Teacher-related Factors and Learning Environment as Determinants of Pre-Primary Education Curriculum Implementation in Public Primary Schools in Southwest, Nigeria

David Monday ONOJAH
LCU/PG/001112

Being a Thesis Submitted to the Department of Arts & Social Science Education, Faculty of Arts & Education, Lead City University, Ibadan, Oyo State, Nigeria

In Partial Fulfillment of the Requirements for the Award of Doctor of Philosophy (PhD) in Educational Management

2022

Certification

This is to certify that this research work entitled "Teacher-related Factors and Learning Environment as Determinants of Pre-Primary Education Curriculum Implementation in Public Primary Schools in Southwest, Nigeria" was carried out by David Monday ONOJAH with matriculation number LCU/PG/001112 in the Department of Arts and Social Science Education, Faculty of Arts and Education, Lead City University, Ibadan, Nigeria and that this work has not been previously submitted.

Dr. A. W. Adewole **Supervisor**	**Date**
Prof. S. Ileuma **Head of Department**	**Date**

Dedication

The research work is dedicated to Almighty God, The beginning and the end.

Acknowledgement

I wish to acknowledge my citadel of learning, Lead City University, Ibadan, Nigeria for the opportunity to be taught and to conduct this research work. I also appreciate the management of my institution for granting me the permission to embark on further study and the enormous of all the staff in the School of Early Childhood, Primary and Adult Education programme, Federal Colleges of Education (Special) Oyo for their help rendered during this study.

My sincere appreciation goes to my Supervisor, Dr. Adewole, A. W. for her motherly role played during my course of study, and also to the Dean of Postgraduate School Prof A.O Oredein. Also, my appreciation goes to all my Departmental lecturers starting from the Dean of Faculty of Education Prof D.A Odeleye, Head of Department (HOD) Associate Prof E. Ileuma, Post Graduate Coordinator Dr. M. M. Ayantunji., Prof. T. P Yara, Prof. B. A. Adeyemi, Dr. M. O. Oyetade, Dr. I. K. Evbuoma, Dr. U. C. Akuche, Dr. A. Ebo, Dr. S. David, Dr. S. Obi, Dr. A. Oti, Dr. O. Killian, Dr. T. Oyedeji, Dr. O. Pitan, Dr. D. Ayeni, Dr. C. Sam-Kayode, Dr. O. Gambo, Miss. D. Awoniyi, Mr. M. O. Beckley, Mr. F. E. Adejuwon and others for their contributions and supports.

My profound gratitude goes to my family and friends for their support and encouragement all through the course of my study. Finally, for all whose names were not being mentioned in this research work, I say thank you. Even though the above mentioned institutions and persons have assisted in the process of this research work, I alone stand responsible for the errors, if any found in the work.

Abstract

Pre-primary education provides a sound basis for learning and helps to develop skills, knowledge, personal competence and confidence as well as a series of social responsibility in children but it appears that the pre-primary education curriculum is not given the necessary recognition by teachers. This study investigated Teacher-related Factors and Learning Environment as Determinants of Pre-Primary Education Curriculum Implementation in public Primary Schools in Southwest, Nigeria. Descriptive survey research design guided the study. Population consisted of school heads (8623), preschool teachers (25719) and pupils (22,718). Multistage sampling procedure was used to obtain (1406) preschool teachers and (624) pupils sample size. Frequency counts, mean, multiple regression analysis and t-test were used for data analysis. Findings revealed low level of participation of teachers in professional development ($\bar{x}$=1.601), low level of teacher motivation ($\bar{x}$=1.808), low extent to which mother tongue is being used as a medium of instruction ($\bar{x}$=1.615), low level of availability of instructional materials ($\bar{x}$=1.454) and bad condition of school physical facilities ($\bar{x}$=1.409). There was combined influence of teacher-related and learning environment on pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria ($F_{7,497}$ =3.641; R^2=.072; adjusted R^2= .038; p≤0.05). Teacher professional development (β=104, t= 3.071), teacher motivation (β= .136, t =3.534) and mother tongue instruction (β= .082, t=3.615) were relatively significant at P≤0.05. There was significant difference between the academic achievement scores in Mathematics of ECE and Non – ECE (t=3.682, p≤0.05). There was significant difference between the academic achievement scores in English Studies of ECE and Non – ECE (t=3.610, p≤0.05). It was recommended that teacher professional development, teacher motivation Mother tongue instruction, instructional materials and physical facilities should be improved.

Keywords: Pre-Primary Education, Curriculum, Professional Development and Motivation.

Word Count: 283

Table of Contents **Page**

Chapter Two: Literature Review

List of Tables

List of Figures

List of Appendices

List of Acronyms

Abbreviation	Meaning
MKO	More Knowledgeable Others
ZPD	Zone of Proximal Development
ECD	Early Child Development
UBEC	Universal Basic Education Commission
CRDD	Curriculum Research and Development Division
TRCN	Teacher Registration Council of Nigeria
IECD	Integrated Early Childcare and Development
MT	Teacher Motivation
SPF	School Physical Facility
ECCE	Early Childhood Care and Education
NCCE	National Commission of Colleges of Education
UNICEF	United Nation Children's Fund
UNESCO	United Nations Educational, Scientific and Cultural Organisation
NERC	Nigerian Educational Research Council
TPD	Teacher Professional Development
MT	Mother Tongue
GRA	Government Reserved Area

UPE	Universal Primary Education
LIC	Language of the Immediate Community
ECC	Early Child Care
NPE	National Policy on Education
ECE	Early Childhood Education
EFA	Education for All
PE	Pre-Primary Education
NELDS	National Early Learning Development Standards
NERDC	Nigerian Education Research and Development Council
ECCDE	Early Childhood Care, Development and Education
CBCI	Content-Based Collaborative Inquiry
CGI	Cognitively Guided Instruction
NTI	National Teacher Institute
NPIECD	Integrated Early Childhood Development in Nigeria
ECDS	Early Childhood Development Standards for Nigeria

Chapter One

Introduction

1.1 Background to the Study

The importance of pre-primary education in creating a viable, conducive, and effective society for both the current and future generations cannot be overstated. Pre-primary educations seem to be responsible for providing high-quality instruction and fostering the overall development of children. The stimulation, support, and encouragement children receive and the learning process they are exposed to determine the child's capacity to reach his or her potential. Early infancy is a crucial time for the brain's development so that it can process information, express emotions correctly, and speak clearly. A child's physical and mental development, as well as their personalities, morals, and emotional stability, all take shape at this time. Pre-primary education, according to research, benefits kids' subsequent social, cognitive, and practical development[1].

Pre-primary education, commonly referred to as early childhood education, aims to support and nurture all facets of young children's lives to promote holistic development. The foundation for adulthood is most heavily influenced by the early years, which span from birth to age six. Therefore, this time should be handled carefully by all parties involved. Early childhood education has been emphasized as being extremely important for kids and something that should be offered to them. Pre-primary education offers a solid foundation for learning and aids in the development of abilities, knowledge, competence, and confidence on an individual basis, as well as a number of socially responsible behaviors. As a result, every child ought to have access to a high-quality pre-primary education. Children during this period are very sensitive, interested and curious about the world around them and pre-primary education provides them with the opportunity of exploring, and to some extent, satisfying their curiosity. Early years

in life are the most consequential to the formation of intelligence, personality and social behaviour of the child. This is why modern societies show serious concern to the education of their young ones by providing all necessary support for them to accomplish their holistic development. The demand of pre-primary education has continued to increase as family situations and childcare practices change, as more women join the labour force[1]. Pre-primary education is concerned with the care and education of children just before the age of formal schooling[2]. The early year's period is a critical period of rapid physical, cognitive and physiosocial development of the child. The quality of intensity of care, nutrition and stimulation a child received during this period determines, to a large extent, the overall development of the child[3]. Hence, Nigeria as country cannot be left out in providing all essential facilities for children at preschool age.

A remarkable achievement was recorded in the history of Nigeria educational system in 2004 when the Federal Government made preschool education available for Nigeria children. This led to the Establishment of one-year preschool section in the existing public primary schools. This development shows an important turnaround in the history of basic education in the country because prior to that year, the preschool education was left to the discretion of private individuals and institutions[4]. The recognition accorded to preschool education might not be unconnected with the realization of the benefits associated with this level of education. All over the world, Early Child Development (ECD) has been recognized as being associated with adult health, productivity, social cohesion and wellbeing generally. Research in childhood development in developing countries revealed that 219 million children under the ages of five globally are unlikely to reach their full potentials[5]. This is because their development has been stunted by stress, lack of early stimulation and poor nutrition.

Failure of these children to reach their full potentials can harm their opportunities in the future, and in turn, ultimately impact on national growth and development.

Meanwhile, research has revealed that the loss of individual potential can turn into an unhealthy and ill-equipped workforce[3]. This may hamper economic growth and strain education. Also, recent evidence about pre-primary education revealed early years as a period of rapid brain development. New global report on pre-primary education showed that the period from conception to the start of school opens a critical and singular window of opportunity to shape the development of a child's brain. At this time, brain connections form at a high speed, giving shape and depth to children's cognitive, emotional and social development, influencing their capacity to learn, to solve problems and to relate to others. This shows that early moments of life offer an irreversible opportunity to build brains of the young children who will build the future. This is why adequate and good nutrition, health, protection and early stimulation, especially in the first 1000 days are imperative for brain development. Unfortunately, millions of children globally are deprived of the positive early life foundation for human capital. They do not have good nutrition or healthcare; they are abused or neglected neither are they provided with early stimulating environment. These deprivations can have adverse effect on children's development and can disrupt their opportunities in the future [3]. This explains why the Universal Basic Education Commission (UBEC) asserts that quality pre-primary education is delightful, yet risky period in the development of the child as the experiences gained at this stage may make or mar the child.

Furthermore, the early years are the important period of a child's life because these are the years the child experiences rapid development as earlier stated. That is why the kind of stimulation, quality of care, experiences and learning opportunities that may be offered at this period tends to affect their educational potential and their life chances

in a lasting way[5]. The importance placed on early years by the Federal Government of Nigeria has resulted in sharp interest and increase in the provision of quality pre-primary education, development of its curriculum and teacher preparation as well as the pronouncement that this level of education is compulsory for every Nigerian child before starting primary education. It has been asserted that it is impossible to have a school without a curriculum if indeed there is to be education. This is because; most of the beneficiaries of such education are likely to end up in the society where they put to use all they have learnt in the overall interest of the society[6]. Curriculum should possess certain qualities which are flexibility, visibility, susceptibility, functionalism, relevance, validity, comprehensiveness, dynamisms, responsiveness and reliability. This is because the aim of education as a means of inducting people into the society where they live and preparing them for life call for the use of curriculum that gives direction and meaning to such education. This makes curriculum appear like a thrown spanner in the works of educational process[6].

Curriculum is the why, what, how and how far of any educational enterprise. Curriculum is also the vehicle through which any educational programme can be successfully implemented. There are standards for serving good quality education. Therefore, there is need for teachers to meet those standards, especially when their role is related to curriculum implementation. However, knowledge in pre-primary education curriculum is more challenging and heavier as greater responsibility is placed on the shoulders of pre-primary educators. It also appears that despite what is planned and documented in pre-primary education curriculum, practices of teachers and events going on in the classroom settings are not being realized[5]. Nevertheless, the Curriculum Research and Development Division (CRDD) reported that pre-primary education curriculum has been enacted to meet the developmental needs of children at the

formative years and also to help children come out with tremendous potentials and experiences covering various areas of human experiences. However, it appears in their report that pre-primary education curriculum is not given the necessary recognition by preschool teachers[5]. Without doubt, the most important person in the curriculum implementation process is the teacher. With their knowledge, experiences and competencies, teachers are central to any curriculum development effort. Better teachers support better learning because they are most knowledgeable about the practice of teaching and are responsible for implementing the curriculum in the classroom[7]. Teacher-related factors' indices in this study include teacher professional development and teacher motivation. There is need for effective and efficient teacher professional development and teacher motivation for quality implementation of pre-primary education curriculum in public primary schools.

Professional development for teachers entails the acquisition of skills and knowledge for both personal and professional growth[8]. This includes a wide range of supported learning experiences, including academic credentials, formal course work, conferences, and informal learning chances in the workplace. Teacher professional development can also refer to the constant and continuing re-energization of a teacher's technique while on the job. Its primary goal is to give ongoing refreshment and critique of what is and should be occurring in the classroom[8]. Professional development for teachers is also a life-long form of education for the improvement of the teacher and the educational system.

Teachers' professional development has two main phases: initial preparation and continuing professional development. Teacher professional development may be regarded as all forms of in -service', 'continuing education', 'on-the-job-training', 'workshops', 'post-qualification courses' etc; whether formal or informal, structured or

unstructured, teacher-initiated or system-initiated[8].Meanwhile, as the focus of global corporate competitiveness turns from efficiency to innovation, and from scale expansion to value creation, management must focus on human resource strategy. As a result, teacher education must focus on instilling values in both society and educators. Furthermore, there is a critical need for teacher professional development since, in today's environment; the man who employs yesterday's formula will be out of business tomorrow[8]. This remark emphasizes the reality that we live in a rapidly changing world, and whatever information and skills teachers acquired during their pre-service training quickly become obsolete when new challenges and realities in the socio-economic and political contexts emerge[8].

Opportunities for continuing professional development must be created to re-skill the potential teacher re-motivate the interested teacher; retrain the dedicated teacher and the practicing teachers. Teacher professional development has high influence on pupils' motivation, teaching methodologies, communication skills, organization of content and planning of lessons and very high influence on pupils' participation during lessons, teacher confidence and knowledge of subject matter. It is undeniable that high-quality professional development is a necessary component of any successful educational program[8]. As a result, the ultimate goal of teacher professional development is to foster effective teaching that results in learning improvements for all preschoolers. Studies have demonstrated that a country cannot hope for a high-quality education system if its schools are staffed by second-rate teachers, because teacher quality is largely determined by the quality of training they receive before entering the profession (pre-service) and while on the job (in-service)[8]. The success of any educational venture is thus thought to be dependent on the quality of instruction provided in the classrooms. Teachers' well-being is dependent on their competencies;

less competent teachers are less content with their work, less efficient, and have lower well-being; this has a direct impact on the teaching process and its outcomes in students. Teachers with specialized training, expertise, and abilities in early childhood and language education are more likely to engage in warm, pleasant relationships with students, provide richer language experiences, and establish higher-quality learning environments[8].

Early childhood field is a place where professional development practice and craft knowledge require a larger and firmer platform of theoretical and empirical expertise, in order to guide planning and implementation of the ambitious kinds of school and child care reforms that are demanded in the current era of services expansion and accountability[9]. However, the unavailability of professional or qualified caregivers to implement the programme coupled with the fact that most preschool teachers are not fully informed of the holistic approach to the care, growth, survival, nutrition and education of the pre-primary school child makes it an issue for grave concern[9]. Also of concern is the training of head teachers and caregivers in public primary schools who are expected to have received training for proper implementation strategies of the curriculum and to equip them to cope with the demanding and restless nature of this category of children[9]. A professional teacher is one that has passed the Teacher Registration Council of Nigeria (TRCN) professional qualifying examination. A qualified and professional teacher is more likely to change the life of the pupils by planting the seed of aspiration, noble goals and dreams in the heart of pupils and be a role model and show the way to greatness to pupils. A qualified and professional teacher is more likely to resolve and prevent conflict in the classroom, thus, bring about a better classroom environment conducive for teaching and learning, leading to better academic performance[9]. However, a study of the Epe Local Government Area of Lagos State's

Implementation Strategies for Integrated Early Childcare and Development (IECD) revealed that head teachers and caregivers have not been properly and adequately trained on the implementation of the curriculum and most of the available care givers are not even qualified to be so called as they are improvised from clerks, cleaners, to mention but few[9].

Teacher motivation is another variable considered under teacher-related factors that may seem to influence the implementation of quality pre-primary education curriculum. Teacher motivation has been an important point of concern for educationists, education planners and school managers. Motivation may be described as a force that navigates the behaviours of human towards the achievement of set goals or/and objectives[10]. Motivation is simply what encourages or drives employees to do what the employee does. Motivation is the inner force or urge that drives, directs, or influences an individual to attain organizational objectives[13]. Motivating an employee can be in the firm of bonus, rewards, and some other incentives etc. only for the reason to attain the organizational objectives[10]. It is what mentioning that, without employee, nothing can be done in an organization. Teacher motivation such as employee motivation is a process whereby an organization has the willingness to meet the needs of the employees[10]. Individual needs can be in form of survival, safety, social, esteem and self-actualization. Meeting these needs will lead the individual to perform better in their career. Some employees due to the existence of stereotypes and prejudices feel less important for the organization; therefore, their working capacity is reduced. There is quite a number of evidence to show that in the midst of competitive labor market, retaining a productive employee is a huge task as the hunt is always there to find and snatch from one organization to the other[10].

Teacher motivation (MT) has direct bearing on pupil's motivation and pupil's drive to excel. Teacher motivation is a major driving force for educational reforms. Motivated teachers are more likely to work for educational reforms as well as for their own satisfaction and fulfillment[10]. The pre-primary school systems run smoothly and efficiently if they have preschool teachers that are motivated. Teacher motivation has become an important issue given their responsibility to impart knowledge and skills to learners and this should start with preschool teachers because the sector is aimed at caring and nourishing all dimensions of life of young children to enhance holistic development. The early years are important in laying firm foundation for adulthood; therefore it is of great importance that all the stakeholders should treat this without any contempt[11].

Learning environment is another factor that may determine the implementation of pre-primary education curriculum. This is because learning environment can serve as a tool for influencing behaviour and as an aid to the preschool teacher in the management tasks. That is the more reason why pupils learn better in a well-managed classroom environment while various studies show conducive learning environment can have effect on both the attitudes and achievement of pupils. Positive learning environment is relevant for pupils to achieve their educational goals and teachers to meet their instructional objectives as indicated that the school physical facilities and other elements are the determinant factors in the attainment of educational goals. Hence, the quality of education that preschool children receive bears direct relevance to the availability or lack of physical facilities and overall atmosphere in which learning takes place. The school facilities consist of all types of buildings for academic and non-academic activities, areas for sports and games, landscape, farms and gardens. Others include furniture and toilet facilities and packing lot, security, transportation, ICT,

cleaning materials, food storage facilities and social facilities for the physically challenged persons[12]. School learning environment is of paramount importance to promote quality teaching and learning process. Thus, mother tongue instruction, instructional materials, and school physical facilities are included in the indices under learning environment as a determinant of pre-primary education curriculum implementation in public schools in this study.

Mother tongue is the first language one learns as a baby, the language one grows up knowing, which is also known as the native language[13]. A child first comprehends what is around them through the language they hear their mother communicating in from before they are born and thought their lives[13]. Mother tongue is appreciated due to numerous reasons. Mother tongue is central in framing the thinking and emotions of individuals. Learning in school highlights with the use of mother tongue. Mother tongue is a influential tool in advancing the learning in people[13]. The importance of mother tongue is studied because when children develop their mother tongue, they are simultaneously fostering a whole host of other essential skills, such as critical thinking and literacy skills[13].There are two ways in which mother-tongue instruction could be helpful in learning other subjects. First, mother tongue could be used directly for teaching mathematics or science, for example. Using a familiar grammatical structure and vocabulary likely would enhance student understanding of new material. Incorporating mother-tongue instruction into courses often taught in a second or third language could be particularly useful where pupils' knowledge of the language of instruction is very low[14]. Second, skills learned in mother-tongue literacy classes may indirectly lead to improved outcomes in English and other language courses through the transfer of specific literacy skills across languages[14]For example, once children learn that letters have associated sounds in the mother tongue, they can apply the same

principle when learning additional languages. Scholars argue that the 'common underlying proficiency' developed while learning to read in one language is beneficial in the learning of subsequent languages[14]. The essential role of language can never be overemphasized in the learning of pupils as most acquisition of knowledge and learning of skills are realized through the aid of language[15].

In the National Policy of Education, it has been stipulated that even at pre-primary education level, the mother tongue or the language of the immediate environment should be used as a language of instruction[16]. Parents and teachers have not been favorably disposed to this issue, since they seem to believe that the ability to communicate fluently in English is one of the reasons why parents send their children to nursery schools. It has been established by scholars that education in the mother tongue is more effective and relevant to the needs of young children. Globally, it is posited that initial education in mother tongue facilitates second- or foreign-language learning[16]. The more accurate a child's knowledge is of his/her own language, the more efficient and adequate his/her translation to English (as a second language) will[16]. This was made apparent in the Ife Six-Year Primary Project. It showed positive results for teaching in mother tongue with a later effective transition to English. This study could be used to enlighten parents and teachers on the impact of mother tongue on learning[18]. One problem associated with teaching in mother tongue is that there are not sufficient books for children at this level to interact with. Majority of available books are foreign-based and expensive, making them unaffordable and not readily available to children. The few home-based books that are available are of low quality, making them unappealing and unattractive to read. There are virtually no reading materials for this age range in the children's indigenous languages[17]. It then becomes a great challenge to the government sector charged with the responsibility of book production, scholars and educators in the

area of children's literature to wake up to their responsibility so that the Nigerian child might have an enabling environment to interact with in these formative years.

Instructional material is the second variable considered under learning environment. Instructional materials play a very important role in the teaching and learning process as well as in the implementation of pre-primary education curriculum. Instructional materials enhance the memory level of the preschool children. At this time that education has spread wide and entirely, oral teaching cannot be the key to successful pedagogy; therefore, the teacher has to use instructional materials to make teaching and learning process interesting[18]. Instructional materials are tools locally made or imported that help to facilitate the teaching/learning process. The need for emphasis on the use and importance of instructional materials in any learning and teaching environment cannot be underestimated. For any learning to take place, the teacher has to make use of these materials that would enable him to teach effectively[19]. Instructional resources can be seen as those materials that aid the learner in understanding of concepts or ideas presented in a learning environment or situation. Instructional materials are those materials that are accessed in the school environment, these materials can be three dimension, two dimension or real objects and others may be electrical. Availability of instructional materials is a core determinant in the successful implementation of any curriculum. Teachers use these materials to assist and increase interest in learning. These materials are also essential since they enhance learners' participation in class activities for effective learning. Instructional materials are crucial in planning and implementing curriculum. There is a relationship between availability of instructional materials and curriculum implementation by the teachers[20].

Instructional materials are teaching and learning aids used by teachers to make the content of what they present more vivid, interesting and pragmatic to learners.

Instructional materials vary from simple and inexpensive ones, such as the chalkboard, flat pictures, text books, flash cards, counters, diagrams, worksheets, illustrations, and maps, to more complicated and expensive ones like the television, computers, movie projectors, slides and filmstrip projectors. Instructional materials are also broadly grouped into two categories printed and non-printed materials. This is to say that instructional materials are gradients in learning and the intended curriculum cannot be implemented without them[18]. Over the past years, the importance of adequate learning and teaching materials (including text books, teachers' guide and supplementary materials) to support educational development and quality upgrading has been recognized by governments among developing and developed countries. The broad categories of printed materials that are being used in classrooms include books, and supplementary reading materials. These broad categories of instructional materials have implications on early learners' performance on prerequisite skills taught in an Early Childhood Education (ECD) classroom. Research has shown that instructional materials are believed to offer variety of experiences to the lesson and thus keep monotony and boredom at bay. They, thus make learning interesting, they help shorten the explanations and make abstract concepts to be understood easily by the learners[18]. Hence, the current study is aimed at examining Instructional Materials as Determinant of Implementation of Pre-Primary Education Curriculum in Public Primary Schools in Southwest, Nigeria.

Scholars in the field of education have observed that many classrooms continue to be dominated by a single medium and this is usually the printed textbooks. This dominance prevents teachers from reaching all pupils when there are other media readily available that are more suitable for communicating particular kinds of learning materials. They maintain that the use of instructional media allows the growth of

specific learning abilities and enhance intellectual skills and motor skills[21]. The use of charts and models enables the preschool teacher to present and illustrate many physical phenomena and issues easily and at the same time, allows him to focus attention on the characteristics of objects. However, other scholars also observed that instructional materials are scarcely available and that what is obtainable are archival materials[21]. Moreover, most teachers whose training predated the recent emphasis on information technology are not even competent to operate the few available ones[21]. Meanwhile, at a time when developments in educational technology have made computers, internet facilities, video recorders, the radio and television and overhead projectors necessary tools for adequate instruction in schools, public schools in Nigeria have nothing but the ancient blackboard to work with and in most state-owned schools across the country the teachers are faced with the onerous task of molding bricks without straws[21].

School physical facility (SPF) is another variable considered under Learning Environment. School facilities are the physical and spatial enablers of teaching and learning which will increase the production of results. School facilities serve as pillars of support for effective teaching and learning. School facilities include permanent and semi-permanent structures such as machinery, laboratory equipment, the blackboard, teacher's tools and other equipment as well as consumables. Substandard school buildings frequently have unsafe drinking water, moldy environments, inadequate fire services and fire safety, inadequate ventilation, insufficient lighting, noisy classrooms, no wiring for technology, peeling paint, and crumbling plaster. The age of a school building is a strong predictor of building condition[22]. Older buildings are less likely to have features such as controlled temperatures, acceptable lighting, good acoustics, and wiring for technology that are necessary for quality learning environment. Numerous studies have concluded that pupils in substandard school buildings perform at lower

levels than pupils in newer, functional buildings. Studies have revealed that pupils in deteriorating school buildings score between five (5) to eleven (11) percentile points lower on standardized achievement tests than pupils in modern buildings, after controlling for income level. In addition, some experts believe that the negative impact of substandard school buildings may be cumulative and continue to increase the longer the pupil attends an older, deteriorating school[22].

Clean and attractive surroundings tend to make workers happy when doing their work. The converse is true that poor working conditions such as inadequate space, noise and uncomfortable surrounding would make the workers dissatisfied with their work. Good quality and standard of school depend largely on the provision, adequacy, unitization and management of educational facilities. Educational curriculum cannot be sound and well operated with poor and badly managed school facilities. From all indication, school facilities are physical resources that facilitate effective teaching and learning. They include blocks of classrooms, laboratories, workshops, libraries, equipment, consumables, electricity, water, visual and audio-visual aids, tables, desks, chairs, playground, storage space and toilets. In Nigeria, public school enrolment has continued to increase without a corresponding increase in facilities for effective teaching and learning[18]. As a result of underfunding of education in Nigeria, the government has been encouraging proper maintenance of available school facilities. School facility maintenance entails ensuring that the facilities are kept near their original state as possible. This involves keeping the school sports and football field clean, periodic renovation of the buildings, servicing the school bus and generator sets, repairs etc. for the purpose of restoring the facilities to optimum working condition[22].

Teacher related factors such as teacher professional development, teacher workload, teacher motivation and learning environment indices such as mother tongue

instruction, instructional materials and school physical facilities as earlier stated above seem to be fundamental to the implementation of pre-primary education curriculum. Research has shown that poor development during early childhood years affects key aspects of brain development. Therefore, the role of the practitioners and teachers in early childhood education is complex and teachers have to keep pace with current knowledge and teaching strategies on an ongoing basis. It is against this background that this study investigates the Teacher-related Factors and Learning Environment as Determinants of Pre-Primary Education Curriculum Implementation in Public Primary Schools in Southwest, Nigeria.

1.2 Statement of the Problem

Pre-primary education curriculum has been designed to meet the developmental needs of children at the formative years and also to help children come out with tremendous potentials and experiences covering various areas of human experiences but it appears that despite what is planned and documented in pre-primary education curriculum, effective teaching and learning are not been realized. This may be due to preschool teachers' lack of professional development, poor motivation and maybe the physical facilities, instructional materials and the language of instruction being used in the learning environment are inappropriate, which could be attributed to deficits in their level of training and qualifications. Previous studies focused on pre-primary education curriculum implementation in public primary schools. However, empirical studies on the combined influence of teacher-related factors and the learning environment on pre-primary education curriculum implementation in public primary schools seem to be scarce. It is against this background that this study investigated the teacher-related factors (teacher professional development and teacher motivation) and learning environment (mother tongue instruction, instructional materials and school physical

facilities) as determinants of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

1.3 Aim and Objectives of the Study

The aim of this study was to investigate teacher-related factors and learning environment as determinants of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria. The specific objectives are to:

i. determine the level of teachers' participation in professional development in public primary schools in Southwest, Nigeria.
ii. determine the level of teachers' motivation in public primary schools in Southwest, Nigeria.
iii. examine the extent to which mother tongue is being used as a medium of instruction in public primary schools in Southwest, Nigeria.
iv. determine the level of instructional materials in public primary schools in Southwest, Nigeria.
v. ascertain the condition of school physical facilities in public primary schools in Southwest, Nigeria.
vi. determine the significant combined influence of teacher related-factors (teacher professional development and teacher motivation) and learning environment (mother tongue instruction, instructional materials and school physical facilities) on pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.
vii. examine the significant relative influence of teacher-related factors (teacher professional development and teacher motivation) and learning environment (instructional materials and school physical facilities) on pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

viii. examine the achievement test scores in Mathematics between ECE and Non-ECE primary one pupils in public primary schools in Southwest, Nigeria.

ix. examine the achievement test scores in English Studies between ECE and Non-ECE primary one pupils in public primary schools in Southwest, Nigeria.

1.4 Research Questions

The following questions were addressed by this research:

i. What is the level of teachers' participation in professional development in public primary schools in Southwest, Nigeria?

ii. What is the level of teachers' motivation in public primary schools in Southwest, Nigeria?

iii. To what extent is mother tongue being used as a medium of instruction in public primary schools in Southwest, Nigeria?

iv. What is the level of instructional materials in public primary schools in Southwest, Nigeria?

v. What is the condition of physical facilities available in public primary schools in Southwest, Nigeria?

1.5 Hypotheses

This study tested the following hypotheses:

H_O1 There will be no significant combined influence of teacher-related factors (teacher professional development and teacher motivation) and learning environment (mother tongue instruction, instructional materials and school physical facilities) on pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria

H_O2 There will be no significant relative influence of teacher-related factors (teacher professional development and teacher motivation) and learning environment

(mother tongue instruction, instructional materials and school physical facilities) on pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

H_O3 There will be no significant difference in achievement test scores in Mathematics between ECE and Non-ECE primary one pupils in public primary schools in Southwest, Nigeria.

H_O4 There will be no significant difference in achievement test scores in English Studies between ECE and Non-ECE primary one pupils in Public Primary Schools in Southwest, Nigeria.

1.6 Scope of the Study

The purpose of this study was to examine teacher-related factors and the learning environment as determinants of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria. The respondents in this study were the preschool teachers and pupils in primary one in selected public primary schools. The study covered the extent to which teacher professional development, teacher motivation; mother tongue instruction, instructional materials and school physical facilities influence pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

1.7 Significance of the Study

The findings of this study when published are expected to provide empirical bases for better understanding the influences of teacher-related factors and learning environment on pre-primary education curriculum implementation in public primary schools. The study provided insight on better ways of improving teacher professional development, teacher motivation, mother tongue instruction, instructional materials and school facilities on pre-primary education curriculum implementation in public primary schools. The results would also help in designing ideal educational environments to minimize preschool children's poor learning outcome and advising parents, practicing teachers, early childhood practitioners and policy makers on how best to improve pre-school children's learning environment to be more child-friendly.

The results of the study will be beneficial to government in ensuring the minimum standard requirement in preschools and possible ways through which there would be improvement in the provision of materials, supervisions, and maintenance of ECCE Centres as it is expected to provide relevant framework in improving early childhood care education centres. The findings of this research will also be beneficial to the ECCE proprietors in organizing training and re-training, workshops and seminars for teachers. Some areas of inadequacies will be identified to guide proprietors improve their centres.

The results of the study may give insight to the Federal and State Ministry of Education on the provision quality and child-friendly preschool public primary schools. The Ministry of Education might use the findings and recommendations to provide in-service courses for the pre-teachers on child friendly school environment. The National Commission of Colleges of Education (NCCE) might use the study findings to adjust their training programs to incorporate administration of child friendly pre-schools. The

findings may again enlighten organizations like UNESCO, UNICEF and other NGOs who have interest in improving quality of education by providing information on school factors impacting the provision of child-friendly environment in preschools. The findings may also act as a data base for future researchers who will find the research instructive.

1.8 Limitation to the Study

Since the study was conducted in both rural and urban settings characterized by long distances from one school to another, this posed a big setback to the researcher while carrying out this study. To address this challenge, the researcher utilized alternative means of transport such as the use of motorbikes which were more reliable and flexible. The researcher had no control over the attitudes of the respondents, which could affect the validity of the responses. This limitation was therefore addressed by the use of structured oral interview questions which helped to verify some of the responses provided by the respondents. Insecurity and the unwillingness of some of the respondents to participate in the study were some of the limitations of the study. However, despite the identified limitations, this study has the potential of adding value to the existing body of knowledge on teacher-related factors and the learning environment as determinants of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

1.9 Operational Definition of Terms

Pre-primary Education: Refers to the semi-formal education given to children before entering into primary schools.

Early Childhood Education: Refers to Pre-primary and preschool education

Teacher-related Factors: Refers to teacher professional development, teacher workload and teacher motivation.

Teacher Professional Development: Refers to seminars, workshops, conferences, and in-service programmes for preschool teachers to enhance their skills.

Teacher Motivation: refer to any supportive or incentive benefits or facilitation for teacher while carrying out assigned duties for the school, such as good working condition, prompt salaries, recognition, fringe benefits, training opportunity and promotion opportunity among others.

Learning Environment: Refers to mother tongue instruction, instructional materials and school physical facilities.

Mother Tongue Instruction: Refers to the use of the child first language, local language or native language as a medium of instruction in teaching and learning in the schools.

Instructional Materials: Refersto materials or tools locally made or imported such as counters or abacus, crayons, flash cards, game puzzles, building blocks and toys among others for effective teaching and learning in preschools.

School Physical Facilities: Refers to the school premises, school buildings, toilets, libraries, tables and chairs among others available in preschools.

Curriculum: Refers to all the knowledge, skills and attitudes which are planned and implemented in pre-primary schools.

Curriculum Implementation: Refers to putting the pre-primary education curriculum in operation.

Endnotes

[1] C. J. Okusun. & R. Onyeizu, *Early Childhood and Achievement of Sustainable Development Goals in Nigeria*. **Journal of Early Childhood Association of Nigeria,** 8 (2), 2019, 450-462.

[2]. *Federal Republic of Nigeria*, *National Policy on Education*, **Lagos: NERDC Press**. 8th edition, 2014. https://issuu.com/esspin/docs/national_policy_on_education.

[3]. UNICEF Nigeria, *Early childhood care and education*, 2018. https://www.unicef.or/nigeria/children1931.html.

[4]. O. O. Arewa & D. M. Onojah, *Early Childhood Education Teachers' Perception of the Roles of Guidance and Counseling in Preschools in Benue State,* Nigerian, **Journal Educational Research and Development Issues,** 3 (1), 2017, 56-64.

[5]. R. V. Akume & A. A. Ogoda, *Early Childhood Development as a Tool for Achieving Sustainable Development Goals.* **Journal of Early Childhood Association of Nigeria,** 8 (2), 2019, 440-448.

[6]. C. O. O. Kolawole, *Language Education and the Curriculum Nexus: Pathway to Achieving Sustainable Development in Nigeria.* Ibadan: Ibadan University Press, 2016.

[7]. M. A.Alsubaie,*Curriculum Development: Teacher Involvement in Curriculum Development*, **Journal of Education and Practice** Vol.7, No.9, 2016, 106-107.

[8]. C. Omotuyole &A. R. Okudo, *Professional Development of Early Childhood and Language Education Teachers for Sustainable Development,***Journal of Research & Method in Education,** 4(2), 2014, pp.1-6.DOI: 10.9790/7388-04210106.

[9]. O. A. Viatonu; T. Usman-Abdulqadri & O. M.Dagunduro, *An Assessment of Implementation Strategies of Integrated Early Childcare and Development (IECD) in Epe Local Government Area of Lagos State,***An International Multidisciplinary Journal, Ethiopia,** Vol. 5 (4), Serial No. 21, 2011, Pp. 501-510. https://www.ajol.info/index.php/afrrev/article/view/69299.

[10]. T. A. Amatokwu, *Motivational Factors as a Correlate of Staff Job Performance in Lead City University, Ibadan in Oyo State*, A Thesis Submitted to the Department of Arts and Social Science Education, Faculty of Arts and Education, Lead City University, Ibadan, Oyo State, Nigeria in partial fulfillment of the requirement for the award of M.Ed in Educational Management, 2020.

[11]. Z. M. Owala; B. Odongo&P.A, Raburu, *Motivational Factors Influencing Teachers Job Performance in Pre-school Centres in Kenya*, **International Journal of Innovative Research & Development,** 2016, 5 (5), https://repository.maseno.ac.ke/handle/123456789/1688.

[12]. N. Adamu, *Impact of Learning Environment on the Performance of Students in Socialstudies in Junior Secondary Schools in Taraba State, Nigeria*, Master Degree

Thesis, School of Postgraduate Studies, Ahmadu Bello University, Zaria, Nigeria, 2015.

13. R. Nishanthi, *Understanding of the Importance of Mother Tongue Learning*, **International Journal of Trend in Scientific Research and Development**, 5 (1), 2020, 77-80.

14. B. Piper; S. S. Zuilkowski; D. Kwayumba & A. Oyanga, Examining the Secondary Effects of Mother-Tongue Literacy Instruction in Kenya: Impacts on Student Learning in English, Kiswahili, and Mathematics. **International Journal of Educational Development**, 59, 2018, 110-127.

15. P. G. Casil-Batang. & C. Malenab-Temporal. *Language Attitude and English Proficiency of ESL learners*. **Asian EFL Journal,** 20 (2), 2018, 186-200.

16. H. O. Ajayi, *Early Childhood Education in Nigeria: A Reality or a Mirage?***Contemporary Issues in Early Childhood** *Volume 9 (4),* 2008. http://dx.doi.org/10.2304/ciec.2008.9.4.375.

17. H. O. Ajayi, *Book Development for Under-fives*, Paper presented at 5th Pan-African Reading for All Conference, 6-10 August, 2007. University of Ghana, Legon.

18. D. M., Onojah. *Contemporary Issues in Early Childhood Education in Nigeria*. An unpublished lecture notesof Federal College of Education (Special), Oyo, 2020.

19. C. E. Igiri. & O. E. Effiong, *Impact of Instructional Materials in Teaching and Learning of Biology in Senior Secondary Schools in Yakurr LGA,***International Letters of Social and Humanistic Sciences,** 62, 27-33, 2015. https://doi.org/10.18052/www.scipress.com/ILSHS.62.27.

20. O. R. Achola; C. O. Gudo & B. Odongo, *Implications of Instructional Materials on Oral Skills among Early Childhood Learners in Central Zone, Kisumu County, Kenya,* **International J. Educ. Pol.,** Res. Rev, 3 (2), 2016, 20-28. https://kerd.ku.ac.ke/handle/123456789/676?show=full.

21. O. N. Ohakamike, *Use of Instructional Media as Determinant of Students' Achievement and Attitude in English Language*. **International Journal of English Language and Linguistics Research** Vol.8, No 2, 2020, pp. 76-90.

22. J. K. Kiptum,*Influence of School Physical Environment on Teachers' Satisfaction in Selected Public Primary Schools in Elgeyo Marakwet County, Kenya*, A thesis submitted in fulfillment of the requirements for the award of the Degree of Doctor of Philosophy in Education of Kenyatta University, 2018.

Chapter Two

Literature Review

This chapter was based on the review of related literature on the research work. It was discussed under the following sub headings:

2.1 Conceptual Review

2.1.1 Concept of Pre-Primary Education

2.1.2 Concept of Teacher Professional Development

2.1.3 Concept of Teachers' Motivation

2.1.4 Concept of Mother Tongue Instruction

2.1.5 Concept of Instructional Materials

2.1.6 Concept of School Physical Facilities

2.1.7 Concept of Curriculum

2.1.8 Concept of Curriculum Implementation

2.1.9 Concept of Pre-Primary Education Curriculum Implementation

2.1.10 History of Pre-Primary Education in Nigeria

2.1.11 National Policy on Education for Pre-primary Education Nigeria

2.1.12Significance of Pre-Primary Education in Nigeria

2.1.13 Philosophical Overview of Pre-Primary Education Curriculum

2.1.14 Global Status of Preschool Curriculum Implementation

2.1.15 Sub- Saharan overview of Pre-Primary Education Curriculum

2.1.16 Status of Pre-Primary Education Curriculum Implementation in Nigeria

2.1.17 Curriculum Content of Pre-Primary Education in Nigeria

2.1.18 Responsibilities of Pre-Primary Education Professional in Preschools

2.1.19 Factors Influencing Motivation of Teachers

2.1.20 Significance of Mother Tongue Instruction in Preschools

2.1.21 Significance of Instructional Materials in Pre-Primary Education

2.1.22 Significance of School Physical Facilities in Pre-Primary Education

2.2 Theoretical Framework

2.2.1 Maslow Theory of Human Needs

2.2.2 Bruner Instructional Theory

2.3 Review of Empirical Studies

2.3.1 Teacher Professional Development and Implementation of Pre-Primary Education Curriculum

2.3.2 Teacher Motivation and Implementation of Pre-Primary Education Curriculum

2.3.3 Mother Tongue Instruction and Implementation of Pre-Primary Education Curriculum

2.3.4Instructional Materials and Implementation of Pre-Primary Education Curriculum

2.3.5 School Physical Facilities and Implementation of Pre-Primary Education Curriculum

2.4 **Conceptual Framework**

2.5 **Summary of Literature Reviewed**

2.1 Conceptual Review

2.1.1 Concept of Pre-Primary Education

Education is one of the vital factors that help in the development of a human being. The fundamental right of every child is to learn and develop to his or her full potentials through equal access to quality education regardless of their age, gender, origin ethnicity and social background. However, pre-primary education provides the foundation of education in the pre-school education which forms an integral part of a child‘s early education, given formally or informally, in an educational institution to children ages two- five years prior to entering the primary school[1]. Education is increasingly attracting more attention all over the world as the bedrock of national development and the provision of adequate care and stimulation for the child’s development right from birth is now recognized as the best way to guarantee a good start in life. Pre-primary education is very important for the development of young children before they enter formal school[2]. It helps in cognitive development of children at the early stage of primary education and it has strong bearing on attendance and participation of children once they enter primary school. It is considered to be very important for the child as it is the first step towards entering the world of knowledge as well as a healthy and purposeful life. This education system helps children become more independent and confident as well as promoting the all-round development of children [2]. Research reports have confirmed that children from conception to six years of age undergo radical mental and physical development. In addition, those children, if given good care during early childhood, are more likely to benefit from later education and other social services, and become more productive, healthy, and law abiding citizens[2].

