Pre-Primary School Teachers' and Classroom Characteristics Towards The Attainment of the Objectives of Policy Documents in Early Childhood Education in North Central, Nigeria

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Abstract: Pre-primary education is adjudged the best investment any country can offer the young generation. Hence, the study, investigated exploration of pre-primary school teachers' and classroom characteristics towards the attainment of the objectives of policy documents in early childhood education in north central, Nigeria. The descriptive survey design was adopted for this study. The sample consisted of 81 pre-primary schools. Multi-stage sampling was used to select the sample. Researcher-designed questionnaires were used to elicit information. Pre-primary school Teacher Characteristics Questionnaire (PTCQ), and Pre-primary school Classroom Characteristics Checklist (PCCC) all the instruments and were subjected to face and content validation. The reliabilities of the instruments were established using PPMC; the result yielded 0.91, and 0.96 respectively. Two research questions were generated and answered. Descriptive statistics of frequency, mean, and percentage were used to answer the research questions. The findings indicated that teachers with NCE qualification were more in number, female teachers were more in number than male teachers. Also, the groups chosen by pupils' were predominant in the classroom. The grid was the most used seating arrangement in some pre-primary school, the most available learning corner in most pre-primary school classrooms was play corner. It was recommended that the bodies in charge of granting approval for the establishment of pre-primary schools across the country should be proactive and be more meticulous in following the minimum standards.

Keyword: Preschool, teacher characteristics, Classroom characteristics, Policy documents

Introduction

A pre-primary school, also known as a nursery school, playschool, or kindergarten, is an educational institution or learning environment that provides early childhood education to children who are not yet of school-going age before they begin formal education at a primary school. It can be run either publicly or privately, and it can be sponsored by the government with public monies in certain circumstances. Luanne (2019) described pre-school as a type of educational programme offered to children between the ages 0 to 5 who provide care and education, teach social skills and introduce children to reading, writing, science and mathematics. The importance of this level of education has been established in various researches.

However, the quality of such services would determine the level of impact such establishments could have on children who passed through them. Pre-primary school programmes are usually rated on two dimensions, quality process and structure. Under quality process, the interactions, activities, materials, learning opportunities, health and safety routines are observed and rated as a measure of process quality; while the second dimension, which is structural quality, includes the number of the children in a class, the adult to child ratio, and the level of education and training of the teachers and staff working with the children (National Institute for Early Education Research, 2019).

The policy's goals for the one-year pre-primary education program are to: ensure a smooth transition from home to school; prepare the child for primary school; provide adequate care, supervision, and security for children while their parents are at work; instill social, moral, and value norms and values; and instill a spirit of inquiry and creativity in the child through exploration of nature, the environment, art, music, and the use of toy vehicles (FRN, 2013).

In pre-primary settings, teachers remain the major variable that dictates the quality provided. Luanne (2019) defined a pre-primary school teacher as one who guides children as they learn to explore the world around them and work with other children in a pre-

primary school programmes. The primary responsibility of the teacher is to care for and educate the young children kept under their care. During this period, the teacher exposes the young children to basic skills through the use of play, storytelling, rhymes, games, songs, and formal instructions. For example, pre-primary schoolers are taught the alphabet, numbers, colours, and social skills; they may also learn how to write their own names (Angelov, 2019). Pre-primary teachers also help children develop language and social skills. The educational requirements for working in the Nigeria pre-primary (FGN, 2013) is the Nigerian Certificate in Education (N.C.E.), a bachelor degree in education (B.Ed.), and other qualification in education. NMSECCC allow schools in Nigeria to engage the services of elderly women with experience in child care and nursing.

In countries like the United States, the requirements vary and range from a high school diploma to a college degree in early childhood education or a related field, certification or licensure may be required. In addition, prospective pre-primary teachers may need previous experiences working with children and also be able to pass a background check and meet mandatory immunization requirements. According to Angelov (2019), children at young ages tend to be quite active and may still have difficulty communicating effectively. Some of the most important skills and/or abilities a pre-primary teacher can have include: flexibility, creativity, a nurturing demean or patience, strong verbal communication skills, technical skills in ICT and good classroom management skill.

Similarly, pre-primary school teachers continually engage in the process of learning about young children, both through on going professional development and careful observation of the children in their classes, reflect on what they have learnt and use such knowledge as bases for future activities (Onu, Oiozor, Agbo, & Ezeanwu, 2010). Pre-primary school teachers are expected to adhere to Developmentally Appropriate Practices (DAP) by allowing children to be children by playing, creating, pretending, and exploring. The teacher should not be at the centre of all activities, filling the children with knowledge, but an inconspicuous facilitator, encouraging children curiosity, which are necessary in developing children who are critical thinkers, self-motivated learners, and happy, well-adjusted individuals (McKenna, 2019).

In Finland, pre-school teachers must acquire a bachelor's degree in educational science. This degree qualifies them to serve as kindergarten teachers and as pre-school teachers (Sool, 2020) while primary school classroom teachers need a master's degree in educational science which also qualifies them to serve as pre-school teachers. Karin (2020) explained that teaching and guidance staff within day care centres typically needs Bachelor's degrees. Hence teaching profession is highly respected in Finland. Meanwhile in United States of America, there are certain qualifications that a teacher must have in order to work in a day care or pre-primary school. While regulations vary from state to state, most states require a high school diploma or equivalent, a valid state driver's license, a background check with no cases of child abuse or neglect, fraud, or substance charges (Momentpath, 2019).

Occasionally, teachers with more advanced degrees such as a bachelor degree (BA) or master's degree (MA) are required to reach the highest accreditation status. According to U.S. Bureau of Labour Statistics as cited in Angelov (2019), pre-primary school teachers should have the following: High school diploma or associate's degree; bachelor's degree is required to teach in public school, the degree field (specialization) should be in early childhood education, an experience working with young children and a licensure or Certification that must be a nationally recognized certification, such as the Child Development Associate (CDA) or Certified Child Care Professional (CCCP). In addition, skills like strong communication, interpersonal, organizational, and problem solving skills, as well as an understanding of classroom management techniques and the use of general office and word processing software are equally required.

The Federal Government of Nigeria (2013) in the National Policy on Education document recommended National Certificate in Education (NCE) as the minimum qualification for teachers from pre-primary school to basic 9. This is different from what is in practice in other countries of the world. Other certificates that may be required to teach in Nigerian pre-primary school settings include; Bachelor' degree in Education (B.ED), Post Graduate Diploma in Education (PGDE), Master degree in Education (M.ED), and Ph.D. with specialization in Early Childhood Education.

