role can community-based organizations and institutions play in promoting Early Childhood Education programs in Nigeria, and how can they be supported and empowered to do so effectively?

Community-based organizations and institutions play a vital role in promoting Early Childhood Education (ECE) programs in Nigeria. These organizations and institutions are well-positioned to provide support and resources to ECE programs, leveraging their local knowledge, expertise, and community trust (Okeke, 2018). They can:

1. Provide access to education and healthcare services (UNICEF, 2019).
2. Offer training and capacity building for ECE providers (Adeyemi, 2017).
3. Mobilize community resources and support (Wagner, 2018).
4. Advocate for ECE policy and program development (World Bank, 2018).
5. Facilitate community engagement and participation (Katz, 2019).

To support and empower community-based organizations and institutions, the following strategies can be employed:

1. Provide funding and resource support (OECD, 2020).

2. Offer technical assistance and capacity building (USAID, 2019).
3. Foster partnerships and collaborations (UNESCO, 2017).
4. Promote community ownership and leadership (Save the Children, 2018).
5. Encourage community-based research and evaluation (Journal of Early Childhood Education, 2020).

By supporting and empowering community-based organizations and institutions, ECE programs in Nigeria can benefit from increased access to resources, expertise, and community trust, ultimately leading to improved outcomes for young children.

How can partnerships between public, private, and civil society sectors be fostered and strengthened to promote Early Childhood Education programs in Nigeria, and what are the key factors that contribute to successful partnerships?

Fostering and strengthening partnerships between public, private, and civil society sectors is crucial for promoting Early Childhood Education (ECE) programs in Nigeria. Effective partnerships can leverage resources, expertise, and influence to improve access, quality, and sustainability of ECE programs (UNICEF, 2019). Key factors contributing to successful partnerships include:

1. Shared goals and vision (Adeyemi, 2017).
2. Trust and mutual respect (Wagner, 2018).
3. Clear roles and responsibilities (OECD, 2020).
4. Effective communication and coordination (Katz, 2019).
5. Capacity building and resource sharing (USAID, 2019).
6. Flexibility and adaptability (Save the Children, 2018).
7. Community engagement and participation (Journal of Early Childhood Education, 2020).

To foster and strengthen partnerships, the following strategies can be employed:

1. Establish a partnership framework (World Bank, 2018).
2. Encourage multi-stakeholder dialogue (UNESCO, 2017).
3. Build capacity and provide technical assistance (DFID, 2019).
4. Foster private sector engagement (IFC, 2020).
5. Leverage technology and innovation (GSMA, 2019).

Adopting these strategies and emphasizing key factors, partnerships between public, private, and civil society sectors can be strengthened, leading to improved ECE outcomes in Nigeria.

What are the key barriers and challenges that hinder community engagement and partnerships in promoting Early Childhood Education programs in Nigeria, and how can these be addressed and overcome to unlock the full potential of community engagement and partnerships?

Community engagement and partnerships are essential for promoting Early Childhood Education (ECE) programs in Nigeria, but several barriers and challenges hinder their effectiveness. Key barriers and challenges include:

1. Lack of awareness and understanding of ECE importance (UNICEF, 2019).
2. Limited community resources and infrastructure (World Bank, 2018).
3. Cultural and linguistic barriers (Adeyemi, 2017).
4. Power imbalance and lack of community ownership (Katz, 2019).
5. Inadequate funding and support (USAID, 2019).
6. Poor communication and coordination (Journal of Early Childhood Education, 2020).
7. Limited capacity and skills of community members and ECE providers (DFID, 2019).

To address and overcome these barriers, the following strategies can be employed:

1. Raise awareness and build understanding of ECE importance through community sensitization and education (UNICEF, 2019).
2. Provide resources and infrastructure support through partnerships and funding (World Bank, 2018).
3. Develop culturally sensitive and linguistically appropriate ECE programs (Adeyemi, 2017).
4. Empower communities to take ownership and lead ECE initiatives (Katz, 2019).
5. Mobilize adequate funding and support through government and private sector engagement (USAID, 2019).
6. Establish effective communication and coordination mechanisms (Journal of Early Childhood Education,



2020).

7. Build capacity and skills of community members and ECE providers through training and technical assistance (DFID, 2019).

Addressing and overcoming these barriers, community engagement and partnerships can be strengthened, leading to improved ECE outcomes in Nigeria.

## Conclusion

Community engagement and partnerships are essential for promoting Early Childhood Education (ECE) programs in Nigeria. The paper has highlighted the importance of community engagement and partnerships in improving access, quality, and sustainability of ECE programs. However, several barriers and challenges hinder the effectiveness of community engagement and partnerships, including lack of awareness, limited resources, cultural and linguistic barriers, power imbalance, inadequate funding, and poor communication.

To unlock the full potential of community engagement and partnerships, it is crucial to address and overcome these barriers. Strategies such as raising awareness, providing resources and infrastructure support, developing culturally sensitive programs, empowering communities, mobilizing funding, establishing effective communication mechanisms, and building capacity and skills of community members and ECE providers are essential.

## Suggestions

1. Develop a national framework for community engagement and partnerships in ECE, emphasizing shared goals, roles, and responsibilities.
2. Establish a community engagement and partnership fund to support ECE initiatives.
3. Develop culturally sensitive and linguistically appropriate ECE programs, incorporating community values and beliefs.
4. Empower communities to take ownership and lead ECE initiatives, providing training and technical assistance.
5. Mobilize private sector engagement and funding, leveraging technology and innovation.
6. Establish effective communication and coordination mechanisms, utilizing digital platforms and community networks.
7. Build capacity and skills of community members and ECE providers, focusing on early childhood development and education.
8. Conduct regular monitoring and evaluation, using participatory and inclusive approaches.
9. Foster collaboration among government, private sector, civil society, and communities, promoting a coordinated approach.
10. Support research and development, generating evidence-based solutions and best practices.

Therefore implementing these suggestions and addressing the barriers and challenges, community engagement and partnerships can be strengthened, leading to improved ECE outcomes in Nigeria. This will ultimately contribute to the achievement of the Sustainable Development Goals (SDGs), particularly SDG 4, ensuring inclusive and equitable quality education for all.

Some authors support these suggestions, emphasizing the importance of community engagement and partnerships in ECE (UNICEF, 2019; World Bank, 2018; Adeyemi, 2017; Katz, 2019; USAID, 2019). By unlocking the power of community engagement and partnerships, Nigeria can make significant progress in promoting ECE programs, improving the lives of young children and their families.

## References

- Adeyemi, A. (2017). Capacity building for early childhood education in Nigeria. *Journal of Education and Human Development*, 6(1), 1-9.
- Adeyemi, A. (2017). Cultural sensitivity in early childhood education in Nigeria. *Journal of Education and Human Development*, 6(1), 1-9.
- Adeyemi, A. (2017). Partnerships in early childhood education in Nigeria. *Journal of Education and Human Development*, 6(1), 1-9.

- Adeyemi, A. (2017). Power dynamics and community engagement in early childhood education. *Journal of Education and Power*, 4(1), 1-12.
- Arikewuyo, A. (2019). The role of community engagement in improving early childhood education in Nigeria: A review of the literature. *Journal of Early Childhood Education*, 7(2), 1-15.
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-258). Greenwood Press.
- Bourdieu, P. (1990). Cultural reproduction and social reproduction. In J. Karabel & A. H. Halsey (Eds.), *Power and ideology in education* (pp. 487-511). Oxford University Press.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95-S120.
- DFID. (2019). *Supporting early childhood education in Nigeria*. DFID Nigeria.
- GSMA. (2019). *Mobile for early childhood education in Nigeria*. GSMA London.
- IFC. (2020). *Private sector engagement in early childhood education in Nigeria*. IFC Nigeria.
- Journal of Early Childhood Education. (2020). Community-based partnerships in early childhood education. *Journal of Early Childhood Education*, 48(1), 1-10.
- Journal of Early Childhood Education. (2020). Community-based research in early childhood education. *Journal of Early Childhood Education*, 48(1), 1-10.
- Katz, I. (2019). Evaluating community engagement and partnerships in early childhood education. *Journal of Early Childhood Education*, 47(2), 155-166.
- Katz, I. (2019). Partnerships in early childhood education. *Journal of Early Childhood Education*, 47(2), 155-166.
- OECD. (2020). *Early childhood education and care in Nigeria*. OECD Publishing.
- OECD. (2020). *Leveraging technology to enhance community engagement and partnerships in early childhood education*. OECD Publishing.
- Okeke, M. (2018). Community engagement in early childhood education in Nigeria. *Journal of Education and Community Development*, 3(1), 1-12.
- Okeke, M. (2018). Community involvement in early childhood education in Nigeria: A case study of Anambra State. *Journal of Education and Human Development*, 7(1), 1-9.
- Okeke, M. (2018). Social capital and early childhood education in Nigeria. *Journal of Education and Community Development*, 3(1), 1-12.
- Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, 6(1), 65-78.
- Save the Children. (2018). *Partnerships in early childhood education in Nigeria*. Save the Children Nigeria.
- UNESCO. (2017). *Community engagement in early childhood education: A review of the literature*. UNESCO Institute for Lifelong Learning.
- UNESCO. (2017). *Early childhood education in Nigeria: A review of the sector*. UNESCO Abuja.
- UNICEF. (2019). *Community-based early childhood education programs in Nigeria*. UNICEF Nigeria.
- UNICEF. (2019). *Early childhood education in Nigeria: A review of the sector*. UNICEF Nigeria.
- UNICEF. (2019). *Early childhood education in Nigeria: A situation analysis*. UNICEF Nigeria.
- USAID. (2019). *Supporting early childhood education in Nigeria*. USAID Nigeria.
- Wagner, C. (2018). Collaboration and partnership in early childhood education. *Journal of Early Childhood Education*, 46(1), 39-48.

- Wagner, C. (2018). Partnerships and collaboration in early childhood education. *Journal of Early Childhood Education*, 46(1), 39-48.
- World Bank. (2018). *Early childhood education in Nigeria: A review of the sector*. World Bank Group.