Education plays a vital role in this modern and competitive world as it is the backbone of a nation[3]. It is a lifelong process that starts with the mother's womb and continues till tomb. The foundation of education starts from one's very early childhood which is called pre-primary education[3]. Pre-primary education is an enjoyable education system at the preparatory level of the under 5+ children to adopt and adjust with their future education stage and to reduce the school phobia[3]. It is an initial preparation of education under 3+ or 5+ children (before their primary education starts) to make the resource for the development of the country as well as monumental for children's cognitive, mental, and other developments. Pre-primary education is usually divided into two stages: kindergarten/ nursery/playgroup for children of 3-5 years; and pre-primary or kindergarten for children aged 5-6 years. A leading concern for the development of pre-primary education was the convention on the rights of the child by the General Assembly of the UN (United Nations) in 1989. As a result of the convention, most countries realized the importance of pre-primary education and have worked for ensuring universal pre-primary education for giving children a better start of life[3].

Early Childhood is the most critical period in human development, thus comprehensive and quality pre-primary education can make a significant contribution to the physical, psychomotor, cognitive, social and emotional development of the child; including the acquisition of languages and early literacy. Children are active learners from birth, and the early years are vital to their success in school and later in life. Early childhood education might be considered to be education which takes place before compulsory education. The term refers to education in its broadest sense, including childcare and development. This includes early childhood services provided in kindergartens, nurseries, pre-school classes, child-care centers and other similar institutions. It goes beyond what some refer to as pre-school education, as it is education

in its own right, having not only the purpose of preparing children for school, but for life in the same way as all other parts of education systems contribute to this process[1].

Pre-primary education refers to the activities and experiences that are intended to effect developmental changes in children prior to their entry into elementary schools. This means that Pre-primary education should be programmes that should help children attend their potentials while in the preschool and also improve their later school performance[4]. Pre-primary education is the education given to children from birth through age six-year period in the life of a human being in terms of the learning that occur, the attitudes about learning and school that develop and the social skills that are acquired, that will enable the individual to succeed in today's world. From infancy to kindergarten, children undergo an unimaginable amount of growth and development[5]. By the time they have walked through the doors of their preschool classroom, their brain has already developed 90 percent of its capacity and pre-primary education is a significant contributor to that[6].

Pre-primary education refers to the education that gives physical health, nutritional well-being, and intellectual ability to pre-school children in a semi-formal education setting outside the home; it also helps the child's aesthetic, emotional, and social development[7]. It is the cornerstone of a child's education because it is the first and most crucial step toward accomplishing educational objectives. Pre-primary education encompasses a variety of programs targeted at enhancing children's physical, cognitive, and social development before they start primary school[7]. Preprimary education aims to physically and cognitively prepare children. This type of teaching, when received in a group setting, will pique the children's interest in education and school. Pre- Primary education is the initial stage of educational life. The education system plays a significant role in children as it forms the foundation of all subsequent stages. Through the

reception of proper kind of preprimary education, we can choose the right path in our life and advance towards a bright future[8].

Pre-primary education is a crucial area in the development and survival of children. Pre-primary education places a strong emphasis on the holistic development of the child i.e. emotional, cognitive and physical needs of the child, in order to establish a solid foundation for life-long learning and well-being [9]. Early years are crucial for the development of an individual and any support given at this stage helps to promote all round development of the child [9]. Pre-primary education is the education and care given to children between the ages of 3 to 5 years[9]. Pre-primary education has received special attention from researchers, scholars and administrators because it plays a vital role in fostering basic intellectual abilities in children, which are crucial to life success[9]. Several studies clearly demonstrate that high-quality; developmentally appropriate pre-primary education produce short and long-term positive effects on children's cognitive and social development[9].

In addition, pre-primary education has an important role in securing all children in good education, thus childhood years are important in themselves and pre-primary education can contribute to too many positive and valuable experiences which form a solid basis for future life and learning. This is supported by the 2007 edition of the Education for All (EFA) and Global Monitoring Report (GMR), which provides evidence that children's experiences in the first years create a solid foundation for subsequent learning. In addition, researchers asserted that ECE addresses issues of child poverty and educational disadvantage, as well as promoting women labour market participation [10]. In recent studies, researchers have looked at the long-term impact of ECE, and its findings reveal that 15-year-olds who had attended pre-school were, on average, a year ahead of those who had no reading literacy[10]. At present various

opportunities are provided and several avenues are opened that help in imparting knowledge to children all over the world[1]. Globally, individuals and governments invest heavily to ensure high quality and accessible early childhood education at early stage of life. The importance of the early years in a child physical, social, emotional, linguistic and cognitive development cannot be over emphasized. That, future capabilities and successful educational practices are notably linked up with both knowledge and good reasoning ability acquired in the early years of life. Research studies on capabilities of young children stages, styles of learning, social, emotional, moral developments and successful educational practices have established that children who lack knowledge and experience may not have good reasoning ability[1]. Hence education provided at early childhood specifically at nursery and primary education level, will enhance children future/later reasoning and educational needs within the formal school system which will promote their educational success and ability.

Pre-primary education is an activity that takes place before formal school, in this case, preschool is a part of early childhood, and the aim is the versatile development of child personality and also helping the child to be ready and mature for a smooth transition to school[1]. In other words, early childhood programme encompasses both qualitative education and care, which should not be separated but provided in a complementary fashion. Quality Pre-primary education will earn children a position or state of readiness to learn in a formal and non-formal setting. Disposition to learn refers to development of social skills and behaviour in formal educational environment, while readiness to learn is related to the fact that children will start schooling on a solid (footing) foundation to develop their potentials. Emphatically, Pre-primary education is seen as an evolving field of study, research and practice, which concerns itself with all aspect of early life experience, from separation of anxiety to early literacy development.

Pre-primary education sometimes called Early Childhood Care and Education or Early Childhood Care Development Education refers to the education that children obtain during early stages of life. Learning is known to be greatly influenced by extraneous factors like the nature of educational environment: instruction material conducive environment provision facilities to which the child is exposed during the first 6 years of life[1]. Early gains in school readiness due to early childhood education have been shown to have enormous positive economic and social impacts, lasting well into adulthood ranging from higher educational attainment and less chance of involvement in criminal activity, to higher status employment and higher earnings

It is a time when children need high quality personal care and learning experience. That is, for any meaningful learning or acquisition of skills and knowledge to take place, the environment should be provided with adequate instructional materials in addition to quality educators[1]. Children who received quality pre-primary education from qualified teachers are more likely to succeed in school and in life. Such children with richer literacy environment demonstrate higher level of reading, knowledge and skills at primary school level: Good early childhood education increases cognitive abilities, school achievement and improves classroom behaviour. Hence, there is the need for careful planning and effective implementation of early childhood education programme which will have positive impact on effective completion of school for the child[10]. To buttress this, scholars specified that early childhood education produces benefits that persist into early adulthood which means that children who participated in early childhood education are likely to perform better in subsequent educational, moral, and social milestone than a similar group who attended another pre-school programme[1].· The "former" group who participated in pre-primary education for one or two years will benefit in several ways viz:- Less grade repetition, lower dropout rates, improved

parent-child relationship, higher intelligence scores, higher school completion rate, improved social and emotional behaviour, increased female labour force participation, lower rates of juvenile crimes and have a lower chance to committing violent crimes[1]. These will not only benefit the child but the society as well. For effective and efficient development of a child latent abilities and forms of behaviour of positive values in the society in which the child lives, pre-primary education becomes imminent, not only to the educational development but also social interaction and good moral behaviour inclusive[10].The importance of pre-primary education in Nigeria necessitated the establishment of Early Childhood Development (ECD) in 1987 through the efforts of UNICEF and Bernard van LEER in partnership with Federal Government of Nigeria, the Nigerian Educational Research Council (NERC), private sectors and NGOs[11].

2.1.2 Concept of Teacher Professional Development

The professional development of teachers can be referred to as the process of meaningful and lifelong learning, in which teachers develop their conceptions and change their teaching practice; it is a process that involves the teacher's personal, professional and social dimension and represents the teacher's progress towards critical independent, responsible decision making and behaviour[12]. Within the framework of professional development, teachers change, improve in the professional field, as well as change, improve, and complement their pedagogical competences and behaviour, and change as a person. A teacher who is committed to continuous professional development and working with others (colleagues), is aware of the connection between one's own development and the development of students and sees its role also outside the class: it builds the connection with people in the local community and society as a whole, with management bodies and researchers[12]. A teacher's professional identity is composed of three factors; such as the subject they teach; their relationship with pupils,

and their role or role conception. The latter is built in relation to the object and the relation with pupils and therefore cannot be considered independently of the other two factors[12]. The interpretations of teachers' roles refer to teachers' tasks, their social position, status, or the status, image, and expectations of other people (especially pupils and parents)[12].

Teacher professional development has been defined as a life-long process of growth which involves collaborative and/or autonomous learning teachers are engaged in the process and they actively reflect on their practices[13]. Professional development is defined as structured professional learning that results in changes in teacher practices and improvements in student learning outcomes[14].Professional learning can also be referred to as a product of both externally provided and job-embedded activities that increase teachers' knowledge and help them change their instructional practice in ways that support student learning[14]. Thus, formal professional development represents a subset of the range of experiences that may result in professional learning[14].

Therefore, developing the teacher workforce, including training teachers in ways that improve their pedagogical approaches, is one of the most effective ways to increase learners' learning[15].Teacher professional development (TPD) programs describe a broad array of approaches to improving teaching practice, and evaluations of such programs often benchmark success based on whether or not programs improve student learning outcomes. In an effort to understand pathways of change, some evaluation studies also examine changes at the classroom level that may underlie improvements in student outcomes[16]. Both student and classroom-level outcomes are generally measured only during the period in which a program is implemented. In sub-Saharan African countries, where resources are often very limited and absolute learning levels are comparatively low understanding the long-term impacts of teacher professional development

interventions on teaching practice is of great value[17].As teachers are the key driver of student learning outcomes, it is important to understand whether investments in teacher professional development programs will have lasting gains, or whether more frequent and ongoing training is needed to truly transform teaching practice, a particularly in low-resource contexts[15].

Professional development consists of all natural learning experiences and those conscious and planned activities which are intended to be of direct or indirect benefit to the individual, group or school, which contribute, through these, to the quality of education in the classroom[18]. Professional development is the process by which, alone and with others, teachers review, renew and extend their commitment as change agents to the moral purpose of teaching; and by which they acquire and develop critically the knowledge, skills and emotional intelligence essential to good professional thinking, planning and practice with children, young people and colleagues throughout each phase of their teaching lives[18]. Professional development as a broad range of activities designed to contribute to the learning of teachers who have completed their initial training[13]. In light of the previous definitions, we use the term professional development here to refer to all types of professional learning undertaken by in-service preschool teachers beyond the point of initial formal teacher preparation.

Teacher professional development could be conceived as an essential mechanism for enhancing teachers' knowledge and instructional practices through carefully designed programs[19].Teacher professional development refers to the process through which teachers learn, learn how to learn, and transform their knowledge, competences, and skills into practice, with a view of enhancing students' achievement of learning outcomes[20]. Other scholars perceive professional development for teachers as a key vehicle through which teaching is improved, hence improving student

achievement[20]. Hence, teacher professional development entails all learning experiences which are geared towards developing teachers' knowledge, skills, competences, and other attributes in order to enable them cope with educational reforms and facilitate achievement of learning outcomes during teaching and learning.

In order to improve the implementation of pre-primary education curriculum, teachers need to be able to effectively deliver instruction. Teachers require adequate training to implement evidence based practices so that learners can receive high-quality instruction across content areas. Teacher professional development (TPD) is the means by which we train in-service teachers on current research-based methods[21]. Professional development involves all learning opportunities that enable teachers to adapt to changes in the education system and increase their effectiveness[22]. In this age when the success of the education system was evaluated with the success of the students, it was determined that the teachers had a significant effect on the success of the students[22]. The research showed that teacher professional development indirectly increases student achievement by increasing teachers' effectiveness [22]. Professional development, which covers all the processes that support the development of professional skills and knowledge, is the process of self-renewal by adapting to changing technology and living conditions throughout one's life.

The concept of professional development is referred to a systematic studies carried out in order to increase the effectiveness and skills of professionals in their jobs. Some researchers argue that the competence of people in their professions can only be increased through professional development and argued that it is possible to observe and eliminate the problems that arise from other people in the same occupational group through professional development because the quality of the work varies according to the professional development opportunities of the employee and ensures that the

employee and his / her environment are always open to new knowledge and experience[22]. Professional development has become a turning point in people's lives because it helps people discover and eliminate their missing aspects in their occupations[22]. The professional development of teachers is to constantly update their knowledge, skills, and attitudes in the subject area, instructional, managerial and personal area of the teacher[22]. The main purpose of the professional development of teachers is to increase the effectiveness in the classroom[22]. This feature is one of the most important features that distinguish professional development from the professional development of other professionals in the teaching profession. This implies that the teacher will acquire a natural teaching ability by developing himself/herself professionally and can create an education system in all activities in the classroom. Games, stories and collective activities will both entertain and socialize students and improve their learning processes and abilities.

Professional development must be systematically addressed, especially in the case of teachers. This is because the teacher is the person practicing. The teacher should not try new training techniques and current issues without internalizing them first[22]. If s/he does, it may not achieve the targeted efficiency at school. Furthermore, the support of lifelong learning and professional development by the educational institution in which it is located may facilitate the teacher to take steps in this regard[22]. Professional development helps the teacher to recognize his students easily, to discover their talents and tendencies, to gather information about family life, to teach the lessons and to carry out many tasks at the same time[22]. Therefore, it is essential that professional development is carried out under the influence of many disciplines[22]. It is very important for teachers to have environments where they can perform many activities for the development of both pupils and the teachers themselves. Education is a discipline in

which new methods are continuously developed and knowledge is continuously increased[23]. This situation forces teachers to stay up to date. In schools, administrators, education policies, educational materials and other physical conditions of the school should be in a structure to support professional development[22].

Professional development for teachers is defined as the sum of formal and informal learning pursued and experienced by the teacher in a compelling learning environment under conditions of complexity and dynamic change[24]. The continual learning process, in which serving teachers acquire the knowledge, abilities, and values necessary to maintain the desired spark of intellectual vitality, which will increase the quality of teaching and students' academic success, is a common foundation claim of the above definitions. Seminars, introduction courses, workshops, conferences, and symposia in educational subjects are examples of professional development methods highlighted by a scholar. Other experts agreed that in-service training, seminars, workshops, and conferences help employees' bridge the gap between what they've learned and what they're expected to do. This helps them improve their job performance as well as their academic progress at school[24.] But from the other hand, it has been claimed that proper teacher training in current methodology impacts how the student learns during instructional activities to a great extent[24]. Notwithstanding the fact that the majority of teachers have teaching credentials, many of them lack sufficient knowledge of some subjects, and as a result, they wind up teaching their students incorrect information.

Teachers in Nigeria are expected to have a thorough understanding of their subject areas in order to select acceptable and sufficient facts for lesson preparation, efficient delivery of lessons, proper monitoring and evaluation of their students' performance, delivering regular feedback on their students' performance, improvisation

of teaching materials, enough record keeping, and appropriate student discipline. Students' achievement is influenced in three ways by professional development. Professional development improves the knowledge, abilities, and motivation of teachers in several ways. Second, improved classroom teaching results from increased knowledge, skills, and drive; third, better instruction boosts student enthusiasm[24]. This meant that if one of the links was weak or lacking, the learning of the pupils could suffer. Pupils, on the other hand, will not profit from a teacher's professional development if he or she fails to adapt new concepts from professional development to classroom instruction. In other words, the impact of teacher professional development on student learning can be mediated by two factors: teachers' learning and classroom instruction[24]. Teachers' professional development is informed by the idea that in order to function well in their teaching roles, they must have access to chances for continued professional development, growth, and improvement in their chosen profession[24].

Meanwhile, it is generally accepted among teacher educators, scholars, and researchers that teacher professional development is an important component for the success of any reforms intended for an education system. All countries around the globe have forms of teacher professional development. The reason for having such initiative is that teachers face challenges resulting from changes taking place in education systems. The changes range from subject matter knowledge and pedagogical approaches to the use of technology in teaching and learning. Thus, teachers need to be developed continuously.

2.1.3 Concept of Teachers' Motivation

The word motivation comes from the word 'motive', which can be interpreted as a driving force that influences the readiness to start doing a series of activities. Motivation is also related to the level of effort made by someone to achieve a goal. Motivation is a psychological process that enhances and directs behaviour to achieve goals[25]. Motivation can also be defined as internal factors and external factors that influence and encourage someone to increase success, achieve performance or change behaviour and attitudes[25]. Motivation is the main factor in determining success. Therefore, aspects of motivation must be seen as one of the important elements that must be considered. To be motivated means being moved to do something[25]. Therefore, the concept of motivation refers to why people think and behave as they do. A scholar gives a description of a person's motive to action, which can be low level of motivation if a person takes a long time to begin or even to complete his project, and also it can be highly motivated if a person drives toward objectives, goals or target and likely those who are highly motivated is easy to fulfill and achieve their things in their lives[26]. Motivation in its broadest sense can be defined as forces acting either on or within a person to initiate behaviour[26]. Motivation it's what get you going. Motivation is what potentially makes you enjoy the job. The word motivation mostly used in psychology and it refers to the factors which move or activate the organism[26]. Actually, we recognize motivation factors when people work to achieve a certain goal, or the action taken or established to reach their goals[26].

Motivation is a process that starts with a physiological deficiency or need that activates behaviour or a drive that is aimed at a goal or incentive[27]. Motivation therefore consists of needs (deficiencies) which set up drives (motives) which help in acquiring the incentives (goals)[27]. Drives or motives are action-oriented while incentives/goals are those things which alienate a need. Motivation is what people need to perform better

and can only work if the right person with the right skills has been placed in charge of the task at hand[27]. Motivation constitutes one dimension that has received considerable attention for the purposes of understanding the individual worker and his/her working environment [27]. It is then notable that when employees are highly satisfied, the productions in the organization will always increase[27].

Motivation is said to result when the sum total of the various job facets give rise to feelings of satisfaction; and when the sum total gives rise to feelings of dissatisfaction, job dissatisfaction results[27].Improving any one of the facets leads to the direction of job satisfaction and eliminating any one of them leads to job dissatisfaction[27]. It is therefore evident that improvement of job satisfaction among workers in any organization is a linchpin of productivity. Motivation covers all the reasons which cause a person to act including the negative ones like fear along with the more positive motives such as money, promotion or recognition[27]. The source of motivation is both intrinsic and extrinsic. Intrinsic motivation occurs when people engage in an activity without external incentives. They get motivated when they can control the amount of effort they put in an activity since they know the results they will get, will not be by luck. Extrinsic motivation has to do with incentives. Incentives are external to a person and are provided by the management in order to encourage workers to perform tasks[27].

2.1.4 Concept of Mother Tongue Instruction

Mother Tongue (MT) is the language which human beings acquire from birth. It is the first language a child learns. It means that mother tongue has a central role in education that demands cognitive development[28]. Mother tongue has greater prominence than any other language in the life of every individual; it is the language that identifies with the personal or native culture, and it is also the language in which a person conducts his everyday activities and has the greatest linguistic facilities or possesses intuitive knowledge[29]. Mother tongue is regarded as the language of a monolingual person, which meets all his linguistics needs. Mother tongue is regarded as language which has a socio-cultural obligation of serving as the instrument of nationalism in a speech community. It is believed that children acquire knowledge of their language from their family which consists of their parents, siblings and other relatives before being exposed to formal instruction in schools[29]. This they tend to internalize proficiency and basic skills of listening, speaking, reading and writing in that order. Mother tongue helps a child in his mental, moral and emotional development.

It was maintained that much of a child's future social and intellectual development hinges on milestones of mother tongue[30]. It is generally accepted that in teaching and learning processes, the child's mother tongue is of utmost importance because it categorizes a large part of child's environment where the child has name for most object, actions, ideas and attributes that are so important to him. Mother tongue is an essential instrument/medium for learning and intellectual development. This is why many school practitioners in different parts of the world advocate the use of the Mother tongue as a medium of communication and instructions in early years of learning[31]. Using mother tongue at the pre-primary will compliment children's acquisition of the language at home and this will help them further learn their environments' socio-cultural norms[32]. Scholars are of the view that mother tongue will offer the child

opportunity to explore his natural environment, develop curiosity, communicate in the native language, develop reasoning ability, and engender self confidence as practiced in many countries such as China, India, Kenya, Tanzania, Malaysia, Japan, Hong Kong to mention but few[32].

The ability to communicate clearly is a key function for all people. Therefore, the ability to communicate effectively in an individual's first or home language connects a person to his ethnic group and helps to shape a person's identity[33]. The use of mother tongue is of benefits in the sense that it will empower our future generation to respect who they are and what they stand for and also easy transfer of indigenous skills, values and traits to the coming generation. Scholars in education affirm that mother tongue promotes unity in the nation which brings about progress in the educational system[33]. Mother tongue makes us to appreciate our culture and other peoples' cultures as well as promoting easy communication and friendliness among Nigerians which brings co-operation[33]. Mother tongue increases our knowledge by studying other peoples' beliefs, custom, culture and traditions, encourages mutual understanding and also erases tribalism in our country. Literature also confirms the significance of mother tongue in the child's life and growth viz: "Mother tongue provides the concepts of substance on which the child builds new thoughts. Mother tongue is the language through which the child, early in life, learns to organize his environment, and relate himself to it. Mother tongue is closely related to the personality of the child[33].

2.1.5 Concept of Instructional Materials

Instructional Materials as the name suggests, are materials of visual, audio and audio - visual category that helps to make concepts abstracts and ideas concrete in the teaching/learning process[34]. They are also materials which the teacher uses in supplementing his teachings[32]. Instructional Materials include materials used to facilitate learning for better results. Likewise, it is the use of the chalkboard, charts, models, overhead projectors, films, television and computers in teaching process [32]. Hence, it is not just the' use of tools of technology alone but a systematic, integrated organization of machines hardware and software and man, teachers etc. In order to ensure an effective teaching learning process, it is important for the teacher to be thoroughly acquainted with the teaching resources and services available to him. The components of instructional materials available to teachers and pupils are in large numbers and also vary according to the functions of each of them. Pictures (motion and still) graphics, maps, radio - recording and play back and the equipments used to get some of these utilized can be regarded as the components of Audio Visual Aids, or Instructional Aids. Examples of instructional materials are charts, maps, diagrams, comics, models, globes, slides, film strips, television, radio cassettes, video, recorders, cinema, public address system, laboratories and museums, flash Cards, flannel boards, card boards, Calendar, Computers, and to mention but few[32].

Instructional materials are essential tools in learning every subject in the school curriculum. They allow the learners to interact with words, symbols and ideas in ways that develop their abilities in reading, listening, solving, viewing, thinking, speaking, writing, using media and technology. Instructional materials are print and non-print items that are designed to impact information to pupils in the educational process[35]. Instructional materials include items such as prints, textbooks, magazines, newspapers, slides, pictures, workbooks, electronic media, among others[35]. Instructional materials

play a very important role in the teaching-learning process. The availabilities of textbook, appropriate chalkboard, Mathematics kits, Science kit, teaching guide, science guide, audio-visual aids, and overhead projector, among others are important instructional materials[35].

Instructional materials refer to those alternative channels of communication, which a classroom teacher can use to concretize a concept during teaching and learning process. Traditionally, classroom teachers have relied heavily on the 'talk-chalk' method during their teaching. But recently, instructional materials help to provide variations in the ways in which messages are sent across. In using instructional materials teachers and students do not only extend the range of sense organs we use but also extend the range of materials used for conveying the same message through the same organ[34]. For instance, in teaching a topic a teacher can manipulate real objects or use their stimulators. Instructional materials therefore constitute the media of exchange through which a message transaction is facilitated between a source and a receiver. In addition to extending the range of materials that can be used to convey the same instructional message to learners' instructional materials also facilitate the 'process' of communication. The process nature of communication implies that both the source and the receiver of a message are actively involved in a communication encounter. This implies that both the receiver and the source share and exchange ideas, feelings in any communication[34]. High quality education is realized when preschool Education is provided with school instructional resources particularly with instructional materials[36]. Instructional materials are those tools used in educational lessons, which includes active learning and assessment. Basically, any resources a teacher uses to help him teach his student is an instructional material[34]. Instructional materials are both human and

material resources that are used as instrument of impacting knowledge, skills and attitude to learners.

Instructional materials are obtained within the environment of the learners and manipulated both by the teacher and learners to meet stated planning objectives[37]. Instructional materials cover all the materials and human means, which an instructor or a teacher might use to teach and facilitate pupils in order to achieve the desired result [37]. Instructional materials may also include traditional and modern materials such as chalk boards, handouts, charts, slides, over-head protectors, real objects, videotape and other latest methods such as computer, DVDS, CD-ROMS, the Internet and interactive Video conferencing[37]. Instructional materials arc those alternative channels of communication which a classroom teacher can use to concretize a concept during teaching and learning process[37]. Traditionally, classroom teachers have relied greatly on talk-chalk method during teaching and learning. Currently, instructional materials have been introduced to serve in a variety of teaching and learning.

2.1.6 Concept of School Physical Facilities

School Physical Facilities (SPF) refers to the movable and immovable objects in schools that bring comfort to the learner. They include classrooms, libraries, offices, toilets and desks. In developed countries like the United States of America, the government has put up measures to ensure all public primary schools have all the required physical facilities, instructional materials among other variables that may lead to effective teaching-learning process[38]. Physical facilities refer to the school buildings, classrooms, library, laboratories, toilet facilities, offices and other materials and infrastructures that would likely motivate pupils towards learning. Physical facilities are germane to effective learning and academic performance of pupils[39]. Physical facilities compose a strategic factor in the operation and functioning of an organization because they determine the

excellent performance of any social organization or system including education[40]. Well sited school buildings with aesthetic conditions, laboratory and playground often contribute to improved performance in the school system.

Physical facilities play a fundamental role in improving academic achievement in the school system. Furthermore, their availability, relevance and sufficiency affect academic achievement positively[40]. On the other hand, poor school buildings and overcrowded classrooms affect academic achievement negatively[40]. Poor and inadequate facilities affect the overall performance of the institutions. Sufficient facilities promote academic achievement and strengthen the overall institutional performance. While unattractive and old school buildings; cracked classroom walls and floors; lack of toilet facilities; desks and benches; transport facility; proper security system; drinking water; stable power supply; playgrounds; teaching staff; sufficient classrooms; overcrowded classrooms; educational technology; first aids facility etc, negatively affect academic achievement of institutions[40].

School physical facilities (SPF) affect teaching and learning process. Provision of facilities with poor conditions put more hurdles in delivering and conveying education to children. Facilities of school directly influence on teacher's health and their career decisions. No doubt school facilities add positively to the process of education. The teachers' effectiveness and the pupils' achievements are directly affected by the school facilities[41]. Physical facilities influence learning environment. Noise, heat, cold, light and air quality have a bearing on students and teacher performance[41]. Facilities attribute towards academic outcomes. Scholars have categorized facilities into six main varieties; internal quality of the air, ventilation system and lighting facility, sound quality, fresh and clean water availability, quality of the school building, size of a school and size of class. A school needs better ventilation; bad ventilation hampers

student performance and capacity to learn. Good acoustics are fundamental to good academic outcomes. Good facilities produce long term positive effects on academic achievements[41].

Meanwhile, within the framework of this study, school facilities are seen in terms of adequacy of classroom resources, enough sitting places, school libraries, School laboratories, toilets, availability and nature of dispensary. Studies have shown that the quality and quantity of school input, status and process variables are the major determinants of the quality of output. This implies that the quality of facilities supplied to the school, the efficiency in the utilization of such facilities would certainly influence the quality of the outputs. So, school administration has to consider the management of school facility as a priority and should thus be actively involved in the definition of relevant facilities based on school objectives, planning and controlling the utilization and maintenances processes of facilities. This is because proper teaching learning cannot take place without adequate instruments that are fundamental in fostering conducive environments both for teachers and students in academic settings. It is part of their professional ethics that they should not divert money for procurement to another use[42]. However, some scholars in education observed that educational facilities consist of instructional resources such as audio and visual aids, graphics, printed materials, display materials and consumable materials[42]. They also include physical resources such as land, building, furniture, equipment, machinery, vehicles, electricity and water supply infrastructure. In another dimension, scholars also identified three components of educational facilities. These are school infrastructure, such as buildings and playgrounds; instructional facilities[42].

2.1.7 Concept of Curriculum

Curriculum refers to the means and materials with which students will interact for the purpose of achieving identified educational outcomes. Curriculum is an organized framework that sets out the content that children are to learn; the processes through which the curriculum are set for them; it is what evaluators do to help children to achieve these goals and the context in which teaching and learning occurs[43]. Curriculum is a Latin word that originally means 'race course'. Traditionally, the term means a list of courses but over the years, different people have different perceptions about it. For some people, curriculum has been equated with a plan for learning[43].

A scholar also brought up a list of conceptions in defining curriculum as being interpreted by different people as; a programme of study, set of subjects, a course of study, a content, that which is taught in school, a sequence of courses, the curriculum is a set of materials, a set of performance objectives, all activities that goes on in the school and or, all experiences received as a result of schooling. However, from these it can be concluded that curriculum is broadly designed as the totality of student experiences that occur in the educational process. The term often specifically refers to a planned sequence of instruction, or to a view of the student's experiences in terms of the educator's or a school's instructional goals[43].

Curriculum is a planned programme of learning opportunities aimed at achieving broad goals and related objectives adding that it could be viewed from different dimensions[43]. Firstly, it is an arrangement of materials of instruction, extending over a considerable period of time and planned for a specific group of students/pupils. Secondly, it is the interchange between students, faculty and subject matter. Lastly, it is the subject matter taught to students; - a sequence of experiences set up by the school to discipline students in a group; a means to facilitate the growth of students and the

planned engagement outcomes. Curriculum is the art and science of what is planned for and done in and outside the school for the purpose of effective teaching and learning. From these definitions, it can be concluded that curriculum is all that is planned to be taught by the teacher/facilitator to the students/learners at whatever level in and outside school. It can also be considered as all the courses planned for specific group of students/learners for a specific period[43].

2.1.8 Concepts of Curriculum Implementation

Scholars identified four areas which characterize the multi-dimensional nature of educational change namely, politics, contexts, emotions, and chaos/complexity[44]. However other scholars argued that when curriculum content is adequately implemented with the appropriate materials needed for it, a lot is achieved in the learner adding that a learner who is well grounded in appropriate skills and competences become not only effective but also competent and contented individual in his life[43]. What is to be taught and how it should be taught may be referred to as curriculum. Curriculum implementation can be viewed as part of the process, which involves determining whether the school has or has not received the recommended materials, determining whether it is being used, and assessing teachers and student attitudes and understanding in relation to the desired outcomes[43].

Curriculum implementation also involves putting curriculum to work, considering the process necessary to accomplish and predict behavioural outcomes in the learner [43]. A scholar stated that the extent to which a curriculum is implemented in the classroom is associated with the teacher involvement in the process and that one cannot assume that teacher involvement in curriculum development assures successful implementation, but it is obvious that when curriculum innovations are alien or threatening to most teachers, no matter how realistic they are in addressing issues of the

contemporary world, they often fail at implementation stage[43]. Also note that the extent to which a curriculum is implemented in the classroom is associated with the teacher involvement in the process[43]. Scholars stated that teachers, either fail to understand what the curriculum actually demands of them, or they just refuse to make a genuine commitment to ensuring its success. The best or poorest designed curriculum owes its ultimate success or failure to the quality of the teachers own planning and implementation. This provides a challenge to the curriculum worker and if the curriculum grows out of teacher experience then personality phenomenon in its implementation will be minimized[43].

Curriculum implementation is the process of putting into actual practice, what has been planned in the curriculum document [45]. Curriculum implementation can be defined as the process of putting all that have been planned as a curriculum document into practice in the classroom through the combined efforts of the teachers, learners, school administrators, parents as well as interaction with physical facilities, instructional materials psychological and social environment[46]. Curriculum implementation can be referred to as the translation of the objectives of the curriculum from paper to practice' pointing out that the process begins when the curriculum is handed over to the teacher and ends when the learners have been exposed to the learning experiences prescribed by the curriculum[43]. The activities of curriculum implementation include practical work such as experiments, interaction (student-teacher, student-student, pupil-materials) workshops, field trips, lectures, and evaluation which is normally followed by feedback. The success of any curriculum implementation is dependent on the teachers' behaviour and attitudes such as dedication, hard-work, interest, commitment and possessing the required knowledge of the subject matter. This is normally manifested through the students/learners performances[43,47].

2.1.9 Concept of Pre-Primary Education Curriculum Implementation

Etymologically, the word curriculum is derived from the Latin word "curere" which is a literal translation of race Course [48]. This metaphoric description of curriculum is in place since learners in schools or training institutions consider their modules or course programme as series of obstacles or hurdles to be cleared[48]. It was further asserted that to a very large extent how we approach the education of young children depends on what we believe children are like and how they act and behave in life[48]. Curriculum for pre-schools is structured around some underlying assumptions about the nature of children. For example, an idea that children learn actively by exploring their environment would result in a different type of pre-primary education curriculum than one based on the idea that children learn passively by being taught specific information and skills. In the same vein, a view that children are basically unruly and need strict control so that they will learn appropriately would result in a different guidance approach than the notion that children generally strive toward social acceptance from others by conforming to reasonable expectations[48].

Pre-primary education curriculum is a product of both long- range and short term planning. Many programme start with a master plan that covers a sizeable period, for instance a year, and is then filled in with details for shorter segments of time. In other words, the curriculum of the young children is a product of the interest of the children. This means that the spontaneity and flexibility are the hallmarks of planning as far as such curriculum. In either case, pre-school curriculum has to be integrally related to several prominent factors: programme philosophy, goals, objectives, and evaluation. Activities are thus evaluated on an ongoing basis, returning to the starting point; goals and objectives are reassessed and adjusted as needed, starting the cycle anew[48]. Preschool teachers as key players in young children education have crucial roles to play

in pre-primary education curriculum implementation. This may include child guidance and discipline, respecting cultural diversity, adopting the appropriate methods of teaching and learning, encouraging self-dependence and many[48].The early child curriculum was designed by the federal government and it contains all the things children are expected to learn in the centers[49]. However, preschool curriculum should have a tendency to control the standard of the learning outcome, content and process[50]. For effective implementation of curriculum, a scholar a scholar suggested that early childhood professionals to integrate social and cultural diversity into curriculum development and to localise imported curricular practices so as to ensure a good fit between the curriculum and the local context[51]. Curriculum implementation therefore, comprehensively underlines the importance of how the learning process is expected to be conducted; and also describes how the contents should be covered during the early years of preschool education[52].

2.1.10 History of Pre-Primary Education in Nigeria

Families in the pre-industrial era traditionally involved the extended family members such as grand parents, siblings, cousins, nieces, etc. in the care and sometimes early education of the child. The inculcation of social norms into children, teaching of basic etiquette and respect for elders were assigned to families, especially to parents who were perceived as the first teachers in the life of a child. Before the coming of Western education, Nigerian had their own educational practices and systems, aimed at bringing up young ones in the way of life of the people. Generally, this was done in form of indigenous education which is aimed at providing the physical, cognitive and psychosocial, moral, aesthetic, social and vocational development[49]. Right from a very early age, the child was taught informally by his parents and older siblings. The child was imbibed with facts on how to live within the norms of his society. Such knowledge

was transmitted orally. The method of instruction in the traditional system of education consisted of role-play, discovery, observation and imitation. The educational system was such that the children acquired skills, knowledge, patterns of thought and attitudes which the communities recommended for effective living. In the indigenous pre-primary education system, the mother and other older siblings were most of the times the teachers. Specifically, the mother played a great role in the intellectual, social and emotional development of the child. The traditional Nigerian woman is quite sympathetic and understanding, helping her young child to develop emotional and social stability, while learning[53].

Pre-primary education has been on from the beginning, but informally[54]. Plato a foremost Educationist came up with the idea that children should be given formal education as early as possible since knowledge could be most effectively absorbed by them at this stage. He opined the need for specially trained teachers for children. Following this, adults' perceptions of children ceased from children as miniature adults to that of separate innocent beings that need to be trained, protected by the adults around them[54]. On the other hand, Locke another notable Educationist emphasized the need to provide children with "easy and pleasant books to develop their minds rather than force them to behave as adults"[53]. To Locke, children were to be cozed into knowledge of the letters using play method, without their clear conscious effort to learn letter identification or reading.

During the early period of capitalism, new ideas about the upbringing of children emerged. Focus was on the significance of children's welfare. It became widely acknowledged that children have their own right to sustenance, community acceptance and education. John Locke's theory which holds that a child's mind starts as a blank slate accelerated the publication of children's text books that were simplified to take the

form of children's rhymes, stories and games, to leave impression on the minds of children[54]. The modern attitude to children emerged in the 19th century. This era was greeted with the publication of more child oriented books, which were more attuned to children's imagination. Later on, the concepts of childhood education as a time of fun and happiness gave birth to the production of factory-made toys, particularly dolls which delighted the girls' in particular. The development in the western world was sooner or later copied by non-western parts of the world[54]. In 1842, the Missionary established the nursery of the infant Church at Badagry which is a primary school. They kind of education introduced by the missionaries at this period were one actually aimed at propagating Christianity and getting Nigerians to abandon their traditional beliefs and practices. In effect, the idea was not to get Nigerian children educated per se, but to prepare them to imbibe the word of God[53].

Meanwhile, since the 1887 Educational Ordinance mentioned two year infant classes, one can say that the infant classes were the origin of pre-primary institution in Nigeria which can be traced to the arrival in good numbers of European traders, missionaries and colonial masters. Most of these people were of British origin. Their arrival is assumed was responsible for the origin of pre-primary education because, having left home, they needed schools for their young ones. As such, their wives in the Government Reserved Area (GRA) firstly managed the schools. There were called infant classes by the 1887 Education Ordinances and was a two year programme, while primary was seven years. The number of the Europeans living in the Government Reserved Area (GRA) was responsible for the viability and size of such schools and such schools were operated on the terms and guidelines of the most' senior staff. Later, Africans who were in the Government Reserved Area (GRA) also sent their children to such schools rather than allow them to stay lonely with their mothers in the one large

house[55]. Though the schools were likely to have started as free institutions (just gatherings) for the idle white women, they soon started to charge fees in order to reduce enrolment. This did not deter the desire as more people attained the cadres to access the fund to pay for their children[55]. With the increase in urbanization and more civil servants with the ability to pay for special training, these pre-primary schools started to move out of the Government Reserved Area (GRA). People were motivated by the neat appearance of pupils from these schools. Consequently, more people including the middle class and business men joined in sending their children to such schools. It became a symbol of affluence or social status. The number started to increase to accommodate those interested[55]. By 1970's and early eighties 1980's, labor mobility and arrival of women to labor market as well as economic boom resulted to high increase in the number of pre-primary schools, as more families decided to have their children sent to the schools, because they had better hands than the aunties and nannies. It has to be noted that, these schools usually offer primary school education in the same school[55].

The 1957 and 1995 introduction of Universal Primary Education in the Western and Eastern Region respectively, discouraged many parents in sending their children in such schools. The parents were not comfortable with the standard of teaching and instruction as well as the infrastructural materials. Again, with the introduction of the Universal Primary Education (UPE), those who could have served as nannies became students and so many parents in the towns had no option than use the nursery primary schools. The Universal Primary Education (UPE) also resulted in poor treatment of teachers and which led to unending strikes. Public schools became a sore sight. Retired teachers and civil servants took advantage and opened pre-primary schools in both urban and rural areas. The pupils in such schools were usually properly dressed. Their

appearance lured many parents to patronize them even after public schools were opened on the excuse that another strike is soon to come[55]. Significantly too, pre-primary education was mostly in the hands of private proprietors. This also meant that government hardly interfered in running of such schools. This non-interference of government in pre-primary education continued until the 1969 Curriculum Conference[53]. At the end of the conference, the committee recommended a preschool programme for toddlers and children. The nursery and kindergarten schools were to accommodate children between the ages of three and five years. It was suggested that pre-primary education programme would help to bring about a smooth transition from home to school, to prepare the child for primary education, to provide adequate care and supervision for children for working class parents. It was also recommended that pre-primary education should be in private hands[53]. The Federal Government, in her first major National Policy on Education in 1981, had a full section on pre-primary education [53]. Gradually, pre-primary institution stayed and by 1985 the number increased to about 4200 nursery primary schools and by 1992 the number increased to about 8300[55]. However, the number of preschools seems to have reasonably increased these days than in the pass.

2.1.11 National Policy on Education for Pre-Primary Education in Nigeria

Pre-primary Education is described as the education offered to children who have not yet reached the statutory age of beginning primary school as a semi-formal education arrangement, usually outside home where by young children from about the age of 3 years are exposed through play like activities in a group setting through mental, social and physical' learning suited to their developmental stages, until the mandatory age of government approved formal schooling[56]. The National Policy on Education refers to pre-primary education as the education given in an educational institution to children

between the ages of 3 to 5 years prior to their entering the primary school[53]. Pre-primary education in Nigeria is designed to help children develop their cognitive, social, emotional, perceptual, psychomotor linguistic, and creative skills. Subsequently, the National policy document articulates the objectives of early childhood education to include the following[57]:

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

ii. Prepare the child for the primary level of education

iii. Provide adequate care and supervision for the children while their parents are at work (on the farms, in the market, offices, etc.)

iv. Inculcate social norms

v. Inculcate in the child the spirit of inquiry and creativity through the exploration of nature, the environment, art, music and playing with toys, etc.

vi. Develop a sense of cooperation and team spirit.

vii. Learn good habits, especially good health habits.

viii. Teach the rudiments of numbers, letters, colours, shapes, forms etc. through play.