Nigeria Education Research and Development council (NERDC, 2007) put the minimum qualification for pre-primary school teachers and relevant staff as follows; caregivers for 0-3 years olds should have basic literacy and aged not less than 21 years, caregivers for 3-5 years old should hold NCE, or be a retired nurse, teacher, other educated retirees, or anyone with at least senior secondary school certificate, proficiency certificate and not less than 21 years old; while helpers should not be less than 21 years, preferably having primary six or basic literacy certificate (NEDRC, 2007).

NERDC (2007) further stipulated that caregiver, helper and children ratio in pre-primary classes in Nigeria should be one caregiver and one helper per 20-25 children of 0-3 years old; one caregiver and one helper for 30-35 children of 3-5 years old. Other qualities in addition to the qualification as contained in the minimum standard (NEDRC, 2007) are that caregivers and helpers should be medically fit, committed and trustworthy whether they are volunteers or otherwise. NERDC (2007) in the minimum standard also recommend that update and refresher courses for caregivers and helpers should be organised from time to time. However, studies

(Odinko, 2008, 2010) results have revealed that discrepancies exist between what the policy says and the actual practice by the service providers.

The Federal Government of Nigeria specified the minimum standard of a pre-primary school class room. According NERDC (2007), a pre-primary classroom should be of solid structures that will not collapse; generally the building should not pose danger to children, with enough space. The classroom should be up to (16 square meters) for 20-25 children, must be well ventilated with at least two doors, the design should allow for free movement and with sitting arrangements which should not be rigid like in formal school setting; but flexible, allowing for play and interaction with other children (NERDC, 2007).

The classroom flooring should also be smooth but not slippery, as stated in the article (it must be plastered with cement or local material that does not include cow dung or other dangerous components). Raffia, bamboo, wood, mats, and thick cartons (but not asbestos ceiling boards) should be used to cover corrugated iron sheet roofs and modern ceiling boards (NERDC, 2007). The classroom walls can be made of blocks, bricks, mud, raffia, or bamboo, and there should be enough open space for lighting (children should be able to see clearly in all parts of the room), wooden or iron locked doors, and corners for science, health and nutrition, drama, shopping, sleeping, and other activities (NERDC, 2007).

According to the National Centre for Learning Disabilities (NCLD, 2019) in USA, pre-primary school teaching activities can be; child-centred or teacher-centred settings. Child-centred school environment is often used to describe settings that take the children's interests into consideration when planning activities. For example in a child-centred setting, the classroom activities are based on the interests of the learners, not on pre-scheduled topics chosen by the teacher. These settings offer increased opportunities for children to choose activities to work on throughout the day, depending on their interests. Teacher-led settings are opposite of a child-centred setting. Teacher-led centred schools often mean that curriculum and supplementary activities are implemented based on schedule set and developed by the teachers in the school. This type of setting usually provides children with a structured learning environment.

NCLD (2019) posited that child-led settings operate with belief that children learn best when they are engaged and interested in learning. Child-led settings wait for each child to initiate or ask for new activities and experiences, fostering individualized learning experiences rather than group experiences. Faith-based child-led centres, describe pre-primary school with programmes that are run through faith organizations such as churches or Islamic bodies, according to the philosophies of their faith. Co-operative child-led settings often require parents and families to assist in the running of the pre-primary school.

Research Questions

1. What are pre-primary school teachers' characteristics in the North Central states of Nigeria with respect to: i. Teacher's qualification, II. Teacher's area of specialization, III. teacher's gender, iv. teacher's years of experience, v. Teacher's method of teaching?

2. What are the pre-primary school classroom characteristics in the North Central states of Nigeria with respect to: I. Classroom grouping, II. Seating arrangement, III. quality, learning iv. corners, nature of daily activities, v. Indoor materials?

Methodology

The study was carried out in pre-primary schools in Kwara, Kogi, and FCT of the six states and the Federal Capital Territory (FCT) that make up North Central geopolitical zone of Nigeria, the research covered these states because of the current security challenges in the country, particularly in the geo-political zone, secondly, because of the availability of pre-primary classes in the public schools in the State, and thirdly, the selected two states and FCT shared borders with other geo-political zones in the country there making the sample more heterogeneous and findings more generalizable.

This study employed a descriptive survey research design. The population of this study consists of all pre-primary schools pupils and teachers (public and private) in North Central, Nigeria (Kwara, Niger, Kogi, Nasarawa, Benue, Plateau state, and the FCT). The sample of this study comprises 81 teachers and pre-primary schools. Hence, the sample size was selected from the two states and the Federal Capital Territory out of the six states in North Central Nigeria. The two states (Kwara and Kogi) in North Central Nigeria have three senatorial districts, each and one senatorial district in the Federal Capital Territory, the senatorial districts were used as natural strata. Three local government areas and three area councils were sampled from each stratum (Senatorial district)

This study made use of two research instruments; Pre-primary school Teacher Characteristics Questionnaire (PTCQ), and Pre-primary school Classroom Characteristics Checklist (PCCC). PTCQ was designed by the researchers and it is comprise of A and B. Section A consists of items on personal information such as: name of school, area of specialization, qualification, number of years

of experience, classes taught, school location, school type and teacher's gender. Section B consisted of items on teacher's style of teaching and understanding of pre-primary school. This consists of 10 items. While PCCC was designed by the researchers also; it is made up of two sections. Section A consists of items on basic information such as: school location, school type number of pre-primary school classes, pre-primary school children class size, class grouping, and seating arrangements. Section B consisted of items on nature of the classroom. It consists of 15 items. The instruments were subjected to both face and content validity. The reliability of the instruments was determined through test re-test and slit half method of reliability. It was analyzed using Pearson Product Moment Correlation which yielded 0.91 and 0.94. Descriptive statistics were used to analyse the data collected for this study. Frequency count and percentages were used to describe the demographic data. Percentage and mean were used to answer the research questions. The decision rule on the mean is as follows, 3.50 to 4.00 is high, 3.00 to 3.49 is average, 2.50 to 2.99 is low and below 2.50 is very low, on four point scale.

Result

Table 1: Distribution of Respondents (Teachers) based on School Type

School Type	No. of Teachers	Percentage
Public	23	28.4%
Private	48	59.3%
Missionary and communities	10	12.3%
Total	**81**	**100%**

Table 1 data shows the distribution of respondents based on school type. 23 of the respondents, representing 28.4%, were public school teachers, while 48 of the respondents representing 59.3% were teachers in private schools; 10 of the respondents representing 12.3% were from missionary and communities schools. It is apparent that respondents from private schools were more in number than those from other categories.

Table 2: Distribution of the Respondents (Teacher) based on Gender

Gender	Frequency	Percentage
Male	20	24.7%
Female	61	75.3%
Total	**81**	**100%**

Data in table 2 shows the distribution of respondents based on gender. 20 of the respondents representing 24.7% were male, while 61 of the respondents representing 75.3% were females. It is apparent that female respondents were more than male respondents.

Table 3: Distribution of the Respondents (Teachers) based on School Location

School Location	Frequency	Percentage
Urban	39	48.1%
Rural	19	23.5%
Sub-Urban	23	28.4%
Total	**81**	**100%**

Table 3 data shows the distribution of respondents based on School Location. 39 of the respondents representing 48.1% were teachers teaching in schools located in Urban Areas, 19 of the respondents representing 23.5% were teaching in Rural Areas, while 23 of the respondents representing 28.4% were teachers teaching in schools located in Sub-Urban Areas. It is apparent that respondents whose school locations were in Urban Areas were more.

Research Question 1: What are pre-primary school teachers' characteristics in the North Central states of Nigeria with respect to teacher's area of specialization, teacher's qualification, teacher's gender, teacher's years of experience, and teacher's method of teaching?

Table 4: Pre-primary school teachers' characteristics in the North Central states of Nigeria with respect to teacher's area of specialization

Teacher Specialization	Frequency	Percentage
Early Childhood Edu.	22	27.2%
Primary Education	10	12.3%
Other Fields in Education	39	48.2%
Others	10	12.3%
Total	**81**	**100 %**

Table 4 shows the frequency on pre-primary school teachers' characteristics in the North Central states of Nigeria with respect to teacher's area of specialization. The findings revealed that 22 of the respondents representing 27.2% were Early Childhood Education specialist, 10 of the respondents representing 12.3% were Primary Education specialist, 39 the respondents representing 48.2% were in other fields in Education and 10 respondents representing 12.3% are in other area of specialization. It is apparent that teachers in other fields in Education were more in number.

Table 5: Pre-primary school teachers' characteristics in the North Central states of Nigeria with respect to teacher's qualification

Teacher's Qualification	Frequency	Percentage
SSCE	10	12.3%
NCE	36	44.1%
DEGREE	35	43.2%
Total	**81**	**100%**

Table 5 data shows the frequency on pre-primary school teachers' characteristics with respect to qualifications in the North Central states of Nigeria. The findings revealed that 10 of the respondents representing 12.3% were holders of SSCE, 35 of the respondents representing 43.2% have Degree Qualification, while 36 of the respondents representing 44.5% have NCE as their highest qualification. It is clear that respondents with NCE qualifications were more than other.

Table 5: Pre-primary school teachers' characteristics in the North Central states of Nigeria with respect to teacher's year of experience

Teacher's year experience	Frequency	Percentage
Below 3 Years	27	33.3%

3 to 5 Years	54	66.7%
Total	**81**	**100%**

Data in table 5 shows the frequency on pre-primary school teachers' characteristics with respect to years of experience in the North Central states of Nigeria. The findings revealed that 27 of the respondents representing 33.3% have below three years of experience, 54 of the respondents representing 66.7% have between three to five years of experience. This shows that respondents with 3 to 5 years of experience were more in number.

Table 6: Pre-primary school teachers' characteristics in the North Central states of Nigeria with respect to teacher's gender

Gender	Frequency	Percentage
Male	20	24.7%
Female	61	75.3%
Total	**81**	**100%**

Table 6 data shows the pre-primary school teachers' characteristics in North Central states of Nigeria with respect to teacher's gender. The findings revealed that 20 of the respondents, representing 24.7%, were male, while 61 of the respondents representing 75.3% were female. Female respondents were more than male respondents.

Table 7: Pre-primary school teachers' characteristics in the North Central states of Nigeria with respect to teacher's method of teaching

S/N	Items	Always	Sometimes	Never
1.	Play	54(66.7)	23(28.4)	4(4.9)
2.	Demonstration	34(42.0)	24(29.6)	23(28.4)
3	Memorisation	20(24.7)	41(50.6)	20(24.7)
4.	Discovery	26(32.1)	29(35.8)	26(32.1)
5.	Flipped classroom	34(42.0)	41(50.6)	6(7.4)
6.	Story telling	49(60.5)	14(17.3)	18(22.2)
7.	Rhythms	42(51.9)	35(43.2)	4(4.9)
8.	Songs	50(61.7)	24(29.6)	7(8.7)
9.	Problem solving	41(50.6)	35(43.2)	5(6.2)
10.	Role Play	42(51.9)	17(21.0)	22(27.1)
11.	Recitation	6(7.4)	58(71.6)	17(21.0)
12.	Crossword puzzle	37(45.7)	30(37.0)	14(17.3)
13.	Inquiry	10(12.3)	47(58.1)	24(29.6)
14.	Jigsaw puzzle	16(19.8)	28(34.6)	37(45.6)
15.	Flannel board	19(23.5)	46(56.8)	16(19.7)
16.	Gaming and stimulation	18(22.2)	50(61.7)	13(16.1)
17.	Field trip	39(48.1)	27(33.3)	15(18.6)
18.	Differentiated instruction	11(13.6)	31(38.3)	39(48.1)
19.	Project	39(48.1)	30(37.1)	12(14.8)
20.	Questioning	1(1.2)	61(75.3)	19(23.5)

Table 7 data shows frequency on pre-primary school teachers' characteristics with respect to teacher's in North central states of Nigeria method of teaching. The findings reveal that the respondents always made use of the following methods in teaching pre-primary school children More than 66% of the teachers indicated that they always use play method, followed by Songs, while more than 60% of the teachers indicated to always use Story telling method. Other methods used as indicated by the teachers are: demonstration, recitation, rhythms, problem solving, role play, crossword puzzle, field trip and project, memorization, flipped classroom, inquiry, flannel board, gaming and stimulation.

Research Question 2: What are pre-primary school classroom characteristics in North Central states of Nigeria, with respect to classroom grouping, seating arrangement, classroom quality, learning corners, nature of daily activities, indoor materials?

Table 8: Nature of classroom grouping in pre-primary school classroom in North Central states of Nigeria

Class Grouping	Frequency	Percentage
Teacher-Assigned Group	20	24.7%
Pupils Chosen Group	30	37.0%
Group by Age	15	18.5%
Randomized Group	16	19.8%
Total	**81**	**100 %**

Data in table 8 shows the Frequency on pre-primary school classroom characteristics in North Central states of Nigeria with respect to classroom grouping. The finding revealed the predominant classroom grouping adopted by teachers. The result indicated that 20 of the respondents representing 24.7% practice Teacher-Assigned Group, 30 of the respondents representing 37.0% practice Pupils' Choose Group while 15 of the respondents representing 18.5% used Group by Age and 16 of the respondents representing 19.8% make use of randomized grouping. The result shows that Pupils' Chosen Group is the predominant classroom grouping.