# Empowering Primary School Teachers in Nigeria: Exploring their Role in Fostering Social Skills through Affective Domain Measures

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## Abstract

*Empowering Primary School Teachers in Nigeria: Exploring their role in Fostering Social Skills Through Affective Domain Measures in continuous assessment is aimed at developing a manual for the training of primary school teachers. A sample of 147 teachers were drawn from a population of 1470. The cross-sectional survey design was adopted. Proportionate to size sampling technique was used. The instrument (RNPT-IADM) of the study was a self- developed questionnaire. The content validity of the instrument was sought through expert judgments. The Cronbach Alpha method was used and a reliability coefficient of 0.83 was obtained. The findings show that the teachers found respect and appearance easy to implement while honesty, obedience, self-control and relationships traits difficult to implement. There are no significant differences in the implementation according to gender, school type and school location for t-test at Alpha = 0.05. It is concluded that the implementation of the affective domain measures is critical in averting the current trend of insecurity in Nigeria and recommended among others that teachers should be trained on its implementation by stakeholders like the State Universal Basic Education Board and using such traits alongside the cognitive records of pupils for promotions.*

**Keywords:** Primary School, Teachers, Social Skills, Affective Domain

## Introduction

The primary school teacher is the person that is saddled with the responsibility of inculcating knowledge, values and skills to children aged 6- 12yrs. Knowledge refers to the cognitive ability of the child to learn, values refer to affective components while skills refer to the psychomotor ability of the child. In the primary school emphasis is made on training children in the cognitive to the detriment of the affective and the psychomotor domains. Thus, this trend continues to the secondary and tertiary institutions of learning in Nigeria despite the claim that a candidate must be found worthy in character (affective) and in learning (cognitive),

The affective domain refers to one's feelings, values, appreciations, enthusiasm, motivations, and attitudes (The Peak Performance Center, 2024). It has five levels arranged in ascending order namely: Receiving, responding, valuing, organization and characterization ((The Peak Performance Center, 2024). The teachers' role is to implement these core components to the pupils so that not only will these help them in their cognitive development but also for peaceful co-existence in the society. In the primary schools these values are further broken down into respect, honesty, obedience, self-control, social relationship skills, and appearance.

Respect is the admiration of people or things and can also be considered as moral behavior which are sometimes wrongly considered as fear, acceptance or tolerance by some people (Jones, 2022, Mokracek& Mohammed, 2022). Primary school teachers who are supposed to train pupils to be respectful are themselves the least respected in Nigerian society today unlike their counterparts in the 70's and early 80's (Wanlor., Ezulike&Punshak, 2022, Mokracek& Mohammed, 2022). Despite the fact that they are not trained on how to use instrument that will help them in assessing the pupils, they try their best to train pupils to rise up and greet the teacher both morning and afternoon in the class, make children to run errands, help the elderly in the society and above all entreat pupils to treat their colleagues' as they would want themselves to be treated.

Store (2024) defined honesty as a state of being truthful, sincere, responsible, and fair among others. Although teachers do not have the requisite training to assess and implement this soft skill they often impart this spirit consciously as well as unconsciously to pupils. Consciously, they demand that children tell the truth when settling disputes among them, while unconsciously they act as role models for the pupils when they are prompt and regular in school, in the classroom for teaching, marking pupils' assignments and providing them with



immediate feedback among others.

Obedience on the other hand is the carrying out of instructions or obeying rules and regulations. Pupils who do not obey rules and regulation engage in stealing, bullying, and gangsterism among others (Manaf, Ali, Said & Musa, (2017). Teachers inculcate this trait in pupils by ensuring that pupils do not come late to school and leave only after school hours, are punctual at school functions, obey the school prefects, maintain silence in the classroom when the teacher is teaching them and would not be roaming outside while their teachers are teaching others in the classroom.

Self- control is the ability of the child to control his or her behaviors in order to avoid unpleasant consequences in the future.in order word it can also be referred to as self-discipline, self- restraint or will- power (Henden, 2008, Schiffer & Brown, 2023). In school teachers tend to restrict pupils' movements during school hours and to think rather than provide answers to questions asked by impulse, be quiet and listen attentively. Outside the classroom teachers place restrictions on pupils playing around while they are expected to be in their respective classes and also give them assignments to do at home in order to engage in what will help them in future rather than watching films, playing computer games and wasting time on what might not benefit them later in life.

Appearance is the physical out-look of the child. In order words how such a child appears before his peers, teachers and other people (Fitzpatrick & Cote-Lussier, 2015). Teachers inculcate this value by inspecting pupils' hair, teeth, finger nails, uniforms and by keeping the classroom clean through a planned duty roster for them. Social relation skills on the other hand are the ability of pupils to interact with each other in specific ways that are acceptable to their peers and the society (Astuti & Asyari, 2022). It includes oral and written communication skills, and the ability of a pupil to cooperate with others in small or large groups. Teachers try to implement this virtue in pupils by giving them individual or group assignments such as written compositions, debates, quiz, and Arts and Science exhibition among others.

Some empirical findings reveal that aggression, immorality, disobedience, class disruption and not following school rules and regulations affect students' performance in examinations both in developed and developing countries (Manaf, Ali, Said & Musa, 2017) found that there is a significant relationship between achievement of learning outcomes and obedience to rules and regulation. Similarly, Schiffer and Brown (2023) found that self-control is very significant in achieving school work and sports and also strengthens intra and interpersonal relationships. Fitzpatrick and Cote-Lussier (2015) found that academic outcomes are likely to be associated with students' general appearance demeanor like appearing hungry, tired, dirty, and poorly dressed. Similarly, Astuti and Asyari (2022) found that no meaningful learning outcomes can be achieved without proper mastery of task-related behaviours and communication skills by elementary school pupils.

## **Purpose**

The purpose of the study is to empower primary school teachers in Nigeria by exploring their roles in fostering social skills through affective domain measures. The specific objectives are to:

- determine the extent to which primary school teachers in Pankshin LGEA assess pupils' level of respect.
- determine the extent to which primary school teachers in Pankshin LGEA assess pupils' level of honesty.
- find out how which primary school teachers in Pankshin LGEA assess pupils' level of obedience.
- find out how primary school teachers in Pankshin LGEA assess pupils' level of self-control
- investigate the extent to which primary school teachers in Pankshin LGEA assess pupils' social relationship skills?

## **Research Questions**

The following research questions were raised to guide the study:

- To what extent do primary school teachers in Pankshin LGEA assess pupils' level of respect?
- To what extent do primary school teachers in Pankshin LGEA assess pupils' level of honesty?
- To what extent do primary school teachers in Pankshin LGEA assess pupils' level of obedience?
- What will be the level of Pankshin LGEA primary school teachers' assessment of pupils' self-control?

- To what extent do Pankshin LGEA primary school teachers assess pupils' social relationship skills?
- What will be the extent to which Pankshin LGEA primary school teachers assess pupils' appearance?

### Hypotheses

The study was anchored by the following hypotheses:

- H<sub>0</sub>1: There is no significant difference in the mean score implementation of the affective domain measures based on gender in Pankshin LGEA.
- H<sub>0</sub>2: There is no significant difference in the mean score implementation of the affective domain measures based on school type in Pankshin LGEA.
- H<sub>0</sub>3: There is no significant difference in the mean score implementation of the affective domain measures based on school locations in Pankshin LGEA.
- H<sub>0</sub>4: There is no significant difference in the implementation of the affective domain measures based on teachers' qualifications (M. Ed, B. Ed, NCE and Others) in Pankshin LGEA.

### Methodology

The study adopted the survey research design. The population of the study was 1470 primary school teachers from public and private schools within Pankshin Local Government Education Authority, Pankshin LGEA. The sample was 10% of the population, that is 147. Out of this sample there were 52 males and 95 females. There were 93 respondents from public schools and 54 of them from private schools. Similarly, 98 of the respondents were from Urban Area while 49 of them were from rural areas. The Probability Proportionate Sampling (PPS) technique was used.

The instrument called Roles of Nigeria Primary teachers in the Implementation of Affective Domain Measures (RNPT-IADM) adapted from Wanlor (2007) was four-point Likert Scale or questionnaire. The instruments had two sections, A and B. Section A sought for respondents' biodata while section B had items on the implementation of affective domain. The content validity of the instrument was established by two experts: One from Measurement and Evaluation Unit Department of Educational Foundations University of Jos and the other from Psychology Unit school of Education, FCE, Pankshin. The instrument was trial-tested using 30 teachers randomly selected for the establishment of internal consistency. The Cronbach Alpha method was considered appropriate as it ensured the homogeneity of the items from section B. The reliability coefficient of 0.83 was obtained. This indicated that the instrument was reliable.

The mean was used to answer the six research questions. The criterion mean was 2.50. Mean values greater than or equal to 2.50 were accepted while mean values less than 2.5 were rejected. Hypotheses one to three were tested using the student t-test statistics while hypothesis four was tested using Analysis of Variance (ANOVA).

### Results

#### Research Question One

To what extent do primary school teachers in Pankshin LGEA assess pupils' level of respect?

**Table 1**

**Mean Ratings of Respondents on the Assessment of Respect in Primary schools**

Section B1	Respect	SA	A	D	SD	Mean	Decision
	1 Tolerance	21	29	67	30	2.28	Reject
	2 Respect for Teachers	102	38	7	0	3.85	Accept
	3 Respect for School Authority	46	94	7	0	3.23	Accept
	Mean of means					3.12	Accept

Table 1 shows that the respondents found it difficult to assess tolerance of pupils with a mean score of 2.28 below the criterion mean while respect for teachers and school authority were being assessed. Respect was being assessed by the respondents as indicated by the mean of means 3.12 above the criterion mean

### Research Question Two

To what extent do primary school teachers in Pankshin LG EA assess pupils' level of honesty?

**Table 2**

#### Mean Ratings of Respondents on the Assessment of Honesty in Primary schools

Section B2	Honesty	SA	A	D	SD	Mean	Decision
	4 Truthfulness	40	84	23	0	3.27	Accept
	5 Trustworthiness	17	53	70	7	2.65	Accept
	6 Faithfulness	15	24	48	60	1.67	Reject
	Mean of means					2.53	Accept

Table 2 shows that the respondents found it difficult to assess faithfulness of pupils with a mean score of 1.67 below the criterion mean as compared to truthfulness and trustworthiness which both have means above the criterion mean. The mean of means shows that the teachers found it easy to assessed pupils' honesty with a mean of 2.53 slightly above the criterion mean of 2.50

### Research Question Three

To what extent do primary school teachers in Pankshin LG EA assess pupils' level of obedience?

**Table 3**

#### Mean Ratings of Respondents on the Assessment of Obedience in Primary schools

Sections B3	Obedience	SA	A	D	SD	Mean	Decision
	7 Regular in school activities	23	40	57	27	2.33	Reject
	8 Punctuality in class	22	47	66	12	2.54	Accept
	9 Obey Rules and Regulation	18	40	60	29	2.32	Reject
	Mean of means					2.39	Reject

Table 3 shows that the respondents found it difficult to assess regularity with a mean of 2.33 and obeying school rules and regulations with mean score of 2.32 below the criterion mean but easy to assess pupils' punctuality in class with a mean score of 2.54. The mean of means shows that the teachers found it difficult to assessed pupils' level of obedience with a mean of 2.39 below the criterion mean of 2.50

### Research Question Four

What will be the level of Pankshin LG EA the primary school teachers' assessment of pupils' self-control?

**Table 4**

#### Mean Ratings of Respondents on the Assessment of Self-control in Primary schools

Section B4	Self-control	SA	A	D	SD	Mean	Decision
	10 non-aggressions	9	30	42	66	1.88	Reject
	11 Use of decent language	12	24	23	88	1.73	Reject
	12 Interaction with the opposite sex	11	24	20	92	1.69	Reject
	Mean of means					1.77	Reject

Table 4 shows that the respondents found it difficult to assess aggression, use of decent language and interaction of pupils with the opposite sex in primary schools with all the means below the criterion mean of 2.50. Thus, the mean of the means 1.77 below the criterion mean reveals that the respondents found it difficult to assess self-control in primary schools

#### Research Question Five

To what extent do Pankshin LGEA primary school teachers assess pupils' social relationship skills?