For effective implementation of this level of education, National policy on education articulates the government measures towards growth and development of pre-primary education to include[57]:

i. Promotion of the training of qualified pre-primary education teachers in adequate number;

ii. Provision for specialization in pre-primary education;

iii. Supervision and monitoring to control the quality of such institution through adequate regulatory guidelines;

iv. Intention to establish pre-primary education sections in existing public schools;

v. Encouragement of both community and privates' efforts in the provision of pre-primary education;

vi. Contribution to the development of suitable curriculum development of orthographies of many Nigerian languages for use by such institutions to enable the growth of mother tongue for teaching;

vii. Encouragement of the production of textbooks in Nigeria languages;

viii. That teacher-pupil ratio shall be 1:25 so that teachers' supervision will be enhanced;

ix. Ensuring that the administration of these institutions be a collective responsibility of the government, teachers and communities;

i. Ensuring that play dominates the teaching method;

x. Teacher education program be oriented to achieve the objectives.

Critique of National Policy on Education for Pre-primary Education Nigeria

The goal by the government was for the National Policy on Education's development plan in pre-primary education to be distributed effectively, but there are many flaws in the plans process and implementation as discussed in this section. One area is in provision and distribution of policy guidelines for the establishment and management of pre-primary institutions. One major problem was the federal government's decision to facilitate the objectives of pre-primary education by the granting permission for private establishments of pre-primary education in the country, but not the participation of the public schools in their establishment. Presently there are many ill-equipped, substandard pre-primary schools scattered all over the country. This is as a result of lack of supervision and inspection to ensure that standard and quality are maintained. It is assumed that with the amount of money being charged by these commercial institutions that the facilities should be of high standards, but the reverse is the case. Therefore,

there is need for the federal, state, and local governments to put measures in place to ensure standards. This is because the pre-primary level is bedrock for smooth transmission to the primary school. If the foundation is faulty it will naturally affect the superstructure. The policy ironically failed in this aspect[58].

Secondly, currently there is limited provision in teacher education programs for specialization in early childhood education. Unfortunately, significant provision is yet to be made in public or private teacher training institution in Nigeria for the production of professional teachers in Early Childhood Education. Most tertiary institutions in Nigeria run teacher education B.Ed. programs that will lead the graduate to secondary or primary school teacher in subject areas other than early childhood education. Such specialists in early childhood are few and because of low wages and job insecurity associated with the private institutions, many otherwise interested teachers cannot afford to take these positions. The government to date has not effectively addressed the lack of early childhood teacher education[58].

Thirdly, the National Policy on Education ensures that the communication medium of early childhood institutions is principally the mother tongue (MT) or language of the immediate community (LIC) and orthography and textbooks of Nigerian languages will be produced to enhance MT and LIC. Ironically, in most of pre-primary schools in Nigeria the medium of instruction is principally the English language[58].As far as mother tongue instruction is concerned, a scholar notes that the value attached to native language as regards protection, preservation, promotion of Nigerian culture, as well as its role in promoting interethnic unity that enhances human dignity and subsequently helps promote national unity and integration in the country[58].This policy supported by the Constitution of the Federal Republic of Nigeria and justified in the National Policy on Education. The use of English language for a child to the neglect of

his mother tongue has a negative influence on the child's cultural background which the policy is meant to protect. Contrary to this, most parents want their children to be immersed in English language as early as possible because of the perceived advantages and belief that knowledge of English accelerates the teaching process for children entering the primary and other levels of the educational system. But on the other hand, evidence shows that, if children are taught with their mother tongue, they learn and develop faster intellectually, cognitively, and psychologically[59]. The policy has failed in the aspect of language implementation. The question is, does it mean that the teachers teaching those children do not speak their native language? How do we promote culture when our children cannot speak their mother tongue or language of the immediate community? This question is for the policy makers to review and address.

Fourth, the NPE ensures that the main method of teaching at this level shall be through play and that the curriculum of teacher education is oriented to achieve this. As a result of the government inability to regulate and control private establishment and operation of pre-primary education in the country, some schools employed teachers who are neither trained to teach nor know how to handle or relate to children. Moreover, there is no standard curriculum to guide the activities of these teachers. Such people without teaching pedagogy cause the children to lose interest in education as they are unable to present teaching and learning experiences to children in a stimulating, sequential, and logical manner[58].

Lastly, the input of government in terms of the financial aspect in pre-primary education has been very negligible[58]. Pre-primary education is recognized by the federal government in the National Policy on Education, which stated that financing education shall be a collective responsibility of the three tiers of government, but it is found that there is no financial provision for education at the pre-primary education level. The only

time the government financed education at that level was through the Early Child Care (ECC) project of the NERDC which was founded through the collaboration of UNICEF and Federal Government of Nigeria and other international agencies prior to 2001[58].

Meanwhile, despite the criticism discussed above, there should be effective implementation strategies not just a policy on paper. If pre-primary education is to benefit from this national policy there is a need for the federal, state, and local governments to ensure that the necessary educational facilities are available in both rural and urban areas. Through the various departments of the Ministries of Education implementation of effective monitoring, supervising, and inspecting of pre-primary school facilities should be mandated. If any of the private entrepreneurs does not meet the national standards or specifications for pre-primary schools, then they should be closed down and their license revoked until the owners meet the quality and standards required to maintain effective pre-primary education[58].

The federal government in conjunction with tertiary institutions, institute of education, and colleges of education should take positive steps to produce adequate number of teachers and specialists in early childhood education. This will help in methodology and teaching curriculum of early childhood education. In addition, each state of the federation should add a nursery section in their existing publicly funded primary schools[58]. Government should ensure that pre-primary school proprietors implement the policy statement on the medium of instruction in their institutions to maintain mother tongue or language of the immediate community as the medium of instruction. To support this implementation, government should encourage and facilitate the writing of textbooks in Nigerian languages beyond the three major languages (Hausa, Igbo, and Yoruba). This will enhance the children's cultural identity development. Government should ensure that the main method of teaching in pre-primary institution

is through play and that the curriculum of teacher training colleges is oriented to achieve this[58].

2.1.12 Significance of Pre-Primary Education in Nigeria

Pre-primary education is imperative for the holistic development of a child. Pre-primary education also known as Early Childhood Education (ECE) is a foundation on which Education for All (EFA) and essential education has to be provided to the early learners[60]. It is necessary to provide pre-primary education to young kids before entering primary education[58].Pre-primary education is also significant for young children as researches show that by the age of five, children would have ninety percent develops ninety per cent of the brain. Pre-primary education in recent two decades has considered various fields, for example, formative brain science, social brain research; youth contemplates social humanities, history, and theory[60].Researchers are wholly focused on various part of youngsters' life since small children are brought into the world with the ability to comprehend their general surroundings provided that the essential condition and qualified instructors are available to them.

Pre-primary education is productive for those children who come from a low socio-economic background[60].The advantage of children who are served with early education, originating from low-salary families, their cognitive development and school status are profoundly impacted[60]. Pre-primary education, from the recent times, has taken consideration of different fields for example, "developmental psychology, cultural psychology, childhood studies, cultural anthropology, history and philosophy" and studies that revealed that kids are brought into the world with the ability to comprehend[60].Pre-primary education helps working-class parents who do not have relatives or domestic help to look after their children while they are at work. Children

who have participated in early childhood or pre-primary programs are more likely to stay in primary school and get good grades than other children, according to studies[54,58].

Taking cognizance of the importance attached to pre-primary education, the World Declaration on the Survival, Protection and Development of Children in 1990 undertook a joint commitment to make an urgent universal appeal to give every child a better future. In addition, the World Conference on Education for All (EFA) and the United Nations Convention on the Rights of the Child emphasized urgent priority to ensure access to and improve the quality of education for all children[61,62,63]. A scholar has documented eight reasons given in support of the provision of affordable, quality programmes of early childcare that are community based, and which are linked with health care and nutrition as part of an integrated approach to meeting the needs of the young child[62].These include the followings:

i. From conception to six years of age, children, according to research findings, undergo rapid mental, social and physical development to the extent that by the age of six, their brains would have developed to almost the size of an adult;

ii. The convention on the rights of the child stipulates that children have a right to live and develop to their full capacity;

iii. Moral and social values postulate that through children, societies pass on values and culture from generation to generation;

iv. Supporting the development of the child physically and mentally leads to increased enrolment, improves performance and the society generally.

v. Provision of early childcare facilities offers equal opportunities to children from both the privileged and disadvantaged homes.

vi. A programme in early childhood development should be used as an entry point for other developmental activities which will benefit the entire community;

vii. ECC (Early Child Care) projects should be linked with other developmental activities for women, nutrition, health, water and sanitation.

viii. There is a growing demand for better ways of caring for children through pre-primary education project given the advancement in science and technology which now ensures the survival of many more children, thereby increasing population growth.

The past fifteen years have witnessed worldwide recognition of the importance of investing in the early years of children's lives, with rapid expansion of Early Childhood Care and Education (ECCE) services around the world[56].When children are young, they are learning sponges. Every new experience, every word they learn, and every behavior a child adopts; is an investment in a more fruitful future. These develop into benefits for them, their families, and the society at large. Such benefits include[56]:

Socialization: Socialization with people other than the child's family helps to introduce young children to other children and support their transition into their own friendship groups. The earlier this is done, the better, as it helps children overcome shyness and gain self-confidence.

Cooperation: Young children undergoing Early Childhood Education learn how to share, cooperate, take turns and persevere within a safe learning environment. This is especially important for the first child, who may not be used to sharing with their siblings at home. While it can be a difficult lesson, it's so crucial to learn it early.

Encouraging Holistic Development: Early Childhood Education builds a strong foundation for a child's emotional, social, physical and mental development, which will prepare them for a lifetime.

Love of education and learning: Since lessons are delivered in fun and exciting ways that encourage children to be effective learners, they readily develop love for reading, learning, discovery etc., and a thirst for learning with eagerness and enthusiasm.

Respect: In a typical Early learning Centre, everything is shared and civility and manners are both taught and learned practically, thus enabling young children learn the value of respect for others despite their differences and for their society (both immediate and wider).

Teamwork: Many Early Childhood learning activities are centred on teamwork thus instilling in the children the importance of teamwork that can teach respect for the opinions of others, listening, cooperation and equality. A person who learns how to work in a team at an early age will ultimately be more socially attuned.

Confidence and Self-Esteem: Positive interactions with other children and teachers promote positive, healthy and secure view of themselves. This provides children with confidence, optimism and self-esteem which will encourage then to explore their talents, skills and interests that will allow them to approach situations and problems confidently throughout their lives.

Exposure to Diversity: Valuing difference and diversity are crucial to a child's early development. Early childhood education- serves to guide children to appreciate and accept differences in others such as race, tribe, religion etc., andbecome well- rounded contributors to society.

2.1.13 Philosophical Overview of Pre-Primary Education Curriculum

A considerable number of studies indicate that children have the potential of wholly developing either alone or interpersonally, depending on the curriculum they are exposed to. Scholars have cautioned against the tendency of separating or applying all philosophical pedagogies while implementing the curriculum[64].They advise that

appreciation of these revolutionary underpinnings would assist in understanding how best teachers and children can apply their everyday teaching and learning processes. This formed the central thesis of this research as it intended to investigate teachers' experiences and reflections on the implementation of the preschool curriculum. Pre-primary education's historical background and the conceptualization on theories of child development form the basic principles of young children's learning[65].These basic principles as perceived by the past generations were ideologies based on religious, ethnic, political and economic pressures of the times. It has been indicated that the philosophy of formalizing preschool education and its curriculum implementation can be traced from the eighteenth century[64].Other proponents of preschool education include Jean- Jacques Rousseau (1712-1778), Johann Pestalozzi (1746- 827), Friedrich Froebel (1782- 1852), John Dewey (1859- 1952) and Maria Montessori (1870- 1952). These philosophers are believed to having perceived preschool education as a child-centred pedagogical system, coupled with the significance of play and the idea of the classroom as a social community.

Lev Vygotsky, a Socio-Constructivist Psychologist, believed that human learning is a social process and suggested that play should form the basis of any curricula[60]. He also theorised that "different domains of development are influenced by human evolution (phylogenesis), development of human cultures (socio-cultural history), individual development (ontogenesis) and development which occurs during the course of a learning session or activity or very rapid change in one psychological function (micro genesis)". All these are believed to centre on the fact that children enjoy playing and as they do so they learn and develop voluntarism and experiential characteristics. This suggests that learning activities carefully infused with play would make the children more motivated to learn and to express themselves.

Vygotsky's theory suggests that play originates from appropriate and viable mental functions. This implies that as children begin to play they have already registered in their brains what they want to achieve, although they may not express that verbally[64].This explains why a child would cry to play with a certain object but upon asking them what they want to use it for they would fail to express themselves and would easily forget about it when they are given a different object. Scholars advocate for Vygotsky's Zone of Proximal Development (ZPD) and scaffolding in order to promote children's learning and teacher's professional development[64].ZPD is referred to as "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peer"[66]. This implies that any normal child has the potential to learn independently but can achieve more learning through being properly guided. That is, there is a probable difference between what the child can learn alone and when there is a teacher. This is referred to by Vygotsky as the "More Knowledgeable Other" (MKO). Scaffolding involves assisting a child to achieve certain learning process. It has also been reported that scaffolding represents all the activities that occur in the classroom that help children to learn effectively [67]. A scholar also argues that learning activities and resources provided for reinforcement of learning should be removed once the child masters a particular skill they are learning[67].

Meanwhile, the above analogy is related to Jean Piaget's Theory of Cognitive Development[64]. The theory posits that learning occurs when children interact within a specified environment and among themselves. Piaget formally trained as a Natural Scientist but developed interest in studying children's learning processes while working with Theodore Simon, the core-creator of the first intelligent test. Like Vygotsky, Piaget

emphasized on the value of play to increase learning, but added that learning occurs and increases in stages[64]. Jean Piaget refers to these learning processes as the Stages of Cognitive Development which encompass the Sensory Motor, which occurs from birth up to about two years[64]. The stage is characterized: by discovering new ideas or information and repeating it in order to master it. The second stage is the Pre-operational stage (two to seven years) in which the child expands on her knowledge through using language and memorizing activities. The third stage is the Concrete stage which occurs between the ages of seven and eleven and is characterized by logical and systematic manipulation of objects. Finally, the formal operational stage occurs from the adolescent stage up to adulthood whereby learning is characterized through the use of multiple and abstract objects[64].

Maria Montessori, who introduced Montessori preschools, believed that each child deserves fair treatment when receiving education and care in order to be a well-rounded individual[68]. Maria Montessori was an Italian Medical Doctor who was influenced by Pestalozzi. Pestalozzi believed that a teacher must have a special form of training consisting of both intellectuality and the ability to respect and sympathize with children in order to touch their hearts. While dealing with children, Montessori is said to have observed that children, who did not grow cognitively, actually needed appropriate stimulation in order to develop[69]. Studies found that mentally disturbed children's unique senses need to be nurtured in order for them to become independent learners. Montessori also believed that children should be allowed to freely explore and interact with one another and with their teachers[69].A scholar also indicates that a teachers' main role is to observe and promote a developmentally appropriate environment by guiding and providing the needed learning materials for the children[69]. This kind of learning

framework allows children to properly learn and explore concepts relevant to their potential.

2.1.14 Global Status of Pre-Primary Education Curriculum Implementation

Although preschool curriculum implementation approaches vary, they all require integrative methods of teaching[64]. Nordic countries such as Sweden have been acknowledged as the best implementers of preschool curriculum. For Example, Sweden is reported to have made home and centre-based Pre-Primary Education (PE) compulsory. Furthermore, a universal curriculum has been implemented and focuses mainly on setting the principle for whole life learning[64]. All the above international endeavors have been put in place to assist children to become well rounded and transit well into the formal teaching and learning system and into life in general. New Zealand is another European country reported to have achieved remarkable milestones in preschool curriculum development and implementation. It has successfully implemented the 'Te Whãriki' curriculum blueprint that advocates for the development of children from birth to five years from different socio-cultural and economic backgrounds. The different communities from which children come significantly influence the manner in which the curriculum should be implemented[70]. This denotes that each child's background is highly considered when planning daily teaching and learning activities. One of the local languages in New Zealand has an expression that says, "A tree comes from one seed but bears many fruits." This suggests that the community's united effort to develop children through the preschool curriculum has significantly borne fruit. Similar expressions in Africa, such as "it takes the whole village to raise a child" and "home is where life is found in all its fullness" illustrate the importance of upholding and promoting varied socio-economic activities to raise and teaching of children[64].

2.1.15 Sub-Sahara Status Pre-Primary Education Curriculum Implementation

Sub-Saharan countries like Ghana and South Africa have also successfully implemented Pre-Primary Education (PE). In South Africa, a curriculum-related policy initiative focusing primarily on the early learning needs of children from birth to four years referred to as National Early Learning Development Standards (NELDS) exists; as well as the South African National Curriculum Framework for Children from birth to four [64]. These policy documents guide teachers, parents and child care givers to develop integrated activities for the promotion of holistic development in children. On the other hand; a scholar indicates that Ghana's preschool education is guided by a standardized curriculum developed by the Ghana Education Service in collaboration with UNICEF[67]. This curriculum is used by all public preschools in Ghana. The curriculum shapes the learner's physical, emotional, spiritual, and cognitive development and provides guidelines for the various activities such as the use of play songs, games, object identification and descriptions[71].

Nigeria can benchmark from New Zealand, Sweden, Ghana and South Africa to improve the implementation of the Pre-Primary Education (PE) curriculum. Nigerian government has good intention in drafting fantastic national policy on pre-primary education. However, there is little or no motivation to ensure total implementation of the National Policy on Education[72]. This is because since the development and introduction of the curriculum (which addresses virtually all the critical areas of pre-primary education), limited preschools have accessed to the curriculum[72]. The Report of National Case Study Delivery services in Nigeria, found that there was a major geographical disparity in access to information and curriculum about early child care development between urban (37%) and rural (12%) areas[72]. However, there seems to be a gap in the implementation of Pre-Primary Education (PE) curriculum in Nigeria. It is

assumed teachers do not recognize the country's cultural diversity when implementing the curriculum. Conversely in Nordic countries, for instance, the diversity between countries and within each country is highly considered when implementing the curriculum[73]. The Nordic countries share ideas but each applies the curriculum according to their local needs.

2.1.16 Status of Pre-Primary Education Curriculum Implementation in Nigeria

Surely, implementation is the systematic way of carrying out planned document or projects. The implementation is the act of executing policies, programme and projects. It is the process of coordinating activities of carrying out drafted planned, policies and projects. In educational institutions, implementation is a necessity. Planned educational policies and programme must be implemented to realize the objectives of education. Implementation in education must follow defined processes and pattern to be successful. Implementation as an activity constitutes a central phase in the policy process[74]. Once a policy is formulated, the next logical sequence is to implement it using an appropriate implementation strategy for purposes of achieving effectiveness. Policy implementation can also be referred to as activities, tasks and functions undertaken after a law is passed[74]. They translate the broad, vague and multiple statements about goals, programme outlines and policies in the statute into concrete activities. In other words, implementation activities imply the process of activating approved policy document. Policy implementation can also be defined as the process of assembling resources (including people), allocating resources and utilizing resources in order to achieve policy objective[75].

Curriculum is the totality of what and how of any education enterprise[71,75]. In this view, ECE curriculum can be regarded as that indispensable tool that can only ensure effective achievement of ECE goals. ECE curriculum is an important written

plan that includes goals for children's development, learning and experiences through which they will achieve the goals[76]. ECE curriculum specifies what staff and parents do to help children achieve the goals and the materials needed to support the implementation of the curriculum[76]. The early childhood curriculum helps to ensure that staff or teachers cover important learning areas, adopt a common pedagogical approach and reach for a certain level of quality across age[76]. The aims of early childhood curriculum will include for example, health and physical development, emotional well-being, curriculum and social competence positive approaches to learning, communication skills, cognition and general knowledge[76].

The description of Early Childhood Education Curriculum in the paragraph above further indicates that it is an important document in the process of ECE. It is in recognition of this that the federal government developed a unified curriculum which was all encompassing for the programme of ECE in Nigeria. The curriculum is called National Early Childhood Curriculum for Ages 0-5 years and it is divided into two sections to cater for age 0-3 and 3-5 years respectively[76]. The curriculum was developed in 2007 by the Nigerian Education Research and Development Council (NERDC), a body saddled with the responsibility of developing curriculum for all levels of education in the country. The pre-primary education curriculum is not designed based on subjects as it is with primary or secondary school curriculum. The curriculum is thus divided into two sections based on the two age cohorts of 0-3 and 3-5 years. For each age cohort, eight themes are identified and topics under each theme are specified. The eight themes are: physical development; affective/psychosocial development, cognitive development; food and nutrition; health and environmental sanitation; safety measures and protection issues. This study focused specifically on the age 3-5 years' cohort because learning in this age cohort is already becoming a little more formal than in the age 0-3 years' cohort.

It is believed therefore that choosing this age cohort would allow the researchers to carry out better observation of the classroom implementation of the curriculum by pre-primary school teachers[76].

Meanwhile, of critical importance to the issue of pre-primary education curriculum is its availability. This is why, as noted earlier, the federal government specified, in the 6th edition of NPE, its dissemination to schools as one of the ways to ensure its effective implementation[57]. Availability is defined as the quality of being able to be used or obtained[76]. When the pre-primary education curriculum is available in pre-primary schools, teachers would have access to it and equally disseminate its content to support holistic development of children. This would then aid the achievement of pre-primary education objectives. Related to the issue of availability is the implementation of the curriculum. The objectives of any curriculum can only be achieved when it is properly implemented by teachers who are saddled with the responsibilities to do so. This then implies that in the issue of curriculum implementation, teachers are a constant factor that performs key role. Curriculum implementation is the act of working out the plans and suggestions that have been made by curriculum specialists and subject experts in a classroom or school setting[76].

Pre-primary education curriculum gives us a chance to perceive how youngsters and their method for learning are seen by the past ages considering "religious, ethnic, political and economic" forces[60]. Pestalozzi considers that kids learn through their senses and that they can accomplish their regular potential. Teachers teach the perception to observe the "whole person", for their development. Even today, the same idea works to develop young children's' behaviour and beliefs[60]. Frobel, the father of kindergarten, introduced a planned curriculum for early learners[60]. Nowadays, toys are being used to teach early years' students. The idea of learning through play is an

excellent contribution of Frobel It might be perceived that early childhood education has a great historical background as I have earlier stated and has established a curriculum to make early learners learn indeed. Early childhood education curriculum implementation involves placement into training. The procedure includes helping the child to get experience.

Pre-primary education curriculum implementation cannot occur without the children. The children are the focal figure in the educational implementation process. Implementation happens as the child procures the arranged or expected encounters, information, aptitudes, thoughts, and mentalities that are planned for empowering him or her to work successfully in society. Similarly, a curriculum cannot be implemented without the teacher. The teacher is in the driving seat of implementation of the curriculum[60]. The implementation of early childhood education curriculum is highly imperative if the objectives of pre-primary education must be achieved. This is because pre-primary education curriculum focuses on learning of motor skills, sensory skills, perception, concept formation, mathematics, physical and biological sciences and social studies; the arts-music and dance, dance, painting and the essence of focusing on these aspects of curriculum is to stimulate and facilitate growth and development in all aspects of development in the child within the first five years[34].

2.1.17 Curriculum Content of Pre-Primary Education in Nigeria

Curriculum at the pre-primary education level is broad, and the range of subjects offered is quite wide. It focuses on English language, mathematics (arithmetic), Nigerian languages, writing, reading, rhymes, social studies, music, singing, and elementary science/nature study. At this level, six 30-minute periods per week are devoted to the teaching of English and it is the maximum number of weekly periods for any subject. Another subject that is given prominence in the pre-primary school programme is

mathematics/arithmetic for which five periods are allocated to this subject per week. On the average, children spend one 30-minute period every day learning mathematics. Topics like counting, recognition of numbers, addition and subtraction are also taught. This gives an important start in the acquisition of numeracy. Similarly, three periods are allocated to each of these subjects: moral and religious instruction, writing, reading, drawing, rhymes, elementary science/nature study, social studies, handicraft and music/singing. In fact, the local language will be taught for two periods. Instructional time is divided into twenty-eight teaching times each week on average. The mother tongue or the language of the immediate community is the primary medium of education at this level. Continuous assessment is the foundation of the evaluation system. Continuous assessment is defined as a record of a child's achievement in numerous subjects during the course of his or her school career, as determined by tests, quizzes, and other means[43].

Curriculum in pre-primary education programmes gives children the opportunity to master information and practice the skills that they need in order to function effectively in the society. The early childhood curriculum emphasizes content that is connected to real world experiences, values, hopes, dreams, and expectations of families and communities. Young children are active contributors to the curriculum. In sum, they are the basic subjects for the subject matters taught in the early childhood settings. Examples of the curriculum content in Ghanaian (ECCDE) centres include pre-number activity, creativity, language and literacy, environmental studies, physical education, music and dance, psychosocial skills, which cut across all subject areas[43]. Children are at the center of pre-primary education and all the decisions about pedagogy are governed by the needs of children, their families and communities. The early childhood period is a time of rapid growth and development and during this period, the foundation

for future learning is being laid and the dispositions required for the pursuit of lifelong learning are being formulated. It is therefore critical that the learning experiences to which children are exposed during this period are developmentally appropriate, culturally relevant and meaningful in the context of how young children learn[43].

Curriculum Content and Pedagogy for Preschool Children

Scholars argued during the International Conference on Early Childhood Education Development held in Ghana that all of a child's learning experiences, whether consciously or unconsciously, are referred to as curriculum[43]. Curriculum is all that is taught in a school including the time tabled subjects and all those aspects of life that exercise an influence in the life of the pupil. Similarly, it encompasses all the learning that is planned or guided by the school whether it is carried in groups or individually inside or outside the school. The context of the curriculum is made up of people and provision and gives children access to quality programmes. Based on the above characteristics, children must be provided with opportunities to imagine, explore, hypothesize, investigate, interact and solve problems. They must also be provided with opportunities that would make them to think critically and constructively construct of their world.

Curriculum Guidelines for Nigerian Pre-Primary Schools

Early Childhood Care Development and Education (ECCDE) curriculum content in Nigeria prepares children for higher education, particularly primary education, which is considered the cornerstone of all levels of education[43]. To find out the adequacy and effectiveness of the ECCDE curriculum in preparing children for primary education, there is research reviewed curriculum guidelines with specific reference to mathematics, language and communication; scientific and reflective thinking; physical and health

education; and creative arts. Highlighting on mathematics and materials to support its learning, NERDC further stated thus[43]:

i. **Mathematics Skills: T**hese are skills that enable children at the age of three (3) years to be able to recognize and name primary colours and shape; sort by colours and shapes; recognize number symbols from 1 to 5 and count up to 10. To achieve the objectives, the teaching aids required are number cards, beads, bead frames, bricks, bottle tops, used match sticks, seeds, counting sticks, wooden cubes and so on, number songs, rhymes, stories and games. At the age of four (4) years, the children should be able to build on the educational gains made at the 3- year old level; count to 50; identify number symbols from 1 to 20; and do simple addition using the number symbols 1 to 5. The teaching aids required at this level for the attainment of the stated objectives are sticks, bottle tops, stones, seeds, desks, chairs, tables, pencils, books, cups, saucers, spoons, forks, toys, boys, girls and so forth. Others are picture-matching cards showing one-to-one correspondence, measuring tape, buckets, cups, bowls, calabashes, water, sand, sawdust and so on. At the age of five (5) years, children should be able to build on the educational gains made at the 4 -year old level by counting up to 100; identifying number symbols from 1 to 50; doing simple addition and subtraction using the number symbols 1 to 9; and reciting the days of the week. To achieve the objectives, the teaching aids required are charts, diagrams, number cards, pictures, simple mathematics books and calendars.

ii. **Language and Communication Skill**s: Children at the age of three (3) years should be able to communicate with others, recite rhymes, sing songs, recognize and name colours and objects in the home and at school, scribble, form patterns as well as trace letters of the alphabet and recognize the letters of the alphabet. To achieve the stated objectives, the essential teaching aids needed are nursery rhyme books, picture books

prepared by the Teacher, chalkboard or slates, old newspaper, kitchen paper, charcoal, chalk, crayons, pencils, paint, home corner and large pictures. In the case of children aged four (4) years, they should be table to build on the educational gains made at the 3-year old level, tell stories, identify pictures of objects, associate pictures with words, write own names and write some words. To attain the stated objectives however, the teaching aids to be made available should include crayons, pencils, paper, chalk, charcoal, sand, blackboard, activity and workbooks encouraging left-to-right and top-to-bottom orientation, a children's library, charts, diagrams, pictures, objects, calendars, magazines, old books, posters, and so forth for illustration[43].

For the five (5) years old, the objectives are to build on the educational gains made at 4-year old level, the child to express himself clearly, tell simple stories, read simple pictures books and copy simple sentences. The teaching aids required at this level are various types of music, collections of stories, poems, rhymes, pictures, interesting objects, newspapers, and other items that stimulate language use and reading and writing, plenty of picture/word and sentence cards, language games, work books and worksheets.

iii. Scientific and Reflective Thinking: The objective, as it affects children aged three (3) years is to enable them to observe nature, for example, flowers, leaves, animals and the weather. For this purpose, pictures of flowers, leaves, animals, the sun, clouds, rain, the moon and stars should be provided as teaching aids. For the four (4) years old, the objectives are to enable them build on the educational gains made at the 3year old level; and demonstrate awareness about nature. The teaching aids needed to achieve the objectives are school grounds that should provide opportunities for the study of nature; and a science corner that should be well stocked with specimens of animals, plants, birds, insects, fish, and paper boats, wood, stones and so forth. In the case of children

aged five (5) years, the objectives are to build on the educational gains made at the 4 - year old level; identify living and non-living things and observe their characteristics; and carry out simple experiments and make observations and name a few machines used for transport and name some machines used in the home and on the farm. The teaching aids required are the materials for the children to carry out simple experiments, real specimens (plants, animals, insects, rocks, pieces of wood and so on) or pictures; charts to teach the children how to identify living and non-living things; pictures and specimens of various types of soil; pictures of a variety of machines; and class science and nature corner with exhibits clearly labeled[43].

iv. Physical and Health Education: According to NERDC the objectives behind its teaching to children aged three (3) years are to enable them to form good health habits; and take part in some physical activities. The teaching aids required for the purpose include pictures and charts showing good health habits, tyres, hoops, bean-bags, bouncing balls, skittles, slides, swings, cane mats, skipping ropes, foam, wooden tunnel, wooden boxes, ladder, play equipment and suitable songs for various exercises. For children aged four (4) years, the objectives are to enable them to build on the educational gains made at the 3-year old level; develop gross motor skills; develop fine motor skills; and demonstrate good health habits. The teaching aids needed to achieve the objectives are the appropriate apparatus for the development of gross motor skills and fine motor skills such as swings, tyres, tunnels, climbing apparatus, balls, slides, beans bags; and songs, jingles and rhymes that teach good health and safety habits, posters and health charts, filmstrips and slides. Others are video cassettes that motivate children to observe good health habits, a well-stocked first aid box and a sick room where possible, wash-hand basins, a wash room, soap, and other equipment for the teaching of good habits[43].

On teaching Physical and Health Education to children aged five (5) years, NERDC further stated that the objectives behind that are to enable them to build on the educational gains made at the 4-year old level; take part in sports; help keep their surrounding clean, observe safety rules; and observe good health habits. The required teaching aids for the attainment of the afore-mentioned objectives are football, skipping rope, hoops, balls, local games materials and so forth. Others include pictures and charts showing home and school safety rules, brooms, duster, dustbin, dustpan, posters to illustrate road safety rules, pictures and charts showing good health habits[43].

v. C**reative Arts:** For children aged three (3) years, NERDC indicated that the objectives behind its teaching are to enable them scribble, draw and paint, dance to a variety of music and take part in creative activities. The teaching aids required are paints, crayons, charcoal, chalk, pencils, tables, brushes, containers, songs and music. For the 4-year old, the child should be able to build on the educational gains made at the 3-year old level, draw and paint, model, participate in simple drama, singing and dancing. The needed teaching aids include a home corner that should be well stocked with old clothes, jewelry, shoes, handbags, household items (brooms, pots and pans) and to allow for dramatic play. Similarly, there should be local musical instruments, tape recorder, record player, crayons, marking pens, chalk, charcoal, paint, dye, brushes, paper, pencils, glue, and pictures from old magazines, books, calendars, clay, plasticine and so on[43].

For the 5-year old, the child should be able to build on the educational gains made at the 4-year-old level, make collages, construct things, make his own picture books, and take part in drama, sing and dance. The teaching aids required to attain the objectives are used beads, beans, rice, sand, cowry shells, egg shells, stone, paint, glue and so forth for making patterns and pictures. For music and dance, the teacher should provide simple musical instruments like drums, tambourines, gongs, and the like. For

dramatic plays, materials such as clothes, jewelry, shoes, handbags, plates, spoons and so on should be collected by the teacher while the Home Corner should be used for drama. Similarly, paint, crayons, paper, pencils, chalk and charcoal for drawing, colouring and painting should be provided. For construction, building blocks, cartons, boxes, bamboo, raffia, straw and so forth should be made available.

vi. Social Norms: For children aged four (4) years, NERDC indicated that the objectives behind its teaching is to enable the child to build on the educational gains made at the 3-year old level; talk about himself and his family; talk about his school; participate in cultural dances, songs and games; and use socially accepted expressions when addressing others. The teaching aids required include folklore, folktales, local songs, games and dances; charts, posters and diagrams while parents can be invited to come to the classroom and talk about their occupations. Moreover, projects can be carried out relating to special days'/event sand pictorial displays can be set up showing various aspects of different cultures[43].

For the 5-year old, the child should be able to build on the educational gains made at the 4-year old level; talk about his neighborhood; talk about some ceremonies and festivals in his locality; develop basic moral behaviour; and sing the National Anthem, say the National Pledge and recognize the National Flag. The teaching aids needed to attain the objectives are charts, posters, pictures, photographs, paint, crayons, clay and plasticine that can be used to depict various scenes in the neighborhood. Furthermore, dramatic plays, stories, rhymes, folktales, poems and pictures or posters displaying the National Anthem, Pledge and Flag can all be used to teach cultural values. Similarly, inviting people to talk about themselves and their places of work with pictures, drawing or models of uniforms or materials used by them is another teaching aid[43].

On the other hand, the required teaching materials for English and Mathematics at the ECCDE level to include bottle tops, sea shells, balance scales, attribute blocks, colored beads, three dimensional blocks (cubes, cylinder, cones), geo-board, fruits (like oranges), unfix cubes (representing hundreds and tens), colors, cuisenaire rods and measuring items (ruler, tape, measure, string or ribbon, blocks) play [43]. Others include picture books, story books, materials for drawing, word card, envelops, posters depicting living creatures, picture dictionary, audio materials, and books made by the children themselves. The commission further highlighted that the teaching materials needed for physical development include pull up rope, slide, merry-go-round, swing; skipping ropes and so on play[43]. For cognitive development, the necessary materials are counters, building blocks, clay and so forth while swings, slides, pull-up ropes and so on are required for emotional development. In order to promote social development at the pre-primary education level, balls of different sizes, tricycles, and rocking horses among others are required. From another perspective, scholars identified climbers, swings, sports field, or equipment, bicycles, jump ropes, balls, movable items (boxes, plastic crates) and storage shed as the requirements for outdoor play[43].

Professional Development and Pre-Primary Education Teachers

PD has been referred by some scholars as a continuous process of teachers' learning including the process of how they learn and apply their knowledge to support students. The process of teachers' learning can be planned and unplanned, formal and informal, thus participating in various courses, reflecting on their own teaching, observing other teachers' teaching, conversations with other colleagues before or after teaching[77]. PD was viewed as the body of systematic activities to prepare teachers for their job, including initial training, induction courses, in-service training, and continuous professional development within school settings[77]. Scholars have identified a positive

relationship between the quality of the teacher and student outcome, stating that there is a positive effect between on-the-job teacher training and student performance while other scholars also assert that improving instruction is the only way to improve students' achievement and that there should always be a balance between the quality of an education system and teachers' quality. To achieve students' outcome, teachers' quality and Development should not be compromised[77]. It has been revealed that teacher PD has tremendous ramifications on students' learning achievement in three ways. Firstly, PD improved teachers' knowledge and skills; also, teachers acquire effective knowledge and skills, which eventually enhance their teaching, and lastly, PD helps teachers with teaching skills which lead to better students' learning outcomes[77]. Research has also shown that there can be tremendous improvement in teachers' instructional methods if teachers actively participate in PD activities[77]. Notwithstanding, scholars believed that such PD programs should be intensive, continuous and connected to practice so that they would achieve the effective changes significant for the on-going improvement of teachers' practice and students' outcome[77].

PD has been articulated by some scholars as any designed activity meant to change the beliefs and practices of the teacher profession and understanding of school persons toward an articulated end" such as improved student performance. It follows that PD can be seen as effective if the end results are met and improved teacher practices and students' outcomes[77]. Scholars are of the view that PD is an on-going collaborative sharing of professional knowledge among teachers on the current trends of issue concerning the teaching job in order to keep teachers formed and informed. Some researches classify PD into formal and informal. Formal PD programs include trainings, courses, or other instructional activities conducted to support teachers' continuing education and inspire positive change in their teaching[77]. Teachers reflecting on their

own teaching, observing other teachers' teaching, conversations with other colleagues before or after teaching are classified as informal PD[77]. Again, it has been revealed by researches that there is acknowledgement and recognition by school systems throughout the world that teaching quality is a crucial factor impacting on students' achievement [77]. It goes without mention that quality and relevant PD program create opportunities for the individual and collective teacher, where teachers have the chance to observe and be observed while teaching and planning classroom activities[77]. Effective PD activities focus on promoting continuous professional dialogue among teachers and ensuring that teachers integrate the best practices that are consequential to their teaching experience[77].

Professional development in pre-primary education is a high priority matter that helps educators in the field to improve their knowledge, skills and practices in providing pre-primary education to children, their family and society[78]. Professional development is a process engaged in to enhance the knowledge, skills and attitudes of the teachers. This implies the responsibility to create, preserve, evaluate and transmit knowledge through continuing learning. Development programmes have the ingredient of fostering and preserving the scholarly values, curiosity and integrity to nurture these values through inculcation[78]. The basic objectives of professional development are to improve quality of teaching and learning as well as to improve the performance of those with teaching and management responsibilities. Thus the ideas for pre-primary education teacher's development can be said to be conceived from the acknowledgment that efficiency and effectiveness to a large extent depend on training and retraining of the workforce.

Responsibility of government to provide capacity building of the school personnel is clearly articulated in the 6h Edition of the National Policy on Education 2013. Section 2, items 16(d) and 18(d) mentioned provisions for regular training and

retraining of teachers with specialization in Early Childhood Care Education through conscious efforts in capacity building and development of the personnel in pre-primary level of education [57]. A growing body of research demonstrates the long term benefits of high quality childhood education programmes, thus increasing the general awareness of the importance of early years[79]. The constant change and expansion of knowledge in global perspective place much emphasis on regular training of Early Childhood Care and Education (ECCE) teachers to be relevant and to compete in fast developing world. Teaching is not a static profession. It is vital to consistently refresh teachers and contribute to skillfulness in efficient implementation of early childhood education curriculum. Therefore, training and retraining of early childhood education teachers for development will facilitate proper understanding, sufficient retention and greater achievement by pupils. Teachers' preparation is the process of initiating, preparing student-teachers, retraining of existing teachers in schools; and equipping them with relevant experience, skills and competences to tackle the responsibilities of educational profession effectively[78]. Teachers' preparation, if accomplished, will build up their capacity and keep the teachers abreast with latest teaching methodologies and skills.

In an effort to provide high quality and globally competitive preschool education, policy makers around the world increasingly require public pre-school teachers to have at least a Bachelor's degree, preferably in early childhood education[78]. Policies that focus on increasing teacher's education, improve classroom quality and maximize children's academic gains are needed. Furthermore, improving the efficiency of pre-primary education necessitates a diverse set of professional development activities and supports aimed towards teachers' interactions with children. Education is the right of every child: therefore, no child should be denied of it for

no reason. This is in agreement with the assertion of the World Summit on the state of global Education for All Programme (EFA) for which Nigeria has pledged its commitment to this, with the inauguration of the policy early childhood education[78].

The important role of the teacher as an agent of change, promoting understanding and tolerance, has never been more obvious than today[80]. It is likely to become even more critical in the let century as the world is set to achieve sustainable development goals by 2030[80]. Teachers are indispensable in educational development and if the nation is to receive high returns from the enormous investment in education, there must be qualified teachers to support them[80]. The position occupied by teachers as a central figure in the educational system of a country cannot be overemphasized. Consequently, acquiring teacher services, developing their skills, improving their knowledge capacity, motivating them to high levels of performance and ensuring that they continue to maintain than commitment to the organization are essential to achieving national educational goals and accomplishing government reforms[80]. In other words, qualitative reforms of Nigerian education cannot be attained without highly qualified, competent and motivated teachers to actualize the vision and goals of education for individuals, community and national development[80].

2.1.18 Responsibilities of Pre-Primary Education Professional in Preschools

The responsibilities of early childhood professional include the followings[80]:

1. Providing a stimulating, caring, inclusive, safe, and clean environment for infants and toddlers:
2. Ensuring children's safety by identifying and preventing potential risks and health hazards;
3. Assisting in planning, preparing, and implementing a high quality, play-based,
4. Developmentally appropriate curriculum to foster physical, cognitive, emotional, and social development:
5. Developing schedules and routines to familiarize children with daily habits and necessities (e.g. washing hands), including feeding them and ensuring they get proper rest;
6. Teaching children pre-literacy, reading and language skills (e.g. rhymes, alphabets, and numbers), motor skills, shape and colour recognition;
7. Organizing activities that promote and facilitate the development of social, creative, and physical skills;
8. Ensuring that all activities also serve to promote and improve each child's individual self-esteem;
9. individualizing the curriculum as required, ensuring that all activities are accessible;
10. Using different teaching methods in order to adapt to each child's individual needs:
11. Instructing infants and toddlers on how to convey their ideas, feelings, and needs by establishing conversations, asking, and responding to their questions;
12. Improving children's behaviour by explaining and demonstrating good practices to them;

13. Identifying any behavioural or cognitive difficulties children may present in order to apply the necessary corrections or special methods;
14. Identifying and adapting to each child's individual personality, skills, and necessities;
15. Devoting extra time to tend to the special needs of some children;
16. Tracking and reporting children's health. safety, and well-being;
17. Reporting any abusive situation to the appropriate authorities, whether the child is experiencing physical, sexual, emotional, and/or verbal abuse.
18. Observing, monitoring and tracking each child's individual progress and development to make sure they work successfully towards achieving pre-established learning and behavioural goals:
19. Complying with all recording and reporting requirements outlined by the national
20. policies and procedures (e.g. daily log, incident reports, and medication administration); and
21. Meeting with parents and other staff members in order to discuss behavioural and learning difficulties children may present.

Aside from the responsibilities listed above, pre-school teachers also need to demonstrate a thorough understanding of early childhood development, including best practices and related current research. They must also understand and comply with all regulations related to early years programs e.g. Ministry of Education policies and procedures[78].

Characteristics of High Quality Teacher Professional Development

There can be no one size fits all approach to effective teacher professional development. Differences in communities of school administrators, teachers, and students uniquely affect professional development processes and can strongly influence the characteristics that contribute to professional development effectiveness. To have the greatest impact, professional development must be designed, implemented, and evaluated to meet the needs of particular teachers in particular settings. The characteristics of high quality teacher professional development include followings[81]:

Content-focused: Several studies demonstrate that teachers' skills and understandings are directly related to the degree that professional development experiences focus on subject matter content[81]. Being 'content-focused' means also considering pupils' prior knowledge related to the content, and strategies teachers can use to actively engage students in developing new understandings[81].

Extended: Extended professional development experiences rather than one-time sessions may allow for more substantive engagement with subject matter, more opportunities for active learning, and the development of coherent connections to teachers' daily work.

Collaborative: Teacher learning is most likely when teachers collaborate with professional peers, both within and outside of their schools, and when they gain further expertise through access to external researchers and program developers[81]. Professional development activities that include collective participation–that is, the participation of teachers from the same department, subject, or grade–are more likely to afford opportunities for active learning and are more likely to be coherent with teachers' other experiences[81].

Part of Daily Work: Professional development should be largely school-based and incorporated into the day-to-day work of teachers.

Ongoing: Professional development should be continuous, not episodic, and include follow-up and support for further learning.

Coherent & Integrated: Professional development should incorporate experiences that are consistent with teachers' goals; aligned with standards, assessments, and other reform initiatives; and informed by the best available research evidence[81].

Inquiry-based: Professional development should promote continuous inquiry and reflection through active learning. Active learning encourages teachers to become engaged in meaningful discussion, planning, and practice as part of the professional development activity.

Teacher-driven: Professional development should respond to teachers' self-identified needs and interests in order to support individual and organizational improvements. Professional development is more meaningful to teachers when they exercise ownership of its content and process.

Self-evaluation: Professional development should include procedures for self-evaluation to guide teachers in their ongoing improvement efforts.

2.2.11 Models of High Quality Teacher Professional Development

There are many models of professional development that incorporate several of these characteristics of high quality. Recent research and policy in professional development support moving away from 'sit-and-get' workshops on general topics toward teacher-driven efforts to identify and solve instructional problems rooted in their daily work. Each of the following examples of professional development incorporates several characteristics of high quality. These three examples also reflect some of the diversity of possible approaches by focusing on new teacher development, student thinking, and lesson design, respectively[81].

1. **Mentoring**: Mentoring gives novice and master teachers opportunities to learn from each other. It can help new teachers learn to creatively and effectively meet the day-to-day challenges of teaching. Mentoring occurs around activities such as classroom observations, coaching, feedback, and the collaborative teaching. Mentoring can have dramatic effects on teachers, which include increased retention, improved attitudes, increased feelings of efficacy and control, and experience using a wider range of instructional strategies[81].
2. **Content-Based Collaborative Inquiry (CBCI) & Cognitively Guided Instruction (CGI)**: In CBCI and CGI, teachers work together to create deeper understandings of how their students think about and understand particular subjects. In CBCI, teachers and facilitators pose questions about students' understandings, collect and analyze data, share the results with their colleagues, and collaborate to create instructional solutions. In the process, teachers build understandings of content and pedagogy that support student learning[81]. In CGI, teachers create models of how students think and solve problems. Teachers use these models of student thinking to develop instructional materials that address students' learning needs. CGI provides opportunities for teachers to deepen their own understandings of subject matter, while they develop ways to teach it more effectively[81].
3. **Lesson Study**: Lesson study is a multi-step process in which teachers work together to create, study, and improve their lessons. In this approach, a member of the study group teaches a lesson while others make detailed observations. After the lesson, all members of the group meet to discuss their observations and to consider how the lesson might be improved. The lesson is taught again to a different group of students, and the process of observation, collaborative data analysis, and lesson revision is repeated[81]. Lesson study is another model of using collaborative self-study of

teachers' practices as a means to support teacher growth and instructional improvement[81].

Types of Quality Teacher Professional Development

Scholars have identified five major types of teachers' professional development. That can be used by teachers in order to improve their teaching and have continuous professional development in their teaching career[82]:

In-House Professional Development

It is a type of professional development that is offered for teachers at the site of schools. This type of professional development takes time weekly and a member of the staff in a given school is in charge of that. Different staff members can have different sessions in the whole year.

Organizational-wide Professional Development

This type of teachers' professional development requires collaboration in multiple sites whereby it can be scheduled in advance and can take long periods. It can have the form of half-day, full-day or even multiple day professional development. In this way, teachers will have the opportunity to receive a kind of professional development, collaborate together, learn something in common since they are from the same State or Local Government Area and can meet in such occasions. Such educational events usually involve the presence of a guest speaker, usually a professional in the field, to present something or to lead.

Institution-Based Professional Development

The institution-based professional development is a long term one and it usually centres on a common theme or content, say assessment or teaching methods. Such a type of professional development intended for teachers is often related to a university, non-

profit organization or research institution. Such events are funded and teachers may receive a stipend both for time and for participation.

Professional Inquiry Group

Groups of teachers can come together for professional development so as to learn something of great interest to the whole group. This type of teachers' professional development can be site-based. The groups of teachers meet on a regular basis for an extended period of time and they work in a collaborative manner in order to learn new things and share new teaching experiences.

Coaching

This type of professional development will have on-site coaches and district coaches for their teachers. The role of these coaches is to help and support teachers in different ways. Novice teachers will also have a new teacher coach and this latter has an assigned job aimed at helping the new teacher to acquire the necessary credentials.

Qualifications, Education and Professional Development in Preschools

Pre-primary education places a premium on employee qualifications, education, professional development, pedagogical quality, and child results. It's also critical that employees have faith in their abilities to plan and carry out the steps required to achieve the intended outcomes[78]. Qualifications can make a difference in a team when it comes to determining which skill sets and knowledge are essential for working with young children[78]. Good understanding of child development and learning; ability to develop children's views; ability to praise, soothe, question, and be attentive to children are among the abilities and staff attributes that have been identified as vital in promoting high-quality services and outcomes. Good vocabulary and the ability to elicit children's ideas as well as leadership skills, problem solving, and the preparation of focused instructional plans[78].

However, it is the ability of better qualified staff members to create a high-quality pedagogic environment that makes the difference, not the certification per se[80]. There is significant evidence that better prepared staff promote enriched stimulating settings and high-quality pedagogy, and that higher-quality pedagogy leads to better learning outcomes[78]. Staff involvement and engagement with and between children, as well as scaffolding tactics such as directing, modeling, and questioning, are all important aspects of strong staff quality. Other elements of high staff quality include staffs content (curriculum) knowledge and their ability to create a multi-disciplinary learning environment[80].

Specialized Education and Training of Pre-Primary Education Professional

There are specialized training and education for those who work with preschool children. Specialized education is associated with better child outcomes and improved staff competences to provide suitable pedagogical learning opportunities. Specialization refers to any education or training focusing on early childhood education, child development or similar, above and beyond general educational attainments[78]. Initial education and training in areas such as early child development and early education increase the likelihood that practitioners are effective in promoting the educational, socio-emotional and healthy development of children. The practitioners' ability to create rich, stimulating environments in pre-primary education is jeopardized when staff have inadequate, insufficient or incorrect content and pedagogical knowledge. When trained on matters related to early childhood development and care, staff can better be developed on child's perspective by integrating play while learning, have increased ability to solve problems, develop targeted lesson plans and have an improved vocabulary, which stimulates early literacy development perspective[80]. Additionally, staff with higher education and specialized

training engages in more positive teacher-child interactions. The specialized trainings discussed here are meant for only those who specialize in caring for and educating young children. Preschool professionals can best upgrade their knowledge on child growth and development by integrating play while learning, have enhanced ability to solve problems, produce focused lesson plans, and have an improved vocabulary, which enhances early literacy development perspective[80], when they are taught in matters linked to early childhood development and care. Furthermore, teachers with advanced degrees and specialized training have more positive connections with their pupils. The specialized trainings discussed here are meant for only those who specialize in caring for and educating young children.

Ongoing Education and Training

Pre-school caregivers have access to training and further education on issues related to children. For the staff to maintain their professional quality, they need to engage in ongoing professional development which could lead to higher quality pre-primary education services and outcomes. Attending a workshop may be an easy way to realize means of professional development. However, high-quality subject training, field-based consultation training or supervised practices may be more effective. Ongoing professional development should not only be available, but should be a requirement to stay and grow in the profession. Furthermore, professional development should be tailored to staffs needs[80].

Challenges Facing Teacher Professional Development in Preschools

The challenges of the present day professionals are enormous. The present day teaching profession is encountering a lot of dilemma in order to achieve and meet with the demand of the present day quest, particularly in a highly politicized society where every issue relating to the well-being of the child is dropped at the door step of the

school [78]. The paradigm shift in education is demanding so much from the teacher. The educators' roles have expanded to accommodate duties that had hither to been the responsibilities of the home. The duties of the teachers have metamorphosed into curriculum specialist, diagnostician, health care provider, family counselors, programme manager, child development experts, child advocates, and a host of others[78].

The shift has saddled the teachers with new notions of pedagogy which require open-mindedness as against being regimented in the discharge of their duties. The expected pedagogy should promote sense of enquiry, investigations and problem solving. With the new method, educators are face with the problems of creating a whole school learning environment that promotes functional education[78].Hence Teachers in early childhood education training should be exposed to scientific career development trainings that are embedded in constructive learning, inquiry-based and problem solving approaches[78].

In an effort to implement enquiry-based and problem solving methods of learning, teachers are faced with the challenge of conceptualization and implementation of learning experience. The inquiry based learning require teacher to give away a degree of control over the learning process and give learners the opportunity to follow their interest and try to find out answers to questions they have raised. With this method, learners are given opportunity to investigate and engage in problem solving activities. Literally, the educators are challenged to deviate from norm and instead of transmitting knowledge he transforms the pupils from behavioural approaches of teaching to constructivist approaches from teaching information towards a realm of learning in a social context [78]. The teacher moves from being passive to being reflective.

Another problem is enriching the classroom environment enough in order to attract children to learning. The environment should attract and maintain the interest of

the children. There has been rapid pace of development of modern technology, which has required a novel learning profile for both the learners and the teachers. The pedagogy has equally changed with new demands of learning. More also, apart from knowledge and skills, the new generation of early childhood educators need to have a new disposition of care and be able to follow the professional's ethical code. The needs to be responsive enough to help children develop pre-social behaviour that will help them live and work with diversity of people[78].

Strategies for Improving Professionalism of Preschool Teachers Professional

The early childhood programme in Nigeria is confronted with many problems among them are training, recruitment and certification of early years educators. These challenges and more can be addressed if capacity building and professional development of early childhood care professionals would be planned strategically such as:

Training of Teachers

The quality of teachers determines the strength of any educational system and the value of the learners. Therefore, training of teacher should be given a paramount place in every society. This is because the quality of teachers has a larger impact on the children's leaning than the quality curriculum implementation[78]. All pre-service teachers in educational institution should be professionally trained. Pre-service teacher education should be structured to equip them for effective pre-service. The statutory responsibilities for teacher education in Nigeria today is vested in colleges of education, faculties of education, institute of education and National Teachers Education[57,78]. It should be noted that the provision of high quality training for pre-service teachers constitutes one of the priority concerns and that empowering

teachers and pre-service teachers for sustainability should be undertaking through frequent pre-service and in-service training[78].

Pedagogical Knowledge

Pedagogy is the study of the processes and applications of teaching and learning, such as classroom management, lesson planning, and student evaluation, in order to attain the overall educational purposes, values, and objectives[78]. It also refers to the instructional techniques and procedures that enable learning to occur; it is an interaction process between the teacher/practitioner and the student, and it is also used to provide various components of the learning environment, as well as the family and community[78]. For early childhood educators to achieve effective teaching, they must check both their content knowledge and their pedagogical applications[78]. In order to strengthen their pedagogical content knowledge, the educators should participate in professional development studies in child development and education and in such content area in which they feel inadequate[78].Educators should have strong pedagogical content knowledge and be able to transfer the subjects to the learners[80].

Teacher Motivation and Teaching Effectiveness in Preschools

People are involved in educational processes for a variety of reasons, such as increasing their personal income, raising their living standards for higher levels, vocational concerns, intellectual development and social upbringing. Motivation, on the other hand, stimulates people to change their behaviours, and make effort to sustain their endeavors in the direction of determined goals[83]. Employees who are highly motivated to work are more likely to be productivity than those who are forced to do their jobs. The level of teachers' performance connects to their motivation, capacity and work conditions[83]. Teacher motivation is an essential component to enhance classroom effectiveness[83]. As students' learning outcomes are highly dependent on the quality of instruction, teaching

effectiveness has been explored in terms of teaching styles, teacher approaches to teaching, teaching practice and instruction behaviours in relation to teacher motivation factors[83]. An employee with high level of motivation can provide him or her to reach the organizational goals more effectively. A stated that an employee with high level of motivation can contribute to organizational goals with his or her skill, loyalty, performance and excitement[84]. Increasing motivation affecting teacher performance is emphasized as a crucial factor in increasing pupil's success[84]. Moreover, the expectancy theory found in process theories also underlines that work motivation is determined with the relationship between employees' efforts and performance[84]. It is stated that psychological well-being situation (state) will increase and performance development will get easier when teachers' needs are met[84]. Likewise, it is foreseen that organizational performance will increase by means of teacher's performance. Additionally, it has reported that internal motivation strengthened the relationship between pro-social motivation and worker outcomes like determination, productivity and performance[84].

Meanwhile, because teachers are expected to convey knowledge and skills to students85, teacher motivation is a critical issue. As a result, organizational behavior experts and scholars have debated the impact of performance appraisal on employee and commitment on multiple occasions. Motivation is described as the reasons or elements that urge or cause people to behave in a certain way[85]. As a result, motivation is a driving force that encourages people to take action in order to attain their goals. The inner and extrinsic factors that motivate an individual to act in specific ways or do certain activities are referred to as motivation. Hygiene Theory of Motivation (also known as the Two Factor Theory), stated that there are certain factors at the workplace that result in job satisfaction of the workforce. These are referred to as motivators. A

separate set of factors known as hygiene factors, also cause dissatisfaction among workers. Examples of motivators according to Herzberg are achievement, recognition, work itself, responsibility, advancement and growth[86]. Examples of hygiene factors include policy, supervision, relationship, work conditions, salary, and security which must be satisfied if they are not to have negative influence on the employees. The Hygiene Theory of Motivation states that certain workplace characteristics lead to employee job satisfaction[86]. Motivators are what we call them. Workers are also dissatisfied because of a separate set of issues known as hygiene considerations[86]. Achievement, acknowledgment, job itself, responsibility, development, and growth are all examples of motivators[86]. Policy, supervision, relationship, work conditions, remuneration, and security are examples of hygiene variables that must be met in order for them to have a positive impact on employees[86].

Teachers' Remuneration and Job Effectiveness in Preschools

Looking at the global education systems today, there is a challenge of how to attract most talented teachers into the teaching profession. Talented teachers are those who can exhibit the capacity, knowled.ge and skills and are also capable of adapting to the changing environment[87]. Therefore, attractive salaries, possibilities of earning additional allowances, coupled with good working conditions comprise incentives for drawing many people into the teaching profession. These incentives ensure among teachers and head teachers high levels of satisfaction and motivation. Therefore, teachers' remuneration comprises of salary, transport allowance, over-time allowance, duty allowance and any other monetary reward in appreciation of teachers' services in school[87]. For most people, it is undeniable that monetary compensation is a major rationale for working, no matter what other motivations or passions are. Teachers who are paid more stay longer in teaching and teachers with higher opportunity costs, as

measured by test scores or degree subject, stay in teaching less than other teachers[87]. Remuneration for teachers is considered among the extrinsic motivational factors that would affect teachers' curriculum implementation in preschools. Teacher remuneration for exemplary performance is a form of recognition and appreciation of what the teacher has done and achieved for the organization[83]. The experience of Varkey GEMS foundation, in its survey study of 21 countries (Brazil, China, Czech Republic, Egypt, Finland, France, Greece, Israel, Italy, Japan, The Netherlands, New Zealand, Portugal, Turkey, Singapore, Switzerland, United Kingdom -UK, and the United States), revealed that the better teachers are paid, the greater the student outcomes[88]. The study further indicated that in many countries around the world, people think that teachers deserve to be paid more. There was also an overwhelming support for teachers to be paid according to their performance. However, the study cautioned, that improving teachers' pay and working conditions alone, would not solve the problem of status of teachers' motivation. This finding corroborates the previous study that reported the broad consensus among occupational psychologists in the context of developed countries was that, pay on its own does not increase motivation[83,87]. However, the researchers were quick to add that, pecuniary motives were likely to be dominant among teachers in those countries where pay and other material benefits were too low for the individual and household survival needs[87]. These observations were in line with what Herzberg stipulates, when he refers to salary as a dissatisfier in his two-factor theory. Although teacher remuneration may not improve teachers' motivation but it may influence preschool curriculum implementation greatly. The 21 countries, where the survey study was conducted, are all developed countries and at a different economic level from Nigeria. This then implies that Nigeria has her unique economic challenges with a different standard of living. The findings of these studies may not necessarily apply to

Nigeria situation. Hence, the current study examined Teacher Motivation as Determinant of Implementation of Pre-Primary Education Curriculum in Public Primary Schools in Southwest Nigeria.

2.1.19 Factors Influencing Motivation of Teachers in Preschools

Teachers are expected to render a very high job performance, and the Ministry of Education is always curious regarding job performance of its teachers. Also, the Ministry of Education demands a very high measure of loyalty, patriotism, dedication, hard work and commitment from its teachers[89]. Similarly, the roles of motivational methods and tools cannot be underemphasized because high motivation enhances productivity which is naturally in the interest of all educational systems[27]. Employee's needs are influenced by a variety of individual factors and this is so because human beings have their own tastes. Educational administrators must devise better methods of determining ways and means of rewarding teachers if they expect the reward to have an impact on performance[89]. Study examined working conditions, administration and supervision, recognition, responsibility, advancement as well as interpersonal relations as some of motivational factors that influence teachers' job performance. The study categorized the factors into two. These are: extrinsic and intrinsic. Extrinsic factors include elements like pay, promotion opportunities, working conditions, relationship with co-workers, supervision and recognition. Intrinsic factors include personality, education, intelligence, abilities and age[27].

Working Conditions and Motivation of Teachers

Working and living conditions have effect on teacher morale and motivation and thus their performance. The key factors are workload, classroom conditions, and management support distance to work, housing and travel affects teachers' morale and motivation. The high cost of travel contributes to teacher absenteeism and lateness in

schools while very large class sizes are the norm for most teachers in countries such as India and Pakistan[27].

Professional Development and Motivation of Teachers

Professional development is a means for increasing teaching professionalism, which could have a positive influence on the job satisfaction and retention in their schools and their profession. Several studies in other employment situations other than schools support a positive relationship between satisfaction with work place training and overall job satisfaction and found that satisfaction with career development positively correlated with organizational commitment and job satisfaction[27]. The role of supervisor must provide adequate guidance for his subordinates.

Effects of Motivation on Teachers

Job satisfaction/motivation and dissatisfaction/de-motivation are opposite each other as one is a positive feeling while the other is a negative feeling towards work or job. Job dissatisfaction/demotivation results in absenteeism from schools, aggressive behaviour to colleagues and learners, early exits from teaching profession and psychological withdrawal from work[27]. Other effects may be poor performance of school in examinations and extra curricula activities, financial mismanagement, demoralized work force and pupils' unrest among many. Alternatively, job satisfaction/motivation will result in low absenteeism from schools, commitment, friendly behaviour with colleagues and students, low quits from the profession, good performance in examinations, extracurricular activities and motivated work force. In developing countries, teachers' motivation has been researched and addressed significantly. A study revealed that teachers are highly dissatisfied with their remuneration and other conditions of service like poor incentives and conditions of service which have resulted to low morale and thus poor performance[27]. Absenteeism and attrition were largely

influenced by teacher motivational factors like low salaries and poor working conditions. All educational stake holders agree that teacher motivation depend on an array of factors such as levels of remuneration, location of the school, availability of appropriate housing opportunities for further training and conditions of service, work load, promotion and career path, pupil's behaviour, relationship with the community, school quality factors such as availability of teaching and learning resources[27].

2.1.20 Significance of Mother Tongue Instruction in Preschools

Education is a weapon used for total liberation from poverty. Debates on the use of mother tongue in education have been on for a long time as evident in the studies on mother tongue issues in Nigeria and other countries of the world. Language of instruction in an education system determines the quality of education in that country and the overall learner achievement. In order to have education, one needs a medium of communication. Language is the only known viable instrument for human communication. Human languages have been studied and conclusion has been reached that it is conceptualized as having a 'magical' and 'unique' role in capturing the breadth of human thoughts and endeavor[90]. For a learner to have a full grasp of the learning materials, it is imperative that he is allowed and encouraged to come up with his own opinion and interpretations of events around him. For a learner to do this, he needs a language that he is already familiar with and can feed him with all the needed dictions at the appropriate time.

For intellectual (cognitive) development, high level of reasoning and understanding of teaching materials, a child needs a language that is not alien to him. The only language that is not alien to the child at this level is the mother tongue or the language of his immediate community since it is the language acquired by him right from birth. It is agreed that there are many factors involved in delivering quality basic

education while language clearly remains key to communication and understanding in the classroom[91]. Many countries including Nigeria have continued to allow foreign language (English) to dominate its education sectors. This situation is referred to as 'submersion' (that is, situation where learners are given instruction through a language that learners do not speak). This is like holding learners under water without teaching them how to swim[92]. Compounded with this are the level of teacher education poorly designed, lack of adequate school facilities which make teaching and learning extremely difficult, particularly when the language of instruction is also foreign to the learner [91]. Mother tongue is the language which human beings acquire from birth. It is the first language that a child learns. It means that mother tongue has a central role in education that demands cognitive development[28]. Mother tongue has greater prominence than any other language in the life of every individual, it is the language that identifies with the person or native culture, and it is also the language in which a person conducts his every day activities, has the greatest linguistic facilities or possesses intuitive knowledge [29]. It is regarded as the language of a monolingual person, which meets all his linguistics needs. Mother tongue is regarded as a language which has a socio-cultural obligation of serving as the instrument of nationalism in a speech community. It is believed that children acquire knowledge of their language from their family which consists of their parents, siblings and other relatives before being exposed to formal instruction in schools[29]. This they tend to internalize and use for their day to day activities. It is this internalized habit that emphasized proficiency and basic skills of listening speaking reading and writing in that order. Mother tongue helps a child in his mental, moral and emotional development. Much of a child's future social and intellectual development hinges on milestone of the tongue. It is generally accepted that in teaching and learning processes, the child's mother tongue is of utmost importance because it categorizes a

large part of child's environment where the child has names for most objects, actions, ideas and attributes that are so important to him. It is an essential instrument/medium for learning and intellectual development. This is why many school practitioners in different parts of the world advocate the use of the mother tongue as a medium of communication and instructions in early years of leaning[31].

2.1.21 Significance of Instructional Materials in Pre-Primary Education

Instructional materials in schools include audio, audiovisual and video materials. There are human and non-human materials and non-human materials and facilities that can be used to ease, encourage, improve and promote teaching and learning activities [93]. There are broad ranges of resources which can be utilized to enhance effective and efficient communication in the teaching and learning process[93]. Instructional materials are carriers of information between the teachers and the learners and vice versa in the instructional process [93]. Examples of instructional materials include textbooks, journals, reference books, magazines, newspapers, audio tapes, television, telephones, computers, maps, charts, radio, cassette players, models, projectors, internet, electronic mail (e-mail), video tape, mock-ups, still pictures, posters, public address system, among other[93]. The essence of instructional aids in preschool education is to ensure that children are attracted to the lesson, make them feel at home, create a friendly environment that would project and care for them and most especially, enable the children gain maximally from the instructional process[93]. The use of instructional materials would propel the instructional process and eliminate boredom especially in preschool education centres where the children have limited attention span.

The audio and audio-visual instructional materials play a crucial role in encouraging activities like talking, seeing, moving, among others process[93]. It is an established fact that audio-visual resources reinforce the spoken and written words with

concrete images and thus, provides rich perceptual experiences which are the basis of learning. However, it has been observed that most preschools both government and private owned have not adopted these media in learning. It is an open secret to say that even where these resources exist; vast majority of teachers cannot adequately operate them [93]. At all levels of education, instructional materials are significant in teaching and learning in the following ways[34]: Instructional materials develop a continuity of thought; this is especially true of motion pictures. They supply concrete basis for conceptual thinking and reduce meaningless word responses; they provide experiences not easily obtained through other materials and contribute to the efficiency, depth and variety of learning. They make learning more permanent; they contribute to growth of meaning and enhance vocabulary development; they have high degree of interest for pupil. They can be used to arrest and sustain attention; they can promote individualized instruction, they can be used to present facts and information; they can be used to teach concepts and principles; they can be used to guide thinking and induce transfer of learning and they can be used to present instruction to a large class size, thereby solving the problems of over population.

Instructional materials refer to the materials used in education which may be visual audio or audio visual. They are called by professional teachers as instructional or media as stated under categorization of educational media above. Education media also means a broad range- of resources that can be used to facilitate or enhance effective and efficient communication in the teaching and learning process[34]. The relevance of instructional materials in the implementation of pre-primary education includes the following[34]: to enforce verbal and visual massages; to generate interest; to focus attention; to provide source of information and authority; to save teachers preparation time; to provide experience not otherwise available; to develop compression of

judgment; to sustain interest; to develop functional knowledge and skills; to elucidate verbal concepts; to speed up learning and to mould the thinking of today's children.

Criteria for Selection of Instruction Material

The main purpose of using instructional material is to make teaching and learning more effective and to facilitate learning. The selection function of instructional materials should be thought of as part of lesson planning. Therefore, in selecting the appropriate instructional materials for use by teachers, the following criteria are to be taken into consideration[34].

Objective of the lesson- objectives are statement of desirable outcomes. They are also statements of intention. Any instructional resource selected should meet stated objectives. Learning resources in this case should help in the achievement of learning objectives.

Learner's ability- the material selected for teaching/learning must cater for pupil's differing learning abilities before it could be selected for use. If this criterion is met, learning will become very easy.

Time- Timing of the resource to use to arouse children's attention span should also be considered in the selection of resources. For example, time spent in teaching. Learning of practical agriculture should not be the same with that of religious knowledge. The instructional resources for practical lessons should not be same with that of the critical learning.

Learner's entry behaviour- The entry behaviour of the learner helps the teacher to make decisions on the type of materials to select for his instruction or make adjustments on the already selected resources.

Size of the class- If the class size is large, the teacher needs instructional resources that can cater for the interest and needs of all the pupils in the class, hence he will select

such materials that will make every individual in his class achieve the intended learning outcomes, if the class is small, he will also adjust his selection of learning resources to the small class.

Availability of supporting Facilities - There are certain instructional materials that may require supporting facilities for effectiveness. For example, media-equipment may require a projector. The teacher must ensure that such supporting facilities are available before selecting such instructional resources.

Improvisation of Instructional Materials for Preschool Children Learning

Improvised instructional materials are those teaching and learning materials produced using locally available resources with the help of experts[94]. Improvised instructional materials are teaching materials designed and produced from the available local materials in order to promote effective teaching and learning in schools. They are materials that are used in the absence of the original or the ideal objects to bring about the same learning effect that the standard materials would have brought[94]. The idea of making use of available local resources is to ensure that teaching and learning progress simultaneously without hitches is referred to as improvisation[91]. Improvisation is the use of local resources in our environment to assist in the smooth dissemination and transfer of knowledge from teachers to pupils. Improvisation refers to making of substances from local materials found at home or school premises when the real or original materials are not available[94]. Improvisation is the act of using alternative materials and resources due to lack or insufficiency of some specific first-hand teaching aids to facilitate instruction[91,95]. Improvisation is an act of using materials and equipment obtainable from local environment, or designed by the teacher or with the help of local resource personnel (local art and crafts experts) to enhance effective instruction. Improvisation appeals to the three educational domains (cognitive, affective and

psychomotor) [95]. Improvisation demands adventures, creativity, curiosity and perseverance on the part of the teacher. Such skills are only realizable through well-planned training programme on improvisation[96,97].

Purpose of Improvising Instructional Materials Teaching and Learning in Preschool

Instructional materials are the relevant materials utilized by a teacher during instructional process to facilitate teaching and learning and for the purpose of making the contents of the instructions more practical and less vague. Improvised instructional materials according to National Teacher Institute (NTI) (Module Two) are of paramount importance in the teaching and learning because of the following functions they perform[98]: they increase the rate of learning and at the same time allow the teacher to use more time on other gainful activities; they affect a reality of experience that stimulates self-activity on the part of the learners; they provide learning experiences which are not within the immediate classroom environment; they discourage rote learning by emphasizing realistic learning; they make abstract term, concepts and generalizations more practical and realistic; they help the learners to focus their attention during teaching-learning process; they provide the teacher with the means of guiding and controlling desirable responses of learners in relation to stimulus materials of the learning situation; they develop in the learners, awareness of problem, open up possibilities for exploration, present meaningful interactions which naturally lead to provision of solutions to learning problems; they help to stimulate purposeful and utilized self-activity and this is much more preferable educationally than a more or less passive and often bored listening and they improve the classroom communication process between the teacher and the learners, with this, the expected improvement in learning output will be accomplished[93].

Importance of Improvisation of Instructional Materials in Preschools

Improvised materials help to arouse and sustain learners' optimism and enthusiasm; access expert assistance and technical support; stay informed of innovative developments; have confidence to share ideas with other teachers; interpret research and statistical data; diplomatically handle students' resistance; align improvised materials with curriculum guidelines and timelines; and develop materials to cater for individual learner's needs in overcrowded classrooms. The use of improvisation in teaching makes the concept more practical and subsequently reduces rote learning. Locally produced instructional materials encourage creative expression and foster experimentation, sensitive to tactile and visual experience[95]. Again, they are cost effective, because they could be obtained from the local environment. They are generally very safe to use during demonstrations and experiments; it might not be capable of indicting injuries, which means it could be hazard free. Improvised instructional materials give teacher/students the pride of using their talents, allows a teacher to reproduce his potentials, in concrete form and increase teacher's knowledge of the subject matter [95].

In addition, they serve as a motivation to learners in as much as they participate in the activities during the production of the materials and also arouse learners' interest. Moreover, the use of these materials minimizes concerns about breakage, repair and loss since they are readily available in the environment. It informs both students and teachers that alternatives for some of the conventional science teaching materials are possible. It also shows that people can do scientific experiments with the materials around them. It could lead to the discovery of new knowledge, and students' talents may be discovered. Using improvised instructional materials assist teachers economically and may make students more interactive. Beyond these, it makes pupils make use of their intellectual ability in the process of teaching and learning[95].

Problems Associated with Improvisation of Instructional Materials

The problems attached to improvisation can be attributed to a number of factors such as lack of financial support from the school principals, lack of skills and strategies for improvisation and large class size arising from free increase in enrollment. Other factors include time constraint, school location, unavailability of experts and sometime inability to identify local materials[91, 95]. Sometimes the cost involved in designing these materials may be more expensive than buying the original ones. Again, the available material may not be suitable or appropriate for the lesson and can subsequently yield unexpected results; this can make learning more difficult and frustrating. Factors hindering effective production and utilization of teacher-made instructional materials in preschools include inadequate training, poor funding, lack of functional workshops, lack of regular supervision of teachers, poor motivation etc[96].

2.1.22 Significance of School Physical Facilities in Pre-Primary Education

One of the factors that promote adequate implementation of pre-primary education curriculum is the school physical facilities which constitute a whole range of factors that influence the teaching-learning process within the school. They include classrooms, library, technical workshops, quality teaching methods and peers, among other variables that can affect the teaching–learning process[97]. Physical facilities are one of the stimulating factors that play a fundamental role in improving academic achievement in the school system. These include; school buildings, accommodation, classrooms, libraries, furniture, laboratories, recreational equipment's, apparatus and other instructional materials. Furthermore, their availability, relevancy and sufficiency affect academic achievement positively. On the other hand, poor school buildings and overcrowded classrooms affect academic achievement negatively[40]. A good learning environment positively affects the academic achievement and behaviour of a student,

something that is likely to contribute to the implementation of pre-primary education. Studies have reported that dilapidated school buildings are not mentally stimulating and that facilities that are characterized with low or no sitting arrangement, will also affect pupils' learning negatively[40]. In New York, the government has put up measures to ensure every public primary school has all the required facilities that would promote a conducive physical environment that would be rewarding to both the leaner and the teacher and contribute to teachers‟ satisfaction [97]. This kind of measure is also required to effect quality pre-primary education curriculum implementation in public primary schools in Nigeria.

Learning environment that is free from barriers or distraction such as noise, gas/smoke pollution and so on, will promote pupils' concentration or perceptual focus to learning. Similarly, the entire unattractive physical structure of the school building could demotivate learners to achieve academically. This mismatch promotes poor academic performance[40]. School physical environmental factors such as poor conditions of school buildings, inadequate library facility, and working environment were found to be some of the negative factors that affected the performance of female teachers in Pakistan [40]. Teachers in urban areas attained better mean score as compared of those teachers in rural areas. Overcrowded classroom conditions make it difficult for students to concentrate on their lessons and unavoidably limit the amount of time for learning thus affecting teacher's performance. Generally, teaching is really challenging in such schools where a large percentage of the pupils are under performing and the teachers are held responsible for standard, which in return increases job stress. Burnout and stress are some of the emotional factors which may arise from facing the everyday challenges and has foremost influence on teachers' satisfaction[34].

The quality of education not only depends on the teacher as reflected in performance of their duties, but also on the effective coordination of the school environment [98]. Scholar maintained that in a bid to expand the education physical infrastructure in schools, facilities like classrooms and school buildings are considered over the quality of the physical environment[40]. The design and structure of school environment forms the physical facilities of the school which may attract parents of educational institutions in their initial judgments about the quality of what goes on in the school. They have effect on the perception and choice for learning experience desired by parents and pupils[98]. Infrastructure amenities help to create a favorable learning environment. Another issue limiting successful implementation of Nigeria's pre-primary educational policies is a lack of infrastructure resources including as classrooms, chairs, tables, and laboratories[34]. According to the working document on pre-primary educational policies, the government must provide appropriate infrastructure so that children can learn in a comfortable atmosphere[34]. One of the greatest obstacles to the efficient implementation of educational policy in Nigeria is a lack of suitable infrastructure. Without sufficient infrastructure, no real teaching and learning can take place[34]. Classrooms, libraries, staff, laboratories, and furniture in a bigger proportion of ECCE schools have been found to be woefully inadequate[100]. Unfinished buildings, makeshifts, and poorly ventilated car garages, according to a scholar, are in use in many public preschool center facilities, with most of the furniture consisting of merely mats. This environment will never allow for effective teaching and learning for these vulnerable lings, whose lives will be jeopardized further[34].

Sufficient facilities promote academic achievement and strengthen the overall institutional performance. Academic achievement is negatively affected by the school physical environmental factors such as unattractive and old school buildings; cracked

classroom walls and floors; lack of toilets; lack of desks and benches; lack of transport facility; lack of drinking water; lack of power supply; lack of playgrounds; lack of sufficient classrooms; lack of educational technology and lack of first aid etc[40]. This study sought to determine how these factors such as school physical facilities will influence implementation of pre-primary education curriculum.

2.2 Theoretical Framework

2.2.1 Maslow Theory of Human Needs

The "motivation to work" published by Maslow probably provided the field of organizational behaviour and management with a new way of looking at employees' job altitudes or behaviours in understanding how humans are motivated. Probably the best known conceptualization of human needs in organizations has been proposed by this theory. Abraham Maslow was a clinical psychologist who introduced his theory based on personal judgment, which was generally known as the need hierarchy theory. According to him if people grew in an environment in which their needs are not met, they will be unlikely to function as healthy individuals or well-adjusted individuals [98].

This study has adopted humanistic theory of human need. Maslow's theory of human needs states that, people are motivated to achieve certain needs. When one isneed is fulfilled a person seeks to fulfill the next one and so on. It also states that human beings will only think about safety, esteem and self actualization needs if only he or she is able to satisfy physiological need. Maslow's great concern was for humanistic education and so his thinking focused on the individuals needs. Abraham Maslow's view about education of children was firmly based on humanistic philosophy of education. He was mostly concerned with the discovery of identity and humanness believing that one goes most deeply into him/herself seeking individual identity. One also recognizes more clearly the whole human, and when he/she becomes fully human

he or she learns not only how he or she is different from others but how similar he or she is to them[50]. Every school leader or administrator require knowledge of the ability to motivate people to maximize their performance in order to achieve their goals grow professional and to change, school administrators must understand and be able to apply the basic theories of motivations[99].

Maslow largely deals with adults. However, he had much to say about children as well as applying his ideas to all ages. Findings from Maslow human needs form a hierarchy from basic physiological demands to the need for self-actualization needs. Needs at the lower level must be well satisfied before the individual will turn his or her attention to those at the higher levels. For example, a child who is always hungry may not likely develop much intellectual curiosity except if his need for hunger is been satisfied. Maslow identified five levels of basic human needs: physiological, safety, belonging and love, esteem and self actualization as well as cognitive and aesthetic needs.

This study adopted this theory because children need to experience security, physical wellbeing need to love and be loved, need to belong, need to achieve competence, need to know; need to experience beauty and order (aesthetic and cognitive knowledge). Teacher-related factors (teacher professional development and teacher motivation) and learning environment (mother tongue instruction, instructional materials and school physical facilities) which are variables in this study seems to have great impact on the needs of a preschool child as indicated in the Maslow's hierarchy of needs.

2.2.2 Bruner Instructional Theory

This study was guided by Bruner Instructional Theory. This theory was propounded in 1966. Bruner describes the key instructional components of curriculum: its sequence of

activities in which learners become self-sufficient problem-solvers[52]. In this theory, Bruner especially designed a teaching strategy to help learners understand and construct or expand upon their knowledge for example; in order for learning to take place the instruction must incorporate relevant materials that draw the learner in many ways of interest. This theory suggested that teachers play an important role in classroom instruction. The teachers' role is to build an environment that allows learners to make choice which is done through learning interaction. Therefore, the teacher is required to be equipped with the content prepared well for the pupils in the learning atmosphere[100].

This theory has direct implications on the of pre-primary education curriculum implementation in the sense that instruction (teaching and learning materials) must be appropriate to the level of learners. The role of the teacher should not be to teach information by rote learning, but to facilitate the learning process. This theory emphasizes on the following variables for effective and efficient learning. These include; teacher professional development, teacher motivation, mother tongue instruction, instructional materials and school physical facilities. Many scholars have been seeking to establish the most influential variables on pre-primary education curriculum implementation. However, this theory is therefore appropriate for this study for the researcher to assess teacher-related factors (teacher professional development and teacher motivation) and learning environment (mother tongue instruction, instructional materials and school physical facilities) as determinants of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

2.3 Review of Empirical Studies

2.3.1 Teacher Professional Development and Implementation of Pre-Primary Education Curriculum

A study examined the extent to which participation in a 14-week professional development course designed to improve teacher–child interactions in the classroom moderated the relation between teacher-reported job stress and gains in observed teacher–child interaction quality from the beginning to the end of the intervention. Participants were preschool teachers (N = 427; M age = 42) with an average of 11 years of experience teaching. Teachers reported how intensely they experienced different sources of stress at pre-test only (i.e., prior to being randomized into the treatment condition (course or control). Teacher–child interactions were measured through classroom observations at pre and post intervention. Results demonstrated that control teachers reporting higher professional investment stress showed fewer gains in observed emotional support relative to control teachers experiencing less professional investment stress. These findings were not evident for teachers in the course condition. Interestingly, teachers with higher professional investment stress showed fewer gains in instructional support in the control condition and greater gains in the course condition, relative to teachers in their respective treatment groups who reported lower levels of professional investment stress. Findings suggest that participation in the professional development intervention had a buffering effect on the negative association between professional investment stress and emotional support. With regard to instructional support, it is possible that teachers' heightened awareness and anxiety over their need to develop professionally may have made them more responsive to an intervention designed to improve practice[101]. The current study investigated teacher professional development as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

Situated in the context of the Advanced Placement curriculum reform in the sciences, a quantitative study validates selected elements of Desimone's conceptual

framework on teacher professional development. Using national data sets with data from 133 336 students and 7434 teachers, multi-level structural equation models indicate that professional development participation and contextual school- and teacher-level factors influence teachers' classroom practices. In turn, aspects of instructional enactments characteristics are significantly, but very weakly, associated with student performance. Thus, this study reinforces calls to provide teachers opportunities for high-quality professional development and suggests advancing research that identifies effective instructional practices[102]. The current study examined teacher professional development as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

A random sample of 22 Year 4 teachers in mathematics from a middle-sized Swedish municipality participated in a teacher professional development programme in formative assessment. The content of the programme was formative assessment conceptualized as a unity of different, integrated strategies. The study examines the effects on student achievement of the changes in the teachers' formative classroom practice that followed the professional development input. Results show that, after controlling for pretest scores, the classes in the intervention group significantly outperformed the classes in the control group in a posttest administered one school year after the end of the programme ($p = 0.036$, $d = 0.66$). The study contributes to the understanding of under-studied areas of the impact of professional development in formative assessment, and the impact of teacher practice based on formative assessment conceptualized as a unity of different formative assessment strategies[103]. The current study examined teacher professional development as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

In a previous study, researchers describe findings from a three-year evaluation of a well-developed mathematics professional development program that is commercially available on a wide scale. The professional development is designed to improve teachers' mathematical knowledge for teaching and to enable them to elicit more students thinking and reasoning during mathematics lessons. Specifically, it focused on helping teachers (a) learn more mathematics, (b) understand how children learn math, (c) use formative assessment to develop insight into what specific students know and do not know, and (d) develop effective classroom instructional strategies that enable student problem solving. Participants included 105 fourth- and fifth-grade teachers teaching in 19 low-income schools within a single district. Teachers were randomly assigned within schools either to a "business as usual" control group or to receive the professional development. The training consisted of a week-long summer institute and four to six in-service days during the school year. The training was run by full-time trained associates. The study find some limited evidence of positive impacts on teachers' mathematical knowledge for teaching, but no effects on instructional practice or student outcomes[104].The current study investigated teacher professional development as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

Another study investigated the effects of Primarily Math, an in-service elementary mathematics specialist program. Primarily Math sought to augment the mathematical knowledge for teaching of kindergarten through third-grade teachers using a longitudinal multiple cohort design. Two sets of analyses were conducted. The first examined impact on teachers' mathematical knowledge for teaching, attitudes toward learning mathematics, and beliefs about teaching and learning relative to a matched comparison group. Primarily Math teachers demonstrated greater knowledge for

teaching Numbers and Operations and more positive attitudes toward learning mathematics, and more often endorsed student-centered beliefs about teaching and learning. The second set of analyses examined the extent to which students of three cohorts of Primarily Math teachers demonstrated more fall–spring growth in a measure of mathematics achievement relative to students of comparison-group teachers. The findings revealed a small but positive effect of participation in Primarily Math on student mathematics achievement[105]. The current study examined teacher professional development as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

A study described the effects of an analysis-of-practice professional development (PD) program on elementary school students' (Grades 4–6) science outcomes. The study design was a cluster-randomized trial with an analysis sample of 77 schools, 144 teachers and 2,823 students. Forty-two schools were randomly assigned to treatment, (88.5 hours) of integrated analysis-of-practice and content deepening PD (over the course of one year) while 35 schools were randomly assigned to receive an equal number of PD hours in science content deepening alone. Students' content knowledge, as measured by a project-specific test, was compared across treatment groups. The effect size for this comparison was 0.52 standard deviations in favor of students whose teachers participated in the PD that included analysis-of-practice. This effect compares favorably to that of other elementary school interventions whose effectiveness was studied with a narrowly focused outcome measure. Analysis of the demographics of the study schools suggests that the treatment effect could be relevant outside the local study context. Implications for future research include tests of mediation for teacher-level outcomes and efficacy tests of specific teaching strategies (intervention subcomponents)[106]. The current study investigated teacher professional

development as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

A study investigated effects of children's school readiness for 2 interventions focused on improving teacher–student interactions (coursework, coaching) implemented sequentially across 2 years. Teachers from public prekindergarten programs in 10 locations were assigned randomly to treatment or control conditions in each year. Children's language behaviour was observed during the coaching year: Coaching and the course each had positive impacts on children's multiword language behaviour. Treatment impacts on directly assessed literacy, language, and self-regulation skills were evaluated within an intent-to-treat framework for children taught by the participating teachers in the coaching and post coaching years. Children demonstrated higher levels of inhibitory control in direct assessments when their teacher had received coaching the prior year. Teachers who received both coursework and coaching reported in the post coaching year that children in their classrooms demonstrated greater levels of behavioural control. Treatment effects did not differ as a consequence of child, classroom, or program characteristics, and there were no significant effects on directly assessed literacy or language skills. *Practice or Policy*: Results suggest modest benefits for children's language behaviour and self-regulation for intervention(s) that improve the quality of teacher–child interaction[107]. The current examined teacher professional development as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

A scholar indicates that teachers play a significant role in organizing, monitoring and assessing academic and non-academic activities and therefore, should be adequately trained to effectively impart the necessary skills to the children. This suggests that there is a direct link between curriculum implementation and teacher training at every level of

education[64]. Studies revealed that in Serbia, primary school teachers were inadequately trained to effectively implement the environmental education curriculum[64]. Furthermore, another study found that in the United States professional development or teacher training directly influenced the children's positive attitude towards teaching[108]. The empirical evidence from this study showed that continuous training could gradually improve teachers and their teaching methodologies gradually. On the other hand, lack of training was reported to have contributed to the teachers' insufficient and inefficient use of the proposed curriculum and to the children's low performance. Still in the USA researchers carried out another investigation about community-based participatory research on involvement of schools on promoting effective interventions on prevention of childhood obesity. The study showed that community engagement, curriculum support, professional teacher training, and evaluation of employed strategies could make teachers more efficient[109]. The study further showed that trained teachers reported a positive outlook on implementing the prescribed curriculum[109]. In order to understand teacher professional development on pre-primary education curriculum implementation in public primary schools in Southwest Nigeria, the current study was carried out in public primary schools. Researchers conducted a qualitative study using narrative design to compare teacher dispositions and attitudes in student learning and achievement in the USA and China. The study observed examples of passionate and highly motivated teachers at all levels of education in USA and China. Nevertheless, teachers in the USA were vocal for lack of professional opportunities, especially in educational technology. The study pointed out that teachers have limited professional development opportunity especially in using newer technology to improve teaching. In addition, the study revealed that teachers in the USA were grossly concerned about the balance between contact hours of direct teaching and time for preparation and

professional development. This finding suggests that if teachers in the USA accessed the desired professional development in technology, this would improve their confidence levels, knowledge and skill level, and would therefore improve their performance[87]. The current study examined teacher professional development as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

From both countries, USA and China, teachers were enthusiastic about gaining new knowledge and competency in technology. They valued having significant time and priority given to advance their knowledge and pedagogical skills. Teachers believe professional development should be continuous throughout one's career and sustained rather than isolated workshops or conferences. About 30% of the teachers expressed their interest in pursuing advanced degrees such as master's or doctoral degrees. On the whole, the study observed that professional development for teachers is a high priority in China's elementary and secondary schools[87]. The typical student-contact time for teachers is 3-4 hours per day, with the rest of the day devoted to professional development, curriculum development, lesson preparation, and faculty meetings. The priority on professional development for teachers at all levels and a less demanding teaching workload may explain the more consistent positive teacher motivation across the schools in China, accompanied by improved job performance. Teachers, both in US and China, were sensitive to individual learner's needs and guided students through the learning process. In addition, teachers assessed learners regularly to ensure their learning achievement. In China, teachers were involved in learners' discipline and also reported poor student attendance [87]. The study reflects the situation of teachers in USA and China, both developed countries, a situation that may be different in many aspects from the situation in Africa, among developing countries. In addition, the findings of the

study may not be generalized to other geographical contexts since the study used only the qualitative approach. Also it is not clear whether the study involved only government schools or private schools, or both as there was no distinction made. This study employed both quantitative and qualitative approaches and conducted in developing country of Southwest, Nigeria.

In addition, an evaluation study conducted in rural China by on the impact of teacher professional development program-National Teacher Training Program on student achievement, revealed that, although the program had positive effect on mathematics teaching knowledge of teachers, it had no significant effect on teaching practices in the classroom[110]. This finding underlines the fact that both professional development programs and instructional supervision should supplement each other for effective results. Instructional supervision provides an opportunity for the teacher to interact with the supervisor and to air out other challenges regardless of the teacher's mastery of content knowledge. The study used both questionnaires and interviews to collect data from participants and that enabled the study to cover many participants and to gain in-depth knowledge reflecting individual lived experiences and personal perspectives[110]. The current study was therefore conducted both in rural and urban public primary schools in order to comprehend teacher professional development on pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

Another study conducted in North Cyprus, used a case study design where it was observed that most teachers complained of subject group meetings having not enough periodic schedule, thus re-echoing what was reported in the US and China[87]. This observation presupposes that some teachers in North Cyprus desired to attain professional confidence, competence and pedagogical skills for the subjects they taught

in order to perform better. Interestingly, very few teachers from the study recommended training and seminar opportunities as motivators. These views were supported by the responses from administrators who stated that many of the teachers did not see seminars and training opportunities as motivators. The study, unfortunately, does not give reasons for the discrepancy among teachers, vis-à-vis professional development. This perhaps explains how the desire for professional development may depend on individual's personal traits like age, needs, and marital status among others. Lack of professional development denies teachers enhanced knowledge and skills and curtails their performance[83]. As the study employed a case study design, it gives an in-depth understanding of the teachers' situation but with limited applications the study findings cannot be generalized to other areas. .Thecurrent study examined teacher professional development as determinant of implementation of pre-primary education curriculum in public primary schools in Southwest, Nigeria.

Similarly, a study using a multi-method design, examined the state of educators' professional learning in Canada. The study found out that professional learning programs included but not limited to workshops, collaborative inquiry or research, conferences, professional network or learning community, mentoring and coaching, taking on further studies at master's or doctoral level, and observation visits to other schools. These programs fostered teachers' growth and development by offering teacher learning and leadership programs, annual learning plan, teacher performance appraisal, new teacher induction program, collegial involvement in planning, teacher-determined learning goals, collaborative construction of knowledge, among others. In addition, professional learning offered teachers subject-specific and pedagogical content knowledge, trained teachers how to work with all students in an inclusive environment, equipping teachers with teaching cross-curricular competencies, training in instructional

methods, classroom assessment, classroom management, supporting diverse learning needs and others. All these professional learning programs enabled teachers in Canada to appreciate the primacy of continuing career-long professional development, the necessity of teacher autonomy, the importance of teaching-centred and teacher-directed professional development, the diversity of effective professional development needs and practices, the value of teachers teaching teachers, recognition that teachers are learners. These varied professional learning opportunities benefited teachers with knowledge and skills and further enhanced their job performance[111]. The study used both quantitative and qualitative approaches and this helped to reach many participants and also to generate in-depth knowledge thus capturing participants' live experiences and understanding. Nevertheless, the study cannot claim to reflect the situation in Nigeria regarding teachers' professional development opportunities because of the geographical and socio-economic differences between the two countries. In addition, the study was so broad in scope covering all provinces of Canada, which may limit the study to provide specific details of each province. The current study examined professional development as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

In addition, the role of professional development in improving job performance was highlighted in a study a conducted in Asia. The study used survey design in examining the effectiveness of teachers' job performance through motivation in ten public and private schools in Peshawar city in the province of Khyber Pakhtunkhwa, in Pakistan. In the study, majority of the teachers expressed that more educated and experienced teachers had more capabilities and confidence than others and devoted more effort towards their job. This implies that teachers get more committed to their tasks when they are well prepared with the necessary tools of knowledge, skills and

positive attitude. This calls for attention to teachers' professional development about the role of professional development opportunities in improving job performance as it depended only on the cross-section survey design[87]. The current study employed convergent mixed methods design, including phenomenological design that explored participants' perspectives and lived experience for in-depth information about the professional development opportunities provided for the teachers. The current study examined teacher professional development as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

In India, a study was conducted to examine teachers' perceptions of the determinants of teacher motivation and job satisfaction in primary schools. It was a qualitative study, although it also used questionnaires for some participants, without explicitly acknowledging a mixed methods design. The study revealed that many in-service teachers' training programmes were introduced in 1994 and the government of India provides central funds for on-going in-service training of teachers. Most teachers felt that the opportunities for upgrading professional qualifications were inadequate; and opportunities for in-service training were just average. The study indicated that most teachers enrolled for professional growth on their own. Often in most developing countries, policies are made but remain on paper. This could explain the situation in India, which may be true in other countries[87]. The study findings suggest that teachers yearn for professional development opportunities, a fact that if these opportunities were provided, teachers would feel motivated and would perform better. The current study examined teacher professional development as determinant of implementation of pre-primary education curriculum in public primary schools in Southwest, Nigeria.

In African countries and in their education systems, professional development seems not to be given the priority it deserves. For instance, in Malawi, a case study

examined the extent to which low teacher motivation is a constraint to the attainment of UPE[87]. The study, among other factors, identified lack of continuous professional development as a factor contributing to the current poor levels of teacher morale and job satisfaction in Malawi. Lack of opportunities for training and seminars; were observed as affecting teacher' motivation and by extension job performance, whereby teachers with low morale found excuses to absent themselves from school. Other teachers found private teaching in urban schools, while others resorted to farming in rural areas. Teacher absenteeism was reported as a serious problem in Malawian schools. The current study examined teacher professional development as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

In Ghana, a study conducted a qualitative research to explore the perspectives of senior high school teachers on the availability of professional development programs in Sekyere District in the Ashanti region[112]. Findings revealed that teachers were being offered continuous professional development opportunities, for example, to access distance learning facilities and graduate course from institutions of higher learning. Professional development opportunities also took the form of workshops, in-service training, conferences and seminars. These opportunities were traditionally structured, not often organized and also limited to a few selected individual teachers. This made many teachers in Ashanti region to become less effective in imparting quality teachers' instructional practices and thus poor teacher job performance. The study benefited by obtaining in-depth knowledge for employing qualitative approach but missed out on reaching many participants unlike the used quantitative approaches such as questionnaires. The study was conducted in secondary schools which have a variety of differences when compared to primary schools in terms of teachers' opportunities to access professional development, among others. In addition, the study did not specify as

to whether it took place in an urban or rural setting as there is a great discrepancy between urban and rural school[112]. The current study anchored on mixed methods design specifically on convergent parallel mixed methods design. This methodology enabled the study to overcome weaknesses of one approach with the strengths of another. Further still, the current study will be specifically carried out in the Southwest, Nigeria setting and in public primary schools. Therefore, the current study covered the methodological and scope gaps identified in the Ashanti region in Ghana.

A study conducted in Uganda, using mixed methods design to explore secondary school teachers' perception of teacher professional development from five districts. The study sampled five rural schools from eastern Uganda and eight schools from urban Kampala. The findings indicated that teachers had a narrow understanding of teacher professional development. However, the study revealed that the professional development opportunities offered to teachers included in-service training, workshops and seminars. The study further found out that teacher professional development was not without constraints and these included shortage of time, lack of finances, lack of motivation and support by head teachers and the government. The study covered many participants by using a quantitative approach and also obtained in-depth information through qualitative approaches. It also was enriched by obtaining information from both rural and urban settings. In addition, the study considered secondary schools[87]. However, Nigeria has many regions which are different in many aspects; and there are also differences between education levels. The current study limited its scope to only public primary schools in Southwest, Nigeria in order to have a more elaborated and detailed understanding of available teachers' professional development opportunities and how these influences preschool curriculum implementation.

In Nigeria, a survey study on Staff Development Programmes and Secondary School Teachers' Job Performance in Uyo Metropolis showed that teachers who participated in staff development programmes were more effective in their job performance than those who did not. This difference was in terms of knowledge of the subject matter, classroom management, teaching methods and assessment of students' work[87]. This implies that teachers, at whatever school level, should be regularly provided with professional development opportunities to keep them abreast with changes in education systems such as curriculum, teaching methods among others. The study relied only on a survey design which brought many participants on board but fell short of obtaining participant's individual experiences and perspectives, which would have brought out in-depth information on the subject. In addition, the study may reveal geographical and economic disparity between Southeast and Southwest Nigeria as the two regions may be different in levels of development and with difference. Therefore, Southeast, Nigerian teachers' situation may not reflect exactly the situation of teachers in Southwest, Nigerian. This current study was anchored on a mixed methods design to cover the identified gaps.

Similarly, a survey study in Nigeria was conducted on Professional Development Programs for Teachers in Public Junior Secondary Schools. It revealed that cluster type seminar, mentoring, on-job training and in-service training approaches were used to update teachers' professional growth[113]. However, the study found out that not all teachers in public junior secondary schools had equal opportunities to attend the professional development programs. This was so because teachers were selected according to their qualification levels, years of experience, subjects taught and areas of specialization. Another challenge that did not favor progress of the professional development programs was poor conditions of the infrastructure, shortage of

instructional materials, and relevant textbooks. Nevertheless, the study revealed a significant relationship between professional development programs and teachers' productivity in junior secondary schools with r-calculated value of 0.79 that was greater than r-table value of 0.19 at 0.05 level of significance. This meant that the knowledge, skills, value and traits which teachers acquire from professional development opportunities will not only complement their efforts but also increase and improve the way the syllabus is delivered in classroom. This in turn, will add value and quality to the teaching and learning processes. One of the gaps this current study filled was the fact that it was conducted in public primary schools in Southwest, Nigeria.

A study investigates the influence of teachers' professional development on mastery of subject matter in Public Secondary Schools in Delta and Edo States. The ex-post facto research design was used. Three research questions and three hypotheses were raised and formulated. The population was made up of all the teachers. Stratified random sampling technique was adopted to select the teachers. The instrument used for data collection was the questionnaire. The instrument has face and content validity. The Split-half method was used to determine the reliability of instrument. The spearman correlation coefficient was used in analyzing it, which gave a value of 0.96reliability coefficient. The data collected were analyzed with Mean and Standard Deviation for the research questions while the Pearson Product Moment Correlation was used for the hypotheses. A mean of 2.50 was adopted as the agreement level of the items. The findings of the study showed that professional development of teachers' influence the mastery of their subject matter, classroom management strategies contributes to mastery of subject matter, and teaching methods contribute to academic performance of students. Based on these findings, it was recommended that teachers' professional development training should be adopted as a yearly exercise for teachers across all levels of

teaching[114]. The current study examined teacher professional development as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

A study investigated the influence of teachers' professional development on students' academic achievement in secondary schools in Benue and Nasarawa State. Two research questions and two hypotheses guided the study. Descriptive survey research design was adopted for the study. The population of the study comprised 8,335 teachers from 709 secondary schools in Benue and Nasarawa State of Nigeria. A sample of 417 teachers was used for the study. A 10-item structured questionnaire developed by the researcher tilted "Influence of Teachers' Professional Development Questionnaire (ITPDQ)" was used for data collection. Descriptive statistic of mean and standard deviation were used to answer the research questions while the chi-square (χ 2) test of goodness of fit was used to test the hypotheses at .05 level of significance. The findings indicated that teachers' attendance to conference and workshop has significant influence on students' academic achievement in secondary school in Benue and Nasarawa State. It was recommended among others that government should endeavour to provide adequate funds for sponsorship of teachers on workshops and seminars so as to enhance students' better academic achievement in schools[115]. The current study examined teacher professional development as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

The study sought to find out the Influence of Teacher's Professional Development Practices on their Job Performance in Nyamagana District, Mwanza-Tanzania. The study employed convergent parallel design under the mixed methods approach to help collect and analyze both quantitative and qualitative data strands. Stratified random sampling and simple random sampling techniques were used to

sample public secondary schools and teachers while purposive sampling techniques were used to sample heads of schools and the District Education Officer. Data was collected through the use of questionnaires and in-depth interview guides. The quantitative data was analyzed with the aid of Statistical Package for Social Sciences (SPSS) while qualitative data were analyzed through thematic analysis of the specific objectives. The findings revealed that training the workforce (teachers) has the most impact on different dimensions like; improvement of teaching strategies, reduces teachers' burnout, stress and turnover, improves teachers' effectiveness and improves overall teacher's personnel. Henceforth, regular performance appraisals in schools enable teachers to improve themselves in classroom management, simplifies supervision, evaluation and assessment process, improves proper communication and it also ensures teachers' discipline at work. At last the study recommended that the ministry of education, science and technology, education stakeholders in conjunction with school administrators (district educational officer and heads of schools) to regularly organize and facilitate formative in-service training for teachers to enhance their job performance[116]. The current study examined teacher professional development as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

A study recently investigated teachers' participation in professional development programme and its impediments for quality instructional delivery in secondary schools in Rivers State. The study adopted a descriptive research design. The population of the study was 5,216, respondents comprising principals and teachers in Secondary Schools in Rivers East Senatorial Zone. The simple size was 298 (256 teachers and 42 principals) respondents drawn through disproportionate sampling technique from 42 secondary schools in 4 local government areas in the senatorial zone representing 70% of the

principals and 5% of the teachers. The disproportionate random sampling technique was employed because the strata of the population were dispersed in their distribution in the 42 schools. Teachers' Participation in Professional Development Programme and its Impediments for Quality Instructional Delivery Questionnaire (TPPDPIQIDQ) was used for data collection. The questionnaire was face validated by experts in the relevant areas. The reliability coefficient of 0.71 was computed for TPPDPIQIDQ. Data obtained from the respondents were analyzed using mean statistics while the hypothesis was tested using z-test statistics at 0.05 level of significance. Findings indicated that Based on the findings of the study, it was concluded that teachers' professional development is very relevant and indispensable in the actualization of quality instruction in secondary schools in Rivers State. Teachers' professional development has been proven to constantly enhance teachers' development and teaching practices. Teachers' professional development has been faced with series of challenges that impede teachers participating in development programmes. It was recommended that teachers should be encouraged by principals through nominations to participate in workshops for quality instructional delivery in our schools. Similarly, state government should increase the frequency of training programmes such as workshop, seminars, conferences, etc. Training allowance should be approved for teachers to enhance their participation in development programmes. Since the teachers' participation enhances instructional delivery, state government education stakeholders and public spirited individuals should collaborate to promote teacher's participation in programmes that will improve them[117].The current study examined teacher professional development as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

2.3.2 Teacher Motivation and Implementation of Pre-Primary Education Curriculum

A previous study was conducted on the Relationship between Teachers' Motivation and Physical Education Teaching Strategies among Primary School Teachers in Southern Thailand. The survey design was adapted to collect data. The respondents were 269 Physical Education (PE) teachers from primary schools in Southern Thailand. This study found that there are significant relationships between external, identified, and intrinsic motivation with teaching strategies. On the order hand, there is no significant relationship between the interjected motivation and the teaching strategies among primary school teachers. This study provides empirical evidence to support the importance of teacher motivation and teaching strategies and to encourage teachers to increase their motivation for teaching in order to develop more effective Physical Education (PE) teaching. However, the respondents of the study were teachers in primary schools in Southern Thailand provinces; hence, the scope and context of the results of the study apply only to teachers in those areas[118]. This study has some similarity with the current study except for geographical differences and the fact the current study investigated teacher motivation as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

A study examined work and school related variables on teacher motivation in Gasabo District of Rwanda. Two hundred and sixty-seven (267) primary school teachers from Gasabo district, Kigali, participated. Systematic sampling technique was applied to choose the number of needed schools from the total of 55 in the district. Hence 15 schools were chosen as a sample population in which teachers constituting these schools were investigated. The instrument contained 50-structured items that were measured on a four-point scale with a numerical score: - strongly disagree (1), tend to disagree (2),

tend to agree (3), and strongly agree (4). A pilot survey was done before the final data collection to determine the instrument's dependability and to see if it measured what it was supposed to measure. The pilot project enlisted the participation of 44 teachers. The results indicate that motivation of public primary school teachers in Gasabo district is due to work supervision, responsibility assignment, and how teacher effort is acknowledged and respected. The results further indicate that in teacher motivation and school facilities related variables, only aesthetic and cleanliness significantly correlated with teacher motivation. It is recommended that educators, through reflective practice, and in-service and professional development, learn more about how to structure physical classroom settings to meet their instructional goals and activities, which would, as a result, motivate both the learner and the teacher[119]. The identified gap is that this study examined work and school related variables on teacher motivation in Gasabo District of Rwanda while the current study investigated teacher motivation as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

A previous study was conducted to find out relationship between teacher motivation and students' academic achievement at secondary school level. A sample of 950 secondary school teachers using population proportionate to sample technique was taken out of 3168 secondary school teachers teaching in high schools of five districts of Lahore Division in Punjab. Survey technique was used to collect data through a questionnaire titled Motivational Orientation for Teaching Survey (MOTS). The academic achievement of the students was measured by taking two year results of grade 10 students in the annual examinations conducted by Board of Intermediate and Secondary Education Lahore (BISE). The mean, standard deviation, and Pearson's "r" were used to examine the data. It was found that intrinsic motivation of teachers was

having strong correlation with academic achievement of the students[120]. The study recommended that in-service teacher training programs can serve as better source for the enhancement of intrinsic motivation level of teachers. This study was conducted to find out the relationship between teacher motivation and students' academic achievement at secondary school level in Punjab while the current study examined teacher motivation as determinant of implementation of pre-primary education curriculum in public primary schools in Southwest, Nigeria.

A study investigated the influence of Teacher Motivation to the Academic Performance of Pupils in Primary Schools in Nyamira South Sub-County. The population of study was 147 head teachers and 836 teachers in Nyamira South Sub-County. Stratified sampling was used to get a sample of 84 teachers and 15 head teachers. A mixed method design was adopted for this study that used qualitative and quantitative approaches in collecting and analyzing data concurrently. A questionnaire was used to collect data from the teachers while an interview schedule collected from head teachers. Quantitative data was analyzed using both descriptive and inferential statistics. The descriptive statistic was used to describe and summarize the data in form of frequencies and percentages. Pearson correlation analysis was used to establish the relationship between the independent and dependent variable using the Statistical Package for Social Sciences (SPSS). The correlation analysis established a positive but weak (r= .439; p=.000<.0.05 correlation between teacher motivation and pupils' academic performance. Qualitative data from the interview was analyzed using thematic approach. Data was coded and themes analyzed as they emerged. Analyzed data were then merged for presentation and discussion. The study concluded that the teacher motivation had a significant influence to academic performance of standard eight pupils in K.C.P.E[121]. The study recommended that teachers should be given better motivation

in terms of salaries, letters of recommendations and promotions. The results obtained may help the government and the community to make necessary changes and improvements so as to improve the education performance in the sub county. The gap in this study is the fact that the study investigated the influence of teacher motivation to the academic performance of pupils in primary schools in Nyamira South Sub-County in Kenya while will current study investigated teacher motivation as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

A review of empirical studies on teacher motivation indicates decreasing levels of motivation among secondary school teachers ultimately leading to minimal achievements of the projected Kenya's Vision 2030. This study examined School Curriculum as a Determinant of Secondary School Teacher Motivation in Kenya in Curriculum Implementation. The research adopted a survey study design, adopting mixed methods research approach with an aim of fortifying and converging both quantitative and qualitative data. The respondents were sampled from 46 secondary schools located in Nyeri and Kirinyaga counties of Kenya. The findings of this study inform curriculum planners, education leadership and policy makers on the school curriculum as a core determinant of teacher motivation in secondary schools that influence curriculum implementation in Kenya[122]. This study is similar to the current study except that the current study focused on teacher motivation as determinant of implementation of pre-primary education curriculum in public primary schools in Southwest, Nigeria.

Another study investigated the Effectiveness of Teachers' Motivation on Job Performance in Public Primary Schools Uganda. There is public concern for deteriorating teachers' professional conduct in Uganda characterized by teachers' poor

time management, absenteeism, inadequate preparations and syllabus coverage, and poor discipline management that compromise teacher job performance. Literature revealed need of motivating teachers in order to achieve improved teachers' performance in schools. Convergent parallel mixed methods, particularly cross-section survey and phenomenological designs guided the study. Stratified random sampling, simple random sampling, and purposive sampling procedures were used to select participants. Research instruments included questionnaires, in-depth interview guide, and Focus Group Discussion guide. Descriptive statistics such as frequencies and percentages were used to summarize quantitative data, and inferential statistics T-test and ANOVA were used to test hypotheses. Qualitative data was analyzed by generating codes and categories. Findings revealed that workshops, in-service training and seminars were provided for teachers and enhanced their teaching effectiveness. Teachers received a meager consolidated salary which left most teachers dissatisfied. External and internal instructional supervision was conducted but the District Inspector of Schools had facilitation challenges. Few schools had staff quarters, other teachers catered for themselves. Schools had incomplete classroom structures, inadequate reference materials and textbooks which compromised effective teaching[87]. The study recommends that government should increase funding for more workshops and seminars; increase teachers' salary and bridge salary gap between teachers and head teachers. The current study investigated teacher motivation as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

2.3.3 Mother Tongue Instruction and Implementation of Pre-Primary Education Curriculum

A study was conducted on Curriculum Reforms and Mother Tongue Education: Issues, Challenges and Implementation Strategies in Bungoma County in Kenya. Purposive sampling was used to identify key respondents from 10 schools which were used to pilot the new curriculum. The respondents included Grade 3 teachers, head teachers and quality assurance officers (QASOs). The data was gathered through focus group talks, unstructured interviews, and document analysis. The findings revealed that if the implementation of the Mother Tongue Education (MTE) policy is not accompanied by thorough implementation strategies that address teacher training, the production of teaching/learning materials, and efforts to influence parents' attitudes about indigenous languages, the program is likely to fail. The paper advocates for implementation strategies such as greater resource allocation, teacher training on Language of the immediate Environment (L1) methodologies, a change in attitude with regard to Mother Tongue Education (MTE), political will and clearer policy objectives to achieve the aims of an effective Mother Tongue Education (MTE) system in Kenya[123]. The current study examined mother tongue as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

A study investigated the Impact of Mother Tongue Reading Instruction in Twelve Ugandan Languages and the Role of Language Complexity, Socioeconomic Factors, and Program Implementation in Uganda. The study used a mother tongue reading program that used clustered randomized controlled trials in 12 language communities. The findings suggest that significant reading gains are possible in complex, large-scale mother tongue reading programs, but their magnitude may vary by language. The findings also revealed significant positive literacy achievement in 9 of the 12 languages, an encouraging sign of such interventions' overall potential for impact. Language characteristics, including complexity, were more predictive of impact than

implementation fidelity or socioeconomic factors. This study also recommends that literacy improvement program designs consider language complexity and characteristics, among other factors, to maximize impact[124]. The current study will examine Mother Tongue as Determinant of Implementation of Pre-Primary Education Curriculum in Public Primary Schools in Southwest, Nigeria.

The controversy as to whether English Language or the child's mother tongue facilitates teaching and learning at primary school level has not been resolved. The advocates of mother-tongue medium claim that it makes for meaningful teaching and learning and better pupils' participation in the learning process while antagonists of Mother Tongue (MT) as medium of instruction claim it hinders effective teaching and learning of the English language. On the basis of this, a study therefore investigated the impact of the Mother Tongue Education (MTE) on effective teaching and learning of English in selected primary schools in Anambra and Enugu States of Nigeria using survey research design. Three research questions were raised and answered. Data were collected through the use of teachers' questionnaire. Findings revealed that primary school teachers were aware of Mother Tongue (MT) policy provision and that it facilitates effective leaching and learning of English Language at primary schools. Consequently, recommendations were made that pupils should he given the opportunity of learning in Mother Tongue (MT) longer than the first three years of primary education while government should ensure regular monitoring of classroom practices to ensure compliance with Mother Tongue (MT) policy provision[125]. Thus, the current study investigated mother tongue as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

Some group of researchers conducted a study on Improving Pupils' Mathematics Achievement Through Mother Tongue Based-Multilingual Education with Special

Interest in Determining the Effectiveness of MTB-MLE as a medium of teaching in mathematics in relation to pupils' achievement in Filipino and English as the language of assessment. This descriptive method research is focused on the use of researcher-made Mathematics Achievement Tests, supported with document analysis of relevant school forms, and interview with teachers as sources of data. Purposive sampling was employed considering only the big primary public schools, with fifteen grade three Mathematics Teachers (n = 15) and seven hundred forty-six grade three pupils (n = 746) as participants. Results revealed that in mathematics pupils when exposed to either English or Filipino language exhibited "good" performance on items in the remembering and understanding levels while "fair" performance was noted in items where application skills were required. Pupils tend to perform better in Mathematics when Filipino is the medium of teaching and learning[121]. Results provided evidence that the pupils' first language positively affect their Mathematics achievement. However, the current study examined mother tongue as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

Limited rigorous evidence is available from sub-Saharan Africa regarding whether children who learn to read in their mother tongue will have higher learning outcomes in other subjects. A randomised controlled trial of mother-tongue literacy instruction, the Primary Math and Reading (PRIMR) Initiative, was implemented in Kenya from 2013 to 2014. The impacts of the PRIMR mother-tongue treatment group in two languages were compared with those of another group that did not use mother tongue, but utilised the same instructional components. Results showed that assignment to the mother-tongue group had no additional benefits for English or Kiswahili learning outcomes beyond the non-mother-tongue group, and that the mother-tongue group had somewhat lower mathematics outcomes. Classroom observational analysis showed that

assignment to mother-tongue group had only small impacts on the usage of mother tongue in other subjects. Advocates for mother-tongue programmes must consider such results alongside local implementation resistance in programme design[127]. The current study investigated mother tongue as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

2.3.4 Instructional Materials and Implementation of Pre-Primary Education Curriculum

A study conducted in Ghana used descriptive cross-sectional survey study to investigate Teachers' Efficacy in The Employment of Learning Activities and Instructional Resources[128]. The findings of this study showed that lack of provision for teaching and learning materials in Ghana hampered effective curriculum implementation[129]. Similar findings had previously been reported in South Africa. The study found that inadequate resources, facilities and lack of support from concerned stakeholders such as parents, teachers, school authorities and the government contributed to poor implementation of the curriculum[60]. It should be noted these the above studies seem to suggest that teaching and learning resources (materials) contributed to the success of curriculum implementation in different parts of Africa with exclusion of Nigeria. However, the current study investigated instructional materials as determinant of curriculum implementation in pre-primary education in public primary schools in Southwest, Nigeria.

A previous study investigated school size and facilities utilization as correlates of secondary school students' academic performance in Ekiti State, Nigeria. Two key objectives were studied and hypotheses were evaluated, including the impact of school size on academic success and the impact of facility use on academic performance. Two hundred and two questionnaires were randomly distributed to some selected staff in all

the senior secondary schools in Ado Ekiti, Ekiti State. The data were analyzed with the aid of ANOVA, multiple regression analysis of Ordinary Least Square (OLS) to test the relationship that subsist between some identified proxies. The findings of the study revealed that school size and facilities utilization has impacted positively on the performance of secondary school students in Ekiti State. This is evidenced from the regression coefficient that indicated positively to question raised under the issue. The study established a strong and positive relationship between school size and facilities utilization in relation to students' academic performance. From the findings of this study, it was recommended that the State Government should build more classrooms in all schools[192]. The current study investigated instructional materials as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

A similar study was conducted on Relationship between Teachers' Demographic Characteristics and Levels of Utilization of Instructional Materials in Pre-Primary Schools in Kenya. The study used a cross-sectional survey research design and data were collected through self-administered questionnaires. A sample of 164 teachers comprising of 76.2% females and 23.8% males participated in the study. Results established that 86.4% of the teachers had positive attitudes towards instructional practice. In terms of utilization of instructional materials, the researchers determined that 62.1% of the respondents achieved high levels while 37.9% attained low levels of utilization of instructional materials across the Early Childhood Development Education (ECDE) activity areas. Chi-Square results revealed that there was statistically significant relationship between teachers' attitudes and utilization of instructional materials (χ^2 = 4.094; d.f.= 2; p = 0.043). Further analysis using regression test revealed that there was statistically significant relationship between teachers' positive attitudes and levels of

utilization of instructional materials (β =0.516; p = 0.001). These findings established that teachers who had positive attitudes attained higher levels of utilization of instructional materials in their classrooms compared to their counterparts who had negative attitudes. The study therefore, concluded that teachers' attitudes were a significant factor in promoting the utilization of instructional materials in ECDE activities. This implies that positive attitude is an important attribute of a pre-primary school teacher. Therefore, there is need to inculcate positive attitudes towards utilization of instructional materials among teachers during pre-service and in-service training sessions to promote best practices in instruction at the pre-primary school level[130]. The current study examined instructional materials as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

A study was also conducted to find out male and female teachers perception of the effectiveness of Audio instructional materials used in teaching Agricultural Sciences in Senior Secondary Schools in Gombe State. Literature was reviewed to explore opinions and argument relating to the study. The population of the study was 143 Agricultural science teachers, made up of 111 males and 32 females. Structured questionnaire which was validated by experts and tested for internal consistency and reliability using Cronbach alpha formula which indicated 0.99 was adopted. Two research questions and a hypothesis, formulated and tested at 0.05 level of significance guided the study. The data were analyzed using mean statistics and standard deviation, while the t-test was used to test the null hypotheses. Findings revealed that: 1) male and female teachers perceived the use of audio instructional materials as effective at grand mean of 2.18 and 2.05 respectively, 2) There was no significant difference between the mean responses of male and female teachers perception on the effectiveness of audio instructional materials used in teaching Agricultural Science in the study area. The study

recommended that teachers should endeavor to use audio instructional materials in teaching Agricultural Science in Senior Secondary Schools[131]. The gap in this study is that it was carried out on Male and Female teachers' perception of the effectiveness of Audio instructional materials used in teaching Agricultural Sciences in Senior Secondary Schools in Gombe State. However, the current study investigated instructional materials as determinant of implementation of pre-primary education curriculum in public primary schools in Southwest, Nigeria.

Another study was conducted on Assessment of Utilization of Instructional Materials in Teaching and Learning of Business Education Subject in Secondary Schools in Enugu State. The study adopted descriptive survey research design for the study. It was conducted in Enugu Education Zone of Enugu State. The population for this study was 189 teachers in public secondary schools in Enugu Education Zone where business education subject is taught comprising male 54 and female 135. Findings show that they use audio tape recorders in teaching and learning of business education subject, qualified business teachers with knowledge of instructional materials required to teach business education subject. The study therefore recommends that seminars and workshops should be organized for teachers on the availability and management of materials in schools and teachers need to update their skills in the area of modern technology to enable them discharge their duties effectively[132]. This study was conducted on assessment of utilization of instructional materials in teaching and learning of business education subject in secondary schools in Enugu State while the current study will examine Instructional Materials as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

2.3.5 School Physical Facilities and Implementation of Pre-Primary Education Curriculum

a study examined and compared the effect of school physical environment on academic achievement of senior high school students in Ghana. The study sought to investigate the contribution of a number of school physical environment on the performance of students in schools. Participants for the study were selected using the multi-stage sampling technique using simple random sampling. A regression model was used to determine the relationship between the dependent and independent variables. Findings of the study confirmed that students in senior high schools with a pleasant physical environment perform better than those where the learning environment is not conducive. Researchers, on the basis of the empirical evidence, established that adequate school facilities provide a positive educational climate suitable for student learning[133]. The current study examined school physical facilities as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

A study sought to investigate The Influence of School Physical Facilities on Students' Discipline in Public Secondary Schools in Makueni County, Kenya. The objectives of the study were: to determine the influence of adequacy of classrooms on students' discipline, to establish the influence of school library facilities on students' discipline, to establish the influence of science facilities on students' discipline and to determine the influence of adequacy of sports grounds on students' discipline. Descriptive survey design was employed. The target population was 324 principals, 3,865 teachers and 97,200 students in public secondary schools in Makueni County. Sample size of the study was obtained by stratified and simple random sampling procedures. The total sample matrix was 68 principals, 350 teachers and 380 students. Questionnaires, interview guide and observation schedule research instruments were utilized for the study. The reliability of the instruments was confirmed using the test-retest method of reliability. The questionnaire for students had a reliability coefficient of

0.765, while the questionnaire for teachers had a reliability coefficient of 0.814. The information was evaluated and displayed in frequency tables using descriptive and inferential statistics. Pearson To test the hypothesis, the Product Moment Correlation Coefficient was used. From the data analysis, it was found out that adequacy of physical facilities had significant positive relationship at r=+0.78, P=0.002 with levels of students' discipline in public secondary schools in Makueni County. The study recommended that educational stakeholders should expand school physical facilities in order to enhance students' discipline[134]. The current study investigated school physical facilities as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

A similar study examined Physical Resources Availability and the Academic Performance of Students in the Universal Basic Education Scheme, Rivers State. Three research objectives and research questions were raised and the researcher used descriptive survey design for the study. The population of this study is 1590 UBE teachers, from 34 junior secondary schools in Port Harcourt and Obio/Akpor LGA, Rivers State. The sample size for this study was made up of 470 UBE teachers while stratified random sampling technique was used for the study. The instrument used was Physical Resources Availability and the Academic Performance of Students in the Universal Basic Education Scheme, Rivers State Questionnaire (PRAAPSUBESQ). A 4-Point rating scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) was used and the respondents were requested to select one of the four (4) options. 470 copies of questionnaire were distributed and 353 were retrieved for analysis. Test-re-test method was used for the reliability test which yielded reliability co-efficient 0.97. The Mean and standard deviation was used in analyzing the research questions, while the t-test was used in testing the hypotheses at a 0.05 level of

significance. Findings revealed that both students and teachers need facilities such as libraries, laboratories, good buildings, classrooms, good water supply, toilet facilities, security, etc, for teaching and learning to take place. It was therefore recommended that Educational administrators in public junior secondary schools should organize seminars for principals, teachers and students on the strategies of resource maintenance at different levels for the provision of educational services. Educational administrators should allocate funds for resource maintenance and for the provision of physical resources used in educational services which enhances teaching and learning[135]. The current study investigated school physical facilities as determinant of implementation of pre-primary education curriculum in public primary schools in Southwest, Nigeria.

A similar study explored The Management of School Physical Facilities and its Effects on Primary School Pupil's Academic Performance in Uvinza district in Tanzania. Specifically, the study determined the factors that contribute to inadequate physical facilities in Primary schools in Uvinza district; examined the measures taken by school management to maintain physical facilities in Primary schools; and assessed the challenges that the management of primary schools in Uvinza district encountered in maintaining physical facilities. Observation, interview and questionnaires were used to collect information from 56 primary school teachers. Research findings revealed that the factors that contribute to inadequate physical facilities in Primary schools in Uvinza district consist of the following: age of the school building, lack of training on the development and maintenance of school facilities, carelessness in handling them and age of the buildings. Other factors include lack of community participation in the maintaining school facilities, inadequate financial resources, student ignorance on their role in maintaining facilities, lack of auditing by school management, lack of regular visit by administrators and school administration. The study recommends that there

should be community involvement including all education stakeholders in the process and redesigning of policy framework to improve management of school physical facilities in Tanzania[136]. The current study examined school physical facilities as determinant of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

2.4 Conceptual Framework:

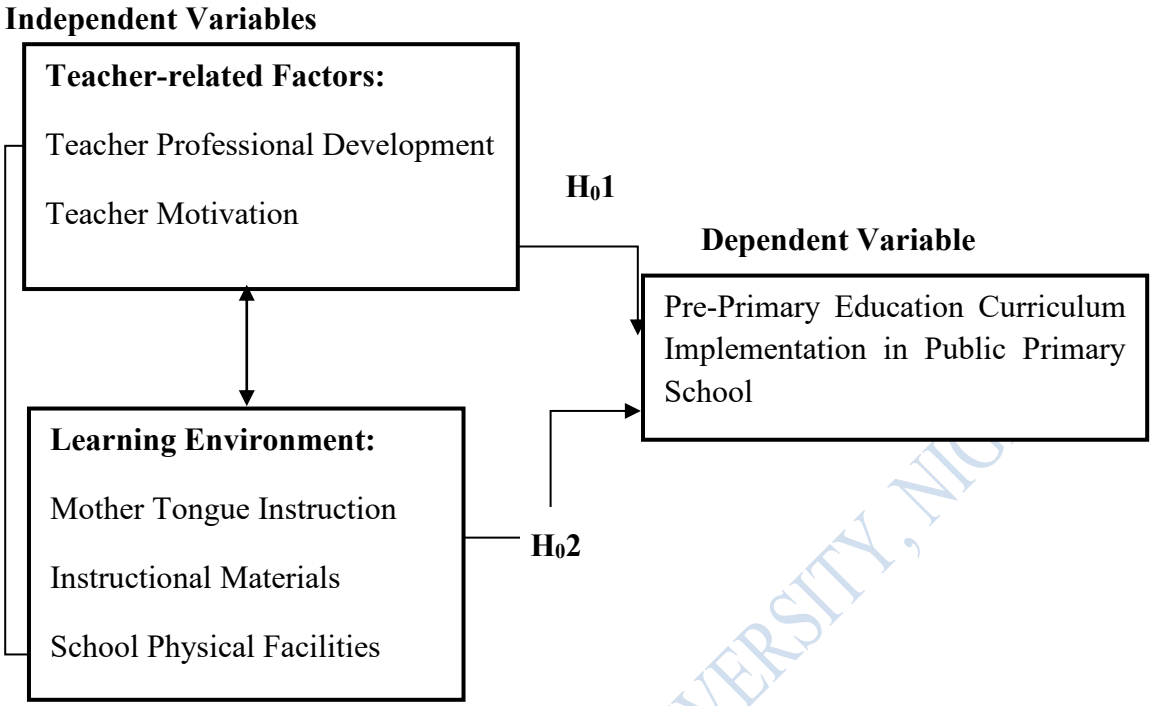


Figure 2.1 Conceptual Framework showing the relationship between variables
Source: Developed by Researcher, 2022

Figure 2.1 above shows the relationship between the variables for the study. It shows that the independent variables for the study are Teacher-related Factors and Learning Environment while the dependent variable is the Pre-Primary Education Curriculum Implementation in Public Primary Schools.

2.5 Summary of Literature Reviewed

Pre-primary education also known as early childhood education is the education of the early years and is of paramount importance because it is the foundation of all other education which will come later in life. Early childhood education in this study refers to the education offered to children who have not yet reached the statutory age of beginning a primary school education[137].Pre-primary education establishes the groundwork for future learning and development. It is a type of education designed for young children (ages 0 to5) to assist broaden their intellectual horizons in the areas of basic knowledge required for their journey through life, with literacy and numeracy as

the focal points[137]. It has been stated that pre-primary education is the education given to children aged 0- 5 years old to develop them morally, socially, intellectually, physically and psychologically for the growth and development of the child in later life [138]. Pre-primary education gears towards laying a sound intellectual, psychological, emotional, social and physical foundation for development and lifelong learning in young children[137]. It is in the early childhood period that children develop their basic values, attitudes, skills, behaviours and habits, which may be long lasting [131].Pre-primary education which is perceived as the first stage of education is where the foundation for development is laid[137]. Education of the early years is very crucial. In support of the above, it has been reported that the first years of every human being's life are the most favourable ones for developing the attitudes and values that form the basis of their personalities [137]. The structure of values and attitudes built in the early years are the strong and permanent roots for one's entire life. Everything deeply lived, practiced and felt in the early years of human development remains for the rest of one's life. This study reviewed literature on teacher related factors and learning environment as determinants of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

The literature review shows that teacher professional development that utilizes models of effective practice has proven successful at promoting teacher's learning and supporting pupils' achievement. This is because curricular and instructional models and modeling of instruction help teachers to have a vision of practice on which to anchor their own learning and growth. Findings of the empirical studies showed that pupils of teachers who participated in any of the Professional Development (PD) opportunities had significantly greater learning gains on than students whose teachers did not participate [18]. Literature review also established that teachers' workload is directly

measured by the overall number of teachers available in the system against the number of students taught, the volume of non-teaching assignment, the number of scripts to mark and record, and other responsibilities considered worthwhile by the school administrator that is regularly or occasionally assigned to the teacher[78]. Effectiveness of school service delivery is contingent on what the preschool administrator conceives as the role expectations of teachers. In this regard, a major function of the school administrator is to rationally analyze what constitute teachers' workload and decide how best to optionally utilize them to achieve results. It is necessary therefore for the school head to work out the most efficient method in assigning workload that will enable teachers put in their best towards achieving maximum result. It has also established from the literature review that employees who are highly motivated to work are more likely to be productive than those who are forced to do their jobs. The level of teachers' performance connects to their motivation, capacity and work conditions[83]. Teacher motivation is an essential component that enhances classroom effectiveness[83]. As pupils' learning outcomes are highly dependent on the quality of instruction, teaching effectiveness has been explored in terms of teaching styles, teacher approaches to teaching, teaching practice and instruction behaviours in relation to teacher motivation factors.

Literature review also covers mother tongue instruction. Researchers have emphasized the use of mother tongue instruction as a medium of communication. This is because mother tongue helps a child in his mental, moral and emotional development. It was maintained that much of a child's future social and intellectual development hinges on milestone of the tongue. It is generally accepted that in teaching and learning processes, the child's mother tongue is of utmost importance because it categorizes a large part of children's environment where the child has names for most objects, actions,

ideas and attributes that are so important to him. It is an essential instrument/medium for learning and intellectual development. This is why many school practitioners in different parts of the world advocate the use of the mother tongue as a medium of communication of instructions in early years of leaning[31]. The only language that is not alien to the child at this level is the mother tongue or the language of his immediate community since it is the language acquired by him right from birth. Instructional materials are another variable reviewed in this study. The essence of instructional aids in preschool education is to ensure that the children are attracted to the lesson, make them feel at home, create a friendly environment that would project and care for them and most especially, enable the children gain maximally from the instructional process [95]. The use of instructional materials would propel the instructional process and eliminate boredom especially in preschool education centres where children have limited attention span. Audio and audio-visual instructional materials play a crucial role in encouraging activities like talking, seeing, moving, among others process[95] Reviewed of related literature also shows that school physical facilitiesplay a fundamental role in improving academic achievement in the school system. These include; school buildings, accommodation, classrooms, libraries, furniture, laboratories, recreational equipment's, apparatus and other instructional materials. Furthermore, their availability, relevance and sufficiency affect academic achievement positively. On the other hand, poor school buildings and overcrowded classrooms affect academic achievement negatively[40]. Good learning environment positively affect the academic achievement and behaviour of pupils. Studies have reported that dilapidated school buildings are not mentally stimulating and that facilities that are characterized with low or no sitting arrangement, will also affect pupils' learning negatively[40].

Endnotes

1. T. K. Nafi'u. *Influence of Early Childhood Education on Academic Achievement, Moral and Social Behaviour of Primary School Pupils* in Kano State, Nigeria, **An**unpublished Phd thesis submitted to School of Postgraduate Studies, Ahmadu Bello University, Zaria, 2016.

2. A. O. Adejobi., A. M. Omoare & W. O. Oyediran, ***C****omparative Assessment of the Implementation of the Early Childhood Education Curriculum in Public and Private Schools in Rural Areas ofOgun State, Nigeria,***International Journal of Education, Learning and Development,** Vol.5, No.8, 2017, 44-54.

3, S. Yasmin; M. A. Rumi & S. Robert, *Impact of Pre-Primary Education on Children on Bangladesh: A Study on Government Primary Schools In Sylhet City*, **American Journal of Educational Research,** vol. 8, no. 5, 2020, 251-258. doi: 10.12691/education-8-5-.

4. L. Mazur. *Early Childhood Education,* 2017. http://www.healthofchildren.com/E-F/ early-childhood-education.

5. B. Elvis. *Overview of Early Childhood Education,* 2018. http://edgist.org/overview-of-eaarly-childhood-education/.

6. C. Partreena. *What is Early Childhood Education*? *7 Things to Know About the Field Forming Future Generation,* 2017. httpsci//blog.wheeock.

7. E. C. George; S. Madu & A. A. Folaranmi, *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), 2016, 80-85. DOI: 10.9790/7388-0602018085.

8. V. Sumita & R. Devi, *Impact of Pre-Primary Education on the Development of Students in Himachal Pardesh,***International Research Journal of Modernization in Engineering Technology and Science**, 03 (03), 2021, 715-729.

9. M. Omar, *Early Childhood Care and Education as a Tool for Achieving Sustainable Development,***Journal of Early Childhood Association of Nigeria**, 8 (2), 2019, 618-630.

10. D. M. Onojah, *Contemporary Issues in Early Childhood Education in Nigeria*. **An unpublished lecture note of Federal College of Education (Special), Oyo,** 2020.

11. E.B. Oke, *Managing Leadership Skills for Teacher Effectiveness in the Implementation of Early Childhood Education in Federal Capital Territory, Abuja,Nigeria*, **International Journal of Innovative Business Strategies**, 5(1), 2019, 285-295.

12. D. Makovec, *The Teacher's Role and Professional Development,* **International Journal of Cognitive Research in Science, Engineering and Education(IJCRSEE),** 6 (2), 2018, 33-45.

[13]. X. P. Buendía & D. F. Macías, *The Professional Development of English Language Teachers in Colombia: A Review of The Literature,* **Colombia Applied Linguist, Journal,** 21(1), 2019, 98-111.

.

[14]. L. Darling-Hammond M. E. Hyler & M, Gardner, *Effective Teacher Professional Development*, **Palo Alto, CA**: **Learning Policy Institute**, 2017. https://learningpolicyinstitute.org/product/teacher-prof-dev.

[15]. S. Wolf & M. E. Peele, *Examining Sustained Impacts of Two Teacher Professional Development Programs on Professional Well-Being And Classroom Practices*, **Teaching and Teacher Education**, 86, 1-11, 2019.https:// doi.org /10.1016/ j.tate. 2019.07.003IMPERATIVES.

[16]. S. Wolf; E. L. Turner; M. C., Jukes, & M. M. Dubeck, *Changing Literacy Instruction in Kenyan Classrooms: Assessing Pathways of Influence to Improved Early Literacy Outcomes in the HALI Intervention September,* **International Journal of Educational Development**, *62*, 2018, 27-34. DOI: 10.1016/j.ijedudev.2018.02.004.

[17]. J. Sandefur, *Internationally Comparable Mathematics Scores for Fourteen African countries (Working Paper No. 444).***Washington, DC: Center for Global Development**, 2016. https://doi.org/10.2139/ssrn.2893768.

[18]. D. Reynolds. *Teachers' Continuing Professional Development: A New Approach, 2018*, 20th Annual World ICSEI of International Congress for Effectives and Improvement.

[19]. A. Bautista. & R. Ortega-Ruí, *Teacher Professional Development*, **International Perspectives and Approaches, Psychology, Society and Education**, **7**(3), 2015, 240-251

[20]. S. C., Komba & R. J. Mwakabenga, *Teacher Professional Development in Tanzania: Challenges and Opportunities, in Educational Leadership*. **Intech Open**, 2019. http://dx.doi.org/10.5772/intechopen.90564.

[21]. L. Didion; J. R. Toste & M. J. Filderman, *Teacher Professional Development and Student Reading Achievement: A Meta-Analytic Review of the Effects,* **Journal ofResearch on Educational Effectiveness**,13 (1), 2020, 29-66. https://doi.org/10.1080/19345747.2019.1670884

[22]. M. F. Karacabey, *School Principal Support in Teacher Professional Development,* **International Journal of Educational Leadership and Management,** 9 (1), 2021, 54-75. http://dx.doi.org/10.17583/ijelm.2020.5158

[23]. D. Stentoft. *From Saying to Doing Interdisciplinary Learning: Is Problem-Based Learning the Answer*? **Active Learning in Higher Education,** 18 (1), 2017, 51-61.

[24]. D. Oluwole, Y. J. Bawa, & J. Owobu, *Influence of Teachers' Professional Development on Students' Academic Achievement in Secondary Schools in Benue*

And Nasarawa State, Nigeria, **International Journal of Academia**, 4 (1), 2017,1 13.

25. M. Mahdum; H. Hadriana & M. Safriyanti, *Exploring Teacher Perceptions and Motivations to ICT use in Learning Activities in Indonesia,* **Journal of Information Technology Education: Research**, 18, 2019, 293-317. https://doi.org/10.28945/4366.

26. A. S. Abdulrahman & X. Hui, *Implication of Motivation Theories on Teachers Performance Context of Education System in Tanzania*, **International Journal of Secondary Education,** Vol. 6, No. 3, 2018, pp. 46-53. doi: 10.11648/j.ijsedu.20180603.11.

27. D. W. Gitonga, *Influence of Teachers' Motivation on Students' Performance in Kenya Certificate of Secondary Education in Public Secondary Schools in Imenti South District Kenya,***A research project submitted in partial fulfillment of the requirements for the Degree of Master of Education in Educational Administration University of Nairobi**, 2012.

28. R. Noormohamadi, *Mother Tongue, A Necessary Step to Intellectual Development*, **Pan-Pacific Association of Applied Linguistic**, 12 (2), 2008, 25-36. https://files.eric.ed.gov>fulltexPDF.

29. N. Okediadi, *Literacy in the Mother Tongue: Police vs Preference. In the Perspective of Language and Literature: Essay in Honour of R. U. J. Uzoezie*, **UJAH Unizik Journal of Arts and Humanities,** 2008, 1-6. hppts://www.journals.sfu.ca>viewfile.PGF.

30. B. Schick., J. de Villiers., P. De Villiers. & B. Hoffmerister, *Theory of Mind: Language and Cognition in Deaf Children,***The ASHA Leader**, 7 (22), 2002, 6-14.

31. A. V. Awopetu, *Impact of Mother Tongue on Children's Learning Abilities in Early Childhood Education Classroom*, **Annual International Scientific Conference 12-14 May. Moscow Russia** 2016 http:// creativecommons.org //licences/by-ng.nd140/.58-63.

32. D. M. Onojah., E.U. Onoja & A. I. Ibrahim, *Relevance of Instructional Materials in Teaching of English Language As a Second Language in Early Childhood Education in Nigeria*, **SPED Journal of Science Education**, 8 (2), 2018, 150-160.

33. M. B. Oguntuasi, S. C. & N. F. Ayodele and Nwarunta, *Quality Teacher Education in Indigenous Languages for the Attainment of 2030 Educational Agenda,* **Southwest Journal of Teacher Education (SOWESJTED)**, 10 (1), 2019, 168-171.

34. D. M. Onojah, *Early childhood education curriculum in Nigeria,*An Unpublished Lecture Note of Federal College of Education (Special), Oyo, 2020.

35. R. O. Bukoye, *Utilization of Instruction Materials as Tools for Effective Academic Performance of Students:Implications for Counseling,*A paper presented at the 2nd

Innovative and Creative Education and Teaching International Conference (ICETIC2018), Badajoz, Spain, 20–22 June 2018.

[36]. I. Khatete; A. Riechi & Muthanje, *Instructional Materials Provision on Learners' Participation in Early Childhood Development and Education in Public Primary Schools in Embu County, Kenya,* **African Educational Research Journal**, 8(2), 2020, 248-257.

[37]. A. K. Bright & B. J. Christiana, *Availability of Instructional Materials in Teaching Economics in Secondary Schools in Obio/Akpor Local Government Area of Rivers State,* **Islamic University Multidisciplinary Journal***,* 6 (5), 2019, 179-189.

[38]. O. Etale., O. Agnes, O. & M Felicity,.*Influence of Physical Facilities on the Teaching-Learning Process in Public Primary Schools in Bungoma County, Kenya*, **Africa Journal of Technical and Vocational Education and Training**, 5(1), 2020, 187-195. http://afritvet.org/index.php/Afritvet/article/view/115.

[39]. C. O. Akomolafe & V. O. Adesua, *The Impact of Physical Facilities on Students' Level of Motivation and Academic Performance in Senior Secondary Schools in South West Nigeria*, **Journal of Education and Practice**, 7(4), 2016, 1-5.

[40]. J. K. Kiptum,*Influence of School Physical Environment on Teachers' Satisfaction in Selected Public Primary Schools in Elgeyo Marakwet County, Kenya*, A Thesis Submitted in Fulfillment of the Requirements for the Award of the Degree of Doctor of Philosophy In Education of Kenyatta University, June, 2018.

[41]**.** M.Arshad; Z. A. Qamar & F. H. Gulzar, *Effects of Physical Facilities at Public Schools on Students' Achievement in Punjab, Pakistan*, **Global Social Sciences Review**, 3, no. 4 2018, 102-113.

[42]. E. N. Souck & M. G Nji, *The Effects of School Facilities on Internal Efficiency: The Case of Selected Bilingual Secondary Schools In Yaoundé Centre*, **World Journal of Research and Review***,* 4, no. 4, 2017, pp. 41-48.

[43]. H.Sa'adatu,*Evaluation of the Implementation of Early Childhood Care Development and Education Curriculum in North-West Geo-Political Zone of Nigeria (2004-2015),* A Dissertation Submitted to the School of Postgraduate Studies, Ahmadu Bello University, Zaria, in Partial Fulfillment of the Requirement for the Award of Doctor of philosophy in Education (Curriculum and Instruction). Department of Educational Foundations and Curriculum, Ahmadu Bello University, Zaria, Nigeria, July, 2016.

[44]. A. Hargreaves, *The Sharp Edge Of Education Change: Teaching, Learning and the Realities of Reform:* London: Rutledge Falmer, 2000. Dspace.nmmu.ac.za: 8080/…/…

[45]. B. T. Doggoh, *Assessment of the Implementation of Universal Basic Education (UBE) Programme in North Central Geo-Political Zone of Nigeria (1999-2011),* (Doctoral dissertation, Ahmadu Bello University) Zaria, Nigeria, 2014.

[46]. J.A.E. Onyeachu, *Implementation Issues in Secondary Education Curriculum in Nigeria:Problems and Prospects,* A paper presented at the International and 7thAnnual Conference of National Association for Research Development, F.C.T College Education Zuba, Abuja, 6th-10th October, 2008.

[47]. P.A.O. Okebukola*, Curriculum Implementation in Nigeria Strategies for the 21st Century,* In Noah.A.O.K. Shonibare, D.O., A.A and Olajuwon, T. (Eds), Curriculum Implementation and Professionalizing Teaching in Nigeria, Lagos: Central Educational Services, 2004.

[48]. S. Ntumi, *Challenges Pre-School Teachers Face in the Implementation of The Early Childhood Curriculum in the Cape Coast Metropolis,* **Journal of Education and Practice,** vol. 7, no. 1, 2016, 54-62.

[49]. A. A. Adenike & K. O. Peter, *Challenges in Implementation of Early Childhood Education in Nigeria: The Way Forward,* **Journal of Education and Practice***,* Vol.7, No.7, 2016, pp 33-3.

[50]. D. Palupi, *What Type of Curriculum Development Models Do We Follow? An Indonesia's 2013 Curriculum Case*, **Indonesian Journal of Curriculum and Educational Technology Studies***, 6* (2), 2018, 98-105.

[51]. W. Yang & H. Li, *The role of Culture in Early Childhood Curriculum Development: A case study of Curriculum Innovations in Hong Kong Kindergartens*. **Contemporary Issues in Early Childhood,** 23(1), 2022, 48-67.

[52] S Revina &F. K. S. Leung, *Educational Borrowing and Mathematics Curriculum: Realistic Mathematics Education in the Dutch and Indonesian primary curriculum*, **International Journal on Emerging Mathematics Education (IJEME)**, Vol. 2 (1), 2018, pp. 1-16.

[53]. C. K. Benjamin, C. Onuegbu. & E. A. Abiata, *Early Childhood; A tool for sustainable development,* **Journal of Early Childhood Association of Nigeria**, 3, 2017, 147-151.

[54]. E. M. Ukpong, *Effective Approach to Childhood: Connecting Theory and Practic,.***Journal of Early Childhood Association of Nigeria (JECAN)**, 4, 2019, 1-19.

[55]. S. A Tor-Anyiin, *Origin, Growth and Development of Pre-Primary/Primary Education in Nigeria*, Makurdi: Selfers Academic Press Ltd, 2008.

[56]. S. Amadioha. *Challenges of Early Childhood Education in Nigeria: Implication for Assessment of Early Childhood Curriculum Implementation in Post Harcout, River State University of Science and Technology,* **Australian Journal of Arts and Scientific Research,** 22, 2018, 125-129.

[57]. *Federal Republic of Nigeria*, *National Policy on Education*, Lagos: NERDC Press,8th edition, 2014. https://issuu.com/esspin/docs/national_policy_on_education.

[58]. N. Obiweluozor, *Early childhood education in Nigeria, policy implementation: critique and a way forward*, **African Journal of Teacher Education,** Vol. 4, No. 4, 2015, PP. 1-9, 2. https://www.researchgate.net/publication/283573329.

[59]. A. B. Fafunwa. *History of Education in Nigeria,*London: George Alien and Unwin, 1967.

[60]. N. Shakee, *Challenges Primary School Teachers Face in Implementation of Early Childhood Education: Teachers' Perception,* **Journal of Early Childhood Care and Education (JECCE),** 3, 2020.

[61]. S. R. Ghazi; M, Ajmal & A. Saeed, *Effectiveness of Early Childhood Education: A Case Study from Remote District Of Central Punjab*, **Journal of Early Childhood Care and Education**, 2, 2018, 75–86.

[62]. J. O. Ogunniye, *Early Childhood Education Care and Education in Nigeria: Problems and Prospects Vis-À-Vis Vision 2030,***Journal of Colleges of Education Academic Staff Union (COEASU) South-West Zone**, 10 (1), 2019, 112-117.

[63]. F. O. Ibhaze, *Issues and Challenges of Implementation of Early Childhood Education in Nigeria,***International Journal of Scientific and Research Publications**, 6 (5), 2016, 176-179.

[64]. E. L. Bawani, *Preschool Teachers' Experiences and Reflections in Implementing a Pre-Primary Curriculum for Five to Six Year Olds in Francistown*, Botswana, PhD diss., 2019.

[65]. I. Y. Kazu and A. & İş, *An Investigation about Actualization Levels of Learning Outcomes in Early Childhood Curriculum,* **Journal of Education and Training Studies**, 6 (3), 2018, 66–77.

[66]. L. S. Vygotsky, *Mind in Society: The Development of Higher Psychological Processes*. Edited by S. S. and S. E. C. M. John-Steiner V, London: Harvard University Press, 1978. doi: 10.1007/978-3-540-92784-6.

[67]. R. Kamil, *Exploring Teacher's Scaffolding to the Students in Teaching Writing,* **Journal of English and Education**, 5 (2), 2017, 187-193.

[68]. P. Osei-Poku. & M. Gyekye-Ampofo, *Curriculum Delivery in Early Childhood Education: Evidence from Selected Public Kindergartens in Ashanti Region,* **Ghana, British Journal of Education**, 5(5), 2017, 72–82.

[69]. L. Kofa, *Elementary Teachers' Perceptions of Mathematics Instruction in Montessori and Traditional Classrooms*, Walden University, 2017.

[70]. Ministry of Education, *Te Whāriki*, *Child Research Net*. Wellington: Ministry of Education, New Zealand, 2017. https:// www. education.govt.nz/assets/Documents/Early-Childhood/Te-Whariki-Early-Childhood-Curriculum-ENG-Web.pdf.

[71]. A. Abdulai, *Activities at Early Childhood Centers in Ghana: Observations of early childhood teacher-trainees*, **Asian Journal of Education and Training**, 3(1), 2017, 74–81.

[72]. O. B. Kayode-Olawoyin,*Assessing the Implementation of Early Childcare Development and Education Policy in Oriade Local Government Area of Osun State,***Journal of Early Childhood Association of Nigeria**, 3, 2018, 197-210.

[73]. Nordic Council of Ministers, *Pedagogy in ECEC Nordic Challenges and Solutions*, **Copenhagen**, 2016.

[74]. O. N. Jacob; D. Jegede. &A. T. Solomon, *Education Policies of Early Child Education Programme in Nigeria: Challenges of Implementation and the ways Forward,* **European Journal of Humanities and Educational Advancements (EJHEA),** Vol. 2 No. 3, 2021, 1-10, https://www.scholarzest.com.

[75]. C. O. O. Kolawole, *Language, Education and the Curriculum Nexus: Pathway to Achieving Sustainable Development in Nigeria*, An Inaugural Lecture Series, 2015/2016. Ibadan: University Press, Ibadan, 2016.

[76]. N. O. Ayoola; B. A. Ojoko & P. K. Olowe, A*vailability and Implementation of National Early Childhood Curriculum for Ages 0-5 in Pre-Primary Schools in Ondo West Local Government Area of Ondo State,* 2019, https://www.researchgate.net/publication/331310529.

[77]. C. Zhaohui & A. S. Anning. *Impact of Teachers' Professional Development on Students' Academic Performance in Higher Education,* **International Journal of Advanced Educatio**n**,** 5 (2), 2020, 50-57.

[78]. C. T. Adeyanju, *Teacher Professional Development in Early Childhood Education*, **Kontagora Journal of Early Childhood Care and Primary Education,** 2, 23-34, 2020.

[79]. I. A. Salami, *Repositioning Early Childhood Education Personnel Matters in Nigeria for Global Competitiveness-Focus on Staff Selection and Professional Development,* **Proceedings of the National Conference of ECAN. Ilorin,** 2017, 96-108.

[80]. A. V. Awopetu & R. M. Odewumi, *Strengthening Professional Development of ECCE Teachers in Nigeria: Demands of Globalisation***,** In E. Oduolowu, I. A. Salami and M. D. Amosun (Eds), *Fundamentals of Preschool and Primary School Teacher Preparation in Nigeria.*

[81]. M. Kedzior & S. Fifield, *Teacher Professional Development,*Delaware Education Research & Development Center*,*The Education Policy Brief series, 2004.http://www.rdc.udel.edu**.**

[82]. N. Boudersa, *Importance of Teachers' Training and Professional Development Programs in the Algerian Educational Context: Toward Informed and Effective Teaching Practices,* **Expériences Pédagogiques**, 1, 2016, 1-15.

[83]. A. Han & H. Yin, *Teacher Motivation: Definition, Research Development and Implications for Teachers*, ***Cogent Education***, 3 (1), 2016. DOI: 10.1080/2331186X.2016.1217819.

[84]. Y. Akman, *Investigating the Relationship between Organizational Justice, Work Motivation and Teacher Performance*, **Cukurova University Faculty of Education Journal**, 47 (1), 2018.

[85]. K. Esia-Donkoh & S. Baffoe, *Instructional Supervisory Practices of Headteachers and Teacher Motivation in Public Basic Schools in Anomabo Education Circuit,* **Journal of Education and e-Learning Research**, vol. 5, no. 1, 2018, 43-50.

[86]. F. Herzberg, *One More Time: How Do You Motivate Employees?* **Harvard Business Review**, 65(5), 2008, 109-120. http://www.hbr.org.

[87]. E. Byaruhanga, *Effectiveness of Teachers' Motivation on Job Performance in Public Primary Schools in Kitagwenda County, Kamwenge District, Uganda***,** PhD diss., 2019.

[88]. E. A. Hanushek & L. Woessmann, *The Economic Impact Of Educational Quality*, In P. Dixon; S. Humble & C. Coutain (Eds), *Handbook of international development and education*. Edward Elgar Publishing, 2015, pp. 9-16. DOI: 10.4337/9781783473540.

[89]. I. U. Ubom. & M. T. Joshua, Needs *Satisfaction Variables as Predictors of Job Satisfaction of Employees: Implication for Guidance and Counseling,* **Educational Research Journal**, Vol. 4. No. 3, 2004, 234 – 213.

[90]. S. S. Danladi, *Language Policy: Nigeria and Role of English in the 21st Century*, **European Scientific Journal**, 9 (17), 2013, 1-12. https://files.eric.ed.gov>fulltext/E.J797605.pdf.

[91]. C. Benson, *The Importance of Mother Tongue-Based Schooling for Educational Quality, Commission Study for EFA Global Monitoring Report 2005*, Stockholm University: Centre for Research on Bilinqualism, 2004. https:/unesdoc.uneso.org/images/0014/001466/146632e.

[92]. A. F. Opoola, *Influence of Supervision and Stakeholders' Attitudes on Mother Tongue Education Policy Implementation in Lower Primary Schools in Southwest, Nigeria,* An unpublished PhD thesis Faculty of Arts and Education, Lead City University Ibadan, Nigeria, 2020.

[93]. O. F. Ndifon; V. V. Peters & R. U.Agba, *Innovation of Universal Basic Education and Early Childhood Education Teachers' Efficiency in Creativity*, **Journal of Research and Practice in Childhood Education**, Vol. 5, 2019.

[94]. P. I. Eze, *Effectiveness of Improvisation of Instructional Materials 6n Students' Academic Achievement and Retention in CRK*, **International Academic Journal of Innovative Research,**4(1), 2017, 54-57.

[95]. N. Bawa & A. A, *Ibrahim, Improvisation of Instructional Materials for Innovative Second Language Teaching in the 21st Century,* **International Journal of Operational Research in Management, Social Sciences & Education**, 5 (1), 2019, 230-242.

[96]. L. Achimugu & P. K. Onojah, *Factors Hindering Effective Production and Utilization of Teacher-Made Instructional Materials in Teaching Senior Secondary Chemistry in Federal Capital Territory Abuja, Nigeria*, **International Journal of Scientific Research in Education**, 10 (3), 2017, 352-361.

[97]. M. A. Ajayi, *Effect of Learning Environment on Students' Academic Achievement in Lagos State Secondary Schools.* Unpublished MED Thesis University of Nigeria, 2001.

[98]. A. Kaur, *Maslow'sNeed Hierarchy Theory: Applications and Criticisms,* **Global Journal of Management and Business Studies,** Volume 3, Number 10, 2013, 1061-1064. http://www.ripublication.com/gjmbs.htm, Acessed on 12/6/2021.

[99]. A. S. Abdulrahman and X. Hui, *Implication of Motivation Theories on Teachers Performance in the Context of Education System in Tanzania*, ***International Journal of Secondary Education***. Vol. 6, No. 3, 2018, pp. 46-53. doi: 10.11648/j .ijsedu. 20180603.11.

[100]. J. S. Bruner. *Toward a Theory of Instruction*, Vol. 59, Harvard University Press, 1966.

[101]. L. E. Sandilos; P. Goble; S. E. Rimm-Kaufman & R C. Pianta, *Does Professional Development Reduce the Influence of Teacher Stress on Teacher–Child Interactions in Pre-Kindergarten Classrooms?* ***Early Childhood Research Quarterly,*** 42, 2018, 280-290. https://doi.org/10.1016/j.ecresq.2017.10.009.

[102]. C. Fischer; B. Fishman; C. Dede; A. Eisenkraft; K. Frumin & B. Foster, F. Lawrenz; A. J. Levy & A. McCoy, *Investigating Relationships Between School Context, Teacher Professional Development, Teaching Practices, and Student Achievement in Response to a Nationwide Science Reform,* **Teaching and Teacher Education,** 72, 2018, 107-121. https://doi.org/10.1016/j.tate.2018.02.011.

[103]. C. Andersson & T. Palm, *The Impact of Formative Assessment on Student Achievement: A Study of the Effects of Changes to Classroom Practice after a Comprehensive Professional Development Programme*, **Learning and Instruction,** 49, 2017, 92-102. https://doi.org/10.1016/j.learninstruc.2016.12.006.

[104]. R. Jacob; H. Hill, & D. Corey. *The Impact of a Professional Development Program on Teachers' Mathematical Knowledge for Teaching, Instruction, and Student Achievement,* **Journal of Research on Educational Effectiveness**, vol. 10, no. 2, 2017, 379-407. https://doi.org/10.1080/19345747.2016.1273411.

[105]. T. S. Kutaka; W. M. Smith; A. D. Albano; C. P. Edwards; L. Ren; H. L. Beattie; W. J. Lewis, R. M. Heaton & W. W. Stroup, *Connecting Teacher Professional Development and Student Mathematics Achievement: A 4-Year Study of an*

Elementary Mathematics Specialist Program, **Journal of Teacher Education**, 68, no. 2 2017, 140-154. https://doi.org/10.1177/0022487116687551.

[106]. J. A.Taylor, K. Roth, C. D. Wilson, M. A. Atuhsatz, & E. Tipton, *The Effect of an Analysis of Practice, Videocase-Based, Teacher Professional Development Program on Elementary Students' Science Achievement,* **Journal of Research on Education Effectives',** vol. 10, no. 2, 2017, 241-217. https://doi.org/10.1080/19345747.2016.1147628.

[107]. R. Pianta; H. Bridget; J. Downer; M. Burchinal; A. Williford; J. Locasale-Crouch; C. Howes; K. L. Paro & C. Scott-Little. *Early Childhood Professional Development: Coaching and Coursework Effects on Indicators of Children's School Readiness,* **Early Education and Development,** 28, no. 8, 2017, 956-975. https://doi.org/10.1080/10409289.2017.1319783.

[108]. G. Atta & E. Mensah, *Exploring Teachers' Perspectives on the Availability of Professional Development Programs: A Case of One District in Ghana***, International Journal of Humanities and Social Science**, 5(7), 2015, 48–59. http://www.ijhssnet.com on 27th May, 2021.

[109]. W. E. Zahnd.; T. Smith; S. J. Ryherd; M. Cleer; V. Rogers & D. E. Steward, *Implementing A Nutrition and Physical Activity Curriculum in Head Start Through an Academic-Community Partnership*, **Journal of School Health**, 87 (6), 2017, 465–473.

[110]. M. Lu; P. Loyalka; Y. Shi; F. Chang; C. Liu & S. Rozelle, *The Impact of Teacher Professional Development Programs on Student Achievement in Rural China*, **Stanford Center for International Development**, 2017, 1-34. http://www.reap.fsi.stanford.edu.

[111]. C. Campbell; P. Osmond-Johnson; B. Faubert; K. Zeichner & A. Hobbs-Johnson, S. Brown,; P. Dacosta,; A. Hales,.; L. Keuehn,; J. Sohn,; K. Steffensen,. *The State of Educators' Professional Learning in Canada***:** Final research report. Oxford, OH: Learning Forward, 2017. http://www.learningforward.org/Canadastudy.

[112]. G. Atta. & E. Mensah, *Exploring Teachers' Perspectives on the Availability of Professional Development Programs: A Case Of One District in Ghana*, **International Journal of Humanities and Social Science**, 5(7), 2015,48–59. http://www.ijhssnet.com.

[113]. A. W. Abiola & C. F, Oluwatovin, *Professional Development Programme: A Veritable Tool for Improving Teachers' Productivity in North Central Zone Public Junior Secondary Schools in Nigeria,* **Bulgarian Journal of Science and Education Policy**, 10(1), 2016, 39-52. http://www.bjsep.org.

[114]. P. M. Egboro. *The Influence of Teachers' Professional Development on Mastery Of Subject Matter. Sapientia Foundation,***Journal of Education, Sciences and Gender Studies (SFJESGS)**, 3(2), 2021,137 – 146.

[115]. D. Oluwole; Y. J. Bawa & J. Owobu, *Influence of Teachers' professional Development On Students Aacademic Achievement in Secondary Schools in Benue*

*and Nasarawa State, Nigeria,***International Journal of Academia**, Vol. 4 No.1, 2017, 1-13.

[116]. E. R. Mduma & D. G. Mkulu, *Influence of Teachers' Professional Development Practices on Job Performance in Public Secondary Schools: A Case of Nyamagana District, Mwanza-Tanzania*, **International Journal of English Literature and Social Sciences,** Vol-6, Issue-1; Jan-Feb, 2021.

[117]. S. E. Weli &Nyimejie, A.*Teachers' Participation in Professional Development Programme and its Impediments for Quality Instructional Delivery in Secondary Schools in Rivers State*, **International Journal of Innovative Education Research**, 9 (1):1-8, 2021.

[118]. S. Tulyakul; M. S. bin Omar-Fauzee; F bin Hussin & H. Khun-inkeeree, *The Relationship Between Teachers Motivation and Physical Education Teaching Strategies among Primary School Teachers in Southern Thailand,* Conference: The 10th Hatyai National and International Conference, Thailand, 2019. https://www.researchgate.net/publication/335679978.

[119]. P. Gatsinzi; R. Jesse R & L. N.Makewa, *Work and School Related Variables in Teacher Motivation in Gasabo District, Rwanda*, **Journal of Education and Training,**Vol. 1, No. 2, 2014, 262-275.http://dx.doi.org/10.5296/jet.v1i2.4747.

[120]. S. N. Akhtar; M. Iqbal, & I. A. Tatlah*, Relationship between Intrinsic Motivation and Students' Academic Achievement: A Secondary Level Evidence*, **Bulletin of Education and Research**, 39, no. 2 2017, 19-29.

[121]. E. N. Nyakundi; P. A. Raburu an & M. O. Okwara, *Influence of Teacher Motivation to Academic Performance of Pupils in Primary Schools in Kenya,***International Journal of Applied Psychology**, 9 (2), 2019, 74-79. http://ir.jooust.ac.ke:8080/xmlui/handle/123456789/9492

[122]. J. Kagema, *The School Curriculum and Its Influence on Teacher Motivation in Curriculum Implementation in Kenya,* **Journal of Culture and Values in Education***,* 1 (1), 2018. https://www.learntechlib.org/p/210567/.

[123]. L. Mandillah*. Kenyan Curriculum Reforms and Mother Tongue Education: Issues, Challenges and Implementation Strategies*, **Education as Change**, 23 (1), 2019, 1-18. https://dx.doi.org/10.25159/1947-9417/3379.

[124]. T. Brunette; B. Piper, R. Jordan., S. King & R. Nabacwa, *The Impact of Mother Tongue Reading Instruction in Twelve Ugandan Languages and the Role of Language Complexity, Socioeconomic Factors, and Program Implementation,***Comparative Education Review,** vol. 63, no. 4, 2019, 591-612.

[125]. I. Obiegbu, *Mother Tongue Education: A Panacea to Effective Teaching and Learning of English in Nigeria Primary Schools,***An International Journal of Language, Literature and Gender Studies**, 5 (2), 2016, 50-59.

[126]. J. M., Aliñab; S. E. Aguja & M. S. Prudente, *Improving Pupils' Mathematics Achievement Through Mother Tongue Based-Multilingual Education*, **Advanced**

Science Letters,24, no. 7 2018, 4840-4843.DOI: https://doi.org/10.1166/asl.2018.11213.

[127]. B. Piper; S. S. Zuilkowski; D. Kwayumba, & A. Oyanga, *Examining the Secondary Effects of Mother-Tongue Literacy Instruction in Kenya: Impacts on Student Learning in English, Kiswahili, and Mathematics,* **International Journal of Educational Development**,59, 2018: 110-127.

[128]. W. K. Abroampa, *Assessment of Kindergarten Teachers' Use of Learning Activities and Instructional Resources in the Implementation of the Curriculum in Central Region of Ghana,* **Ghana Abstract**, 7 (6), 2018, 67–73.

[129]. A. S. Olufemi & A. A. Adeusi, *School Size and Facilities Utilization as Correlates of Secondary School Students' Academic Performance in Ekiti State, Nigeria,* **European Journal of Alternative Education Studies**, 2 (1), 2017, 69-82. doi: 10.5281/zenodo.495179

[130]. J. Waigera; M. Mweru & L. Ngige, *Relationship between Teachers' Demographic Characteristics and Levels of Utilization of Instructional Materials in Pre-Primary Schools in Kenya,* **East African Journal of Education Studies**, 2(1), 2020, 67-77. doi: 10.37284/eajes.2.1.179.

[131]. R. I. Mohammed; A. Iliyasu; A. O. E. Egunsola, & S. I. Yusuf, *Perceived Effectiveness of Audio Instructional Materials for Teaching Agricultural Science at Senior Secondary Schools level*, **ATBU Journal of Science, Technology and Education,** 7, no. 3 2019, 71-77.

[132]. C. L. Ugwu, *Assessment of Utilization of Instructional Materials in Teaching and Learning of Business Education Subjects in Secondary Schools in Enugu Education Zone of Enugu State*, PhD diss., 2017. http://repository.unn.edu.ng:8080/xmlui/handle/123456789/5415

[133]. R. K. A. Baafi, *School Physical Environment and Student Academic Performance*, **Advances in Physical Education**, 10, 2020, 121-137. doi: 10.4236/ape.2020.102012.

[134]. D. Maingi; D. Mulwa; R. Maithya & J. Migosi, *Influence of School Physical Facilities on Students' Discipline in Public Secondary Schools in Makueni County, Kenya,***American Journal of Education and Learning,** Vol. 2, No.1,2017, 34-42. URL: www.onlinesciencepublishing.com.

[135]. A. Eric & C. R. Ezeugo, *PhysicalResources Availability And The Academic Performance of Students in the Universal Basic Education Scheme, Rivers State,* ***International Journal of Innovative Development and Policy Studies****,* 7 (1), 2019, 13-23. https://www.researchgate.net/publication/332607029.

[136]. P. Mvuyekule, *Management of School Physical Facilities for Pupils' Academic Performance in Uvinza District Public Primary Schools in Tanzania,* A Dissertation Submitted in Partial Fulfilment of the Requirements for the Degree of

Master of Education in Administration, Planning and Policy Studies of the Open University of Tanzania, 2017.

[137]. D. I. Ugwude & C. Ekweozor. *The Role of Early Childhood Education for Sustainable Development in Nigeria*, In F. A. Anyogu; C. A. Eme & J. A. Ogbodo (Eds), *University-Led Knowledge and Innovation for Sustainable Development,* Abuja: Boldscholar Research Ltd, 2021.

[138]. D. I. Aleke, *Development of Professional Skills Improvement Programme for Early Childhood Education Teachers in South East, Nigeria***,** An unpolished Doctoral Thesis of the Department of Educational Foundations, University of Nigeria, Nsukka, 2016.

Chapter Three

Methodology

This chapter presents the methodology adopted for this study. It provided information on research design, population of study, sampling techniques and procedures, research instrument, validity of instruments and method of data analysis.

3.1 Research Design

Descriptive survey research design was adopted for this study. A descriptive survey design provides information such as behaviour, attitude, values and characteristics[1]. The design was appropriate because it enabled the researcher to describe teacher-related factors (teacher professional development and teacher motivation) and learning environment (mother tongue instruction, instructional materials and school physical facilities) as determinants of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria. The design was preferred due to its appropriateness for finding out a lot of information, using a relatively large number of Public Primary Schools with ease.

3.2 Population of the Study

The population of the study comprised of all preschool teachers and pupils' in public primary schools in Ogun, Osun, Lagos, Ondo, Oyo and Ekiti States. These are the States that constitute Southwest, Nigeria. The senatorial district statistics with the number of local government areas, number of public primary schools, preschool teachers and pupils in primary one are represented in table 3:1.

Table 3.1 Study Population (8623 Schools, 25,719 Teachers and 22,718 Pupils)

	Southwest State	Senatorial Districts	Number of Public Primary Schools in each District	Number of Preschool Teachers in selected Primary School			Number of Primary one Pupils in Selected Public Primary Schools		
				Male	Female	Total	Male	Female	Total
1	Lagos	Lagos Central	212	220	282	502	550	784	1334
		Lagos East	240	470	730	1200	788	12 46	2034
		Lagos West	642	540	930	1470	1042	1318	2360
		Sub Total	**1094**	**1230**	**1942**	**3172**	**2380**	**3348**	**5728**
2	Ogun	Ogun East	468	860	538	1398	328	694	1012
		Ogun Central	577	1220	1230	2450	755	971	1726
		Ogun West	518	878	924	1802	474	857	1331
		Sub Total	**1563**	**2958**	**2692**	**5650**	**1557**	**2522**	**4069**
3	Oyo	Oyo Central	880	998	1003	2001	473	543	1016
		Oyo North	987	1390	1222	2412	4 94	637	1131
		Oyo South	585	2011	1376	3387	538	715	1253
		Sub Total	**2452**	**4399**	**3601**	**8000**	**1505**	**1895**	**3400**
4	Osun	Osun Central	514	556	644	1200	400	614	1014
		Osun East	381	224	461	685	412	592	1004
		Osun West	448	370	710	1080	483	538	1021
		Sub Total	**1343**	**1150**	**1815**	**2965**	**1744**	**1295**	**3039**
5	Ekiti	Ekiti Central	380	420	492	912	559	645	1204
		Ekiti South	241	530	800	1330	501	605	1106
		Ekiti North	269	296	354	650	442	583	1025
		Sub Total	**890**	**1246**	**1646**	**2892**	**1502**	**1833**	**3335**
6	Ondo	Ondo North	345	343	434	777	416	607	1023
		Ondo Central	416	499	534	1033	462	541	1003
		Ondo South	520	570	660	1230	457	683	1140
		Sub Total	**1281**	**1412**	**1628**	**3040**	**1335**	**1831**	**3166**
		Grand Total	**8,623**	**12,35**	**13,324**	**25,79**	**9,574**	**13,173**	**22,738**

Source: Field Data, 2020

3.3 Sample and Sampling Procedure

Multistage sampling procedure was used to select the sample size for this study. Stratified random sampling technique was used to select three states out of the six states in the Southwest, Nigeria due to proximity or closeness. For instance, Lagos State and Ogun State are both commercial centres and located closed to each other. Oyo State and Osun State were together formally under Oyo State before Osun State was created. This was also applicable to Ekiti and Ondo State because they also have the same features. The researcher decided to group the states into strata such as Lagos and Ogun State, Oyo and Osun States, and Ekiti and Ondo States. Then random sampling technique was used to select three States: that was Lagos, Oyo and Ekiti States. The States were given below with their senatorial districts, number of public primary schools, preschool teachers and primary one pupils as shown in table 3:2.

Table 3.2 Sampled States (4,436 Schools, 14,064 Teachers and 12,463 Pupils)

	Southwest State	Senatorial Districts	Number of Public Primary Schools in each District	Number of Preschool Teachers selected Primary School			Number of Primary one Pupils in Selected Public Primary Schools		
				Male	Female	Total	Male	Female	Total
1	Lagos	Lagos Central	212	220	282	502	550	784	1334
		Lagos East	240	470	730	1200	788	12 46	2034
		Lagos West	642	540	930	1470	1042	1318	2360
		Sub Total	**1094**	**1230**	**1942**	**3172**	**2380**	**3348**	**5728**
3	Oyo	Oyo Central	880	998	1003	2001	473	543	1016
		Oyo North	987	1390	1222	2412	4 94	637	1131
		Oyo South	585	2011	1376	3387	538	715	1253
		Sub Total	**2452**	**4399**	**3601**	**8000**	**1505**	**1895**	**3400**
3	Ekiti	Ekiti Central	380	420	492	912	559	645	1204
		Ekiti South	241	530	800	1330	501	605	1106
		Ekiti North	269	296	354	650	442	583	1025
		Sub Total	**890**	**1246**	**1646**	**2892**	**1502**	**1833**	**3335**
		Grand Total	**4,436**	**6,278**	**7,189**	**14,064**	**7,078**	**5,3387**	**12,463**

Source: Field Data, 2020

Table 3.2 above shows sampled Southwest States (Lagos, Oyo and Ekiti) for the study. These consisted of 4,436 public primary schools, 14,064 preschool teachers (6,875 males and 7,189 female) and 12,463 primary one pupils (5,3387 male and female 12,463) respectively. Proportionate to size sampling technique was used to select 5% of the public primary schools, primary one pupils and 10% of preschool teachers in the sampled three states (Lagos, Oyo and Ekiti) making 222 public primary schools, 1406 preschool teachers and 624 pupils respectively as shown in table 3.3.This was because the sample size of 5% and 10% were considered statistically significant for the study.

Table 3.3 Sample Size (222 School, 1406 Teachers and 624 Primary One Pupils)

	Southwest State	Senatorial Districts	Number of Public Primary Schools in each District	Number of Preschool Teachers selected from Primary School			Number of Primary one Pupils in Selected Public Primary Schools		
				Male	Female	Total	Male	Female	Total
1	Lagos	Lagos Central	11	22	28	50	39	28	67
		Lagos East	12	47	73	120	62	40	102
		Lagos West	32	54	93	147	66	52	118
		Sub Total	**55**	**123**	**194**	**317**	**167**	**120**	**287**
2	Oyo	Oyo Central	44	100	100	200	27	24	51
		Oyo North	49	139	122	241	32	25	57
		Oyo South	29	201	138	338	36	27	63
		Sub Total	**122**	**440**	**360**	**800**	**95**	**76**	**171**
3	Ekiti	Ekiti Central	19	42	49	91	32	28	60
		Ekiti South	13	53	80	133	30	25	55
		Ekiti North	13	30	35	65	29	22	51
		Sub Total	**45**	**125**	**164**	**289**	**91**	**75**	**166**
		Grand Total	**222**	**688**	**718**	**1406**	**353**	**271**	**624**

Source: Author's Calculation Using Proportionate to Size Sampling Technique (2021)

Table 3.3 shows sampled size for the study. The sampled public primary schools, preschool teachers and primary one pupils in the three sampled states (Lagos, Oyo and Ekiti) in Southwest, Nigeria are 222, 1406 (Male 688 and Female 718) and 624 (Male 353 and Female 371) respectively.

3.4 Description of Research Instruments

The instruments adapted and modified for this study[3,4.5.6.7]. These include the followings:

3.4.1 Teacher-related Factors and Learning Environment Questionnaire (TFLEQ)

3.4.2 Mathematics Achievement Test for Primary One Pupils' (MATPOP)

3.4.3 English Studies Achievement Test for Primary One Pupils' (ESATPOP)

3.4.4 Preschool Teachers Interview (PTI)

3.4.1 Teacher-related Factors and Learning Environment Questionnaire (TFLEQ)

The first instrument is a structured questionnaire with sixty-one (61) items to gather information for the study. The instrument is titled Teacher-related Factors and Learning Environment Questionnaire (TFLEQ)**.** The instrument was designed to gather information from the relevant subjects. The questionnaire comprises **two sections, A and B.** While **section A** comprises data on demography of the respondents, **section B** was divided into **Part A-E. Part A** Deals with Level of teacher Professional Development with seven (7) items on four (4) point Likert scale of keys 4= Very High Level (VHL), 3=High Level (HL), 2=Low Level (LL) and 1= Very Low Level (VLL). **Part B** Deals with Level of Teacher Motivation with nine (10) items on four (4) point Likert of 4= Very High Level (VHL), 3=High Level (HL), 2=Low Level (LL) and 1= Very Low Level (VLL). **Part C** Deals with extent to which Mother Tongue Instruction is being used in Preschools with five (5) items on four (4) point Likert scale of keys: 4= High Extent (HE), 3=Moderate Extent (ME), 2=Low Extent (LE) and 1= Very Low Extent (VLE). **Part D** Deals with Level of Availability of Instructional Materials with twenty three (23) items on four (4) point Likert scale of (4) point Likert scale of keys: 4= High Available (HA), 3= Moderate Available (MA), 2= Low Available (LA) and 1= Very Low Available. **Part E** Deals with the condition of School Physical Facilities with sixteen (16) items on four (4) point Likert scale of Keys: 4= Very Good (VG), 3= Good (G), 2=Bad (B) and 1=Very Bad (VB)

3.4.2 Mathematics Achievement Test for Primary One Pupils' (MATPOP)

The instrument is an achievement test for pupils in primary one. The essence of the instrument was to determine the extent of pre-primary curriculum implementation in public primary schools in Southwest Nigeria. The achievement test was administered to pupils' in primary one who previously attended pre-primary education also known as Early Childhood Education (ECE) and those pupils who have not attended ECE before

entering primary one. The instrument comprises **two sections, A and B.** While **section A** deals with of data on demography of the respondents, **section B** deals with Mathematics Achievement Test for Pupils in Primary One.

This instrument was developed by the researcher based on the content of the Primary One Mathematics Curriculum aspect of the UBE programme with 50 items. It was used to generate pupils' academic achievement scores in mathematics. The instrument is divided into three sections: A, B and C. Section "A" tested the pupils' ability in the area of number in words. Section "B" tested their ability on addition of numbers. Section "C" tested pupils' ability to write the names of shapes besides diagram using the appropriate words while Section "D" tested pupils' ability to fill the gaps with the appropriate missing numbers. The pupils were required to either write down the correct number in a box or supply the missing numbers in blank spaces.

3.4.2.3 English Studies Achievement Test for Primary One Pupils' (ESATPOP)

The instrument also is an achievement test for pupils in primary one. The essence of the instrument was to determine the extent of pre-primary curriculum in public primary schools in Southwest Nigeria. The achievement test was administered to pupils' in primary one who previously attended pre-primary education also known as Early Childhood Education (ECE) and those pupils who have not attended ECE before entering primary one. The instrument comprises **two sections, A and B.** While **section A** comprises of data on demography of the respondents, **section B** deals with English Studies Achievement Test for Pupils in Primary One.

The instrument was developed by the researcher based on the content of the Primary One Curriculum (English Studies) of the UBE programme with 50 items. The instrument is divided into three sections, A, B, C and D. Section "A" tested the pupils' ability to fill in the gaps with appropriate letters. Section "B" tested their ability in

filling in the empty spaces using the words in the box to indicate activities perform daily. Section "C" tested their ability in matching pictures with the right words. While section 'D' tests their ability in identifying each activity in the pictures using appropriate words.

3.4.4. Preschool Teachers Interview (PTI)

The fourth instrument was also developed by the researcher and titled "Preschool Teachers Interview (PTI)". School Preschool Teachers Interview (PTI) was a structured interview designed to gather complimentary information from the preschool teachers in their various schools. The structured interview was used by the researcher to complement or capture what the Teacher-related Factors and Learning Environment Questionnaire may fail to capture. The instrument had nine items (9). Items on two (2) point Likert scale of keys: 1= Yes and 2= No. The instrument comprises **two sections, A and B.** While **section A** comprises of data on demography of the respondents, **section B** contained structured interview questions.

Table 3.4: Table of Specification on Mathematics Achievement Test for Pupils (MATPOP)

Content	weight %	Knowledge	Comprehension	Application	Analysis	Evaluation	Total

Numbers in words	30%	1	1	2	-	2	6
Multiplication of Numbers	25%	2	1	1	-	1	5
Shapes	20%	1	2	-	-	1	4
Subtraction of Numbers	25%	2	2	-	-	1	5
Total	100%	6	6	3	-	5	20

Source: Developed by Researcher, 2022

Table 3.5: Table of Specification on English Studies Achievement Test for Pupils (ESATPOP)

Content	weight %	Knowledge	Comprehension	Application	Analysis	Evaluation	Total
Identification of objects	25%	1	1	2	-	1	5
Sentence Formation	25%	1	1	2	-	1	5
Matching of objects	30%	1	1	3	-	1	6
Daily activities	20%	1	1	1	-	1	4
Total	100%	5	4	8	-	4	20

Source: Developed by Researcher, 2022

3.5 Validity of Research Instruments

To ensure that the instruments provided the required responses, the instruments were given to the researcher's supervisor and experts in the field of Measurement and Evaluation, Educational Management and Early Childhood Education from Lead City University, Ibadan for face, content and construct validity.

3.6 Reliability of Research Instruments

After the approval by the researcher's supervisor, a pilot test of the instruments were conducted so as to ascertain the reliability and validity of the instruments and to also familiarize him with the administration of the instruments. The reliability of Teacher-related Factors and Learning Environment Questionnaire **(TFLEQ)** was pilot-tested on thirthy (30) preschool teachers in ten (10) public primary schools in Oyo State who were not involved in the main study. A reliability index value of 0.86 was obtained using Cronbach Alpha.

The Mathematics Achievement Test for Pupils **(MATPOP)** had fifty (50) items initially drafted by the researcher. The items developed were subjected to experts' review. The deletion of 30 item out of fifty (50)items was done based on the opinion of the experts. The items consist of four options (A, B, C and D). The twenty (20) draft items were pilot tested on the thirty (30) primary one pupils who were not involved in the main study in five (5) public primary schools in Oyo State in order to establish the difficulty index and discrimination indices. Twenty (20) items had difficulty index between 0.36 while the discrimination indices between 0.52 above were selected for the study finally. Using the Kuder Richardson formula, a reliability index of 0.93 was produced (Kr 20). Hence, only 20 items survived the trial testing out of 50 questions.

The English Studies Achievement Test for Pupils **(ESATPOP)** had (sixty) 60 items that were initially drafted by the researcher. The items developed were subjected to expert review as well. The deletion of 40 item out of (sixty) 60 items was done based on the opinion of the expert. The items consist of four options (A, B, C and D). The twenty (20) drafted items were pilot tested on the thirty (30) primary one pupils who were not involved in the main study in five (5) public primary schools in Oyo State in order to establish the difficulty index and discrimination indices. Twenty (20) items had difficulty index between 0.68 while the discrimination indices between 0.51 above were

selected for the study finally. Using the Kuder Richardson formula, a dependability index of 0.84 was produced (Kr 20). Hence, only 20 items survived the trial testing out of 60 questions.The Preschool Teachers' Interview **(PTI)** was also pilot-tested on fifty (20) preschool teachers in ten (10) public primary schools in Oyo State who were not involved in the main study. A reliability index value of 0.80 was obtained using Cronbach Alpha.

3.7 Method of Data Collection

The researcher obtained a Letter of Introduction from the Head of Department which was presented to the school head of the various public primary schools in the study area. The researcher trained research assistants and afterwards visited the schools after booking appointments with the selected schools to discuss the reasons for the study, the dimension of the study and use of their schools for the period of the study with the head teachers before the administration of the self-designed and validated instruments. Twenty seven (27) research assistants were engaged and trained to help with the administration of the instruments. Data collection lasted for seven weeks. The first two weeks were used for training research assistants and for booking appointments with the stakeholders in the selected schools. Five weeks was dedicated to administration of the instruments.

3.8 Method of Data Analysis

The responses collected were analyzed using frequency count, mean, percentage, t-test and multiple regression analysis. Research questions were analyzed with descriptive statistics while hypotheses were analyzed with multiple regression analysis and t-test.

3.9 Ethical Approval

Permission was sought from heads of schools in order for the respondents to freely engage in the study. The dignity and privacy of the participants was respected and protected. The researcher ensured that anonymity as well as confidentiality of information was honoured and that the data collected was used only for the purpose of this study. Informed consent when dealing with participants ensured that the respondents knew that their involvement was voluntary at all times and that they had the option to accept or refuse to participate.

Endnotes

[1]. K. J. Nyokabi, *Teacher Factors Affecting the Implementation of Early Childhood Development and Education Curriculum* in Mathira East Sub-County, Nyeri County, Kenya.A research project report submitted in partial fulfillment of the requirement for the award of Degree of Master of Education (Early Childhood Education), in the School of Education of Kenyatta University, 2018.

[2]. S. E. Weli, & A. Nyimejie,*Teachers' Participation in Professional Development Programme and Its Impediments for Quality Instructional Delivery in Secondary Schools in Rivers State,* **International Journal of Innovative Education Research**,9 (1), 2021, 1-8.

[3]. C. D. Olufumilayo, *Teacher's Motivation Techniques as Determinants of Students' Academic Performance in English Language in Selected Government Secondary Schools in Oyo State*, **International Journal of Secondary Education,** Vol. 8, No. 2, 2020, pp. 36-46. doi: 10.11648/j.ijsedu.20200802.

[4].E C. Oenyi; C. S. Ugwuanyi & G. C. Ugwu, *Appraisal of the Status of Instructional Materials, Water and Environmental Sanitation in Early Childcare Centres in Public Primary Schools in Udenu Local Government Education Authority*, **Journal of Research & Practice in Childhood Education**, Vol. 4, 2018, 1-13.

[5]. M. N. David-Osuagwu,*Understanding Mathematics for Nigeria 1*, Onitsha: Africana First Publishers PLC, 2018.

[6]. A. Ayo; K. Adeniran; A. Akana & T. Akinpelu, *English Studies for Primary School Book 1: Universal Basic Education Edition*, Ibadan: University Press, 2017.

Chapter Four

Results and Discussion of Findings

The analysis, interpretation and discussion of data collected from the field based on the administration of the four research instruments – Teacher-related Factors and Learning Environment Questionnaire (TRFLEQ), Mathematics Achievement Test for Primary One Pupils' (MATPOP), English Studies Achievement Test for Primary One Pupils' (ESATPOP) and Preschool Teachers Interview (PTI) are presented. The data were analyzed using descriptive statistics such as frequency and percentages for demographic information and structured interview questions; mean and standard deviation (SD) for answers to research questions and inferential statistics of multiple regressions and t-test for testing of the hypotheses. This chapter is organized as follows:

4.1.1 Instrument Administration Rate and Return

For this study, five separate instruments were administered to respondents in order to get their responses. The first instrument was a questionnaire titled 'Teacher-related Factors and Learning Environment Questionnaire (TFLEQ)' with one thousand, four hundred and six (1406) copies administered to preschool teachers in public primary school across the three selected states for the study (Lagos, Oyo and Ekiti). 1,386 of (TFLEQ) were returned within a period of one month. The 1,386 returned (TFLEQ) were carefully

selected and only 1,325 were found valid. This resulted to a response rate of about 94%.

The second instrument was an achievement test titled ‘Mathematics Achievement Test for Primary One Pupils’ (MATPOP)’ with three hundred and twelve (312) copies administered to primary one pupils in the public primary schools across the three selected states for the study (Lagos, Oyo and Ekiti). 310 of (MATPOP) were retrieved immediately after the test. The 308 retrieved (MATPOP) were carefully selected and only 225 were found valid. This resulted to a response rate of about 72%. These response rates were considered very okay for the research as they are remarked 'above average'.

The third instrument was an achievement test titled ‘English Studies Achievement Test for Primary One Pupils’ (ESATPOP)’ with three hundred and twelve (312) copies administered to primary one pupils in the public primary schools across the three selected states for the study (Lagos, Oyo and Ekiti). 301 of (ESATPOP) were retrieved immediately after the test and only about 217 were found valid. This resulted to a response rate of about 70%. These response rates were considered very okay for the research as they are remarked 'above average'.

The fourth instrument was a structured interview questions titled ‘Preschool Teacher Interview (PTI)’. The researcher decided to interview 20% (281) out of the 1406 total number of teachers for this study in order to corroborate the responses in the questionnaire. This will help the researcher to identify the level of sincerity of the preschool teachersin answering the questionnaire.. All the two hundred and eighty-one (281) preschool teachers were orally interviewed across the three selected states for the study (Lagos, Oyo and Ekiti). This resulted to a response rate of about 100%. These response rates were considered very okay for the research as they are remarked excellent. The summary of the major instruments’ administration rate and return is captured in table 4.1:

Table 4.1: Summary of Instruments Administration Rate and Return

No.	Title of Instruments	Number of Copies administered	Number of Copies returned	Number of Copies carefully selected for the study	Response Rate
1	Teacher-related Factors and Learning Environment Questionnaire (TFLEQ)	1,406	1,386	1,325	94%
2	Mathematics Achievement Test for Primary One Pupils' (MATPOP	312	310	225	72%
3	English Studies Achievement Test for Primary One Pupils' (ESATPOP)	312	308	217	70%
	Total	**2030**	**2004**	**1767**	**79%**

Source: Field Data, 2022

4.2 Demographic Data Analysis

The demographic information obtained from Teacher-related Factors and Learning Environment Questionnaire (TFLEQ), English Achievement Test for Primary One Pupils' (ESATPOP), Mathematics Achievement Test for Primary One Pupils' (MATPOP), Mathematics Achievement Test for Primary One Pupils' (MATPOP, and Preschool Teachers Interview (PTI) are presented below:

Table 4.2 Demographic Information (TFLEQ) (n = 1325)

Demographic Variables	Frequency (F)	**Percentage (%)**
Lagos State	410	30.9
Oyo State	645	48.7
Ekiti State	270	20.4
Lagos State		
Apapa	59	4.5
Ikorodo	42	3.2
Agege	61	4.6
Somolu	40	3.0
Lagos Mainland	90	6.8
Ikeja	34	2.6
Epe	15	1.1
Oshodi/Isolo	79	6.0
Surulere	48	3.6
Oyo State		
Afijio	32	2.4
Akinyele	46	3.5
Lagelu	92	6.9
Iseyin	41	3.1
Oyo East	29	2.2
Oyo West	22	1.7
Oluyele	63	4.8
Ibadan South West	52	3.9
Ibadan North West	114	8.6
Ibadan North East	64	4.8
Ogbomoso North	23	1.7
Ogbomoso South	29	2.2
Ekiti State		
Ado-Ekiti	58	4.4
Oye	40	3.0
Ikere	42	3.2
Efon	36	2.7
Ise/Orun	24	1.8
Ijero	44	3.3
Ikole	26	2.0

Source: Field Data, 2022

Table 4.2 reveals that the state with the highest response on 'Teacher-related Factors and Learning Environment Questionnaire (TFLEQ)' was Oyo State 645 with a percentage of (48%) followed by Lagos state 410 with a percentage of (30.9%) and then Ekiti State with a percentage of 90 (20.4%). However, for the Local Government Areas (LGA), Ibadan North West had the highest responses from respondents with a percentage of 114(8.6%) followed by Lagelu with a percentage of 92(6.9%) and then Lagos Mainland

in Lagos State with a percentage of 90 (96.8%). However, the LGA with the least number of responses was Epe in Lagos State with a percentage of 15 (1.1%).

Tables 4.3 Demographic Information of Teacher (TFLEQ) (n = 1,325)

Demographic Variables	Frequency (F)	Percentage (%)
Gender		
Male	472	35.6
Female	853	64.4
Age		
20-29	110	8.3
30-39	364	27.5
40-49	692	52.2
50 years and above	159	12.0
Years of Teaching Experience		
1-10 years	141	10.6
11-20 years	674	50.9
21-30 years	413	31.2
31 years and above	97	7.3
Educational Qualification		
NCE	855	64.5
HND/Bachelor	387	29.2
Master's degree	74	5.6
Mphil degree	9	0.7
PhD	Nil	Nil

Source: Field Data, 2022

Table 4.3 shows more female public primary school teachers 853 (64.4%) compared to male teachers 558 (42.6%). It also shows that more of the teachers 692 (52.2%) are within 40-49 age bracket followed by 364 (27.5%) of the teachers who are 30-39 years. 674 (50.9%) of the teachers have within 11-20 years of teaching experience followed by 413 (31.2%) with 21-30 years of teaching experience. Lastly, 855 (64.5%) of the public primary school teachers currently have NCE. However, 387 (29.2%) of the teachers have HND/Bachelors (especially Bachelor's degree) as their highest academic qualification. The above results imply that majority of the present public primary school teachers have been teaching for a long period of time, are well advanced in age of which most of them are females and have the basic NCE or Bachelor's degree certificates.

Tables 4.4 Demographic Information of Pupils' Achievement Test (MATPOP) and (ESATPOP) (n = 442)

Demographic Variables	Frequency (F)	Percentage (%)
Lagos State	136	30.8
Oyo State	248	56.1
Ekiti State	58	13.1
Lagos State		
Apapa	9	2.0
Ikorodo	11	2.5
Agege	13	2.9
Somolu	16	3.6
Lagos Mainland	38	8.6
Ikeja	27	6.1
Epe	5	1.1
Oshodi/Isolo	10	2.3
Surulere	7	1.6
Oyo State		
Afijio	12	2.7
Akinyele	24	5.4
Lagelu	10	2.3
Iseyin	13	2.9
Oyo East	10	2.3
Oyo West	8	1.8
Oluyele	29	6.6
Ibadan South West	28	6.3
Ibadan North West	48	10.9
Ibadan North East	37	8.4
Ogbomoso North	18	4.1
Ogbomoso South	11	2.5
Ekiti State		
Ado-Ekiti	5	1.1
Oye	11	2.5
Ikere	6	1.4
Efon	2	0.5
Ise/Orun	16	3.6
Ijero	14	3.2
Ikole	4	

Source: Field Data, 2022

Table 4.4 reveals that the state with the highest response on 'Achievement Test for Primary One Pupils' (ATPOP)' was Oyo State 248 with a percentage of (56.1%) followed by Lagos state 136 with a percentage of (30.8%) and then Ekiti State with a percentage of 58 (13.1%). However, for the Local Government Areas (LGA), Ibadan North West in Oyo State had the highest responses from respondents with a percentage of 48 (10.9%) followed by Lagos Mainland in Lagos State with a percentage of 38 (8.6%).

However, the LGA with the least number of responses was Efon in Lagos State with a percentage of 2 (0.5%).

Tables 4.5 Demographic Information of Pupils' Achievement Test (MATPOP) and (ESATPOP) (n = 442)

Demographic Variables	Frequency (F)	Percentage (%)
Gender		
Male	128	29.0
Female	314	71.0
Age		
6-7 year	378	85.5
8-9 years	64	14.5
Pupils Categorization		
ECE Pupils	221	50
Non-ECE Pupils	221	50

Source: Field Data, 2022

Table 4.5 shows more female 314 (71.0%) to male 128 (29.0%) primary one pupils. It also shows that more of the primary one pupils 378 (85.5%) are 6-7 years and followed by 64 (14.5%) who are within the age bracket of 8-9 years. Table 4.2.2 indicated that there were equal proportions of the sample 221 for ECE which represent 50%and 221 for Non-ECE which equally represent 50% with a total sample size of 442 representing 100%.

Table 4.6 Demographic Information of 20% of Preschool Teachers Interview (PTI) (n=281)

Demographic Variables	Frequency (F)	Percentage (%)
Lagos State	91	32.4
Oyo State	131	46.6
Ekiti State	59	21.0
Lagos State		
Apapa	8	2.8
Ikorodo	9	3.2
Agege	10	3.6
Somolu	6	2.1
Lagos Mainland	25	8.9
Ikeja	9	3.2
Epe	5	1.8
Oshodi/Isolo	8	2.8
Surulere	11	3.9
Oyo State		
Afijio	10	3.6
Akinyele	8	2.8
Lagelu	10	3.6
Iseyin	6	2.1
Oyo East	6	2.1
Oyo West	6	2.1
Oluyele	13	4.6
Ibadan South West	31	11.0
Ibadan North West	9	3.2
Ibadan North East	9	3.2
Ogbomoso North	7	2.5
Ogbomoso South	6	2.1
Ekiti State		
Ado-Ekiti	24	8.5
Oye	9	3.2
Ikere	6	2.1
Efon	9	3.2
Ise/Orun	7	2.5
Ijero	4	1.4
Ikole	10	3.6

Source: Field Data, 2022

Table 4.6 reveals that the state with the highest response on 'Preschool Teachers Interview (PTI)' was Oyo State 131 with a percentage of (46.6%) followed by Lagos state 91 with a percentage of (32.4%) and then Ekiti State with a percentage of 59 (21.0%). However, for the Local Government Areas (LGA), Ibadan South West in Oyo State had the highest responses from respondents with a percentage of 31 (8.2%) followed by

Lagos Mainland in Lagos State with a percentage of 25 (8.9%) and then Ado-Ekiti in Ekiti State with a percentage of 24 (8.5%). However, the LGA with the least number of responses was Ijero in Ekiti State with a percentage of 4 (1.4%).

Tables 4.7: Demographic Information of 20% of Preschool Teachers Interview (PTI) (n = 281)

Demographic Variables	Frequency (F)	Percentage (%)
Gender		
Male	109	38.8
Female	192	64.8
Age		
20-29	69	23.8
30-39	81	28.4
40-49	108	38.8
50 years and above	24	9.0
Years of Teaching Experience		
1-10 years	67	23.8
11-20 years	100	35.6
21-30 years	82	29.2
31 years and above	32	11.4
Educational Qualification		
NCE	149	53.0
HND/Bachelor	73	26.0
Master's degree	35	12.5
Mphil degree	24	8.5
PhD	Nil	Nil

Source: Field Data, 2022

Table 4.7shows more female 172 (61.2%) to male 109 (38.8%) preschool teachers. It also shows that more of the preschool teachers 108 (42%) are 40-49 years and above followed by 61 (31.1%) who are within the age bracket of 30-39 years. 100 (35.6%) of the preschool teachers have 11-20 years of educational experience followed by 82 (29.2%) who have 21-30 years of educational experience. However, majority of the preschool teachers about 149 (53.3%) have Nigeria Certificate in Education (NCE) as their current level of academic qualifications. The above results imply that majority of the present preschool teachers in public primary school are young people and have not been in the educational system for a long period of time. Most of them are females and also have the

basic Nigeria Certificate in Education (NCE) certificates as their highest level of qualifications.

4.2 Presentation of Data

4.2.1 Presentation of Research Questions

Research Question One: What is the level of participation of teachers in teacher professional development in public primary schools in Southwest, Nigeria?

Table 4.8: Level of Preschool Teachers' Participation in Professional Development (n=1325)

S/N	Statement	VHL	HL	LL	VLL	$\bar{x}$	Std.D	Rmk
1	Workshops	38 (2.9%)	40 (3.0%)	825 (62.3%)	422 (31.8%)	1.107	0.74	Low
2	Educational Conferences	98 (7.4)	110 (8.3%)	796 (60.1%)	321 (24.2%)	1.624	0.58	Low
3	ICT Training	48 (3.6%)	94 (7.1%)	873 (65.9%)	310 (23.4%)	1.730	0.69	Low
4	Sandwich Programme	386 (29.1%	724 (54.6)	116 (8.8%)	99 (7.5%)	3.275	1.45	High
5	Full Time in-Service	27 (2.0%)	79 (6.0%)	295 (22.0%)	924 (70.0%)	1.051	1.66	Low
6	Seminars	14 (1.1%)	95 (7.2%)	368 (27.7%)	848 (64.0%)	1.252	0.83	Low
7	Newly Recruited Teachers Programme	99 (7.5%)	126 (9.5%)	759 (57.3%)	341 (25.7%)	1.171	0.78	Low

Weighted Mean Value = 1.765; Overall Remark = Low Level

Source: Field Data. 2022

Keys: 4= Very High Level (VHL), 3=High Level (HL), 2=Low Level (LL) and 1= Very Low Level (VLL)

Threshold: 1.500 – 2.490 =Low Level, 2.500 – 3.490 = High Level and 3.500 - 4.500 = Very High Level,

Decision = Low Level

Table 4.8 presents the answer to research question one on 'level of participation of preschool teachers in teacher professional development in public primary schools in Southwest, Nigeria.' The table reports that the level of participation of teachers in teacher professional development in public primary schools was remarked overall as low **(Weighted Mean Value = 1.601)**. The items that were remarked as 'low' are workshops

($\bar{x}$ =1.107), educational conferences ($\bar{x}$ =1.624), ICT training ($\bar{x}$ =1.730), full time in-service ($\bar{x}$ =1.051), seminars ($\bar{x}$ =1.252) and newly recruited teachers programme ($\bar{x}$=1.171). While the only item with high level is sandwich programme ($\bar{x}$=3.275). This implies that majority of preschool teachers participate mostly in sandwich programme adequately because such programme usually take place during the long vacation where most of the teachers are free from their school activities as the case may be. The level of participation of teachers in teacher professional development in public primary schools in Southwest, Nigeria was low.

Research Question Two: What is the level of teacher motivation in public primary schools in Southwest, Nigeria?

Table 4.9: Level of Preschool Teacher Motivation in Preschools (n=1325)

S/N	Statement	VHL	HL	LL	VLL	$\bar{x}$	SD	Rmk
1	Incentives for learning and career development	81 (6.1%)	134 (1.1%)	694 (52.4%)	416 (31.4%)	2.263	0.68	Low
2	Available promotion opportunity	93 (7.0%)	126 (9.5%)	674 (50.9%)	432 (32.6%)	1.472	0.74	Low
3	Comfortable working environment with good infrastructure	68 (5.1%)	120 (9.1%)	727 (54.6%)	410 (30.9%)	2.058	0.40	Low
4	Adequate recognition for outstanding performance	14 (1.1%)	36 (2.7%)	824 (62.2%)	451 (34.0%)	1.251	0.67	Low
5	Prompt payment of salaries	97 (7.3%)	108 (8.2%)	628 (47.4%)	492 (37.1%)	2.162	0.60	Low
6	Opportunity for interpersonal relationship	40 (3.0%)	140 (10.6%)	753 (56.8%)	392 (29.6%)	1.741	0.79	Low
7	Housing allowance	99 (7.5%)	126 (9.5%)	759 (57.3%)	341 (25.7%)	1.528	0.58	Low
8	Leave bonuses	98 (7.4%)	138 (10.4%)	619 (46.7%)	470 (35.5%)	1.926	0.64	Low
9	Car allowance	16 (1.2%)	64 (4.8%)	426 (32.2%)	819 (61.8%)	2.171	0.51	Low
10	Pension scheme	37 (2.8%)	124 (9.4%)	471 (35.5%)	693 (52.3%)	1.508	0.62	Low

Weighted Mean Value = 1.808; Overall Remark = Low

Source: Field Data, 2022

Keys: 4= Very High Level (VHL), 3=High Level (HL), 2=Low Level (LL) and 1= Very Low Level (VLL)
Threshold: 1.500 – 2.490 =Low Level, 2.500 – 3.490 = High Level and 3.500 - 4.500 = Very High Level, Decision = Low Level

Table 4.9 presents the answer to research question two on 'what is the level of teacher motivation in public primary schools in Southwest, Nigeria?' The table reports that the level of teacher motivation in public primary schools was remarked overall as low **(Weighted Mean Value = 1.808)**. The items that were remarked as 'low level' are incentives for learning and career development ($\bar{x}$ =2.263), available promotion opportunity ($\bar{x}$ =1.472), comfortable working environment with good infrastructure ($\bar{x}$ =2.058), comfortable working environment with good infrastructure ($\bar{x}$ =1.251), prompt payment of salaries ($\bar{x}$ =2.162), opportunity for interpersonal relationship ($\bar{x}$ =1.741), housing allowance ($\bar{x}$ =1.528), Leave bonuses ($\bar{x}$ =1.926), car allowance ($\bar{x}$ =2.171) and pension scheme ($\bar{x}$ =1.508). This implies that the level of preschool teachers' motivation in public primary is low.

Research Question Three: To what extent is mother tongue being used as a medium instruction in public primary schools in Southwest, Nigeria?

Table 4.10 Extent of Mother Tongue Usage as a Medium of Instruction in Preschool

S/N	Statement	HE	ME	LE	VLE	Mean	Std.D	Rmk
1	Mother tongue is used as medium of instruction for all subjects in preschool class.	15 (1.1%)	24 (1.8%)	924 (69.7%)	362 (27.4%)	1.914	0.72	Low
2	Mother tongue is used for classroom interaction.	22 (1.8%)	45 (3.4%)	917 (69.2%)	341 (24.1%)	1.836	0.67	Low
3	Mother tongue is allowed to be used a medium of interaction within the school compound.	75 (5.7%)	95 (7.2%)	839 (63.3%)	316 (23.8%)	0.985	0.94	Low
4	Teachers ask and respond to pupils' questions in class through mother tongue.	51 (3.8%)	84 (6.3%)	764 (57.7%)	426 32.2(%)	1.729	0.82	Low

Weighted Mean Value = 1.615; Overall Remark = Low

Source: Field Data, 2022
Keys: 4= High Extent (HE), 3=Moderate Extent (ME), 2=Low Extent (LE) and 1= Very Low Extent (VLE).
Threshold: 0.500 – 1.490 = Very Low Extent, 1.500 – 2.490 = Low Extent, 2.500 – 3.490 =Moderate Extent and 3.500 - 4.500 = High Extent.
Decision = Low Extent

Table 4.10 presents the answer to the research question three on what extent is mother tongue being used as a medium instruction in public primary schools in Southwest, Nigeria. The table reports the extent to which mother tongue is being used as a medium of instruction in public primary schools is remarked as low **(Weighted Mean Value = 1.615)**. The items that were remarked as 'low' is the use of mother tongue as medium of instruction for all subjects in preschool class ($\bar{x}$ =1.914), use of mother tongue for classroom interaction ($\bar{x}$=1.836), use of mother tongue as a medium of interaction within the school compound ($\bar{x}$=0.985) and teachers use of mother tongue for questions and pupils use of mother tongue for response ($\bar{x}$=1.726). These items indicated that a major portion of the preschool teachers do not use mother tongue as a medium of instruction in public primary schools. This may hinder meaningful teaching and learning in preschools.

Research Question Four: What is the level of availability of instructional materials in public primary schools in Southwest, Nigeria?

Table 4.11 Level of Availability of Instructional Materials in Preschools

S/N	Statement	HA	MA	LA	VLA	$\bar{x}$	SD.	RMK
1	Curriculum	45 (3.4%)	73 (5.5%)	223 (16.8%)	984 (74.3%)	0.625	0.92	Low
`2	Caregivers manual	80 (6.0%)	97 (7.3%)	436 (33.0%)	712 (53.7%)	0.936	0.64	Low
3	Teacher guide	20 (1.5%)	31 (2.3%)	425 (32.1%)	849 (64.1%)	1.374	0.75	Low
4	Toy making manual	51 (3.8%)	96 (7.2%)	336 (25.5%)	824 (63.5%)	0.842	0.85	Low
5	Time table	75 (5.7%)	95 (7.2%)	316 (23.8%)	839 (63.3%)	1.095	0.96	Low
6	Chalk	593 (44.8%)	474 (35.8%)	133 (10.0%)	125 (9.4%)	2.973	0.82	High
7	Chalkboard	695 (52.5%)	527 (39.8%)	84 (6.3%)	19 (1.4%)	2.851	0.80	High
8	Cardboard	20 (1.5%)	67 (5.0%)	490 (37.0%)	748 (56.5%)	1.662	0.91	Low
9	Teachers lesson book	683 (51.5%)	589 (44.5%)	39 (2.9%)	14 (1.1%)	2.971	0.87	High
10	Television Sets	15 (1.1%)	56 (4.2%)	314 (23.7%)	940 (71.0%)	1.021	0.61	Low
11	Radio Sets	52 (3.9%)	138 (10.4%)	442 (33.4%)	693 (52.3%)	1.285	0.83	Low
12	Audio/Visual players	70 (5.3%)	149 (11.2%)	385 (29.1%)	721 (54.4%)	1.461	0.76	Low
13	Building blocks	136 (10.3%)	158 (11.9%)	450 (34.0%)	581 (43.8%)	1.157	0.72	Low
14	Charts and colorful posters	37 (2.8%)	124 (9.4%)	471 (35.5%)	693 (52.3%)	1.012	0.65	Low
15	Counters/Abacus	51 (3.8%)	84 (6.3%)	426 32.2(%)	764 (57.7%)	1.317	0.88	Low
16	Pencils	628 (47.4%)	554 (41.8%)	125 (9.4%)	18 (1.4%)	2.164	0.70	High
17	Crayon/coloring paint	97 (7.3%)	108 (8.2%)	492 (37.1%)	628 (47.4%)	1.733	0.82	Low
18	Brushes	40 (3.0%)	140 (10.6%)	392 (29.6%)	753 (56.8%)	1.729	0.84	Low
19	Drawing books	15 (1.1%)	19 (1.4%)	540 (40.8%)	751 (56.7%)	1.534	0.69	Low
20	Reading materials	81 (6.1%)	134 (1.1%)	416 (31.4%)	694 (52.4%)	1.423	0.76	Low
21	Writing materials	93 (7.0%)	126 (9.5%)	432 (32.6%)	674 (50.9%)	1.351	0.67	Low
22.	Children's works on the walls	83 (6.3%)	125 (9.4%)	375 (28.3%)	742 (56.0%)	1.072	0.96	Low
23	Musical instruments (Flutes, drums, whistles, gunge)	48 (3.6%)	116 (8.8%)	425 (32.1%)	736 (55.5%)	0.836	0.78	Low

Weighted Mean Value = 1.454; Overall Remark = Low

Source: Field Data, 2022

Keys: 4=High Available (HA), 3=Moderate Available (MA), 2=Low Available (LA) and 1= Very Low Available (VLA).

Threshold: 0.500 – 1.490 = Very Low Available. , 1.500 – 2.490 = Low Available, 2.500 – 3.490 = Moderate Available and 3.500 - 4.500 = High Available.

Decision = Very Low

Table 4.11 presents the answer to the research question four on the level of availability of instructional materials in public primary schools in Southwest, Nigeria. The table reports that the level of availability of instructional materials in public primary schools is remarked as low **(Weighted Mean Value= 1.454)**. Among these items remarked as very low are: curriculum **($\bar{x}$ =0**.625**)**, caregivers manual **($\bar{x}$** =0.936**)**, teacher guide **($\bar{x}$** =1.374**)**, toy making manual **($\bar{x}$** =0.842**)**, time table **($\bar{x}$** =0.095**)**, cardboard **($\bar{x}$** =1.662**)**, television sets **($\bar{x}$** =1.021**)**, radio sets **($\bar{x}$** =1.285**)**, audio/visual players (one per class) **($\bar{x}$** =1.461**)**, building blocks **($\bar{x}$** =1.157**)**, charts and colorful posters **($\bar{x}$ =1.012)**, counters/abacus **($\bar{x}$** =1.317**)**, pencils **($\bar{x}$** =2.164**)**, crayon/coloring paint **($\bar{x}$** =1.733**)**, brushes **($\bar{x}$** =1.729**)**, drawing books **($\bar{x}$** =1.534**)**, reading materials **($\bar{x}$** =1.423**)**, writing materials **($\bar{x}$** =1.351**)**, children's works, on the walls **($\bar{x}$ =1.072)** and Musical instruments (Flutes, drums, whistles, gunge)**($\bar{x}$** =0.836**)**. However, only four of the items' availability was remarked as high. Such items with 'high available' were chalk **($\bar{x}$** =2.973**)**, chalkboard **($\bar{x}$** =2.851**)**, teachers' lesson book **($\bar{x}$** =2.971**)** and pencils **($\bar{x}$** =2.164**)**. Hence, it can be inferred that the level of availability of instructional materials in public primary schools is low in the study area.

Research Question Five: What is the condition of school physical facilities in public primary schools in Southwest, Nigeria?

Table 4.12 Condition of School Physical Facilities in Preschools

S/N	Statement	VG	G	B	VB	$\bar{x}$	Std.D	Rmk
1	School compound	89 (5.8%)	172 (13.0%)	406 (31.4%)	658 (48.5%)	1.516	0.81	Bad
2	School buildings	61 (4.6%)	164 (12.4%)	428 (32.3%)	672 (50.7%)	1.903	0.76	Bad
3	Sick bays	26 (2.0%)	93 (7.0%)	371 (28.0%)	835 (63.0%)	1.261	0.93	Bad
4	Toilet for pupils	58 (4.4%)	86 (8.5%)	435 (32.8%)	746 (56.3%)	1.040	0.75	Bad
5	Drinking water	44 (3.3%)	140 (10.6%)	399 (30.1%)	742 (56.0%)	1.310	0.84	Bad
6	Mini library	69 (5.2%)	152 (11.5%)	410 (30.9%)	694 (52.4%)	1.017	0.69	Bad
7	ICT facilities	51 (3.8%)	190 (14.3%)	426 (32.2%)	658 (49.7%)	1.207	0.71	Bad
8	Child-sized chair and desk	99 (7.5%)	241 (18.2%)	463 (34.9%)	522 (30.4%)	1.046	0.86	Bad
9	Teachers Tables and chairs	125 (9.4%)	143 (10.8%)	426 (32.2%)	631 (47.6%)	1.205	0.95	Bad
10	Sanitary facilities	88 (6.6%)	95 (7.2%)	431 (32.5%)	711 (53.7%)	1.486	0.63	Bad
11	Wash hand basin	86 (6.5%)	91 (6.9%)	410 (30.9%)	738 (55.7%)	1.731	0.72	Bad
12	Refuse disposal	109 (8.2%)	130 (9.8%)	385 (29.1%)	701 (52.9%)	1.105	0.84	Bad
13	play ground	73 (5.5%)	80 (6.0%)	420 (31.7%)	752 (56.8%)	1.119	0.97	Bad
14	Measuring equipment (such as weighing scales, heighteners, roller meter/infant meter and shake arm strap and tape measure)	54 4.1(%)	136 (10.3%)	411 (31.0%)	724 (54.6%)	1.835	0.76	Bad
15	Playground equipment (Swing Climbing frames and Rocking boats)	36 2.7(%)	82 (6.2%)	510 38.5(%)	697 (52.6%)	1.262	0.81	Bad
16	Cupboards and cabinets	20 (1.5%)	45 (3.4%)	393 (29.7%)	867 (65.4%)	1.310	0.78	Bad

Weighted Mean Value = 1.409; Overall Remark = Bad

Source: Field Data, 2022

Keys: 4= Very Good (VG), 3= Good (G), 2=Bad (B) and 1=Very Bad (VB)
Threshold: 0.500 – 1.490 = Very Bad, 1.500 – 2.490 = Bad, 2.500 – 3.490 = Good and 3.500 - 4.500 = Very Good.
Decision = Very Bad Condition

Table 4.12 presents the answer to the research question five on 'the condition of school physical facilities in public primary schools in Southwest, Nigeria'. The table reports that the condition of school physical facilities in public primary schools is remarked as bad**(Weighted Mean Value = 1.409)**. All the items used to determine the condition of school physical facilities in public primary schools were remarked 'bad'. The items with very bad conditions are: school compound **($\bar{x}$=1.516),** school buildings **($\bar{x}$=1.903),** sick bays **($\bar{x}$=1.216),** toilet for pupils **($\bar{x}$=1.040),** drinking water**($\bar{x}$=1.310),** mini library **($\bar{x}$=1.017),** ICT facilities**($\bar{x}$=1.207),** child-sized chair and desk **($\bar{x}$=1.046),** sanitary facilities **($\bar{x}$=1.486),** teachers table and chairs **($\bar{x}$=1.205),** wash hand basin **($\bar{x}$=1.731),** refuse disposal **($\bar{x}$=1.105),** playground**($\bar{x}$=1.119),** measuring equipment (such as weighing scales, heighteners, roller meter/infant meter and shake arm strap and tape measure) **($\bar{x}$=1.835),** playground equipment (swing climbing frames and rocking boats) **($\bar{x}$=1.262)** and cupboards and cabinets **($\bar{x}$=1.310).** This is a strong indication that school physical facilities are in a bad or low condition in most public primary schools and this may perhaps reduce the quality of effective teaching and learning in preschools.

4.2.2 Presentation of Test of Hypotheses

Hypothesis One: There will be no significant combined influence of teacher-related factors (teacher professional development and teacher motivation) and learning environment (mother tongue instruction, instructional materials and school physical facilities on pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

Table 4.13: Model Summary and Multiple Regression Analysis for the Combined Influence of Teacher-related Factors and Learning Environment on Pre-Primary Education Curriculum Implementation in Public Primary Schools in Southwest, Nigeria

Multiple R = 0.362 R. Square = .072 Adjusted R Square = .38 Standard Error = 2.537

Analysis of Variance Source of Variance	**SS**	**Df**	**MS**	**F**	**Sig.**
Regression	56.824	7	8.613	3.641	.014
Residual	1216.635	490	3.752		
Total	1273.459	497			

Sources: field work 2022

Table 4.13 presents the ANOVA of multiple regression analysis and model summary for the combined influence of teacher-related factors (teacher professional development and teacher motivation) and learning environment (mother tongue instruction, instructional materials and school physical facilities) as determinants of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria. The table reports that the ANOVA value (F-value) is significant at $p \leq 0.05$ (F-value = 3.641; Significant value = .014). This indicates that there is a significant combined influence of teacher-related factors (teacher professional development and teacher motivation) and learning environment (mother tongue instruction, instructional materials and school physical facilities) as determinants of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria. The null hypothesis is therefore rejected. The model summary further shows that the R value

= .362; R^2 =.072; adjusted R^2 = .038; Standard error of the estimate = 2.624. This implies that 38% of the total variations in pre-primary education curriculum implementation is accounted by teacher-related factors and learning environment (Adjusted R^2 = .038).

Hypothesis Two: There will be no significant relative influence of teacher-related factors (teacher professional development and teacher motivation) and learning environment (mother tongue instruction, instructional materials and school physical facilities) on pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria.

Table 4.14: Coefficients of the Multiple Regression Analysis for the Relative Influence of Teacher-related Factors (teacher professional development and teacher motivation) and Learning Environment (mother tongue instruction, instructional materials and school physical facilities) on Pre-Primary Education Curriculum Implementation in Public Primary Schools in Southwest, Nigeria

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	9.842	1.526		6.813	.000
Teacher Professional Development	.116	.63	.104	3.071	.042
Teacher Motivation	.151	.058	.136	3.534	.009
Mother Tongue Instruction	.101	.61	.028	3.615	.031
Instructional Materials	-.55	.57	-.066	-.624	.261
School Physical Facilities	.063	.48	-.064	-.407	.240

Sources: Field work 2022

Table 4.14 presents the coefficients of Multiple Regression for the relative influence of the indices of teacher related factors (teacher professional development and teacher motivation) and indices of learning environment (mother tongue instruction, instructional materials and school physical facilities) on pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria. In order to find out which of the indices have significant influence and also accounted for the 38% variation in pre-primary education curriculum implementation in public primary school; table 4.16 reports that the beta coefficients and t-test value of teacher professional development (β = .104, t = 3.071), teacher motivation (β = .136, t = 3.534) and mother tongue instruction

(β = .028, t = 3.615) were all relatively significant at p ≤ 0.05. It could therefore be suggested that the above three indices may have been responsible for the significant influence of teacher-related factors and learning environment and also the 38.8% variation of pre-primary education curriculum implementation in public primary schools. However, instructional materials (β = .066, t = -624), school physical facilities (β = -.064, t = -407) were not significant at p≥0.05. This clearly indicates that instructional materials and school physical facilities do not have any significant influence on the pre-primary education curriculum in this study.

Hypothesis Three: There will be no significant difference in achievement test scores in Mathematics between ECE and Non-ECE primary one pupil's in public primary schools in Southwest, Nigeria.

Table 4.15: Mathematics Achievement Test for Primary One Pupils' (MATPOP)

Variables	N	Mean	SD	Df	Calculated t	Sign p value	Decision
ECE	212	18.637	4.826				
Non-ECE	212	15,418	5.648	421	3.682	0.036	Rejected
Total	424						

Source: Field Data 2022 Calculated t =3.682 and p= 0.036 ≤0.05 at Df=421

Table 4.15 revealed that there was a significant difference in the estimated mean of academic success scores in Mathematics between ECE and Non-ECE primary one school students, with ECE students scoring 18.637 and Non-ECE students scoring 15.418 (t =3.682, p=0.036≤0.05, Df=421), respectively. This indicates that statistically significant difference existed in the academic achievement scores in Mathematics of ECE and non-ECE pupils. The mean score reveal that pupils who had ECE experience, had better performance in mathematics than their Non-ECE counterparts. The hypothesis that there is no significant difference in academic achievement scores in Mathematics between ECE and Non ECE primary one pupils is thus rejected.

Hypothesis Four: There will be no significant difference in achievement test scores in English Studies between ECE and Non-ECE primary one pupil's in public primary schools in Southwest, Nigeria.

Table 4.16: English Studies Achievement Test for Primary One Pupils' (MELATPOP)

Variables	N	Mean	SD	Df	Calculated t	Sign p value	Decision
ECE	212	17.483	4.826				
Non-ECE	212	14.271	5.648	441	3.610	0.011	Rejected
Total	424						

Source: Field Data 2022 Calculated "t" =3.610 and p = 0.011 ≤0.05 at Df=441

Table 4.16 shows significant mean difference existed between academic achievement scores in English Studies between ECE and Non-ECE pupils in primary schools. The calculated mean of academic achievement scores in English Studies were 17.483 and 14.271 for ECE and Non-ECE pupils respectively. Information on table 4.18 also revealed the result of analysis was "t" = 3.610, p=0.011≤0.05, Df= 441) from the results, it is obvious that statistically significant difference existed in the academic achievement scores in English studies of ECE and non ECE pupils in primary school. Thus, the calculated "p" value of 0.011 is lower than the 0.05 level of significance while the calculated "t" value was 3.610is higher than the critical value of 0.011, Df: 421. The null hypothesis is hereby rejected.

4.2.3 Presentation of Structured Oral Interview Questions

Table 4.17: Preschool Teachers Interview (PTI) 20% of 1406 Teacher (N =281)

S/No	Items	Yes	No
1	Do you have the current preschool curriculum in your school?	101 (35.9%)	180 (64.1%)
2	Do you have access to the current preschool curriculum in your school?	124 (44.1%)	157 (55.9%)
3	Do you participate in professional development activities such workshops, seminars, ICT training, conference, further study and etc on preschool education?	86 (30.6%)	195 (69.4%)
4	Are you responsible for your professional development activities?	197 (70.1%)	84 (29.9%)
5	Are there available promotion opportunity, comfortable working environment with good infrastructure, adequate recognition for outstanding performance, prompt payment of salaries, leave bonuses and etc as a form of motivation for teachers in your school?	118 (42.1%)	163 (58.2%)
6	Are you aware of the mother tongue education policy in preschool?	167 (59.4%)	114 (40.6%)
7	If yes, do you use mother tongue as a medium of instruction for all subjects in your class?	79 (28.1%)	202 (71.9%)
8	Are you provided with adequate instructional materials such as chalk chalkboard, flash cards, colorful wall charts, toys, building blocks, puzzles abacus, television sets, reading and writing materials, radio set and etc for teaching and learning?	107 (38.1%)	174 (61.9%)
9	Are there adequate school physical facilities such as school compound, conducive classrooms, Mini library, ICT facilities playground, toilets for staff and pupils, playground equipment, drinking water and etc in your preschools?	61 (21.7%)	220 (78.3%)

Source: Field Data, 2022

Table 4.17 presents the answer to the preschool teachers' structured oral interview. The following are the interview questions and their responses. Do you have the current preschool curriculum in your school? 101 (35.9%) said yes while 180 (64.2%) said no. Do you have access to the current preschool curriculum in your school? 124 (44.1%) said yes while 157 (59.1%) said no. Do you participate in professional development activities such workshops, seminars, ICT training, conference, further study and etc on preschool education? 86 (30.6%) said yes while 195 (69.4%) said no. Are you responsible for your professional development activities? 197 (70.1%) said yes while 84 (29.9%) said no. Is there available promotion opportunity, comfortable working environment with good infrastructure, adequate recognition for outstanding performance,

prompt payment of salaries, leave bonuses and etc as a form of motivation for teachers in your school? 118 (42.0%) said yes while 163 (58.0%) said no.

Are you aware of the mother tongue education policy in preschool? 167 (59.4%) said yes while 114 (40.6%) said no. If yes, do you use mother tongue as a medium of instruction for all subjects in your class? 79 (28.1%) said yes while 220 (71.9%) said no. Are you provided with adequate instructional materials such as chalk, chalkboard, flash cards, colorful wall charts, toys, building blocks, puzzles, abacus, television sets, reading and writing materials, radio set and etc for teaching and learning? 107 (38.1%) said yes while 174 (61.9%) said no. Are there adequate school physical facilities such as school compound, conducive classrooms, Mini library, ICT facilities playground, toilets for staff and pupils, playground equipment, drinking water and etc in your preschools? 61 (21.7%) said yes while 220 (78.3%) said no. This implies that the teacher-related factors and learning environment indices based on the opinions of the preschool teachers are likely to frustrate quality pre-primary education curriculum implementation in public primary schools.

4.3 Discussion of Findings

The present research was done to examine teacher-related factors (teacher professional development and teacher motivation) and learning environment (mother tongue instruction, instructional materials and school physical facilities) as determinants of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria. The finding from the demographic data analysis of the preschool teachers in the public primary school teachers revealed more female (64.4%) to male teachers (35.6%). This result agrees with the finding of a researcher who in her study on "Analyzing the Job Motivation Level of Primary School Teachers in Nigeria" reported more female to male teachers in primary schools in Nigeria[1]. The result of this study

also showed that more teachers (52.2%) are within 40-49 years of age which disagrees with the research on "Knowledge, Attitude and Practice of Public Primary School Teachers on Primary Prevention of Child Sexual Abuse in Southwestern Nigeria" which reported that teachers (47.0%) were 50 years and above[2].

In this study, about 50.9% of the teachers have 11-20 years of teaching experience followed by 37.1% with 11-20 years of teaching experience. This result completely disagrees with the result of a research on "Knowledge of School Health Programme among Public Primary School Teachers in Sokoto Metropolis, Northwestern Nigeria" which reported that 56.3% of public primary school teachers have less than 10 years of teaching experience[3]. Lastly, 64.5% of the teachers have NCE as their highest level of educational qualifications. This finding agrees with a study that reported that 44.17% of the primary school teachers have NCE followed by 35.83% with bachelor's degree[2].

The demographic data analysis of 20% (281 out of 1406) of preschool teachers that participated in the interview revealed that we have more female 172 (61.2%) than male 109 (38.8%) preschool teachers. It also shows that more of the preschool teachers 108 (38.8%) are 40-49 years and above followed by 82 (28.4%) who are within the age bracket of 30-39 years. 100 (35.6%) of the preschool teachers have 11-20 years of educational experience followed by 82 (29.2%) who have 21-30 years of educational experience. However, majority of the preschool teachers 149 (53.3%) have Nigeria Certificate in Education (NCE) as current level of academic qualifications. The above results imply that majority of the present preschool teachers in public primary school are young people and have not been in the educational system for a long period of time. Most of them are females and also have the basic Nigeria Certificate in Education (NCE) certificates.

The finding from the research question one showed that the level of preschool teachers' participation in teacher professional development in public primary schools is low (Weighted Mean Value) = 1.808. This study is in line with the work of some researchers on "Education For All (EFA): A focus on public primary schools' facilities, curriculum and teachers' professional development in Lagos and Ogun States, Nigeria." which reported that Governments of both states do not engage public primary school teachers in continuous professional development[4]. This result disagrees with the work of some researchers whose study on "Preschool teachers' learning opportunities in their initial teacher education and in-service professional development – do they have an influence on preschool teachers' science-specific professional knowledge and motivation?" which reported a high level of teacher professional development in preschools[5]. This result is contrary to the work of a study on "Teacher Participation in Professional Development Concerning Implementation of New Technologies in Class" which reported a high level of teachers' participation in professional development ICT skills[6]. This is also contrary to the work of some researchers on "Outstanding Educator Performance: Professional Development in Early Childhood Education" that reported a high level of outstanding early childhood teachers' participation in professional development[7].

This result is also contrary to the work of a study on "Teachers' Perspectives on Professional Development in South Africa and Nigeria: Towards an Andragogical Approach" which reported a high level of teachers' participation in professional development. However, the researcher noted that they were inadequate and irregular for the teachers every year [8]. This result is also contrary to the work of researcher on "Continuous professional development for inclusive ECD teachers in Chiredzi Zimbabwe: Challenges and opportunities" that reported high level of school engagement

of their teachers in a variety of CPD programmes: informal staff-development programmes, and formal school-based in-service programmes. However, the identified CPD programmes were done at the expense of formal conferences, collaborative researches and exchange programmes which are valued as professionally more informative in assisting teachers to better understand inclusive education modalities[9]. This result is also contrary to the study on "Effectiveness of teachers' motivation on job performance in public primary schools in Kitagwenda County, Kamwenge District, Uganda" that reported that workshops, in-service training and seminars were provided for teachers and their enhanced their teaching effectiveness[10].

The findings from research question two showed that the level of preschool teachers' motivation in public primary schools is low (Weighted Mean Value) = 2.856. This finding is contrary to the work of a researcher on "An Assessment of the Quality of Pre-Primary Education Offered in Public and Private Schools in Musoma Municipality, Tanzania" which reported a high level of teachers' motivation in private pre–primary schools than public pre-primary[11]. This study is also in line with the work of some researchers on "Influence of Teachers' motivation on Learning Outcomes among Pre-Primary Learners in Maara Sub County Kenya" reported that the level of motivation in terms of recognition of teachers' performance is low[12]. This result is line with the work of some researchers on "Timely Promotion as A Motivation Factor for Job Performance Among Pre-Primary School Teachers: Observations from Tanzania" which reported that there is low level of teachers' motivation in terms of good working conditions, timely promotion of teachers, payment of their salary arrears, upwardly review of teachers' welfare packages, and the conditions of services[13].

This study is in line with the work of a researcher on "The challenges facing the implementation of early childhood development and education policy in Bungoma

County, Kenya" which reported low motivation in term of poor teacher remunerations in early childhood education in Kenya[14]. This study is in line with the work of some researchers on "Government commitments and teaching strategies for effective quality early childhood education in South Western Nigeria" which reported that low level of teachers' motivation in terms of poor remuneration of teachers[15]. Findings of this study are in line with the study of a researcher on "Effectiveness of teachers' motivation on job performance in public primary schools in Kitagwenda County, Kamwenge District, Uganda". The study reported low level of teacher motivation; a situation where teachers received a meager consolidated salary which left most teachers dissatisfied[10].

Finding from research question three showed the extent to which mother tongue is being used as a medium of instruction in public primary schools is low (Weighted Mean Value) = 1.615. The findings of this study contradict those of some researchers on "Pre-service Teachers' Attitudes towards the Use of Mother Tongue as Medium of Instruction" which reported that pre-service teachers, in general, have positive attitude towards the use of Mother Tongue as medium of instruction and are willing to undergo training to be able to teach using the mother tongue[16]. The findings of this study contradict those of some researchers on "Parents', Teachers' and Students' Beliefs about the Use and Study of Mother-Tongue in the Secondary Schools in Akinyele Local Government Area, Oyo State, Nigeria" which reported that teachers have strong beliefs about pedagogical and sociocultural relevance of the MT in education and that there here is positive indication that the main stakeholders (parents, teachers and students) are ready to embrace the study of MT as a subject in secondary schools[17]. Findings of this study is contrary to the findings of a researcher on "The use of mother tongue in instruction: Pupil's performance across the years" which reported improvement in pupils' cognitive, motor skills, and affective ability observed for three consecutive years

of the implementation of the mother tongue as a result of teachers' positive attitudes, despite the challenges confronting the teaching of mother tongue[18].

The finding of this study is in line with the findings of a researcher on "A survey of teachers' experience in implementing Yoruba medium of instruction in lower primary schools of Ikire Nigeria" which reported that most of the teachers used in the study preferred to employ a bilingual mode of instruction combining Yoruba with English, claiming that English had better educational resources for the subject they were teaching[19]. This study's findings differ from those of others on "Mother Tongue Medium of Instruction in Morocco: Students' and Teachers' Perceptions" which reported that while teachers and students alike agree that mother tongues can facilitate learning, mother tongues are less likely to be adopted as official medium of instruction due to economic and socio-political factors[20]. Findings of this study strongly disagrees with the findings of some researchers on "Attitude towards English and Filipino as correlates of cognition toward Mother Tongue: An analysis among would-be language teachers" who reported that teachers are found to be willing to teach using the MT as a medium of instruction and to teach MT as a subject[21].

Findings of this study partially agrees with the findings of some researchers on "Stakeholders' Perceptions Related to Transition from Mother Tongue to English Medium of Instruction" which reported that more parents than teachers perceived the effects of early transition to English as medium of instruction favorably and believed that transition to English as medium of instruction in earlier grades is the best option[22]. Findings of this study partially disagrees with the findings of some researchers on "Comparing the attitudes of teachers and educational administrators about the use of mother tongue in education in Avramanat region, Kermanshah Province in Iran" which reported that both teachers and administrators have positive attitudes about the use of

mother tongue in education and the difference is not statistically significant. The results showed that teachers and educational administrators have positive attitude toward using mother tongue[23].

Findings from research question four showed that level of instructional materials in public primary schools is low (Weighted Mean Value) = 1.445. This finding strongly agrees with the findings of some researchers on "Instructional Materials' Effect on Learners' Literacy among Public Pre-Primary II in Webuye West Sub-County, Kenya" which found out that schools in the study area did not provide adequate and appropriate instructional materials that would equip learners with literacy skills. It further found out that inadequacy of instructional materials affected the acquisition of literacy skills in pre-school learners[24]. This result strongly agrees with the findings of a researcher on 'Assessment of Kindergarten Teachers' Use of Learning Activities and Instructional Resources in the Implementation of the Curriculum in Central Region of Ghana" which reported that lack of provision for teaching and learning materials in Ghana hampered effective curriculum implementation[25]. Similar findings had previously been reported in South Africa on "Challenges primary school teachers face in implementation of early childhood education: Teachers' perception. The study found that inadequate resources, facilities and lack of support from concerned stakeholders such as parents, teachers, school authorities and the government contributed to poor implementation of the curriculum[26].

The results of this study conflict with the findings of some researchers on "Availability of Instructional Materials and Interest of Secondary School Students in the Study of Physics in Oredo Local Government Area of Edo State, Nigeria" which reported that most of the instructional materials needed by the teacher for effective teaching of physics were available but not functioning[27]. The finding of this study

disagrees with the results of a researcher on "Availability and use of instructional materials in teaching economics in senior secondary schools in Kano State, Nigeria" which reported that instructional materials for teaching Economics are adequate but the extent of their utilization is low[28]. This result partially disagrees with the findings of some researchers on "Availability of Teacher Use of Instructional Materials and Resources in The Implementation of ECCE Programme in Nasarawa State" reported that Instructional Materials in majority of ECCE Centres in Nasarawa State were available for the programme implementation based on the ECCE benchmark of 50% on average[29].

The findings of this study partially disagree with the findings of some researchers on "Perception of teachers on availability of instructional materials and physical facilities in secondary schools of Arusha District, Tanzania" which reported that there is inadequate number of textbooks, reference books, maps and globes in schools[30]. The findings of this study is in line with the findings of some researchers on "Utilization of Modern Instructional Materials for Teaching Business Subjects in Secondary Schools in Anambra State, Nigeria" which reported that that some of the instructional materials were not available for the implementation of early childhood literacy curriculum)[31]. This result partially disagrees with the findings of a researcher on who work on "Evaluation of Available Educational Resources for Early Childhood Education in Rivers State, Nigeria" which reported that instructional resources in form of charts and toys are grossly inadequate in public schools but moderately adequate in private schools[32].

Findings of this study strongly agrees with the findings of a scholar who worked on "Evaluation of Available Resources for Early Childhood Education Programme in Adaklu District, Volta-Region, Ghana" which reported that essential instructional and

infrastructural resources necessary for the delivery of quality Early Childhood Education were absent and in limited supply in the schools within the Adaklu district[33]. This result strongly agrees with the findings of a scholar who worked on "Production and improvisation of instructional materials for effective teaching and learning in early childhood care and education in Nigeria" which reported non-provision or non-availability of an effective use of instructional materials for effective teaching and learning in preschools [34]. The finding of this study strongly disagrees with the findings of some scholars who worked on "Assessment of instructional materials and strategies for teaching Montessori pupils in English Language in Nigeria" which reported that there are instructional materials available for teaching Montessori pupils English Language[35].

The finding from research question five showed that the condition of school physical facilities in public primary schools is remarked is bad (Weighted Mean Value = 1.409). This result strongly agrees with the findings of some scholars who work on "Physical facilities and strategies used by teachers to improve pupils' performance in social studies in Makueni County, Kenya" which reported that that lower primary school classroom environment was not conducive for pupils to learn Social studies effectively while the availability and use of physical facilities in social studies was below average and pupils scrambled to use the little available resources[36]. Findings of this study strongly agrees with the findings of a scholar who worked on "Assessment of Adherence to the Standard Specifications for Early Childhood Education in Anambra State" which reported that there are no suitable chairs and tables for pupils in early childhood education schools, the classrooms are not well illuminated/ventilated, the schools do not have well grassed spacious playground, the classrooms do not have in-

built shelves, the schools do not have conducive spaces with mat or mattresses and the schools are not free from noise/pollution/hazards[37].

Findings of this study strongly agrees with the findings of a scholar who worked on “Availability of physical facilities for implementation of universal basic education in junior secondary school of Ebonyi State, Nigeria “which reported that available physical facilities in JSS in Ebonyi State are generally inadequate except staffrooms. The study also observed that the inadequacy of available physical facilities in junior secondary schools in Ebonyi State hinders the implementation and attainment of the UBE goals[38]. The results of this study partially agrees with the findings of a scholar who worked on "Education For All (EFA): A focus on public primary schools’ facilities, curriculum and teachers’ professional development in Lagos and Ogun States, Nigeria” which reported that basic school physical facilities are either fairly or adequately available in public primary schools in both states, facilities for inclusive education are either inadequate or completely unavailable[4]. The finding of this study partially agrees with the findings of a scholar who worked on "Influence of learning facilities on provision of quality education in early childhood development centres in Kenya” which reported inadequate classes, desks, water, kitchen stores among others. The findings further revealed the lack of adequate learning facilities negatively influenced provision of quality early childhood education[39].

The results of this study strongly agrees with the findings of some scholars who work on "Perception of teachers on availability of instructional materials and physical facilities in secondary schools of Arusha District in Tanzania” which reported that schools have inadequate physical facilities such as classrooms, desks, chairs and the available classrooms are poorly constructed with inadequate spacing[30]. The findings of this study strongly agrees with the findings of some scholars who worked on "Facilities

and funding as indices for effective teaching of physical education in public secondary schools in Obio-Akpor LGA, Rivers State" which reported that inadequate facilities are a significant problem affecting teaching of physical education in public secondary schools in Obio-Akpor local government area of Rivers State[40]. Findings of this study strongly agrees with the findings of some scholars who work on "Education infrastructure in Nigeria: an analysis of provision of school building facility in secondary schools in Delta State, Nigeria" which reported that most of the schools did not have adequate school buildings to support the educational programme[41].

The test of hypothesis one of the study showed a combined influence of teacher-related factors (teacher professional development and teacher motivation) and learning environment (mother tongue instruction, instructional materials and school physical facilities) as determinants of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria (F-value = 3.641; R^2 =.072; adjusted R^2 = .038; Standard. A previous empirical study showed a significant positive relationship between in-service teacher training and teachers' effectiveness in teaching and learning in primary schools in Uganda[42]. A previous study also showed that teacher professional development has significant influence on curriculum implementation in preschools in Kenya[43]. Another empirical study shows positive relationship between teacher motivation and curriculum implementation in secondary schools in Kenya[44]. Previous study showed a significant positive relationship between mother tongue usage and literacy skill acquisition among pupils in rural preschool centres in Kenya[45]. A recent study revealed that using instructional materials in mathematics has a significant positive relationship and pupils' achievement[46]. A previous study also showed a significant positive relationship between learning facilities and provision of quality preschools in West Pokot County, Kenya[39].

The test of hypothesis two of the study showed that the beta coefficient and t-test value of teacher professional development (β = .104, t = 3.071), teacher motivation (β = .136, t = 3.534) and mother tongue instruction (β = .028, t = 3.615) were all relatively significant at $p \leq 0.05$. However, the beta coefficient and the t-test value of instructional materials (β = .066, t = -624), school physical facilities (β = -.064, t = -407) were not significant at $P \geq 0.05$. A previous study also showed teacher professional development has significant influence on curriculum implementation in preschools in Kenya[43]. The study concluded that teacher motivation had a significant influence to academic performance of standard eight pupils in K.C.P.E, Kenya[47]. Another empirical study shows positive relationship between teacher motivation and curriculum implementation in secondary schools in Kenya[44]. The findings of this study partially agree with the findings of a scholar who reported inadequate classes, desks, water, kitchen stores among others in schools[39].The study further revealed that lack of adequate learning facilities negatively influenced negatively provision of quality education[39]. This finding disagrees with previous study which reported a significant relationship between physical facilities and students' level of motivation and academic performance[48].

The test of hypothesis three found a significant difference in academic achievement scores in Mathematics between ECE and non-ECE pupils in public primary schools (calculated t. 3.682, $p=0.036 \leq 0.05$, at df=421). This finding is in line with the findings of a scholar whose study result showed that preschool education contributes to better pupils' academic achievement. Furthermore, the achievement results showed that there was a statistically significant difference between preschool attendance and non-attendees throughout the primary school years. The difference in achievement between these groups was higher in grade one and slightly decreased across grade years[49]. Another scholar reported that pupils with preschool education

experience significantly outperformed their counterparts without such experience in Mathematics in primary school in Benue State[50]. These findings imply that preschool education equips children with pre- requisite skills which make learning in grade one easier and faster for children.

The test of hypothesis four of the study found that there is a substantial significant difference in academic achievement levels between ECE and Non-ECE pupils in English Studies in public primary schools (Calculated t. 3.610, $p=0.011 \leq 0.05$, at Df=421). This finding is in line with the findings of a scholar whose study result showed that preschool attendance led to significant improvement in academic achievement in receptive vocabulary and language and increased educational attainment by age 15. Moreover, the results highlighted the importance of quality of preschool, as well as subsequent school experiences. These quality dimensions have the potential not only to determine the preservation of preschool benefits but to facilitate students' positive academic trajectories from early childhood through adolescence[51]. A previous study also reported that pre-primary education has been observed to have an influence on pupils' performance in spoken and written English[52]. This could be attributed to the experience in the early years, before formal education where quality teachers were found to teach small size population of pupils in class, and probably there was individual contact between the teacher and pupils. Better performance of the ECE pupils could also be attributed to early readiness and exposure to adequate and conducive environment which enhanced good communication skills in English studies both at home and in the school environment.

The results of the structured oral interview questions administered to the preschool teachers revealed that the current preschool curriculums are not available in many preschools. The teachers also reported that they do not have access to the preschool curriculum. The teachers also indicated that they do not participate in

professional development activities such workshops, seminars, ICT training, conference, further study and etc on preschool education. They teachers submitted that they are responsible for their sponsorship of professional development activities whenever the need arises. The preschool teachers further reported that there are no available promotion opportunities, comfortable working environment with good infrastructure, adequate recognition for outstanding performance, prompt payment of salaries, leave bonuses and etc as a form of motivation for teachers in their schools. The study also found out that teachers are actually aware of the mother tongue education policy in preschools but they don't use mother tongue as a medium of instruction for all subjects. However, contrary to the results of this study, the researcher observed that from the time he entered the school compound of most of the public primary schools, majority of the pupils and teachers were communicating in their Yoruba native language. Even during the achievement test, most of the instructions were communicated to the pupils in Yoruba language which is their mother tongue.

The preschool teachers also indicated that teachers are not provided with adequate instructional materials such as chalk, chalkboard, flash cards, colorful wall charts, toys, building blocks, puzzles, abacus, television sets, reading and writing materials, radio set and etc for effective teaching and learning in the classroom. Finally, the study also revealed that there are inadequate school physical facilities such as school compound, conducive classrooms, Mini library, ICT facilities playground, toilets for staff and pupils, playground equipment, drinking water and etc in their preschools as indicated by the preschool teachers.

The finding of this study disagrees with the results of a researcher who reported that workshops, in-service training and seminars were provided for teachers to enhanced their teaching effectiveness in Uganda[10]. The finding of this study is in line with the

findings of some scholars who reported that there is low level of teachers' motivation in terms of good working conditions; timely promotion of teachers, payment of their salary arrears, upwardly review teachers' welfare packages, and the conditions of services in Tanzania[13]. The findings of this study is contrary to the findings of some scholars who reported that teachers have strong beliefs about the pedagogical and socio-cultural relevance of the MT in education and that there is a positive indication that the main stakeholders (parents, teachers and students) are ready to embrace the study of MT as a subject in the secondary school[17].

The finding of this study is in line with the findings of a researcher which reported that most of the teachers used in the study preferred to employ a bilingual mode of instruction combining Yoruba with English, claiming that English had better educational resources for the subject they were teaching[19]. The finding of this study strongly agrees with the findings of some researchers in Kenya who found out that schools in the study area did not provide adequate and appropriate instructional materials that would equip learners with literacy skills. It further found out that inadequacy of instructional materials affected the acquisition of literacy skills in pre-school learners [24].

The finding of this study is also similar to the findings of a scholar who reported that teachers' instructional materials are limited to textbooks and syllabuses and do not go beyond that; pupils learn in harsh and unconducive teaching and learning environments and there is low morale among teachers[53].The finding of this study partially agrees with the findings of a scholar who worked on "Influence of learning facilities on provision of quality education in early childhood development centres in Kenya" reported inadequate classes, desks, water, kitchen stores among others. The

findings further revealed that lack of adequate learning facilities negatively influenced provision of quality early childhood education[39].

Endnotes

1. O.B. Patrick, *Analyzing the Job Motivation Level of Primary School Teachers in Nigeria*, **International Journal of Research and Innovation in Social Science (IJRISS).** 4 (7), 2020, 455-46.

2. S.O. Owoyemi; O.C. Uchendu & O.O Olabumuyi, *Knowledge, Attitude and Practice of Public Primary School Teachers on Primary Prevention of Child Sexual Abuse in Southwestern Nigeria,* **American Journal of Educational Research,** 8(8), 2020, 536-542.

3. A.U. Abubakar; O.M. Oche; K.J. Awosan; I.A. Raji; A.M. Abdullahi & A.U. Kaoje, *Knowledge of School Health Programme among Public Primary School Teachers in Sokoto Metropolis, Northwestern Nigeria*, **Journal of Community Medicine and Primary Health Care,**33(1), 2021 128-139.

4. O. O. Ige; C. O. Omotuyol & O. T. Sebili, *Education For All (EFA): A Focus On Public Primary Schools' Facilities, Curriculum and Teachers' Professional Development in Lagos and Ogun States, Nigeria,***KIU Journal of Humanities, Kampala International University**, 5(3), 2020, 289–297. Accessed on 17/4/2022 from https://ir.unilag.edu.ng/handle/123456789/10754.

5. J. Barenthien; E. Oppermann; Y. Anders & M. Steffensky, *Preschool Teachers' Learning Opportunities in their Initial Teacher Education and In-Service Professional Development – Do they have an Influence on Preschool Teachers' Science-Specific Professional Knowledge And Motivation?*, **International Journal of Science Education**, 42:5, 2020, 744-763, DOI: 10.1080/09500693.2020.1727586.

6 K. Drossel & B. Eickelmann, *Teachers' Participation in Professional Development Concerning the Implementation of New Technologies in Class: A Latent Class Analysis of Teachers and the Relationship with the Use of Computers, ICT Self-Efficacy and Emphasis on Teaching ICT Skills, **Large-scale Assessments in Education,** 5, no. 1 2017, 1-13*. http://doi.org/10.1186/s40536-017-0053-7.

7. Z. Nasucha & I. A. Y. Khotimah, *Outstanding Educator Performance: Professional Development in Early Childhood Education*, **Jurnal Pendidikan Usia Dini,** 14 (2), 2020, 379-400.

8. O. A. Ajani*, Teachers' Perspectives on Professional Development in South Africa and Nigeria: Towards an Andragogical Approach*, **Journal of Educational and Social Research**, 11(3), 2021, 281-288. https://doi.org/10.36941/jesr-2021-0070. http://doi.org/10.1186/s40536-017-0053-7.

9. G. Henry & S. Namhla, *Continuous Professional Development for Inclusive ECD Teachers in Chiredzi Zimbabwe: Challenges and opportunities***, ScientificAfrican**, 8, 2020 1-12, e00270.

10. E. Byaruhanga, *Effectiveness of Teachers' Motivation on Job Performance in Public Primary Schools in Kitagwenda County, Kamwenge District, Uganda***,** PhD diss., 2019.

[11]. R. J. Lyayuka, *An Assessment of the Quality of Pre- Primary Education Offered in Public and Private Schools in Musoma Municipality,* Masters Degree Thesis, The Open University of Tanzania, 2020.

[12]. V. Nkirote & R. Thinguri, *Influence of Teachers 'motivation on Learning Outcomes among Pre-Primary Learners in Maara Sub County, Kenya*, **African Journal of Education and Practice**, vol. 6, no. 2, 2020, 33-43.

[13]. L. G. Ndijuye, & P. B. Tandika, *Timely Promotion as a Motivation Factor for Job Performance among Pre-Primary School Teachers: Observations from Tanzania*, Vol. 3 912), 2019, pp. 440-456http://hdl.handle.net/20.500.12661/2449.

[14]. V. M. Wangila, *The Challenges Facing the Implementation of Early Childhood Development and Education Policy in Bungoma County, Kenya,* **Journal of Education and Practice**, 8, no. 15, 2017, 217-223.

[15]. M. G. Owojori, & T. O. Gbenga-Akanmu, *Government Commitments and Teaching Strategies for Effective Quality Early Childhood Education in South Western Nigeria*, **International Journal of Child Care and Education Policy**, 15, no. 1 2021, 1-10.

[16]. J. Tonio. & J. Ella, *Pre-service Teachers' Attitudes Towards the Use of Mother Tongue as Medium of Instruction,* **Asian EFL,** 21, no. 2.3, 2019, 231-253.

[17]. F. O. Ezeokoli & E. O. Ugwu, *Teachers' and Students' