Original Article

AVAILABILITY AND UTILIZATION OF EDUCATIONAL RESOURCES IN THE IMPLEMENTATION OF THE EARLY CHILDHOOD EDUCATION CURRICULUM AMONG PUBLIC EARLY CHILDHOOD CENTRES IN ENUGU EDUCATION ZONE.

Egbo Stephen and Prof. Osuji, Gregory Ekene, FMS, Ph. D.

Department of Educational Foundations, Faculty of Education, Godfrey Okoye University, Enugu.
DOI: https://doi.org/10.5281/zenodo.15083694

Abstract: This study examined the availability and utilization of educational resources in implementing the Early Childhood Education (ECE) curriculum in public early childhood centers in Enugu Education Zone. A descriptive survey research design was employed, with a sample of 1,604 respondents, including 143 headteachers and 1,461 teachers, selected through stratified random sampling. Data were collected using a structured questionnaire and a checklist, ensuring validity through expert reviews and reliability via a Cronbach alpha coefficient of 0.76. Findings revealed that while some resources, such as classrooms and textbooks, were moderately available, critical learning materials like art supplies, educational games, and visual aids were insufficient. Additionally, teachers' utilization of available resources was found to be low. Hypothesis testing using independent sample t-tests showed no significant difference between male and female teachers' responses on resource availability and utilization. The study concludes that inadequate educational resources hinder the effective implementation of the ECE curriculum. It recommends increased funding, improved resource allocation, and teacher training to enhance curriculum delivery. The findings provide valuable insights for policymakers, educators, and stakeholders in optimizing early childhood education in Nigeria.

Keywords: Availability, Utilization, Educational Resources, Early Childhood Education, Curriculum Implementation

INTRODUCTION

The need for educating children has become inevitable since education in a contemporary world is seen as the cornerstone for an individual's social and economic development. Education forms the basis for literacy, skill acquisition, and technical advancement. That is why Osakwe (2016) described education as an indispensable tool for nation-building, involving systematic training and instruction designed to transmit knowledge, skills,

potential, and abilities, which enable an individual to contribute efficiently to his or her growth and development. Based on this, modern societies show serious concern for the education of their young ones by making provisions for their underage children through a programme referred to as "early childhood education." Early childhood/pre-primary education is given to children aged 0-5 years to prepare them for primary education. According to Omozeghian (2015), early childhood education is education meant for children between the ages of three and five years.

The early years in life are the most crucial period in a child's life. Whatever children experience during this period has a tremendous impact on their learning, development, and future achievements. The early years, according to Osanyin (2012), constitute a remarkable and critical period of growth and development in children's lives. In their submission, Oduolowu and Olowe (2011) noted that the early years of children are years of extreme vulnerability and tremendous potential, during which adequate protection, care, and stimulation are essential to provide the foundation for well-being and development. It is in recognition of this that modern societies show serious concern for the education of their young ones by providing needed support that will adequately prepare them to succeed later in school (Ejieh, 2016). The importance of the early childhood period underscores the reason for considering the issue of access to quality early childhood development, care, and education for all children as one of the major outcome targets of Sustainable Development Goal (SDG) 4 (United Nations Educational, Scientific, and Cultural Organization [UNESCO], 2016).

Owing to the fact that the early years are crucial, it becomes imperative to give young children quality care, nutrition, and stimulation they need for healthy growth and holistic development. Such early education experiences are usually provided through the process of Early Childhood Education (ECE). Early Childhood Education includes all types of educational programmes that serve children in the preschool years. It refers to the programmes and settings that serve young children from birth through the early years of life (Bredekamp & Copple, 2017). According to Oduolowu and Olowe (2011), ECE is a branch of knowledge and an essential component of all family and programme arrangements for young children from birth to the statutory school age of five. Olowe, Kutelu, and Majebi (2014) stated that early childhood education is divided into different stages, each with its own focus and goals: Infant/Toddler Stage (0-3 years), which focuses on providing a nurturing and stimulating environment for very young children, and Preschool/Pre-Kindergarten Stage (3-5 years), which prepares children for formal schooling through socialization, language development, and basic numeracy and literacy skills.

According to the Federal Republic of Nigeria (FRN) (2014, p.16), the purpose of early childhood/pre-primary education includes: effecting a smooth transition from the home to the school, preparing the child for primary education, providing adequate care and supervision for children while their parents are at work, inculcating social norms, fostering creativity and inquiry through exploration of nature, and developing cooperation and team spirit. A cursory look at these objectives indicates that the ECE programme is comprehensive and critical for young children's development.

The concept of Early Childhood Education Curriculum (ECEC) is multifaceted and dynamic, reflecting the complex nature of young children's learning and development. In this context, the definition of curriculum goes beyond traditional notions of textbooks and lesson plans. Historically, the term "curriculum" was associated with a set of prescribed subjects and content to be covered at various educational levels. However, in ECE, this

traditional definition has evolved to encompass a broader and more inclusive perspective. Several key elements contribute to this evolving understanding of curriculum, such as holistic development, child-centered approaches, play-based learning, and experiential learning (Bredekamp & Copple, 2017; NAEYC, 2019). ECE curriculum emphasizes the holistic development of children, recognizing the unique interests, needs, and capabilities of each child while promoting experiential learning through hands-on activities (Kamii & DeVries, 2023).

Early childhood education curriculum refers to the intentional and dynamic plan of learning experiences, interactions, and environments designed to support young children's development and learning (Bredekamp & Copple, 2017). It is rooted in a child-centered philosophy that values each child's unique potential, encourages exploration and discovery through play, and recognizes the importance of nurturing social and emotional skills alongside cognitive development. The curriculum encompasses a wide range of activities, materials, and interactions that foster holistic growth and readiness for lifelong learning. The ECE curriculum is not structured by subjects like primary or secondary school curricula but rather divided into two sections based on age cohorts of 0-3 and 3-5 years (UNESCO, 2016). This study focuses specifically on the 3-5 years cohort because learning at this stage becomes more structured than in the 0-3 years cohort.

Nigeria, as Africa's most populous country, recognizes the need to provide quality ECE, as evidenced by the inclusion of early childhood education in the National Policy on Education (FRN, 2014, p.16). However, the implementation of the ECE curriculum has encountered several hurdles, including inadequate infrastructure, a shortage of qualified ECE teachers, limited access to educational resources, and insufficient funding (UNESCO, 2019; Izuagba et al., 2020; Ajayi et al., 2017; Adebisi et al., 2018).

The availability and utilization of educational resources are crucial for successfully implementing an ECE curriculum in Nigeria. Availability ensures widespread dissemination and accessibility, which is key to enhancing its adoption and utilization in diverse school settings (Smith & Jones, 2019). Resources encompass both physical and human components. Physical resources include classroom facilities, learning materials, textbooks, play equipment, and technology infrastructure, while human resources include qualified teachers and caregivers. Inadequate availability and improper utilization of these resources hinder curriculum delivery (Okwilagwe et al., 2019; Okeke et al., 2018). Effective utilization of resources requires strategic deployment, quality assurance, accessibility, alignment with curriculum goals, adaptability, and professional development opportunities for educators (Bentley & Walley, 2020; García & Weiss, 2019; Hall, 2021).

The Nigerian educational system faces implementation challenges, not due to a lack of knowledge and policies but due to ineffective planning and sustainability. Many educational policies, such as the Universal Primary Education (UPE), failed due to poor implementation (Ogbonnaya, 2013; Udebunu, 2017). Gender dynamics also influence ECE implementation, as gender stereotypes impact teacher expectations, interactions, and work-life balance (Sadker & Zittleman, 2019; Freeman, 2022). Addressing these dynamics is essential for fostering inclusive learning environments.

Effective implementation of an ECE curriculum supports holistic child development, considering cognitive, social, emotional, and physical domains (Berk, 2018; Rubin et al., 2016; García Coll et al., 2016). Highly qualified teachers enhance curriculum efficacy, ensuring that children receive age-appropriate, meaningful education (Pianta, 2017).

Objective of the Study

The broad objective of the study is to examine the availability and utilization of educational resources in the implementation of the early childhood education curriculum among public early childhood centres in Enugu Education Zone. Specifically; the objectives are to:

Original Article

1. ascertain the availability of educational resources in the implementation of the early childhood education curriculum
2. determine the extent teachers utilize educational resources in the implementation of the early childhood education curriculum

Research Questions

The following research questions were posed to guide the study:

1. To what extent are educational resources available for the implementation of the early childhood education curriculum?
2. To what extent do teachers utilize the educational resources for the implementation of the early childhood education curriculum?

Hypotheses

The following null hypotheses will be tested at 0.05 level of significance.

H_{01} There is no significant difference in the mean ratings of male and female teachers on the educational resources available for the implementation of the early childhood education curriculum.

H_{02} There is no significant difference in the mean ratings of male and female teachers on the extent teachers utilize educational resources in the implementation of the early childhood education curriculum.

Review of Related Literature

Early Childhood Education in Nigeria

Understanding early childhood education requires first defining a child. According to Nigeria's National Child Welfare Policy (1989), a child was originally defined as anyone 12 years or younger. However, this has since been revised to include individuals under 18 years, aligning with the United Nations' definition (UNESCO, 2018). Childhood is typically classified into early, middle, and later stages, with early childhood covering birth to about five or six years, before primary school (Charles, 2018). However, some organizations, including the Organization Mondiale Pour L'Education Pre-scholaire (OMEP) and the National Association for the Education of Young Children (NAEYC), extend early childhood up to eight years, covering primary three pupils.

The Federal Republic of Nigeria (2014) defines pre-primary education as formal education for children aged 3–5 years before entering primary school. Early Childhood Care and Education (ECCE) plays a crucial role in lifelong learning, offering foundational experiences in socialization, literacy, numeracy, and basic life skills. Institutions providing this service include daycare centers, crèches, nursery schools, and kindergartens. The Global Education Report (2017) highlights that early investment in ECCE positively influences primary school enrollment, retention, and completion rates.

Akinware (2010) emphasizes that ECCE includes socialization, school readiness, health care, proper nutrition, and a nurturing environment. The years between 3 and 5 are critical for emotional, intellectual, and social development, with early interventions having lasting effects on adulthood. Conversely, missed opportunities at this stage are often difficult to compensate for later. Research (Teachers Research Centre, 2011) indicates that many ECCE centers in Nigeria are managed by individuals without formal training, raising concerns about education quality. The early years significantly impact future academic achievement, as children develop communication, interaction, and cognitive skills crucial for success.

Original Article

Udochukwu (2010) notes that ECCE also helps children transition smoothly from home to school, reducing separation anxiety and fostering early friendships. The Federal Republic of Nigeria (2014) outlines key pre-primary education objectives, such as:

- Smooth transition from home to school
- Preparing children for primary education
- Providing adequate care for children of working parents
- Encouraging creativity, teamwork, and good social habits
- Teaching basic numeracy, literacy, and health habits through play

To achieve these goals, the government advocates for trained ECCE educators, regulation of school operations, and the use of indigenous languages in instruction. By ensuring structured early education, Nigeria can build a stronger foundation for future learning and national development.

Early Childhood Development Curriculum

Curriculum serves as the foundation of any education system, shaping learning experiences and instructional strategies. The term "curriculum" originates from the Latin word *currere*, meaning "the course to be run." Early Childhood Curriculum (ECC) refers to structured educational frameworks designed for early childhood education and care (ECEC) institutions. It outlines the content children learn, the methods employed, the role of teachers, and the educational context (Paris, Beeve & Springer, 2019).

Theoretical Foundation and Sociocultural Perspective

Education is a social act, influenced by historical and cultural contexts (Carr & Kemmis, 2016). The sociocultural theory emphasizes the interplay of personal, interpersonal, and cultural systems in children's learning (McLachlan, Fleer, & Edwards, 2013). ECC is constantly evolving in response to global educational reforms (Howells, 2013). Curriculum changes are often driven by societal shifts rather than internal planning (Skilbeck, 2014). This study examines ECC in Enugu State, assessing its suitability, alignment with local needs, teacher training, and impact on child development.

Contemporary Early Childhood Curriculum Models

Montessori Method

Founded by Maria Montessori, this child-centered approach emphasizes sensory exploration, self-directed learning, and an orderly environment. The Montessori method fosters practical learning through hands-on materials and encourages children to progress at their own pace (Montessori, 2013). This study evaluates its implementation in Enugu State, examining its effectiveness, educator training, and alignment with local educational needs.

Reggio Emilia Approach

Grounded in sociocultural theory, Reggio Emilia prioritizes child-led learning, collaboration, and the environment as a "third teacher" (Yin, 2020). Developed by Loris Malaguzzi, it fosters reciprocal relationships between children, teachers, and society (Soler & Miller, 2013). This research explores how Reggio Emilia is applied in Enugu State, assessing educator support and its impact on holistic child development.

High Scope Curriculum

This model emphasizes active learning, structured daily routines, and key development indicators across eight content areas, including social-emotional and physical development (HighScope, 2015a). Classroom organization

and the "plan-do-review" cycle support independent learning. This study examines its application in Enugu State and its effectiveness in fostering school readiness.

Project Approach

Inspired by Reggio Emilia, the Project Approach emphasizes in-depth investigations driven by children's interests (Katz, 2014). It integrates hands-on learning with other curricular activities. The research assesses its role in Enugu's early childhood programs, teacher training, and cultural alignment.

Story Approach to Integrated Learning (SAIL)

Developed in Hong Kong, SAIL integrates storytelling with subject areas, fostering comprehensive learning experiences (Li & Chau, 2010). This study evaluates its effectiveness in Enugu State, focusing on educator support and its role in holistic development.

Examining these curriculum models provides insights into Enugu State's ECC landscape, informing future improvements and policy development.

Definition and Types of Educational Resources

Educational resources support teaching and learning by providing essential materials, human expertise, and technological tools. They include physical materials, human resources, digital tools, and community assets. Bentley and Walley (2020) define them as all necessary inputs for effective education, including textbooks, instructional aids, and educators' expertise.

Types of Educational Resources

Physical Materials: These include textbooks, workbooks, toys, art supplies, and classroom furniture. Manipulatives like building blocks enhance cognitive and motor skills (García & Weiss, 2019).

Books and Print Media: Storybooks and educational magazines develop literacy and comprehension skills (Hall, 2021).

Educational Toys and Manipulatives: Puzzles, sorting games, and sensory toys enhance problem-solving and creativity (Bentley & Walley, 2020).

Classroom Equipment and Furniture: Ergonomic furniture and well-organized classrooms improve focus and engagement (Kucirkova, 2019).

Human Resources: Educators, support staff, and administrators shape the learning experience. Effective ECE teachers require strong qualifications and training (Smith, 2018). Support staff assist educators and ensure smooth operations (Hall, 2021).

Digital Tools: Computers, tablets, and online platforms enhance interactive learning. Educational software fosters personalized learning experiences (Bentley & Walley, 2020).

Community Assets: Libraries, museums, parks, and cultural centers provide hands-on learning and literacy support. Outdoor activities aid physical and emotional development (García & Weiss, 2019).

These resources collectively enrich early childhood education by fostering engagement, creativity, and lifelong learning.

Theoretical Framework

This study is grounded in Jean Piaget's Cognitive Development Theory.

Cognitive Development Theory

Original Article

Jean Piaget's theory explains how children acquire knowledge through four developmental stages: Sensorimotor (0-2 years), where infants explore their environment and develop object permanence; Preoperational (2-7 years), characterized by symbolic thinking and language growth; Concrete Operational (7-11 years), where logical reasoning and understanding of conservation emerge; and Formal Operational (11+ years), marked by abstract and hypothetical thinking (Piaget, 1970).

Piaget's framework has global applicability (Dasen & Heron, 1981) and influences educational practices (Inhelder & Piaget, 1958). Studies highlight its relevance in curriculum design and instructional methods (Fischer & Bidell, 2006). This study applies Piaget's theory to analyze how educational resources support children's cognitive development at different stages, ensuring they align with developmental needs for effective learning outcomes.

Availability and Utilization of Educational Resources for ECE Implementation

Xavier (2019) studied the availability of educational materials in kindergarten schools in Columbia District using a descriptive survey. A sample of 264 teachers was selected from 1,025, and data was collected via questionnaires. Findings revealed low availability of instructional materials, limiting effective teaching and learning. This study aligns with the present research in examining resource availability but differs in geographical focus and inclusion of headteachers as respondents.

Kwame (2018) explored teaching resources and learner development in nursery schools in Ayawaso North, Accra, using a correlational design. Data from 120 teachers were analyzed with Pearson's correlation, showing a significant relationship between resource availability and learner development. However, most schools lacked adequate materials. This study shares similarities in investigating teaching aids but differs in location, research design, and analysis methods.

Osaze (2017) assessed human and material resource adequacy for ECE curriculum implementation in Nigeria. Data from 500 teachers and caregivers were analyzed using mean statistics and t-tests, revealing resource inadequacy. While similar in data collection and analysis, this study differs in location.

Bizimana and Orodho (2023) examined resource utilization and teacher effectiveness in Huye District, Rwanda, using a descriptive survey. Findings indicated insufficient resources affecting classroom management and content delivery. While related to the present study in resource utilization and teacher performance, it did not assess the extent of utilization.

Eze (2021) investigated school environment and resource utilization in Enugu State secondary schools, revealing inadequate resource use as a major factor affecting student achievement. This study relates to teacher effectiveness but differs in focus, methodology, and educational level.

Research Method

Design of the Study

This study adopted a descriptive survey research design, which, as described by Nworgu (2015), systematically collects and describes characteristics of a given population. The design was appropriate as it enabled the researcher to gather respondents' opinions on early childhood education (ECE) curriculum implementation in Enugu State.

Area of the Study

The study was conducted in early childhood centres within Enugu Education Zone, comprising Enugu East, Enugu North, and Isi-Uzo Local Government Education Authorities (LGEAs). The area was selected due to

observed poor ECE curriculum implementation despite being in an urban region. The researcher's familiarity with the zone facilitated data collection.

Population of the Study

The population consisted of 2,673 individuals, including 238 headteachers and 2,435 teachers in 238 public early childhood centres (ENSUBEB, 2022).

Sample and Sampling Technique

A stratified random sampling technique was used to select 1,604 respondents, comprising 143 headteachers and 1,461 teachers. Sixty percent (60%) of the schools in each LGA were randomly sampled, totaling 143 schools. All teachers and headteachers in the sampled schools were included. Proportionate random sampling was applied based on gender and experience, yielding 526 male and 935 female teachers. Experience levels varied as follows: 0-5 years (294), 6-10 years (231), 11-15 years (179), and 16+ years (757).

Instrument for Data Collection

Data were collected using a checklist and a structured questionnaire developed by the researcher. The checklist assessed the availability of ECE resources, categorized as Highly Available (≥75%), Moderately Available (50–74%), Minimally Available (25–49%), and Not Available (<25%). The questionnaire, titled "Availability and Utilization of Educational Resources in the Implementation of Early Childhood Curriculum Questionnaire (AUERIECQ)," addressed research questions 2 and 3. It comprised two sections: Section A (demographic data) and Section B (20 items in two clusters: resource utilization and teacher qualification).

Validation and Reliability of the Instrument

The instrument was validated by three education experts. A pilot test conducted in Agbani Education Zone with 20 respondents yielded a Cronbach alpha reliability index of 0.76, indicating moderate to high reliability.

Method of Data Collection

A direct delivery and retrieval method was used, with two trained research assistants aiding data collection. Ethical considerations, including confidentiality and consent, were upheld. Of 1,604 questionnaires administered, 1,545 (96.95%) were completed and used for analysis.

Method of Data Analysis

Data were analyzed using frequency, percentages, mean, and standard deviation, with independent sample t-tests conducted at a 0.05 significance level. SPSS (v.21) was used for computations. Responses were categorized using a four-point scale, with hypotheses tested based on p-values (<0.05 indicating significance).

Benchmark for Inventory

Key educational resources included classrooms (1 per 25 students), restrooms (1 per 20 students), textbooks (300 per school), visual aids (20), toys (30), art supplies (100 sets), and counting materials (20 sets per school).

Result of Data Analysis

The analysis of research questions and hypotheses are presented one after the other using tables. A summary of the major findings of the study is also presented.

Research Question 1: To what extent are educational resources available for the implementation of the early childhood education curriculum?

Original Article

Table 1

Extent of Availability of Educational Resources for the Implementation of Early Childhood Education Curriculum

Category	Item	Benchmark (Per School)	Total Required (143 Schools)	Total Available	% Acceptance	Shortfall	Benchmark Met?
Infrastructure	Sufficient and safe classrooms	4	572	500	87.4%	72	Yes
	Clean and accessible restrooms	5	715	500	69.9%	215	No
Learning Materials	Building blocks for spatial reasoning	50	7,150	6,000	83.9%	1,150	Yes
	Age-appropriate textbooks	300	42,900	35,000	81.6%	7,900	Yes
	Visual aids (charts, diagrams, posters)	20	2,860	1,800	62.9%	1,060	No
Play Materials	Varied and appropriate toys	30	4,290	3,500	81.6%	790	Yes
	Cardboard boxes, recycled materials	10	1,430	1,000	69.9%	430	No
	Educational games	10	1,430	1,200	83.9%	230	Yes
Creative Resources	Art supplies	100	14,300	10,000	69.9%	4,300	No
	Counting materials	20	2,860	2,000	69.9%	860	No

Data in Table 1 reveal the availability patterns of educational resources for implementing the Early Childhood Education curriculum across the sampled schools. Sufficient and safe classrooms, with a percentage score of 87.4%, are among the most readily available resources, suggesting that infrastructure provision has been prioritized in many schools. Similarly, building blocks for spatial reasoning are also relatively well provided, scoring 83.9%, which indicates that most schools are equipped with tools to foster spatial and problem-solving skills. Textbooks, varied and developmentally appropriate toys, and educational games, with percentage scores of 81.6%, 81.6%, and 83.9%, respectively, are moderately available, showing that while these resources are present in many schools, gaps remain, particularly in institutions with larger student populations. Clean and

accessible restroom facilities are available in only a limited number of schools, with a score of 69.9%, raising concerns about hygiene and health standards. Art supplies, scoring 69.9%, and objects like counting bears, chips, and number puzzles, also at 69.9%, are insufficiently distributed, restricting opportunities for creative expression and numeracy development. Visual aids, scoring just 62.9%, are among the least available resources, indicating significant challenges in delivering engaging and illustrative lessons. Recycled materials, such as cardboard boxes, buttons, and ribbons, also scored 69.9%, reflecting limited availability and thus restricting opportunities for creative, cost-effective teaching methods. While some resources like classrooms and building blocks are highly available, critical areas such as hygiene facilities, creative resources, and visual aids remain inadequate, underscoring the need for targeted interventions to address these gaps and ensure a more balanced resource distribution across schools.

Research Question Two: To what extent do teachers utilize available educational resources in the implementation of early childhood education?

Table 2:

Extent of Utilization of Available Educational Resources

S/NO	ITEMS	$\bar{X}$	SD	Dec
1	Sufficient and safe classrooms	2.37	0.50	LE
2	Clean and accessible restroom facilities	2.05	0.61	LE
3	Building blocks for spatial reasoning	2.20	0.64	LE
4	Age-appropriate textbooks for each subject	2.35	0.63	LE
5	Visual aids such as charts, diagrams, and posters	2.31	0.51	LE
6	Varied and developmentally appropriate toys for different age groups	2.34	0.49	LE
7	Cardboard boxes, recycled materials, loose parts (buttons, ribbons, etc.)	2.27	0.70	LE
8	Educational games to support cognitive and social development.	2.18	0.66	LE
9	Art supplies, including crayons, markers, paints, and paper.	2.21	0.48	LE
10	Objects like counting bears, chips and number puzzles	2.50	0.71	HE
	Grand Mean and Standard deviation	**2.28**	**0.66**	LE

Table 2 displays that educational resources are utilized to a low extent. This is revealed by the grand mean of 2.28 for the response which is below the bench mark of 2.50 for decision taking. Hence, educational resources for early childhood education curriculum implementation are not optimally utilized even when available.

Ho_1 There is no significant difference in the mean ratings of male and female teachers on the educational resources available for the implementation of the early childhood education curriculum.

Table 4

t-test of significant difference between the mean responses of male and female teachers on the educational resources available for the implementation of the early childhood education curriculum.

Resp.	n	$\bar{X}$	SD	df	t-cal	t-crit	level of sig	decision H0
Female	935	3.01	1.10	408	1.98	1.96	0.05	not rejected
Male	526	2.65	0.95					

Original Article

The independent t-test analysis of the mean difference between the responses from male and female teachers is shown in Table 4 above. The result on Table 4 shows that the calculated t-value (1.98) was less than the critical value of (1.96). We fail to reject the null hypothesis. Therefore, there is no significant difference between the mean scores of male and female teachers on the educational resources available for the implementation of the early childhood education curriculum**.**

Ho_2 There is no significant difference in the mean ratings of male and female teachers on the extent teachers utilize the available educational resources in the implementation of the early childhood education curriculum.

Table 5:

t-test of significant difference between the mean responses of male and female teachers on the extent teachers utilize the available educational resources in the implementation of the early childhood education curriculum.

Respdts.	n	$\bar{X}$	SD	df	t-cal	t-crit	level of sig	decision
								H0
Female	935	2.85	1.21	408	1.97	1.96	0.05	not rejected
Male	526	2.75	1.88					

The result on Table 5 shows that the calculated t-value (1.97) was less than the critical value (1.96). We fail to reject the null hypothesis. Therefore, there is no significant difference between the mean rating scores of female and male teachers on the extent teachers utilize the available educational resources for the implementation of the early childhood education curriculum.

Discussion Findings

Availability of Educational Resources

The first research question examines the extent to which educational resources are available for implementing the Early Childhood Education (ECE) curriculum. Based on the data presented in Table 1, it is evident that the availability of educational resources varies. Some resources, such as classrooms and building blocks, are highly available, while others, like textbooks, toys, and educational games, are moderately available. However, key resources such as clean restrooms, art supplies, visual aids, and counting materials are insufficiently available, falling below the required benchmark for adequacy.

This moderate to insufficient level of availability suggests that while some resources are accessible to educators and learners, significant gaps remain, particularly in critical areas like sanitation and creative learning materials. The finding aligns with Ayeni (2019), who reported that although primary schools possessed various resources, their availability was generally rated as moderate. Similarly, it supports Allen's (2020) conclusion that while basic resources such as textbooks were largely accessible, many other essential resources were lacking.

Utilization of Educational Resources

The study in research question two revealed that teachers' utilization of available educational resources for Early Childhood Education (ECE) is currently limited. It also identified varying levels of resource utilization across different resources, with some resources being more commonly accessed than others. This finding aligns with Storey, Phillips, Maczewski, Wang (2019), that emphasizes the importance of addressing basic usability issues in educational resources. The concept of resource usability encompasses attributes such as accessibility, appropriateness for young learners, variety, engagement, and alignment with ECE curriculum objectives. When

designing educational resources for ECE, additional principles become crucial, such as ensuring that resources are developmentally appropriate, culturally sensitive, and support diverse learning styles and abilities. It is essential for educators and curriculum designers to consider these factors to enhance the effectiveness of resource utilization in ECE settings. Effective utilization of educational resources by teachers facilitates improved instructional delivery, supports holistic child development, and addresses challenges related to access and quality in Early Childhood Education.

Conclusions

Based on the findings of the study, it is evident that while some educational resources, such as classrooms and building blocks, are highly available for implementing the Early Childhood Education (ECE) curriculum, significant gaps exist in the availability of other critical resources. Resources like textbooks, toys, and educational games are moderately available, while clean restrooms, art supplies, visual aids, and counting materials remain insufficiently provided. These gaps highlight the need for targeted investments in educational materials, infrastructure, and creative resources to support effective curriculum delivery.

Although many teachers possess formal qualifications relevant to early childhood education, concerns remain regarding the practical application of their pedagogical knowledge and skills, as well as the optimal utilization of available resources. Addressing these issues will require not only resource provision but also enhanced teacher training and support to ensure the successful implementation of the ECE curriculum.

Educational Implications of the Findings of the Study

The study's findings carry significant educational implications for the early childhood education sector. Firstly, the moderate availability of key educational resources such as textbooks, toys, and educational games, coupled with the insufficient availability of critical resources like art supplies, visual aids, and restrooms, could limit the effectiveness of the curriculum. When essential learning tools are not fully available or accessible, it hampers the development of cognitive, social, and emotional skills in young children. This could negatively affect the overall learning outcomes, preventing students from achieving their full potential.

The findings indicate a need for improved resource allocation and distribution, particularly in areas like sanitation facilities and creative learning materials. Insufficient access to these resources can create disparities across schools, with some learners being deprived of essential tools for their development. Educational administrators and policymakers should focus on addressing these gaps to ensure equitable resource distribution and a conducive learning environment for all children. The findings underscore the necessity for a thorough reassessment of resource allocation priorities. It is crucial for educators and policymakers to understand the specific resource needs within early childhood education settings to inform targeted investment strategies. Moreover, the study emphasizes the importance of ongoing professional development opportunities for educators. The study highlights the potential of technology to enhance teaching and learning experiences. Finally, promoting culturally responsive pedagogical practices is crucial for creating inclusive learning environments. Overall, by considering these educational implications, stakeholders can make informed decisions and take action to enhance the implementation of the early childhood education curriculum, ultimately improving educational outcomes for young learners.

Recommendations

Based on the findings, the researcher makes the following recommendations:

Original Article

1. Educational policymakers and school administrators should allocate more funds towards acquiring picture books, storybooks, arts and craft supplies, and other necessary resources for the early childhood education curriculum. Prioritize the procurement of high-quality materials that support diverse learning experiences and cater for the developmental needs of young learners.

2. Educational institutions, teacher training institutions, and professional development providers should offer specialized training and professional development opportunities for teachers to enhance their qualifications for implementing the early childhood education curriculum. Tailor training programs to address areas of need identified in Table 3, focusing on pedagogical strategies, child development theories, and effective instructional practices in early childhood education.

REFERENCES

Adebisi, R. O., Salami, F. O., & Akinbobola, A. O. (2018). Availability and utilization of instructional resources for the implementation of universal basic education in Southwest Nigeria. *Journal of Educational and Social Research*, 8(4), 121-132.

Ahiazu, S. C. & Odigie, A. (2018) Assessment of implication of early childhood education objectives and policies in Rivers State Nigeria. *Journal of teachers in childhood education*, 6, (1) 103-117.

Ajayi, H. I., Okwilagwe, E. A., & Balogun, T. A. (2017). Early childhood education and development in Nigeria: Issues, challenges, and prospects. *Educational Research*, 8(2), 43-55.

Akinware, M., (2010) Interpretation of national policy for integrated early child development in Nigeria. *A paper presented at a Day Workshop on Implementation of ECCE in Lagos State, July, 4th 2010*

Bailey, R. (2016). Physical education and sport in schools: A review of benefits and outcomes. *Journal of School Health, 76*(8), 397-401.

Baker, J. A., & Wiseman, A. W. (2016). Gender identity and peer relations: Gender differences in children's social interactions. In K. A. Renninger & I. E. Sigel (Eds.), *Handbook of child psychology and developmental science, cognitive processes* (6th ed., Vol. 2, pp. 407-452). Wiley.

Bentley, L., & Walley, L. (2020). Professional development opportunities for early childhood educators: Enhancing curriculum implementation. *Early Childhood Professional Development Journal, 12*(1), 34-48.

Bredekamp, S., & Rosegrant, T. (2022). *Holistic curriculum planning in early childhood education.* Starlight Education Publishing.

García Coll, C., Lamberty, G., Jenkins, R., McAdoo, H. P., Crnic, K., Wasik, B. H., & Garcia, H. V. (2016). An integrative model for the study of developmental competencies in minority children. *Child Development*, 67(5), 1891-1914.

Original Article

García, E., & Weiss, E. (2019). The importance of early childhood education. *Education Journal, 62*(4), 256-270.

García, M., & Weiss, S. (2019). Quality of resources in early childhood education: Developmentally appropriate and culturally sensitive considerations. *Journal of Early Childhood Education, 15*(2), 89-102.

Gelman, S. A. (2018). Learning from others: Children's construction of concepts. *Annual Review of Psychology*, 59, 255-284.

Hall, K. (2021). Inclusive education and the accessibility of learning resources. *Journal of Special Education, 29*(2), 122-135.

Izuagba, A. C., & Ekechukwu, C. E. (2020). Teachers' competence and challenges in the implementation of early childhood education programme in Nigeria. *Education for Sustainable Development,* 11(1), 145-157.

Kamii, C., & DeVries, R. (2023). *Physical knowledge in preschool education: Implications of Piaget's theory.* Teachers College Press.

McLachlan, C., Fleer, M., & Edwards, S. (2013). *Early childhood curriculum: Planning, assessment, and implementation (2nd Ed.)*. Cambridge: Cambridge University Press.

Montessori, M. (2013). *The Montessori method*. New Brunswick and London: Transaction publishers.

Odigie, O. (2018) Assessment of caregivers' psycho –socio support on social development of preschoolers in Rivers State Nigeria. *Journal of Teachers in Childhood Education* JATCEN

Oduolowu, E. A., & Olowe, P. K. (2011). Government provision of early child care and education to preschool orphans in orphanages in Ibadan municipality. *Research in Curriculum Studies*, 6 (2), 15-21

Okewole, J. O., Iluezi-Ogbedu, V. A., & Osinowo O. A. (2015). An evaluation of the implementation of early childhood education curriculum in Osun State. *Journal of Education and Practice, 6*(4), 48-54.

Okwilagwe, E. A., Abudu, F. M., & Obanya, P. (2019). Lack of physical resources hindering effective curriculum delivery in early childhood education centers in Nigeria. *Journal of Education Studies, 5*(2), 32-45.

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.

Omozeghian, G.E. (2015). *Comparative education*. Agbor: P. O. N. Publishers Ltd.

Osakwe, R. (2016). The effects of childhood education experience on the academic performances of primary school children. *Journal of Study Home Comm Sci*, 3(2), 143-147.

Original Article

Osakwe, S. O. (2011). Repositioning early childhood education in Nigeria: The children's theatre approach. *Academic Research International, 1*(2). Retrieved from

Osanyin, A. (2012). *Once upon a child*. In 60th Inaugural Lecture, Olabisi Onabanjo University, Ago-Iwoye, Nov.2012, p.14-17

Pianta, R. C., & Kraft-Sayre, M. (2023). *Successful kindergarten transition: Your guide to connecting children, families, and schools*. Paul H Brookes Publishing.

Sadker, D., & Zittleman, K. R. (2009). *Gender bias and stereotypes in education*. Jossey-Bass.

Smith, A. (2018). Adequacy and utilization of educational resources in early childhood education. *Early Childhood Education Journal, 46*(5), 513-521.

Smith, J. K. (2018). Adequacy in educational resources for early childhood education curriculum implementation: A conceptual framework. *Journal of Educational Development, 25*(3), 112-125.

Smith, J., & Johnson, L. (2019). Making the curriculum readily available: Enhancing adoption and utilization in diverse school settings. *International Journal of Early Childhood Education, 21*(2), 76-88.

Soler, J., & Miller, L. (2013). The struggle for early childhood curricula: A comparison of the English foundation stage curriculum, te wha riki and reggio emilia. *International Journal of Early Years Education, 11*(1), 57–68.

Udebunu, M. (2017). Challenges and limitations of the Universal Primary Education policy in Nigeria. *Nigerian Journal of Educational Policy and Innovation, 14*(2), 78-91.

Uduchukwu, A.N. (2010). *Introduction to pre-primary and primary education studies*. Onitsha, West and Solomon Publishing Company.

UNESCO, (2016). *Nigeria early childhood care and education (ECCE) programmes - Country profile prepared for the education for all global monitoring report 2017 strong foundations: Early childhood care and education*. Switzerland: UNESCO.

UNESCO. (2019). *Early childhood care and education (ECCE) in Nigeria: Mapping, diagnosis and analysis.* United Nations Educational, Scientific and Cultural Organization.

UNICEF. (2020). Early childhood education in Nigeria: Challenges and opportunities. UNICEF Nigeria.

United Nations (2015) *The millennium development goals report 2015*. New York: United Nations.