**Table 5**

#### Mean Ratings of Respondents on the Assessment of Social Relationship Skills in Primary schools

Section B5	Relationship Skills	SA	A	D	SD	Mean	Decision
	13 Kindness	15	22	30	80	1.81	Reject
	14 Leadership roles	15	18	7	107	1.59	Reject
	Mean of means					1.7	Reject

of pupils with the mean scores below the criterion mean. Similarly, the mean of means 1.7 reveals that respondents found it difficult to assess pupils' social relationship skills

#### Research Question Six

What will be the extent to which Pankshin LGEA primary school teachers assess pupils' appearance?

**Table 6**

#### Mean Ratings of Respondents on the Assessment of Appearance in Primary schools

Section B6	Appearances	SA	A	D	SD	Mean	Decision
	15 Neatness of Body	88	48	10	1	3.52	Accept
	16 Neatness of Clothes	49	87	7	4	3.23	Accept
	Mean of means					3.38	Accept

Table 6 shows that the respondents found it easy to assess pupils' neatness of body and clothes with both mean scores above the criterion mean. Similarly, the mean of means 3.38 reveals that respondents found it easy to assess pupils' appearances.

#### Hypothesis One

There is no significant difference in the mean score implementation of the affective domain measures based on gender in Pankshin LGEA

**Table 7**

#### Summary of t-test Statistical Mean Difference of Respondents Based on Gender

GENDER	N	Mean	Df	t	Sig	Sig (2-tailed)
Male	52	40.01	145	0.575	0.233	0.582
Female	95	39.14				

Table 7 shows that there is a significant difference in the mean score implementation of the affective domain measures based on gender with p- value  $0.582 > .05$  level of significance



**Hypothesis Two**

There is no significant difference in the mean score implementation of the affective domain measures based on school type in Pankshin LGEA.

**Table 8****Summary of t-test Statistical Mean Difference of Respondents Based on School Type**

SCHOOLTYPE	N	Mean	Df	T	Sig	Sig (2-tailed)
Public schools	93	41.95	145	4.86	0.000	.001
Private schools	54	35.17				

Table 8 shows that there is a no significant difference in the mean score implementation of the affective domain measures based on school type with p- value .001 < .05 level of significance

**Hypothesis Three**

There is no significant difference in the mean score implementation of the affective domain measures based on their school locations in Pankshin LGEA.

**Table 9****Summary of t-test Statistical Mean Difference of Respondents Based on School Location**

SCHOOL LOCATION	N	Mean	Df	T	sig	Sig (2-tailed)
Urban schools	98	41.52	145	4.27	0.000	.001
Rural Schools	49	35.32				

Table 9 shows that there is no significant difference in the mean score implementation of the affective domain measures based on school location with p- value 0.001 < .05 level of significance

**Hypothesis Four**

There is no significant difference in the implementation of the affective domain measures based on teachers' qualifications (M. Ed, B. Ed, NCE and Others) in Pankshin LGEA.

**Table 10****Summary of ANOVA Statistical Difference of Between and Within Groups for Respondents Based on Qualification**

ANOVA					
Mean					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	6834.097	3	2278.032	74.232	.000
Within Groups	4388.366	143	30.688		
Total	11222.463	146			

Table 10 shows that with Df of Between Groups 3 and Within Groups 146 there is a significant difference in the mean score implementation of the affective domain measures based on teachers' qualification with p- value 0.001 < .05 level of significance.

## Post Hoc Tests

Multiple Comparisons								
Dependent Variable: MEAN								
	(I) QUALIFICATIO N	(J) QUALIFI CATION	Mean Differen ce (I-J)	Std. Error	Sig.	95% Confidence Interval		
						Lower Bound	Upper Bound	
Scheff e	M.Ed	B.Ed	3.25000	2.919 66	.744	-5.0099	11.5099	
		NCE	18.2326 7*	2.824 15	.000	10.2430	26.2224	
		OTHERS	17.6666 7*	3.575 84	.000	7.5504	27.7830	
	B.Ed	M.Ed	-3.2500 0	2.919 66	.744	-11.5099	5.0099	
		NCE	14.9826 7*	1.075 31	.000	11.9406	18.0248	
		OTHERS	14.4166 7*	2.442 76	.000	7.5059	21.3274	
	NCE	M.Ed	-18.232 67*	2.824 15	.000	-26.2224	-10.2430	
		B.Ed	-14.982 67*	1.075 31	.000	-18.0248	-11.9406	
		OTHERS	-.56601	2.327 76	.996	-7.1514	6.0194	
	OTHERS	M.Ed	-17.666 67*	3.575 84	.000	-27.7830	-7.5504	
		B.Ed	-14.416 67*	2.442 76	.000	-21.3274	-7.5059	
		NCE	.56601	2.327 76	.996	-6.0194	7.1514	
*. The mean difference is significant at the 0.05 level.								

The Post Hoc test for Table 10 reveals that staff with NCE qualification display significant differences in the implementation of the affective domain in primary schools with the P-values less than 0.05 level of significance. This finding shows that the significant differences in the implementation of affective domain measures is caused by teachers with NCE qualification.

## Discussion of Findings

The findings of the study revealed that primary school teachers do not find much difficulty in the implantation of respect as an aspect of the affective domain which they do by enforcing both inside and outside the classroom. It was found that although teachers implement honesty as a value it was not so much emphasized as respect. Assessment of pupils' level of obedience was poor as teachers do not take time to assess it. In the same vein it was found that self-control and social relationship skills were also difficult to assess and implement by the teachers. The lack of assessment and the non- implementation of these attribute might be responsible for the poor performances of primary school pupils which is in line with Manaf, Ali, Said and Musa (2017) who found that there is a significant relationship between achievement of learning outcomes and obedience to rules and regulation and Schiffer and Brown (2023) who found that self-control is very significant in achieving school work and sports and also strengthens intra and interpersonal relationships.

Social relationship skills which are very vital were found not to be assessed by the respondents as compared to respect and appearance which they try to implement daily which again can affect students'

performances. This finding corroborates with Astuti and Asyari (2022) who found that no meaningful learning outcomes can be achieved without proper mastery of task-related behaviours and communication skills by elementary school pupils and Fitzpatrick and Cote-Lussier (2015) who found that academic outcomes are likely to be associated with students' general appearance demeanor like appearing hungry, tired, dirty, and poorly dressed.

The finding also revealed that there was significant difference in the way the primary school teachers implement the attributes of the affective domain measures based on their gender – male or female but no significant difference was found based on their school types-public or private and school location - urban or rural. However, it was found that a significant difference exists in the implementation of these attributes based on teachers' qualification. The Post Hoc Test revealed that the significant difference occurs as a result of teachers with NCE qualification. This difference might be as a result of the low qualification of these categories of teachers who might not have been properly exposed to how to implement affective domain measure as their counterparts with B.Ed. or Master's Degree qualifications

## Conclusion

Despite the fact that the affective domain attributes contribute effectively to the cognitive domain objectives in academic performance, primary school teachers have been found to be poor in its implementation. This may not be unconnected to the fact that they have not been trained on how to assessed and generate scores that can be used for transiting pupils from one class to the next. The lack of teacher expertise in the implementation of the affective domain and its lack of emphasis among primary school teachers probably leads to lack of character among Nigerian youths today that has resulted in the current insecurity being experienced. Thus, there are no empirical records such as portfolios, anecdotal, or socio-gramme proving the letter grades that teachers normally award to pupils in their academic reports cards on the attributes discussed in this paper. Therefore, the primary school teachers have a greater role to play in the implementation of the affective domain more than any other stakeholder in promoting the character of pupils that will be needed for sustainable development of Nigeria.

## Recommendations

In the light of this findings the following recommendations were made.

- Teachers should be trained to implement the attributes of the affective domain measures by their authorities
- Test experts from research measurement and evaluation should be invited to train teachers on how to implement affective domain measures
- Reports of children affective domain should contribute to their promotion or repeating a class.
- Government should take the implementation of the affective domain seriously to address the problem of insecurity among youths in the future

## References

- Astuti, B., & Asyari, D. O. (2022). Social skills scale development for elementary school students. *Journals of Advances in Education and Philosophy*, 6(10), 506-510. DOI:10.36348/jaep.2022.v06i10.001.
- Fitzpatrick, C., & Cote-Lussier, C. (2015). Dressed and groomed for success in elementary school: Student appearance and academic adjustment. *The Elementary School Journal*, 1-20, DOI: 10.1086/687753.
- Henden, E. (2008). What is self- control? *Philosophical Psychology*, 21(1), 69-90. DOI: 10.1080/09515080701874092.
- Manaf, S. M. A., Ali, S. R.O., Said, N. S. M., & Musa, W. M. W. (2017). Observing on the student's obedience towards the rules of regulation. *Journal of Applied Environmental and Biological Science*, 7(11), 181-185. Retrieved from
- Mokrcek, P. & Mohammed, L. A. (2022). Examining importance of respect in the classroom. *Journal of Emerging Technologies and Innovative Research*, 9(12), 545-552. Retrieved from <https://www.Researchgate.net>>
- Schiffer, M. E., & Brown, A. (2023). *Self-Control/Definitions, importance and examples*. Retrieved from <https://study.com>lesson>what...>

- Store, A. M. (2024). *Meaning of honesty and importance of telling truth/ meaning and consequences of dishonesty*. Retrieved from <https://sclar.com/m/ayomide-micheal/908431>
- The Peak Performance Center. (2024). *Domains of learning*. Retrieved from <https://thepeakperformancecenter.com>> ...
- Wanlor, S. B. (2007). *The problems of the implementation of continuous assessment in primary schools in Plateau Central geopolitical zone*. [Unpublished master's thesis), University of Jos, Nigeria.
- Wanlor, S. B., Ezulike, C. C., & Punshak, N. L. (2022). Curtailing insecurity in Nigeria for sustainable development through an inclusive character education programme in the universal basic education curriculum. *Pancen Journal of Education*, 11, 226-23.

## Perceived Role of Caregivers and Utilization of Edupreneurship in Early Childhood Education Centre in Lagos State

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### Abstract

*The caregivers play an important role in the early childhood education center in Lagos State. They are responsible for providing care and education to young children during their formative years. The study employed survey research design. Population of the study was pre-primary school teachers. Multi-stage sampling procedure was employed. A self-design instrument was used for the study title 'Caregivers Utilization of Edupreneurship Questionnaire (CUEQ). Validity of the instrument was done by done by the expert in the field of early childhood education by face, content, and construct validity of the items. Cronbach alpha was used to check the internal consistency of the reliability of the instruments which yield the index of 0.76. According to the study's findings, edupreneurship support and caregivers' perceived roles in early childhood education are significantly correlated negatively. Additionally, there is a strong positive correlation between caregivers' desire to embrace edupreneurship initiatives and their perceived self-efficacy in early childhood education. Therefore, the study suggested that in order to improve caregivers' abilities and expertise in early childhood education, the Ministry of Education should regularly offer training and capacity-building initiatives. Lastly, Encourage and support children's edupreneurial initiatives, providing guidance and resources to help them turn ideas into reality.*

**Keywords:** Caregivers, Creativity, Edupreneurship, Innovative, Utilization

### Introduction

The best gift society can give a youngster is education. It is the greatest legacy a parent can leave for their child. This is due to the fact that without a high-quality education, no child can reach their full potential in life. This supports the broad agreement among academics, decision-makers, and childcare providers that high-quality ECE serves as the cornerstone of the educational structure that supports higher education levels (Aubrey, Godfrey & Harris, 2012). The goal of early childhood education is to give young children a supportive and engaging environment that fosters their general development and sets them up for success in later school and life phases.

Undoubtedly, the Federal Republic of Nigeria (FRN) recognized this fact when she stated in her National Policy on Education (FRN) (2014) that Early Childhood Education (ECE) should be provided to children aged 3 to 5 in order to prepare them for primary school enrollment. According to Abosede (2017), early childhood education (ECE) is the kind of instruction provided to students in nursery schools aged three to five and to children aged 0 to three in daycare centers.

Edupreneurship is a breakthrough change in the field of education to not only produce graduates in large quantities every period but also to produce graduates who are of high quality and have high competitiveness to make positive and beneficial contributions to many people (Purwaningsih, 2015, Ananda & Mukhadis, 2016; Darwish, 2019). Edupreneurship is also a formulation of the problems faced by the Indonesian nation today,



aiming to create superior human resources (HR) who are creative, independent, and innovative, with an entrepreneurial mentality (Lailatu, 2017). Thus, economic backwardness and high unemployment rates can be minimized. Edupreneurship, which has a combined meaning of education and entrepreneurship, is a unity that cannot be separated from its meaning. The two become a single unit because the process reflects the concept of entrepreneurship education, which means educating someone to do and produce something of sale value, and then it can be used by him or a group. One of the efforts in preparing students to live and improvise with their environment is to apply character education.

Edupreneurship is an approach through learning scenarios that can bring student entrepreneurial ideas to life. It is hoped that this approach to learning will provide an in-depth conceptual foundation on entrepreneurship, referring to the practice of entrepreneurship in the field combined with relevant and current theoretical studies. Then students are also given direct experience through entrepreneurship training and practice to design various entrepreneurship in early childhood education.

According to (Fadlillah&Khorida, 2013), Character education must be introduced early. So rather than that, there it must be developed so that the goals are clear (Suhendro, Nugrahani&Munastiwi, 2020). This character education must start from the earliest education unit level, namely early age (Narwati, 2018). Early Childhood Education (ECE) plays a significant role in instilling the foundation for future child development (Suhendro, Nugrahani&Munastiwi, 2020). One could argue that ECE serves as the first step in helping kids develop their moral character. According to (Mursid, 2015), the existence of ECE in Indonesia to date has shown excellent development.

Preschools must have skilled and informed caregivers to support high-quality education and high-service delivery if they want children to develop relevant life skills and succeed academically. The methodical procedure by which caregivers provide lessons or academic programs to young learners in order to enhance their academic performance and overall well-being is known as educational service delivery. School service delivery, according to Lin *et. al.*, (2016), is a procedure that supports high-quality instruction and learning in the educational process to help each student reach their full potential. Enhancing service delivery at educational institutions is achieved by caregivers' application of instructional principles, methods, and competences.

An experienced individual who intentionally communicates knowledge, skills, attitudes, and values to learners in order to promote positive change in them is known as a caregiver. Caregivers are skilled professionals who have a solid grasp of the fundamentals of behavioral analysis, which helps them teach effectively by promoting learning and fostering an environment that encourages students to participate in class activities (Igbozurike&Chesa, 2021). Because of the sensitivity of their roles, the complexities of their work, and the professionalism required of them, caregivers must complete training to gain specific competencies in early childhood education before they can begin working as caregivers.

As a result, caregivers should be capable of shaping and guiding the youngster toward intellectual development activities, alphabet construction, and studious or serious work building. In this sense, competence is a confluence of values, attitudes, abilities, and knowledge that manifest in one's thoughts and behavior. Competencies are the information, abilities, attitudes, values, motivations, and beliefs people need to succeed in their careers, according to Ugwu and Ezema (2010). Being competent is behaving in a responsible manner that other people can recognize. It requires the ability to mobilize, integrate, and transmit skills, resources, and information in many professional settings.

According to Colette (2018), social competence is the ability to associate with others in a way that fosters wholesome and constructive connections. Families and other caregivers are crucial in teaching kids how to control their emotions and actions. Because friendships foster curiosity, self-assurance, self-control, and cooperation, they play a crucial role in children's social development. Because diverse settings need different behaviors, young children develop critical social skills through their interactions with others. Young children develop cooperative skills while playing with others, which improves their capacity to maintain relationships. Children must utilize language to have meaningful conversations and conflict-resolution abilities to compromise and try to find socially acceptable solutions to difficulties in order to play actively and continuously with others. Through such experiences, and with appropriate support from adults, children can discover that

cooperation and collaboration are often more fun, more creative, and give a better result in social settings, especially in increasing a sense of belonging to a group (Bilmes, 2022).

Cooper, Haney, Krieg, and Brownell (2017) found that social competence increases social experiences and competence while decreasing the likelihood of unfavorable communication. This suggests that social competency improves communication skills to favorably engage preschoolers. Mental health and well-being throughout preschool and into primary school are also predicted by positive peer interactions (Maggie, 2021). According to Karakaya and Tufan (2018), children's academic competence is also influenced by their positive peer interactions.

A substantial amount of research indicates that it is not only a high-quality organization that promotes the development of positive relationships, but also the quality of the child-caregiver relationship as a foundation of educational service delivery. Caregivers provide sensitive and supportive care when there are favorable structural variables, such as the ability to work in small groups, which is a useful social competence. Classroom quality is strongly correlated with the use of caregiver skills to assist children's social-emotional, cognitive, and language development. Measures of classroom quality, such as space and furnishings, personal care routines, listening and talking, activities, and interaction, were found to positively correspond with caregivers' emotional and behavioral support as well as their engaged support for learning (Hognestad and Boe, 2019).

Research has also shown that positive interactions between caregivers and children are linked to higher levels of communication between caregivers and parents (Ipek, 2021). In fact, caregivers who make an investment in the child's welfare at the daycare center are more likely to form an educational alliance with the parents as part of a joint responsibility agreement wherein the importance and role of the different adults involved in raising and caring for the child are acknowledged by both parties.

The caregivers play a very important aspect in the early stages of a child's development. Their interactions with children are not just about meeting the basic needs but also about nurturing the cognitive and emotional growth of the young minds. Caregivers are often the child's first teacher, and the experiences they provide can set the foundation for lifelong learning and social interaction. Edupreneurship refers to the innovative and entrepreneurial approach within the education sector, particularly in early childhood education. It involves creating and implementing educational programs that not only foster the entrepreneurial spirit from a young age but also cater to the evolving needs of society. Edupreneurs are educators who are also entrepreneurs, seeking to transform the educational landscape by introducing new learning models, methods, and business ideas that can range from daycare and playgroups to educational parks and content creation. The concept of edupreneurship in early childhood education is gaining traction as it aligns with the modern era's demands for creative, dependent, and resilient individuals equipped with entrepreneurial skills.

Combining the nurturing role of caregivers with the innovative spirit of edupreneurship can lead to a dynamic early childhood education environment where children can thrive both academically and personally. Although the value of early childhood education is becoming more widely acknowledged, less is known about how caregivers view their roles and responsibilities in this setting. In order to properly nurture and discipline young children, caregivers are essential. Their daily practices significantly influence early childhood development. Also, low resources communities, caregivers face challenges in providing early childhood development and stimulation. The culture, contextual factors and poverty impact the practices caregivers implement during this critical phase. Remember that both caregivers and edupreneurs play a vital role in shaping the education experiences of young children.

### **Objectives of the study**

The main purpose of this study is to examine the perceived role of caregivers and utilization of edupreneurship in early childhood education centre in Lagos State. Specifically the study sought to:

- identify the perceived role of caregivers in early childhood education centers in Lagos State
- determine the level of utilization of edupreneurship in early childhood education
- examine the relationship between caregiver's perceived role and utilization of edupreneurship in early childhood education centers in Lagos State.

## Research Hypotheses

- H<sub>0</sub>1:** There is no significant relationship between caregivers' perceived role in early childhood education and edupreneurship support in Lagos State.
- H<sub>0</sub>2:** There is no significant relationship between caregivers' perceived self-efficacy in early childhood education and their willingness to adopt edupreneurship programs in Lagos State.

## Methodology

The study adopted a correlational research design type. Caregivers formed the population of the study, as the targeted population was pre-primary school teachers selected from twenty-four (24) schools in the Ojo and Amuwo Local Government Education Authorities Area of Lagos State. The sample of the study consists of 144 participants. Multistage sampling procedure was adopted for the study. Stratified sampling technique was used to select two LGEA's, which are; Ojo and Amuwo respectively. Purposive sampling technique was used to select 9 schools each from the two selected LGEA's in Lagos State. Simple random sampling technique was used to select 8 teachers each from the selected schools. A self-design instrument was used for the study title 'Caregivers Utilization of Edupreneurship Questionnaire (CU\_EQ)'. The instrument was validated by the expert in the department of Early Childhood Care & Primary Education, Lagos State University of Education, Oto/Ijanikin Lagos. The item in the instrument was adjusted to meet both construct and content validity. The reliability of the instrument was assessed using the Cronbach Alpha technique, yielding a coefficient value of  $r=0.74$ . Inferential statistics of Pearson product-moment correlation (PPMC), which was tested at a 0.05 level of significance, were used to examine the acquired data.

## Results

**Hypothesis one:** There is no significant relationship between caregivers' perceived role in early childhood education and edupreneurship support in Lagos State

**Table 1**

**Pearson Product Moment Correlation showing the relationship between caregivers' perceived role in early childhood education and edupreneurship support**

Variable	Mean	Std.DN	r	sig	Remark
Caregivers' perceived role	1.781	.0605			
			144	-0.844	0.000
					significant

Edupreneurship support 31.294 7.500

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

The table above affirms that there is a significant negative relationship between caregivers' perceived role in early childhood education and edupreneurship support ( $r = -0.84$ ;  $p < 0.05$ ). The null hypothesis 1 is rejected because it suggests that the perceived role of caregivers in early childhood education is correlated with edupreneurship support. This is likely the reason why most caregivers apply practical edupreneurial skills when teaching.

**Hypothesis two:** There is no significant relationship between caregivers' perceived self-efficacy in early childhood education and their willingness to adopt edupreneurship programs in Lagos State.

**Table 2**

**Pearson Product Moment Correlation shows the relationship between caregivers' perceived self-efficacy in early childhood education and their willingness to adopt edupreneurship programs.**

Variable	Mean	Std.D	N	r	sig	Remark
Caregivers perceived self-efficacy	3.460	1.438				
		144	.6230.000	significant		
adoption of edupreneuership programs	25.823	4.271				

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

The table above affirms that there is a significant positive relationship between caregivers' perceived self-efficacy in early childhood education and their willingness to adopt edupreneurship programs ( $r = 0.62$ ;  $p < 0.05$ ). This suggests that caregivers' willingness to embrace edupreneurship initiatives is correlated with their perceived self-efficacy in early childhood education; thus, hypothesis 2 is rejected.

### Discussion of findings

The findings showed that edupreneurship support and caregivers' perceived roles in early childhood education are significantly correlated negatively. The result shows that caregivers perceived role in early childhood education have a correlation in edupreneurship support, probably because majority of the caregivers make useful of edupreneuersers skills in the course of their teaching. According to Igbozuruike and Chesa (2021), caregivers are trained as individuals with a solid grasp of the fundamentals of behavioral analysis, which enables them to teach effectively by promoting learning and establishing a supportive environment for successful student participation in class activities (Igbozuruike & Chesa, 2021).

Additionally, given the sensitivity of their roles and the complexity and professionalism required of their work, caregivers must complete training to obtain specific competencies in early childhood education before they can begin working as caregivers. This is because their job is sometimes regarded as demanding and intense. Children who receive the right kind of adult and child assistance can learn that teamwork and collaboration are frequently more enjoyable, more imaginative, and produce better outcomes in social situations, particularly when it comes to fostering a feeling of community (Bilmes, 2022).

The results also showed that caregivers' desire to embrace edupreneurship initiatives is significantly positively correlated with their perceived self-efficacy in early childhood education. Research has also shown that positive interactions between caregivers and children are linked to higher levels of communication between caregivers and parents (Ipek, 2021). In fact, caregivers who make an investment in the child's welfare at the daycare center are more likely to form an educational alliance with the parents as part of a joint responsibility agreement wherein the importance and role of the different adults involved in raising and caring for the child are acknowledged by both parties.

### Conclusion

According to the above analysis, researchers can improve the ability to apply learning outcomes about the graduate profile by pursuing the idea of edupreneurship in the field of early childhood in the current day. There are various ways to characterize the growth of edupreneurship in the early childhood sector in the current period. Future developments of this concept are anticipated to boost the number of young Indonesian entrepreneurs working in the education sector.

### Recommendations

- Ministry of education should provide regular training and capacity-building programs for caregivers to



enhance their skills and knowledge in early childhood education.

- Ensure caregivers have access to necessary support and resources such as educational materials and technology, to effectively engage children.
- Encourage and support children's edupreneurial initiatives, providing guidance and resources to help them turn ideas into reality

## References

- Mukhadis, A., and Ananda, A. F. (2016). Production unit as edupreneurship, collaboration between the commercial and industrial worlds and the school to foster an entrepreneurial attitude in vocational students. AIP Conference Proceedings, 1778, in A. DL, P. P., S. H., P. AA, I. F., P. ABNR, & F. AA (Eds.). *The American Institute of Physics Inc.* 10.1063/1.4965782
- Bilmes, J. (2022). *The Six Life Skills Children Need: Going Beyond Behavior Management*, 2nd ed. Redleaf.
- Colette, B. (2018). outlined the four guiding concepts of social emotional learning and classroom management. These are the principles of classroom management (3862444):
- Cooper, K. M., Haney, B., Krieg, A. & Brownell, S. E. (2017). What does a name mean? The significance of students feeling that a teacher is familiar with them in a biology class with a large student body. *Education in the Life Sciences* 16(8) 1–13 CBE
- Darwish, H. (2019). Edupreneurship business models for various stakeholders using open educational resources (OER). *Education and Information Technologies*, 24(6), 3855–3886
- Fadillah, M., & Khorida, L. M. (2013). *Pendidikan Karakter Anak Usia Dini: Konsep&Aplikasinyadalam PAUD*. Ar-Ruzz Media.
- Hognestad, K. & Boe, M. (2019). In early childhood teacher education in Norway, shadowing is used as a leadership development technique in the classroom. P. Strehmel and associates (eds.). Robert Bosch Stiftung, Opladen, *Leadership in Early Education in Times of Transition*.
- Igbozuruike, I.U. & Chesa, U. L. (2020). Physical environment management for play and safety at Rivers State's early childhood educational facilities.
- Nwafor, S.O & S. O. (2021). Oluwuo. Education management for Nigeria's sustainable national growth. Port Harcourt University Press.
- Ipek, O. K. (2021). Pre-service preschool caregivers' opinions on developing a learning environment in preschool classrooms. *Progressive Education International Journal*, 17(3), 46–56
- Karakaya, E. G. & Tufan, M. (2018). investigated classroom management, problem behaviors, and social skills in inclusive preschool environments. *Journal of Education and Training Studies*. 6(5), 123–134.
- Lailatu, R. (2017). Entrepreneurship Education Implementation for Young Children at TK Khalifah Sukonandi Yogyakarta. Al-Athfal: *Journal of Children's Education*, 3(1), 15–26.
- Maggie, M. (2021). Five strategies to develop social skills in preparation for preschool. *How to Develop Social Skills in Children*
- Mursid. (2015). Development of PAUD Education (Cetakan 1). RosdakaryaRemaja.
- Purwaningsih, A. (2015). Analysis of the garbage bank's accounting procedures and shift in consumer thinking as an edupreneurship tool. 8(4), 332–344, *International Journal of Monetary Economics and Finance*. 10.1504/IJMEF.2015.073228
- Ugwu, C. I, & Ezema, I. J. (2010). Proficiency for effective knowledge management software in academic libraries in Nigeria. *International Library and Information Science*, 2(9):184–189



## Scaling up Human Resource Personnel and School Management on Enrolment of Pupils in Public Primary Schools in Lagos State

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### Abstract

*The main objective of this study is to scale up human resource personnel and school management on enrolment of pupils in Public Primary Schools in Lagos State. The population comprised of all staff members of Public Primary Schools in Lagos State. Purposive sampling technique was first employed to select Epe and Badagry Educational districts thereafter simple random sampling introduced to select 60 staff members from each district to form a sample size of 120 participants. An instrument, Scaling Up Human Resource Personnel and School Management on Pupils Enrolment Questionnaire (SUHRPSMPEQ) was used to generate data. This Questionnaire consists of 15 closed items in a 4-Likert format of Strongly Agree, Agreed, Disagreed, and Strongly Disagreed. The instrument was content validated by two academics in the Department of Human Resources, University of Benin as Split-half a reliability form with an index value of 0.895 was obtained. Correlation analysis was used to analyse data and tested at a significant level of 0.05. Result revealed that scaling up HR personnel and effective school management determines the extent of enrolment in schools as the study recommended that the implementation of HR management systems (HRMS) would likely streamline recruitment, and employee records and increase enrolment.*

**Keywords:** Human Resources Personnel, School Management, Scaling Up, Enrolment rate

### Introduction

Human resources in education are fundamental to creating conducive learning environments. Teachers, school administrators, and support staff are central to the daily functioning of schools and directly impact the quality of education offered. However, many public primary schools face challenges such as teacher shortages, lack of professional development opportunities, and high turnover rates (VSO, 2018). The insufficient number of qualified teachers and administrative personnel often results in overcrowded classrooms, poor learning outcomes, and limited school capacity, which can discourage potential pupils from enrolling. Various studies have indicated that scaling up human resource personnel through recruitment, training, and retention strategies significantly improves student enrollment rates by ensuring that schools are adequately equipped to meet the needs of their students (Gershberg & Winkler, 2018).

The role of human resource personnel and school management in shaping the educational outcome in public primary schools is increasingly being recognized as crucial to improving pupil enrollment and retention. As the global demand for education grows, there is an urgent need for schools to be adequately staffed and effectively managed. Issues bothering on availability of qualified teachers, adequacy of physical resources, and visibility of functional HR system, coupled with competent school leadership, directly influence pupil enrollment and retention (Andrews & Sari, 2019). It is no news that most public primary schools face challenges related to the shortage of qualified teachers and inadequate school management structures, which can lead to under-enrollment, overcrowded classrooms and high dropout rates. As a result, scaling up human resource personnel and enhancing school management practices are vital strategies for addressing these challenges and improving the quality of education in public schools.

Although school management practice is equally critical to the success of the primary education system. Effective management involves a range of activities, including leadership, resource allocation, strategic planning, and community engagement (Day, 2020). Public primary schools that are well-managed tend to attract more pupils because they create a stable, supportive environment conducive to learning. On the other hand,

poorly managed schools, marked by ineffective leadership, inadequate resource distribution, and weak community relations, may face low enrollment and high dropout rates (Leithwood & Jantzi, 2006). A well-managed school fosters a positive reputation in the community, leading to increased pupil enrollment and retention.

Several studies have been executed to justify how scaling up HR personnel determines pupils' enrolment, especially in a society where competition in school establishment is on the increase. A study by Bauer and Erdogan (2016) showed that a pupil's enrollment increases when there is a direct need for scaling up Human Resource (HR) personnel to ensure that the school can effectively manage the additional administrative workload, recruit enough qualified staff, and maintain educational quality. To Bauer and Erdogan (2016) an increase in pupils' enrollment would lead to the need for more teachers, administrative support, and specialized staff to handle the growing number of students. HR personnel are key to recruiting, training, and supporting this expanded workforce.

On effective school management determination of pupils' enrollment in schools, Gupta and Kumari (2018), schools with effective leadership and a focus on continuous improvement in academic standards have higher enrollment rates. This is because parents and pupils tend to perceive these schools as having a higher potential for educational success. Additionally, school management's ability to promote extracurricular activities, maintain a safe and inclusive environment and engage with the community can also contribute to increased enrollment figures (Adeleke, 2020). Effective school management includes efficient administrative practices, strategic planning, resource allocation, curriculum development, and fostering a positive school culture, can lead to higher enrollment numbers. When schools are well-managed, they are more likely to attract and retain pupils, as parents and guardians tend to choose schools with strong organizational structures, quality education and a focus on pupil welfare.

Despite the recognition of the importance of both human resource personnel and school management in influencing pupil enrollment, there is limited empirical research on how these two elements interact to affect enrollment trends in public primary schools. Previous studies have examined human resource challenges in isolation, focusing on teacher quality and staffing levels, while others have concentrated on management strategies (World Bank, 2020). However, few studies have integrated these two aspects to explore how their synergy might contribute to improving pupil enrollment. This research seeks to address this gap by investigating how the scaling of human resource personnel, combined with improved school management, can serve as a catalyst for increasing enrollment rates in public primary schools. By doing so, it aims to offer valuable insights to policymakers, educators, and stakeholders seeking effective ways to improve access to quality education in public schools.

As educational institutions continue to grow in size and complexity, the challenges associated with effectively managing Human Resources (HR) and pupil enrolment processes have become increasingly pronounced. Many schools face difficulties in scaling up their HR personnel to meet the demands of an expanding pupil population, which may lead to inefficiencies in staffing, resource allocation, and overall management. The rising number of pupils requires an agile and responsive HR system that can recruit, train, and manage an adequate number of qualified teachers and staff. Additionally, the enrolment process itself becomes more complex, often leading to delays, errors, and a lack of communication between administrative departments and prospective pupil families. The failure to adequately scale both HR capacity and the enrolment management system risks compromising the quality of education, operational efficiency, and pupil satisfaction. As a result, this study seeks to examine the challenges faced by schools in scaling up HR personnel and improving the management of pupil enrolment processes as it hopes to also explore how HR systems can be optimized to handle increased staffing requirements and how enrolment systems can be enhanced to provide a seamless experience for pupils and administrative staff alike.

### **Purpose of the study**

The main purpose of this study is to investigate how scaling up Human Resource personnel and school management affect enrolment of pupils in Public Primary Schools in Lagos State while the specific objectives include:

- assess how scaling Human Resource Personnel will determine pupils' enrolment in Lagos State
- evaluate how effective school management will determine pupils' enrolment in Lagos State

## Hypotheses

Two null hypotheses were raised and tested at 0.05 significant level

H<sub>01</sub>. Scaling up Human Resource Personnel does not significantly determine pupils' enrolment in Lagos State

H<sub>02</sub>. Effective School Management does not significantly determine pupils' enrolment in Lagos State

## Significance of the study

The outcome of this study will be relevant to stakeholders like human resource personnel, teachers, students/pupils and educational planners respectively.

Human Resource personnel will benefit from the outcome of this work as it unveils that investing in recruitment, training and retention of quality personnel; directly influences students outcomes and satisfaction, which in turn drives higher enrollment as families are more likely to attend schools that offers a high standard of education and effective leadership.; For teachers, an adequate staff to student ratio ensures manageable workload, stress reduction, promote professional growth through collaboration and support. This action in turn will increase job satisfaction and retention therefore making teaching positions more attractive.; Pupils/Students too will benefit from this work since a well-staffed and effectively managed school provides personalized attention, better learning outcomes and a more supportive atmosphere which can improve academic performance and overall well-being of learners; The outcome of this work will also be relevant to educational planners in that it ensures that resources are well utilized, operational challenges minimized and educational programs are executed smoothly to further enhance the schools' reputation.

## Methodology

The population was comprised of all staff members of Public Primary Schools in Lagos State. The purposive sampling technique was first employed to select Epe and Badagry Educational districts; thereafter, simple random sampling was introduced to select 60 staff members from each district to form a sample size of 120 participants. An instrument, Scaling Up Human Resource Personnel and School Management on Pupils Enrolment Questionnaire (SUHRPSMPEQ) was used to generate data. This Questionnaire consists of 15 closed items in a 4-Likert format of Strongly Agree, Agreed, Disagreed, and Strongly Disagreed. A researcher-designed instrument titled the Scaling Up Human Resource Personnel and School Management Questionnaire (SUHRPSMQ) was used to generate data from respondents. This Questionnaire consists of 15 close ended items on 4-Likert scale of Strongly Agree (SA), Agreed (A), Disagreed (D), and Strongly Disagreed (SD). The instrument was content validated by two academics in the department of Human Resources, University of Benin. Split-half reliability form was used to analyse the data sourced from 30 staff in the Education District, Lagos Island, not part of the study. A reliability index  $r=0.895$  obtained meaning highly reliable and suitable for the study. The instrument was administered to respondents in the two educational districts with the assistance of four (4) research assistants employed by the researcher. All administered instruments were collected with ease upon completion. Correlation statistical analysis was used to analyse the data and tested at a 0.05 significant level.

## Results

H<sub>01</sub>. Scaling up Human Resource Personnel does not significantly determine pupils' enrolment in public primary schools

**Table 1:**

**Correlation analysis showing relationship between Scaling up Human Resource Personnel and pupils' enrolment in public primary schools**

Variables	N	Mean	SD	r-crit.	Sig	Remark
Scaling Up HR Person	120	2.33	0.67			
Pupils enrolment	120	1.79	0.53	0.736	0.025	Reject H <sub>01</sub>
Total	<b>120</b>					

Source: Research work (2024)

Table 1 reveals that a total of 120 respondents were involved in the study as scaling up HR personnel recorded a higher mean and standard deviation value of 2.33 and 0.67 as against pupils' enrolment with lower mean and standard deviation of 1.79 and .53 respectively. R crit. A value of .736 was obtained, which shows a positively high relationship. At sig value of .025, the null hypothesis is rejected and alternative hypothesis which states that there exists a relationship between Scaling up Human Resource Personnel and pupils' enrolment in public primary schools is retained.

## **H<sub>02</sub>: School Management does not significantly determine pupils' enrolment in public primary schools**

**Table 2:**

**Correlation analysis showing relationship between School Management and pupils' enrolment in public primary schools**

Variables	N	Mean	SD	r-crit.	Sig	Remark
School Management	120	2.64	0.71			
Pupils enrolment	120	1.79	0.53	0.895	0.014	Reject H <sub>02</sub>
Total	<b>120</b>					

### **Source: Research Work (2024)**

Table 2 reveals that a total of 120 respondents were involved in the study as school management recorded a higher mean and standard deviation value of 2.64 and 0.71 as against pupils' enrolment with lower mean and standard deviation of 1.79 and .53 respectively. R crit. The value of .895 was obtained, which shows a positively high relationship. At sig value of .014, the null hypothesis is rejected, and the alternative hypothesis, which states that there exists a relationship between School management and pupils' enrolment in public primary schools, is retained.

### **Discussion of Findings**

The result from hypothesis one revealed that there exists positively strong relationship between Scaling up Human Resource Personnel and pupils' enrolment in public primary schools. The statement supports emphasised that schools with functional scaled up HR personnel are likely to experience a surge in enrolment of pupils in their schools. The outcome of this work aligns with study of Bauer and Erdogan, (2016) who claimed pupil enrollment increases, when there is a direct need for scaling up Human Resource (HR) personnel to ensure that the school can effectively manage the additional administrative workload, recruit enough qualified staff, and maintain educational quality. An increase in enrollment often leads to a need for more teachers, administrative support, and specialized staff to handle the growing number of students. HR personnel are key to recruiting, training, and supporting this expanded workforce. Without adequate HR resources, schools may struggle with staffing shortages, which can negatively impact student-teacher ratios, the quality of instruction, and overall school management (Ogunode&Ahaotu, 2020).

Also, hypothesis two reveals that there exists a positively strong relationship between school management and pupils' enrolment in public primary schools. School management plays a crucial role in shaping the overall environment and reputation of an institution, which directly impacts pupil enrollment. Effective school management, which includes efficient administrative practices, strategic planning, resource allocation, curriculum development, and fostering a positive school culture, can lead to higher enrollment numbers. When schools are well-managed, they are more likely to attract and retain students, as parents and guardians tend to choose schools with strong organizational structures, quality education, and a focus on student welfare. The outcome of this work conforms to study by Gupta and Kumari (2018), which found that schools with effective leadership and a focus on continuous improvement in academic standards had higher enrollment rates. This is because parents and pupils tend to perceive these schools as having a higher potential for educational success. Additionally, school management's ability to promote extracurricular activities, maintain a safe and inclusive environment, and engage with the community can also contribute to increased enrollment figures (Adeleke, 2020).



## Conclusion

As part of measures to improve the quality of education at the primary school level in Lagos State, the study concluded that scaling up HR personnel in the educational sector will bring about a corresponding increase in enrollment of children. Also, the research concluded that adequate monitoring, continuous staff assessment, and periodic evaluation of school resources would lead to an increased pupil population.

## Recommendations

- Integrated HR management systems (HRMS) that streamline recruitment, employees' records, payroll, and performance management should be implemented.
- Schools should develop continuous professional development programmes to improve HR and school management personnel in areas like digital tools, data-driven decision making and effective communication strategies.
- Adopt digital enrollment systems that facilitate data entry, provide real-time updates, and facilitate quick communication with parents.

## References

- Adeleke, O. (2020). The Role of School Management in Enhancing Student Enrollment in Public Secondary Schools in Nigeria. *Journal of Educational Administration and Policy*, 6(1), 45-58.
- Andrews, D.& Sari, T. (2019). The Impact of Teacher Quality on Primary School Enrollment: A Comparative Study of Public and Private Institutions. *Education Policy Review*, 34(2), 45-59.
- Bauer, T.N.& Erdogan, B. (2016). An Introduction to Organizational Behavior (6th ed.). Cengage Learning.
- Day, C. (2020). The Changing Role of School Leadership in the 21st Century: Managing Schools for Effective Learning. *Journal of Educational Management*, 22(3), 112-129.
- Gershberg, A.I.& Winkler, D.R. (2018). Human Resource Management and School Performance: Implications for Improving Education in Developing Countries. *Education Economics*, 25(4), 401-422.
- Gupta, R. & Kumari, S. (2018). Impact of School Leadership on Student Enrollment: A Case Study. *International Journal of Educational Management*, 32(5), 960-974.
- Leithwood, K. and Jantzi, D. (2006). Transformational Leadership and School Effectiveness. *Educational Administration Quarterly*, 42(1), 99-123.
- Ogunode, N.J., Ahaotu, G. N.(2020). Challenges facing the implementation of teacher students ratio policy in the Nigerian educational system and the ways forward. *International Journal on Integrated Education*, 3(X), 189-197
- VSO. (2018). Teacher Shortages and Its Impact on Education Systems: Global Trends and Country-Specific Challenges. Volunteer Services Overseas Report.
- World Bank. (2020). Improving Education Systems through Effective Management: The Role of Leadership and Human Resources in Public Schools. World Bank Policy Paper.



## Investigating the Leadership Roles of Stakeholders in the Up-Scaling of Early Childhood Care Education in Rivers State, Nigeria

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### **Abstract**

*The study investigated leadership roles of stakeholders in the up-scaling of early child-hood care education in Rivers State Nigeria. There were two research questions as well as two hypotheses formulated to guide the study. The design adopted was the descriptive research design. The population of the study was 210 junior senior secondary school teachers in Rivers State out of which 135 teachers were sampled for the study. The instrument used was a 15-item questionnaire titled "Leadership Roles of Stakeholders and Up-scaling of Early Childhood Care Education" (LRSUECCE). The questionnaire was validated by experts in the study area. The reliability was analyzed using Cronbach Alpha method deriving a co-efficient of 0.84. The research questions raised were answered using mean and standard deviation while T-test was used to test the hypotheses were at 0.05 level of significance. The findings of the study showed that a positive relationship exists between the leadership roles of stakeholders and the up-scaling of early childhood care education in Rivers State. It was recommended that effective measures should be ensured in the training of early childhood/pre-primary teachers through adequate scholarships, approving the mounting of such programmes in all Universities, Institutes of Education and College of Education.*

**Keywords:** Leadership, Roles, Stakeholders, Up-scaling, Early-childhood.

### **Introduction**

Early years in life are the most important to the formation of intelligence, personality and social behaviour of a child (Ho, & Tikly, 2017). The year before a child reaches Kindergarten are among the most critical in his or her life to influence learning. That is why modern societies show serious concern for the education of their young ones by providing needed support to prepare them to succeed later in school (Bagudo, 2021). It is common practice in most societies to make provision for early childhood education programmes of various sorts for children below the official school-going age (usually 6 years) mainly to prepare them for education in primary schools (Ang, 2017). The Federal Government of Nigeria recognizes the importance of early childhood education in Nigeria and as a result it was given prominence in the National Policy of Education (FRN, 2004) as one of the programmes in the Nigerian educational system.

According to Arbour, (2016), Early Childhood Education (also known as Early Childhood learning and Early Education) varies in scope and seem to be closely linked to geographical locations. While the main thrust of some definitions is based on age bracket, some consider the environment within which the education is delivered, others combine both. ECE was considered by Arbour, (2016) to be a pre-school, semi-formal education outside the home. It includes the crèche, the nursery and kindergarten. This program was introduced for children between the ages of 0 – 5 years. In Nigeria, ECE came into being in order to assist and bring early child care within the reach of majority of Nigerian children, particularly those in rural and low socio economic areas.

Dennis, and O'Connor, (2017) refers to early childhood care and Education as the education offered to children who have not yet reached the statutory age of beginning primary school. He further maintained that it is a semi-

formal education arrangement, usually outside home where by young children from about the age of 3 years are exposed through play like activities in a group setting through mental, social and physical learning suited to their developmental stages, until the mandatory age of government approved formal schooling. FRN (2004) refers to early childhood care and Education (pre-primary education) as an education given in an educational institution to children aged 3-5 plus prior to their enrollment in the primary school.

The objectives of early childhood education according to FRN (2004) are:

1. Effect a smooth transition from home to school
2. Prepare the child for the primary level of education
3. Provide adequate care and supervision for the children while their parents are at work (on the farm, in the market or offices)
4. Inculcate social norms
5. Inculcate in the child the spirit of inquiry and creativity through the exploration of nature, the environment, art, music and playing with toys and so on.

The involvement of stakeholders in early childhood development education programmes therefore is vital, since it forms the child's foundation for learning (Ball, 2017). Meaningful stakeholder engagement is not an end in itself, nice to have, or just a good way to manage crises when they come along. It may start as an activity to help solve a problem but as the continuous loop of engagement develops and matures over time, stakeholder engagement becomes an essential and mutually beneficial strategic function that results in better- informed staff and constituents as well as more effective policies, projects, programs and services. Ball, (2018) posited that stakeholders' involvement influences success or failure of Early Childhood development and educational programmes performance in Nigeria.

A report by UNICEF (2017) shows that the responsibility of child rearing and early childhood education development projects in Nigeria has in many places remained unsuccessful in the hands of individual families and communities without a proper and competent institution and stakeholder involvement in education development programmes to provide for their continued needs of education and development. Early childhood education program in Nigeria operates on the basis of partnership, collaboration and networking (Hua, 2018). The main stakeholders in ECE are the parents, the community and the private sector. Other partners include Government of Nigeria and its constituent ministries coordinated by Ministry of Education (MOE). Nongovernmental Organizations (NGOs) such as, community-based organizations (CBOs), Faith-based organizations have been providing support to ECE as well as bilateral and multilateral partners including UNICEF, World Bank, and UNESCO (Hujala, 2016). The roles of these stakeholders and the coordination mechanism were defined in the National ECDE Policy Framework developed in 2005 by UNESCO in collaboration with the MoE and standard guidelines launched in 2007. The Ministry of Education on the other hand provides policy guidelines on capacity building of ECDE personnel, develops curriculum, supervises ECDE programs and registers ECE centres.

In the up-scaling of early childhood education in Nigeria, various stakeholders play critical leadership roles to ensure its success.

According to Heikka, and Hujala, (2019), here are some key stakeholders and their leadership roles: (i) Government: Policy formulation and implementation: The government sets policies and regulations to improve early childhood education standards, including curriculum development, teacher training, and infrastructure development. Funding allocation: Government allocates resources and funding to support early childhood education programs, including subsidies for low-income families and grants for early childhood education centers. Monitoring and evaluation: Government agencies oversee the implementation of early childhood education programs, ensuring compliance with quality standards and assessing the impact of interventions. (ii) Non-Governmental Organizations (NGOs) and Civil Society Organizations (CSOs):

Advocacy and awareness-raising: NGOs and CSOs advocate for increased investment in early childhood education and raise awareness about its importance among policymakers, communities, and parents.

Capacity-building: NGOs and CSOs provide training and support to early childhood educators and caregivers, enhancing their skills and knowledge in child development and education.

Service delivery: Some NGOs and CSOs directly implement early childhood education programs, particularly in underserved or marginalized communities, filling gaps where government services may be lacking

(iii) Education Professionals: Curriculum development: Teachers, curriculum developers, and education experts

collaborate to design age-appropriate curricula that promote holistic child development, including cognitive, social, emotional, and physical skills.

**Training and professional development:** Education professionals receive training and ongoing professional development to enhance their teaching skills, pedagogical approaches, and understanding of early childhood development principles.

**Classroom management:** Teachers create supportive and stimulating learning environments that foster children's curiosity, creativity, and love for learning, while also addressing individual learning needs. (i) **Parents and Caregivers:** Parental involvement: Parents and caregivers actively participate in their children's early childhood education by engaging in activities at home, volunteering at schools, and attending parent-teacher meetings and workshops.

**Advocacy:** Parents advocate for improved access to quality early childhood education services in their communities and collaborate with educators and policymakers to address concerns and priorities.

The leadership roles of stakeholders in the up-scaling of early childhood education in Nigeria encompass policy formulation, funding allocation, advocacy, capacity-building, service delivery, curriculum development, parental involvement, resource mobilization, and collaboration (Kagan, Kauerz, & Tarrant, 2021). By working together, these stakeholders can create an enabling environment that ensures every child has access to quality early childhood education, setting the foundation for lifelong learning and development.

### Statement of Problem

Since the commencement of the implementation of the National Policy on Education in Nigeria which seeks to ensure an optimal and qualitative ECE, stream of concerns have been raised by stakeholders in respect of the quality of education in Early Childhood Development and Education (ECDE) and its actual implementation. Despite all measures put in place by the Federal Ministry of Education in Nigeria, there are still some lapses in the implementation and non-implementation of this program. There is no doubt that the implementation of Early Childhood Education requires the collaborative effort/input of all stakeholders, including the government, parents/guardians, and school authorities. While the government is expected to provide necessary teaching and learning resources, the stakeholders at different levels are expected to know their various roles and play them adequately. Now the problems are, do these stakeholders know the roles they are supposed to play? If they truly know these roles, what is the extent to which these roles have aid the up-scaling of early child-hood care education. It is on this premise the study tends to investigate the leadership roles of stakeholders in the up-scaling of early child-hood care education in rivers state Nigeria. The specific objectives are to:

- investigate and analyze the specific leadership roles played by stockholders in the up-scaling of early childhood care education in Rivers State, Nigeria
- assess the extent to which the leadership roles of stakeholders contribute to the up-scaling of early childhood care education in Rivers State, Nigeria

### Research Questions

The following research questions are raised to guide the study

- What are the leadership roles of stockholders in the up-scaling of early child-hood care education in rivers state, Nigeria
- To what extent does the leadership roles of stockholders aid the up-scaling of early child-hood care education in rivers state, Nigeria

### Hypotheses

- H<sub>0</sub>1: There is no significant difference in the mean ratings of male and female respondents on the roles of stockholders in the up-scaling of early child-hood care education in Rivers State, Nigeria
- H<sub>0</sub>2: There is no significant difference in the mean ratings of male and female respondents on the extent to which leadership roles of stockholders aid the up-scaling of early child-hood care education in rivers state, Nigeria

## **Theoretical Review**

### **Distributed Leadership Theory by James P. Spillane (2006)**

Spillane (2006) argued that leadership is not just about individuals in formal leadership roles (like principals or directors), but about the interactions between people, their actions, and the situations they are in.

Distributed Leadership Theory suggests that leadership is shared across multiple individuals rather than being concentrated in a single leader. It emphasizes collaboration, collective responsibility, and shared decision-making within an organization or institution.

This theory moves away from the traditional top-down leadership model and focuses on how leadership functions are spread across a group of people. In an educational setting, for example, leadership responsibilities are distributed among teachers, administrators, staff, and even students and parents, rather than solely resting with the principal or headteacher.

This theory is relevant to this study because the theory plays a crucial role in improving and expanding Early Childhood Care and Education (ECCE) by promoting shared responsibility, collaboration, and sustainability as well, it encourages innovation by using diverse skills and perspectives.

## **Methodology**

The descriptive survey design was used for this study. The population of the study was 210 stakeholders made up of parents, community and private sector, Government officials, Non governmental Organizations (NGOs) such as, community-based organizations (CBOs) and Faith-based organizations etc. Stratified sampling techniques was used and a sample size of 135 stakeholders was derived. The instrument for data collection was a questionnaire titled: Leadership Roles of Stakeholders in the Up-Scaling of Early Childhood Care Education in Rivers State, Nigeria (LRSUECCE). The instrument provided response to the two research questions with 15 items; Item 1-7 addressed research question one and item 8-15 addressed research question two in a 4-point rating scale weighted as "Strongly Agreed" (SA) – 4 points, "Agreed" (A) – 3 points, "Disagreed" (D) – 2 points and "Strongly Disagreed" (SD) – 1 point. To establish the validity of the instrument, the questionnaire was subjected to face and content validation by two experts from the department of Childhood Care Education in Ignatius Ajuru University of Education, Port Harcourt, Rivers State and the department of Business education in Ignatius Ajuru University of Education Port Harcourt. The data analysis was done using the mean and standard deviation to answer the research questions while t-test was used to test the null hypotheses. The mean was obtained by the summation of all responses as assigned to a rating scale in an item divided by the total number of responses:  $4+3+2+1/4 = 2.50$ . The mean score of 2.50 and above was accepted, while those below 2.50 were rejected. Also, the decision rules for the hypotheses was that any hypothesis which the t-calculated value is less than the t-critical table value of 1.96 is considered accepted whereas if it is more than the critical table value is considered rejected.

## **Results**

The results of the study were presented based on the research questions and hypotheses that guided the study.

**Research question 1:** What are the leadership roles of stockholders in the up-scaling of early child-hood care education in rivers state, Nigeria?

**Table 4.2.1:**  
**Mean and standard deviation on the leadership roles of stockholders in the up-scaling of early child-hood care education**

S/ N	leadership roles of stockholders in the up- scaling of early child- hood care education	Female Stakeholder s		Male Stakeholders		Remark
		X	STD	X	STD	
1.	<b>Government:</b> Policy formulation, Funding allocation, Monitoring and evaluation	3.23	1.05	2.90	0.90	SA
2.	<b>NGOs and CSOs:</b> Advocacy, Capacity- building, Service delivery	3.34	0.90	2.76	0.50	SA
3.	<b>Education Professionals:</b> Curriculum development, Training and development, Classroom management	2.53	0.96	2.80	1.09	A
4.	<b>Parents and Caregivers:</b> Parental involvement, Advocacy	2.87	0.95	2.98	0.86	A
5.	<b>Community Leaders and Businesses:</b> Resource mobilization, Collaboration and partnerships	3.93	0.92	2.97	1.12	SA
6.	<b>Religious and Community-Based Organizations:</b> Outreach and community engagement, Values-based education	3.23	0.99	3.09	0.89	SA
7.	<b>Academic Institutions and Researchers:</b> Research and innovation, Knowledge dissemination:	3.80	1.16	3.18	1.10	SA
8.	<b>Media and Communication Platforms:</b> Awareness-raising, Advocacy and public engagement	3.32	1.02	3.50	0.78	SA
<b>Grand Mean/STD</b>		<b>3.28</b>	<b>0.99</b>	<b>3.02</b>	<b>0.91</b>	<b>SA</b>

*Source: Field work (2024)*

The data presented in the above table shows that respondents strongly agrees with a grand mean score of 3.28 and SD of 0.99 for female and grand mean score of 3.02 and SD of 0.92 for male that items 1-8 as listed above are the leadership roles of stockholders in the up-scaling of early child-hood care education in rivers state, Nigeria.



**Research Question 2:** To what extent do the leadership roles of stockholders aid the up-scaling of early childhood care education in rivers state, Nigeria?

**Table 2:**

**Mean and standard deviation on the extent to which the leadership roles of stockholders aid the up-scaling of early child-hood care education in rivers state, Nigeria**

S/N	extent to which the leadership roles of stockholders aid the up-scaling of early childhood care education in rivers state, Nigeria	Female Stakeholders		Male Stakeholders		Remark
		X	STD	X	STD	
9.	School-community relationship and implementation of effective teaching methods	3.56	1.11	2.80	0.88	SA
10.	Improved learning outcomes and a supportive home environment	3.26	0.67	2.83	0.66	SA
11.	Improved institutional organizational partnership	2.78	0.89	2.74	0.84	A
12.	Attracting private sector involvement for corporate sponsorship and partnership	2.98	0.87	2.90	0.95	A
13.	Promoting the importance of ECE through the involvement of research-based organizations	3.29	0.92	2.70	0.79	SA
14.	Improved infrastructure, teacher training and quality curriculum development	3.21	0.87	3.03	1.02	SA
15.	Improving children's physical well-being and their general health	3.29	1.09	3.13	1.05	SA
16.	Inclusion of digital learning tools, educational apps and online resources	3.79	0.89	3.00	0.98	SA
<b>Total Mean/STD</b>		<b>3.27</b>	<b>0.91</b>	<b>2.97</b>	<b>0.90</b>	<b>SA</b>

*Source: Field work (2024)*

The data presented in the above table shows that respondents strongly agrees with a grand mean score of 3.27 and SD of 0.91 for female and grand mean score of 2.97 and SD of 0.90 for male that the items 9-16 as listed

above are the extent to which the leadership roles of stockholders aid the up-scaling of early child-hood care education in rivers state, Nigeria

**Hypotheses 1:** There is no significant difference in the mean ratings of male and female respondents on the roles of stockholders in the up-scaling of early child-hood care education in Rivers State

**Table 4:**

**t-test analysis of the mean ratings of male and female respondents on the roles of stockholders in the up-scaling of early child-hood care education in Rivers State**

Gender	N	X	Std Dev	Df	T-cal	T-tab
Female	56	3.28	0.99	118	1.96	1.09
Male	92	3.02	0.91			

Result in table 4 shows that the t-tabulated 1.09 is less than the t-calculated 1.96 thus we accept the null hypothesis. This implies that at 0.05 level of significance there's no significant difference in the mean ratings of male and female respondents on the roles of stockholders in the up-scaling of early child-hood care education in Rivers State.

**Hypotheses 2:** There is no significant difference in the mean ratings of male and female respondents on the extent to which leadership roles of stockholders enhance the up-scaling of early child-hood care education in Rivers State

**Table 5:**

**t-test analysis of the mean ratings of male and female respondents on the extent to which leadership roles of stockholders enhance the up-scaling of early child-hood care education in Rivers state**

Gender	N	X	St. dev.	Df	T-Cal	T-Tab
Female	56	3.27	0.91	118	1.63	1.96
Male	92	2.97	0.90			

Result in table 4 shows that the t-tabulated **1.96** is less than the t-calculated **1.63** thus we accept the null hypothesis. This implies that at 0.05 level of significance there's no significant difference in the mean ratings of male and female respondents on the extent to which leadership roles of stockholders aid the up-scaling of early child-hood care education in Rivers State.

## Discussion of Findings

The result of the data analysed in table 2, show that the respondents to a very high extent agreed Policy formulation, Funding allocation, Advocacy, Capacity-building, Service delivery Curriculum development, Training and development, Classroom management Parental involvement, Advocacy etc. are the leadership roles of stockholders in the up-scaling of early child-hood care education in rivers state, Nigeria

This finding agrees with a study by Dacre and Sewell, (2018) who found out that leadership roles of stockholders fosters improvement in the upscaling of early childhood education in Nigeria. This goes a long way to show the importance of the stakeholder in the early childhood programme in Nigeria. The identified leadership roles are needed not just for the upscaling of the programme but for sustainability of the programme.

The result of the study in table 5 also revealed the extent to which the leadership roles of stockholders aid the up-scaling of early child-hood care education in Rivers State, Nigeria. Some investigated indicators include: Improved learning outcomes and a supportive home environment; improved learning outcomes and a supportive home environment; improved institution-organizational partnership; attracting private sector involvement for corporate sponsorship and partnership; promoting the importance of ECE through the involvement of research-based organizations; Improving children's physical well-being and their general health etc. This investigation is in line with the findings of Atakpa, (2019) who found out that leadership roles of stockholders enhances early

self awareness in children and quick open mindedness. And with that of Okorafor, (2011) who established that, the leadership role of stockholders facilitates knowledge and awareness and critical reflection on the general public a regards early childhood education and upbringing. This also goes a long way to justify the research question two hence, leadership roles of stockholders should be taking seriously in various level of participation.

### Conclusion

The importance of a solid foundation in education is obvious. Early Childhood education is where the foundation is laid. Poor performance in the other levels of academic can be traced to this foundation level. So a thorough knowledge of what, and how education is been handled at this level is imperative. Therefore, government needs iron determination to implement the strategies that will necessarily enhance quality development of early childhood/pre-primary education in Nigeria. Leadership plays a central role in supporting and sustaining quality in ECEC settings. This review of the ECEC leadership roles suggests that effective leadership establishes a set of organisational conditions that have a positive impact on process quality, and thereby fosters children's learning, development and well-being. Based on the view of this paper, it has been asserted that for effective implementation of ECE programme in Rivers State, stakeholders have vital roles to play. Effective curriculum implementation is not just dependent on the classroom teacher alone. It requires collaboration between all stakeholders. If all stakeholders are aware of their roles and willingly perform them, then the implementation of the ECE programme would be effectively done with quality results.

### Recommendations

For effective implementation of ECE by the stakeholders in Nigeria, the following recommendations are hereby made:

- Effective measures should be ensured in the training of early childhood/pre-primary teachers through adequate scholarships, approving the mounting of such programmes in all Universities, Institutes of Education and College of Education.
- The government should provide conducive learning environment and good working condition as well as providing adequate resources necessary to offer quality education that will guarantee quality assurance in the system.
- Government (Federal, State and Local) in collaboration with other stakeholders should provide adequate funds through their annual budgets to strengthen teacher's motivational needs. The importance of staff training, retraining and development should be noted and strengthened.
- Teachers and counselors alike should take motivation seriously in the teaching and learning process. Teachers should be involved in the communication and in decision making process of the school.
- Parents should embrace the teachers and lay complaints in a cordial tone and as well contribute to education development in their local communities. Stakeholders should always be contacted when there is need for an important decision to be made. This would give them a sense of belonging as sustained confidence in the system. It would also command their commitment towards the system for success.

### References

- Ang, L. (2017). Leading and managing in the early years: A study of the impact of a NCSL programme on children's centre leaders' perceptions of leadership and practice. *Educational Management Administration & Leadership*, 40(3), 289-304.
- Arbour, M. (2016). Improving quality and child outcomes in early childhood education by redefining the role afforded to teacher in professional development. Evanston Publication.
- Bagudo, A.B, (2021). The Relevance of early Childhood Care Development and Education in Achievement of Vision 2020 Farfuru. *Journal of Multi-Disciplinary Studies*, 3(5), 20-27.
- Ball, J. (2017). "Equity for Indigenous Children in Early Childhood Education", in Heyman, J. (ed.), *Increasing Equity in Education: Successful Approaches from around the World*. Oxford University Press.
- Ball, J. (2018). "Centring Community Services Around Early Childhood Care and Development: Promising Practices in Indigenous Communities in Canada", *Child Health and Education*, 2(2), 28-51.
- Dennis, S. & O'Connor, E. (2017). "Reexamining quality in early childhood education: Exploring the relationship between the organizational climate and the classroom", *Journal of Research in Childhood Education*, 27(1), 74-92.

- Douglass, A. (2011). *Improving family engagement: The organizational context and its influence on partnering with parents in formal child care settings*. Prentice Publications.
- Federal Republic of Nigeria (2004). *National Policy on Education (4th Ed)*. NERDC Press.
- Heikka, J. & Hujala, T (2019). "Early childhood leadership through the lens of distributed leadership", *European Early Childhood Education Research Journal*, 21(4), 568-580
- Ho, D.& Tikly, L. (2017). "Conceptualizing teacher leadership in a Chinese, policy-driven context: A research agenda", *School effectiveness and school improvement*, 23(4), 401-416
- Hua, R. (2018). Early Childhood and Development: Benue State situation. *Paper Presented at the Workshop on Establishment and Strengthening Civil Society Organization (CSOs) Network for Effective Implantation of ECC/Gender Issues Programmes* in Benue State at Gboko, Benue State.
- Hujala, E. (2016). "Leadership tasks in early childhood education in Finland, Japan, and Singapore", *Journal of Research in Childhood Education*, 30(3), 406-421.
- Kagan, S. L. Kauerz, K. & Tarrant, K. (2021). *The early care and education teaching workforce at the fulcrum: An agenda for reform*. Teachers College Press.
- UNESCO (2012). Early Childhood Care and Education. <https://unesdoc.unesco.org/ark:/48223/pf0000219613>



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