Table 9: Pre-primary school classroom characteristics in North Central states of Nigeria with respect to seating arrangement

S/N	Nature of seating arrangement	Available	Not Available
1.	Pairs	24(29.6)	57(70.4)
2.	Grid	36(44.4)	45(55.6)
3.	Group of four	34(42.0)	47(58.0)
4.	U-shapes	18(23.2)	63(77.7)
5.	Double U-shape	20(24.7)	61(75.3)
6.	Conference small/ large	21(24.9)	60(75.1)
7.	Conference layer	13(16.1)	68(83.9)
8.	Herringbone	13(16.1)	68(83.9)
9.	Rows	5(6.1)	76(93.9)
10.	Circle	28(34.6)	53(65.4)
11.	Banquet	13(16.0)	68(84.0)

Table 9 data shows pre-primary school classroom characteristics in North Central states of Nigeria with respect to seating arrangement. The result revealed the seating arrangements in pre-primary schools. It was observed that Grid is the most commonly used (44.4%), followed by Group of four (42.0%), then Circle (34.6%) seating arrangement. However, the following seating arrangements were not in wide usage in most pre-primary school classrooms in North Central states of Nigeria; Pairs, U-shapes, Double U-shape, Conference small/ large, Conference, layer, Herringbone, Rows, and Banquet. The result indicates that Grid is the most used (44.4%), followed by Group of four (42.0%) then Circle (34.6%) seating arrangement in some pre-primary school in North Central State, Nigeria.

S/N	Learning Corner	Available	Not Available
1	Nature and Science	21(25.9)	60(74.1)
2	Art	22(28.0)	59(72.0)
3	Sleeping	21(43.2)	60(74.1)
4	Literacy	35(43.2)	46(56.8)
5	Play	39(48.1)	42(51.9)
6	Shopping	28(43.3)	53(56.7)

Table 10: Pre-primary school classroom characteristics in North Central states of Nigeria with respect to learning corners
Table 10 data shows pre-primary school classroom characteristics in North Central states of Nigeria with respect to learning corners. Result revealed the learning corners available in pre-primary schools in North Central states of Nigeria. It was observed that the most available learning corners in most pre-primary school classroom in North Central states of Nigeria is Play corner (48.1), followed by Literacy (43.2%), shopping corner (43.3), Art (28.0), Nature and Science (25.9) corners.

Table 11: Pre-primary school classroom characteristics in North Central states of Nigeria with respect to indoor materials

S/N	Indoor Material	Available	Not Available
1	Sand and Water	25(39.9)	56(69.1)
2	Musical instruments	22(28.2)	59(72.8)
3	Numeracy materials	33(40.7)	48(59.3)
4	Manipulative materials	31(39.3)	50(61.7)
5	Technological materials	31(39.3)	50(61.7)
6	Building blocks	36(44.4)	45(55.6)
7	Abacus for counting	26(33.1)	55(67.9)
8	Alphabet learning materials	32(39.5)	49(60.5)
9	Story books	36(44.4)	45(55.6)

Table 11 data shows pre-primary school classroom characteristics in North Central states of Nigeria with respect to indoor materials. The result revealed the available indoor materials in pre-primary schools in North Central states of Nigeria. It was observed that the following indoor materials were not available in most pre-primary school classroom in North Central states of Nigeria; sand and water, musical instruments, numeracy materials, manipulative materials, technological materials, building blocks, abacus for counting, alphabet learning materials, and story books.

Table 12: Pre-primary school classroom characteristics in North Central States of Nigeria with respect to classroom quality

S/N	Qualities of the Classroom	Yes	No
1	Has enough space for children	49(60.5)	32(39.5)
2	Is up to 16 square meters	34(42.0)	47(58.0)
3	Is well ventilated with at least two doors	52(74.2)	29(35.8)
4	Design allows for free movement	38(46.9)	43(53.1)
5	Seating arrangements is rigid like in formal school setting	42(51.9)	39(48.1)
6	Sitting arrangement is flexible and allows for interaction with other children.	35(43.2)	46(66.8)
7	Floor is smooth but not slippery	49(60.5)	32(39.5)
8	Floor is plastered with cement	43(54.3)	38(45.7)
9	Floor is plastered with local material	31(39.3)	50(61.7)
10	Floor of the classroom is made with harmful materials	20(34.7)	61(75.3)
11	Is roof with corrugated iron sheet	39(48.1)	42(51.9)
12	Is not leaking	43(53.1)	38(46.9)
14	Roof is ceiled	47(58.0)	34(42.0)
15	Walls are cemented with blocks, bricks, mud, raffia, or bamboo.	50(61.7)	31(38.3)
16	Is well illuminated and children are able to see clearly in every part of the room	48(59.3)	33(40.7)
17	Door is wooden or iron that can be locked	46(56.8)	35(43.2)
18	Door is child friendly	43(53.1)	38(46.9)
19	Has child sized furniture	49(60.5)	32(39.5)

Table 12 data shows pre-primary school classroom characteristics in North Central states of Nigeria with respect to classroom quality. The result revealed the classroom quality of pre-primary schools in North Central states of Nigeria. It was observed that pre-primary schools in the region meet the following as recommended by the minimum standard: well ventilated with at least two doors, (74.2%), walls are cemented with either blocks, bricks, mud, raffia, or bamboo (61.7%), has enough space for children (60.5%), the floor is smooth and not slippery (60.5%), with child sized furniture (60.5%). Others are floor is plastered with local material, the roof is with corrugated iron sheet and is not leaking and roof with ceiled, is well illuminated and children are able to see clearly in every part of the room and the doors are child friendly and equip. However, the pre-primary school did not measure up to the following: centres are not up to 16 square meters, Sitting arrangement is not flexible and does not allows for interaction with other children, and the design did not allows for free movement, also Seating arrangements is rigid like in formal school setting.

Table 13: Pre-primary school classroom characteristics in North Central states of Nigeria with respect to nature of daily routine

Nature of Daily Routine	Frequency	Percentage

Subject time table	57	70.4%
Schedule of activities	7	8.6%
Mixed format	6	7.4%
No visible schedule	11	13.6%
Total	**81**	**100 %**

Table 13 data shows the pre-primary school classroom characteristics in North Central states of Nigeria with respect to nature of daily routine. The findings revealed the nature of daily activities in schools in North Central Nigeria. The result indicated that 57 schools representing 70.4% used subject time table, seven schools representing 8.6% used schedule of activities, mixed format is used by six schools representing 7.4%, while 11 schools representing 13.6% had no visible schedule. It is apparent that schools with subject time table were more in number.

Discussion

This study found among others things that only 22 of the respondents (teachers) representing 27.2% were Early Childhood education Specialist, 10 of the respondents representing 12.3% were Primary Education specialist, while 39 respondents 48.1% were in 0ther field in education and 10 respondents 12.3% were not trained to teach at any level of education, also 10 of the respondents were holders of SSCE, 35 of the respondents have degree qualification while 36 of the respondents have NCE as their highest qualification. This shows that respondents with NCE qualifications were more in number. This finding revealed that most teachers teaching at this level of education has no training in early childhood or primary education. Although FGN (2014) put the qualifications of care givers at pre-primary school as NCE holders, it also allows retired Nurses, teachers, and other educated retirees, or anyone with at least senior secondary school certificate, with proficiency certificate and not less than 21 years old to teach at this level. This decision may be as a result of shortage of personal at the introduction of this level of education in Nigeria coupled with the fact that few experts exist in the field.

This is a disservice and not a good policy for this very important level of education. This is informed by the position of Pacific (2017), Pacific (2017) posited that pre-primary school teachers need thorough knowledge and an in-depth understanding of the subjects they are teaching and should remain up-to-date with all the latest developments in those fields. The finding of this study is in line with that of Odinko, Williams and Donn (2009) who opined that none of the teachers observed, had pre-primary school education training. Paul (2018) also reported that teachers' knowledge of subject matter and teaching method all correlated significantly and positively with students' academic performance, which means that there is need for teachers at this level to be trained and have knowledge of this level of education. This finding equally corroborated the finding of Odinko (2008) that teachers teaching at pre-primary centres were not trained to teach at this level.

This study also found that 33.3% has below three years of experience, 66.7% has between three to five years of experience. This implies that most pre-primary school teachers have less than 5 years of experience. This may mean that pre-primary teachers hardly stay on the job. Meanwhile, pre-primary school teachers should have a high level of maturity when dealing with their pupils problems and managing the centre which may be as a result of experience gain on the job. Teachers experience is one of the qualities of a good pre-primary school and the teachers teaching at this level of education base on evidences from research. Ebere, Loretta, and Ngozi (2016) revealed that teachers teaching experience and qualifications influence learners achievement. Equally, Bolarinwa's (2014) investigation revealed that a positive relationship exists between teachers' characteristics (Qualification and Experience) and learners' performance level. Female pre-primary school teachers was the dominant gender in North central geo political zone of Nigeria, 20 of the respondents representing 24.7% were male, while 61 of the respondents representing 75.3% were female.

Play method was revealed as the most used method by pre-primary school teachers, followed by songs method. Other methods used by pre-primary school teachers are demonstration, storytelling, rhythms, problem solving, role play, crossword puzzle, field trip and project. However, pre-primary school teachers sometimes make use of the following methods in teaching pre-primary school children: memorization, flipped classroom, inquiry, flannel board, gaming and stimulation. This finding is slightly different from the finding of Odinko (2008), who reported that the use of lecture methods instead of play is dominant in pre-primary centres, as well as teacher-whole class interaction denominated by the teachers during instructional delivery. Teachers still deliver instruction through whole class interaction but use of play learning has improved. Also, Pupils' Chosen Group is the predominant classroom grouping in the North Central State of Nigeria.

The result also revealed that Grid is the most used seating arrangement, followed by Group of four then Circle seating arrangement in pre-primary schools in North Central States, Nigeria. However, the following seating arrangements were not in use in pre-primary school classrooms in the North Central states of Nigeria; Pairs, U-shapes, Double U-shape, Conference small/ large, Conference, layer, Herringbone, Rows, and Banquet. A good use of and variance in seating arrangement is productive in pre-primary schools, this is evident in the study conducted by Pédro, Ulrich, and Innocent (2018); the choice of seating arrangements affects interaction between and among EFL beginners in various ways. Seating arrangements, as important classroom setting events, have the potential to help prevent behaviour problems that decrease student's attention and diminish available instructional time. Evidence supports the idea that students display higher levels of appropriate behaviours during individual tasks when they are seated in rows, with disruptive students benefiting the most.

The most available learning corners in most pre-primary school classroom in North Central states of Nigeria is Play corner, followed by Literacy, then Shopping corner, others are Sleeping, Art, Nature and Science corners. Similarly, the following indoor materials were not available in most pre-primary school classroom in the North Central states of Nigeria; Sand and Water, Musical instruments, Numeracy materials, Manipulative materials, Technological materials, Building blocks, Abacus for counting, Alphabet learning materials, and Story books. Considering the quality of pre-primary classrooms, it was fund that pre-primary schools in the region meet the following classroom qualities as recommended by the minimum standard: Had enough space for children, well ventilated with at least two doors, the floor is smooth and not slippery, floors were plastered with local materials, the roofs had corrugated iron sheets and not leaking and roof with ceiled, walls were cemented with either blocks, bricks, mud, raffia, or bamboo, classrooms were well illuminated and children were able to see clearly in every part of the room. The doors were child friendly and equipped with child sized furniture. However, the pre-primary schools did not measure up to the following: centres are not up to 16 square meters, Sitting arrangement is not flexible and does not allows for interaction with other children, and the design did not allows for free movement. Also seating arrangements was rigid like in formal school setting.

This study found that 70.4% of pre-primary schools used subject time table, 8.6% used schedule of activities, and mixed format was used by 7.4% school, while 11 schools representing 13.6% had no visible schedule. It is apparent that schools with subject time table were more in number. This implies that pre-primary school daily activities in this geo-political zone were run based on subjects which is against the policy of the government as contained in the National Policy on Education (FGN,2013), with provision for Integrated Early childhood Curriculum (FGN, 2014) where it was explicitly stipulated that integrated approach was adopted for pre-primary schools in the country as against the subject base in other level education most especially in primary and secondary schools, thematic nature of learning should give room for schedule of activities (FGN, 2014). This finding supports the work of Odinko (teacher-whole class interaction); who found that teacher-whole class interaction is used in pre-primary schools which are typical of subject time table classes.

Conclusion and Recommendation

Government and other schools (private school) should make sure they employ early childhood experts in schools. More so, government should be committed to its policies for effective quality of early childhood education by establishing more early childhood departments in the Colleges of Education and Universities to accommodate more candidates who are interested in teaching children so that more early childhood specialist (teachers) can be made available.

Regular teachers training and improvement of the teachers' remuneration should be promoted. Provisions should also be put in place for re-training of unqualified teachers who are already working with children in pre-primary establishments. Also, parents and stake holders should encourage their children to study early childhood and primary education, so as to be able to provide more early childhood experts for schools across the country

Pre-primary school teachers' remuneration should be attractive to allow teachers stay on the job gain more experience and use their wealth of experience to cater for the children and toddlers at the childhood level. Teachers should use teaching methods, skills or techniques that provides more realistic and exciting experience of the subject matter and also allows pupils' to learn through experience that gives the pupils' opportunity to immerse themselves in a learning environment, while putting their acquired skills to use and building new skills.

Reference

Adkintomide, A, G. & Oluwatosin, S. A. (2011). Teacher Characteristics and Students' Choice of Teaching as a Career in Osun State: *Edo Journal of Counselling* 4(1-2). https://www.ajol.info/index.php/ejc/article/view/72729

Adu, E. T. & Ade-Ajayi, J. (2015). Teacher Variables and School Effectiveness in Ekiti State, Nigeria: *International Journal of Humanities and Social Science*, 5(7). http://www.ijhssnet.com/journals/Vol_5_No_7_July_2015/12.pdf

Allsaints. (2018). Top 5 Qualities of a Good Pre-primary school. https://www.allsaints.org/news-detail?pk=1190977

Angelov, A. (2019). Pre-primary school Teacher Qualifications: Education and Career Roadmap. https://study.com/pre-primary school_teacher_qualifications.html

Bachpan, J. (2018). Planning to start a Pre-primary school? 7 Tips for Choosing the Right Location. https://www.bachpanglobal.com/blog/planning-start-pre-primary school-7-tips-choosing-right-location/

Black, A. (1985) Desk Arrangement Effects on Pupil Classroom Behavior. *Journal of Educational Psychology, 77 (01), 101-108*

Bolarinwa, K. O. (2014). Teachers characteristics and students'performance level in senior secondary school financial accounting: *Journal of Empirical Studies* 1(2), 48-53. http://www.conscientiabeam.com/pdf-files/eco/66/JES-2014-1(2)-48-53.pdf

Broekhuizen, M. L., Mokrova, I. L., Burchinal, M. R., & Garrett-Peters, P. T. (2020). Classroom Quality at Pre-kindergarten and Kindergarten and Children's Social Skills and Behavior Problems. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4774198/

Chepkonga, M. (2017). Classroom environmental setting and provision of quality education in public pre-school centres in west pokot county, Kenya: *European Journal of Education Studies.* 3(4). https://AppData/Local/Temp/586-2243-2-PB.pdf

Christine, J. S. (2020). Effect of classroom environment on academic performance in mathematics of pre-primary school children in pioneer zone, uasin gishu county, https://pdfs.semanticscholar.org/2fc3/774b463481172b833516b842c8f7e2d8fa21.pdf

Dada, O.C., & Sulyman, H.T., (2021). Teachers' knowledge of pupil with learning disability in ilorin south local government area, kwara state: IFE PsychologIA: An International Journal 29 (2), 79-88

Edward, M. (2012). Pre-primary school. http://www.child-encyclopedia.com/pre-primary school-programs

Ejieh, M. U. C. (2006). Pre-Primary Education in Nigeria: Policy Implementation and Problems. http//:ikogretim-oinline.org.

Ekpo, C. G., Samuel, M., & Folaranmi, A. A. (2016). Appraisal of the Implementation of Early Childhood Education in Owerri Education Zone I of Imo State, Nigeria. *Journal of Research & Method in Education.* 6(2). https://www.iosrjournals.org/iosr-jrme/papers/Vol-6%20Issue-2/Version-1/N0602018085.pdf

Elif, C. E. (2010). Pre-primary school children's using of play materials creatively. https://www.sciencedirect.com/science/article/pii/S1877042810007512

Encyclopaedia of children health, (2019). Health of Pre-primary school Children. http://www.healthofchildren.com/P/Pre-primary school.html#ixzz5kWyD3enC

Encyclopaedia Social Sciences and the Law Education, (2020). Education: Terms and Concepts in pre-primary school education. https://www.encyclopedia.com/social-sciences-and-law/education/education-terms-and-concepts/pre-primary school-education

Erika, C. (2016). Today's young children are working more, but they're learning less: The New Pre-primary school Is Crushing Kids. https://www.theatlantic.com/magazine/archive/2016/01/the-new-pre-primary school-is-crushing-kids/419139/

Federal Government of Nigeria (2013). *National Policy on Education*. Yaba: NERDC.

Federal Government of Nigeria (2019). Total Primary Schools Enrolment (Public And Private) By State, Class And Gender, 2013 2014. http://education.gov.ng/nigeria-digest-of-education-statistics/

Great Schools Staff. (2016). 10 signs of a great pre-primary school: How to spot a top-notch program for your child. https://www.greatschools.org/gk/articles/10-signs-great-pre-primary school/

Günseli, Y., & Güzin, Ö. A. (2017). The effect of outdoor learning activities on the development of pre-primary school children: *South African Journal of Education* 37(2): https://www.researchgate.net/publication/317364687_The_effect_of_outdoor_learning_activities_on_the_development_of_pre-primary school_children

Ibe, E., Nworgu, L. N., & Anyaegbunam, N. J. (2016). Influence of Teachers' Characteristics on Academic Achievement of Secondary School Biology Students: *British Journal of Science;* 13(2). http://www.ajournal.co.uk/pdfs/BSvolume13(2)/BSVol.13%20(2)%20Article%203.pdf

Joseph, F. (2014). Teachers' Characteristics as Correlates of Students' Academic Performance among Secondary School Students in Saki-west Local Government Area of Oyo State: *Journal of Educational and Social Research*: DOI: 10.5901/jesr.2014.v4n6p459. https://www.researchgate.net/publication/271105299_Teachers'_Characteristics_as_Correlates_of_Students'_Academic_Performance_among_Secondary_School_Students_in_Saki-west_Local_Government_Area_of_Oyo_State

Karin, H. (2019). Why is Finnish teacher education ex-cel-lent? Teacher train-ing schools provide one ex-plan-a-tion: Teaching & studying at the University. https://www.helsinki.fi/en/news/education-news/why-is-finnish-teacher-education-excellent-teacher-training-schools-provide-one-explanation

Komendat, A., Sarah, E. (2010) Creative Classroom Designs; Creative Studies Graduate Student Master's Projects. Paper 54.

Louisa P. (2018). Material Matters in Children's Creative Learning. https://jods.mitpress.mit.edu/pub/bwp6cysy/release/1

Luanne, K. (2019). What Qualifications Are Needed to Become a Nursery Teacher? https://work.chron.com/qualifications-needed-become-nursery-teacher-6964.html

Mariette, V., Andrea, J., Sylvia, H. (2019). Early learning experiences, school entry skills and later mathematics achievement in South Africa: *South African Journal of Childhood Education.* DOI: 10.4102/sajce.v9i1.597. https://www.researchgate.net/publication/332014248_Early_learning_experiences_school_entry_skills_and_later_mathematics_achievement_in_South_Africa

McKenna, M. (2019). What to Look for in a Pre-primary school: 50 Features That Indicate High Quality. https://wehavekids.com/education/-100-Characteristics-of-a-Top-Notch-Pre-primary school

McKenna, M. (2020). 50 Features of a High Quality Pre-primary school. https://wehavekids.com/education/-100-Characteristics-of-a-Top-Notch-Pre-primary school

Moffatt, G. K. (2004). Child's Play." The Citizen http://www.mpsconsultations.com/702.htm (accessed December 11, 20040).

MomentPath. (2019). Child Care and Pre-primary school Teacher Qualifications that Make a Difference https://www.momentpath.com/owners-directors/employment/child-care-and-pre-primary school-teacher-qualifications-that-make-a-difference/

Morrow, L., Weinstein, C. (1982) Increasing Childrens Use of Literature through Program and Physical Design Changes. *The Elementary School Journal*, 83 (2), 131-137

Nafiu, T. K. (2016). Influence of early childhood education on academic achievement, moral and social behaviour of primary school pupils in kano state, Nigeria. http://kubanni.abu.edu.ng/jspui/bitstream/123456789/8208/1/INFLUENCE%20OF%20EARLY%20CHILDHOOD%20EDUCATION%2

0ON%20ACADEMIC%20ACHIEVEMENT%2C%20MORAL%20AND%20SOCIAL%20BEHAVIOUR%20OF%20PRIMARY%20SCHOOL%20PUPILS%20IN%20KANO%20STATE%2C%20NIGERIA.pdf

National Association for the Education of Young Children. (2020). What Do Children Learn in a High-Quality Pre-primary school Program? https://www.naeyc.org/our-work/families/what-do-children-learn-pre-primary school-program

National Center for Learning Disabilities. (2019). Choosing a Pre-primary school: Simple Tips for Parents. http://www.getreadytoread.org/early-learning-childhood-basics/early-childhood/choosing-a-pre-primary school-simple-tips-for-parents

National Institute for Early Education Research. (2015). High-Quality Pre-primary school: Why We Need It and What It Looks Like. http://www.readingrockets.org/article/

National Institute for Early Education Research. (2019). High-Quality Pre-primary school: Why We Need It and What It Looks Like. http://www.readingrockets.org/article/high-quality-pre-primary school-why-we-need-it-and-what-it-looks

National Institute for Early Education Research. (2020). Encyclopaedia of children health . pre-primary school. http://www.healthofchildren.com/P/Pre-primary school.html

Neil, K. (2019). Pre-primary school Teacher Requirements. https://work.chron.com/pre-primary school-teacher-requirements-6920.html

Nigeria Education Research and Development Council. (2007). National Minimum Standard for Early Child Care Centres in Nigeria. Yaba: NERDC

Obiweluozor, N. (2019). Early Childhood Education in Nigeria, Policy Implementation: Critique and a Way Forward. https://journal.lib.uoguelph.ca/index.php/ajote/article/view/2930/3590

Odiagbe, S. I. (2015). The National Minimum Standard on Early Child Care Centers (ECCC) in Nigeria and the Status of Pre-Primary Education in Uhunmwode Local Government Area of Edo State: *American Journal of Educational Research*, 3(4),399-405. http://article.scieducationalresearch.com/pdf/education-3-4-3.pdf

Odinko M., Williams, J. (2006). Language of Instruction and Interaction Patterns in Pre-Primary Classrooms in Nigeria: *The Journal of Classroom Interaction*. 41(1), 22-32. https://www.jstor.org/stable/23869756?seq=1

Odinko M.N., Arikpo O.U. (2015). Effect of Gender on Primary Five (5) Pupil's Achievement In Basic Science Using Computer-Assisted Instruction In Ibadan Oyo State, NIGERIA. *British Journal of Psychology Research* 3(4), .35-45, http://www.eajournals.org/wp-content/uploads/Effect-of-Gender-on-Primary-Five-5-Pupil---s-Achievement-In-Basic-Science-Using-Computer-Assisted-Instruction-in-Ibadan-Oyo-State-Nigeria.pdf

Odinko, M. N. (2008). Nigeria pre-school environmental characteristics: a survey study. http://ir.library.ui.edu.ng/handle/123456789/2515

Odinko, M. N. (2016). Promoting cognitive and emotional adjustment well of nigerian children: critical issues for early childhood teacher education: *JISTE*, 20(1). https://files.eric.ed.gov/fulltext/EJ1177124.pdf

Odinko, M. N., Uzoeshi, I. V. (2014). Teacher factors as predictors of nursery pupils' socio- emotional skills development. http://ir.library.ui.edu.ng/handle/123456789/2456

Odinko, M.N., Williams, J. N., Donn, G. (2009). Teacher Qualification and Instructional Delivery Modes at the Pre-primary school Level in Nigeria: *Journal of Early Childhood Teacher Education.* 30(3) https://www.tandfonline.com/doi/abs/10.1080/10901020903084306?mobileUi=0&journalCode=ujec20

Ohakamike-Obeka, N. (2016). The School Learning Environment and Students' Attitude and Achievement in English Language. www.iiste.org

Ojofeitimi, E.O., Adebayo, A. A., Fatusi, A. (2010). Influence of Family Size, Household Food Security Status, and Child Care Practices on the Nutritional Status of Under-five Children in Ile-Ife, Nigeria: *African Journal of Reproductive Health* 14(4):117-26. https://www.researchgate.net/publication/51543140_Influence_of_Family_Size_Household_Food_Security_Status_and_Child_Care_Practices_on_the_Nutritional_Status_of_Under-five_Children_in_Ile-Ife_Nigeria

Okudo, A. R., Omotuyole, C. (2013). Utilization of Locally Made Resources in Early Childhood Education to Promote Effective Learning and Communicative Competence: *Academic Journal of Interdisciplinary Studies*. 2(8). file:///C:/Users/SULYMA~1/AppData/Local/Temp/693-2765-1-PB.pdf

Olowe P., John. N & Okoroafor, N. A., (2019). Technology in Early Childhood Classrooms: Teachers' Knowledge and Availability Issues. https://www.researchgate.net/publication/331318828_Technology_in_Early_Childhood_Classrooms_Teachers%27_Knowledge_and_Availability_Issues

Onu, V.C., Williams, E. O. Agbo, O. E., & Ezeanwu, C. (2011). Integration and Innovation in Early Childhood Education in Nigeria: Implications for Quality Teacher Production:DOI: 10.21083/ajote.v1i1.1587. https://www.researchgate.net/publication/305289635_Integration_and_Innovation_in_Early_Childhood_Education_in_Nigeria_Implications_for_Quality_Teacher_Production

Onu, V. C., Oiozor, W. E., Agbo O E, & Ezeanwu C. (2010). Intergration and innovation in early childhood education in Nigeria: implication for quality teacher production. *Africa journal of teacher education* 1(1),209 221.

Osho, L. O., Aliyu, N., Okolie, O., & Onifade, O. (2014). Implementation of Early Childhood Education:A Case Study in Nigeria: *Universal Journal of Educational Research* 2(2): 119-125. https://files.eric.ed.gov/fulltext/EJ1053964.pdf

Pacific Pre-primary school. (2017). 15 Important Qualities of an Outstanding Pre-primary school Teacher. https://www.pacificpre-primary school.com/pre-primary school/15-important-qualities-of-an-outstanding-pre-primary school-teacher

Paul, E. (2018). Impact of Teacher Characteristics on Students" Academic Performance in Public Secondary Schools. https://www.researchgate.net

Pédro M E., Ulrich O. S. H., & Innocent C. D. (2018). Improving Interactions in EFL Beginner Classes: The Case of Some Secondary Schools in Littoral Region: *International Journal on Studies in English Language and Literature* 6(10). https://www.arcjournals.org/pdfs/ijsell/v6-i10/3.pdf

Raising children Network. (2020). Pre-primary school: how it works and why it's good. https://raisingchildren.net.au/pre-primary schoolers/play-learning/pre-primary school/pre-primary school-how-it-works

Salami, I. A. (2016). Nigerian Early Childhood Education Policies and Practices for Sustainability: *European Journal of Research and Reflection in Educational Sciences*: l(4) https://www.idpublications.org

Samantha, T. (2020). The Importance of Classroom Design. http://teachingonpurpose.org/journal/the-importance-of-classroom-design/

Sandra, B. (2018). Qualities of A Good Nursery School. https://www.eventsmanagementschool.com/qualities-of-a-good-nursery-school/

Sarah, M. S. (2020). Ecological Systems Theory: You and Your Environment https://explorable.com/ecological-systems-theory

Sarah, S. (2016). Importance of Play: Play-Based Instruction Withina Pre-primary school Learning Environment. https://digitalcollections.dordt.edu/cgi/viewcontent.cgi?article=1102&context=med_theses

Scott, B. (2011). Aesthetics in the Classroom Setting: http://www.communityplaythings.com/resources/articles/2011/aesthetics-in-the-classroom-setting

Seda, A., Aysegul, D., & Berrin, A. (2012). The physical environment factors in pre-primary schools in terms of environmental psychology: https://pdf.sciencedirectassets.com/277811/1-s2.0-S1877042812X0017X/1-s2.0-S1877042812015534/main.pdf?X-Amz-Security

Shri, K. M., & Badri, Y. K. (2019). Effect of Activity Based Approach on Achievement in Science of Students at Elementary Stage: https://globaljournals.org/GJHSS_Volume13/2-Effect-of-Activity-Based-Approach.pdf

Sool. (2020). Teacher education in Finland: https://www.sool.fi/in-english/the-finnish-school-system/

Sophia, A. (2017). Qualities of a Good Pre-primary school. https://www.yourcoffeebreak.co.uk/lifestyle/26338772139/qualities-good-pre-primary-school/

Stephens, T. (2013). Pre-primary school Report: https//www.childcareIntro.com

Steven, R. G. (2004). A Comparative Study of Children's Out-of-School Activities and Arithmetical Achievements: *Journal for Research in Mathematics Education*: 35(2) 117-150: https://www.jstor.org/stable/30034934

Sulyman, H.T. (2021). Influence of Homework on Pupils' Academic Performance in Ilorin East Local Government Area, Kwara State: Gender and Behaviour 19 (3), 18375-18382

Sulyman, H.T., & Daguduro, O.M. (2020). Closing pupils' achievement gap in mathematics through the use of preparatory homework in Ilorin metropolis, Kwara state Nigeria: Journal of early childhood and primary education 9 (2354-3930), 130-144

Sulyman, H.T., & Oladoye, E.O. (2022). Covid 19 pandemic era: a shift in pedagogical approach as a means of improving children learning in today's classroom: KWASU International Journal of Education (KIJE) 4 (1), 231-243

Sulyman, H.T., (2017). An Exploration into the Demographic Characteristics of Child Labourers in Ilorin Metropolis, Kwara State, Nigeria: Journal of early childhood association of nigeria (jecan) 6

Sulyman, H.T., Abubakar, A.O., & Oladoye, E.O. (2022). Effect of Hands-on Activities on Pupils Academic Performance in Basic Science in Ilorin East local Government Area of Kwara State: Journal of the department Early Childhood and Educational Foundation, niversity of Ibadan. V(4) 89-109

Teacher.org. (2019). How to Become a Pre-primary school Teacher. https://www.teacher.org/career/pre-primary school-teacher/

The Psychology Notes Headquarters. (2019). What is Bronfenbrenner's Ecological Systems Theory. https://www.psychologynoteshq.com/bronfenbrenner-ecological-theory/

United Nation International Children Emergency Fund. (2013). Education for all. https://www.unicef.org/nigeria/education

United Nations Educational, Scientific and Cultural Organisation, International Institute for Educational Planning. (2020). Parental and community involvement in education https://learningportal.iiep.unesco.org/en/issue-briefs/improve-learning/learners-and-support-structures/parental-and-community-involvement-in

Virtual Lab School. (2019). Pre-primary school Learning Environments The Environment. https://www.virtuallabschool.org/pre-primary school/learning-environments/lesson-4

Yong J. P. (2012). A Pre-primary school Teacher's Action Research Using a Combination of Hands-On Manipulatives and Computer Software to Help Pre-primary schoolers Understand Number Concepts: *journal of early childhood education research association*: 6(1),85-117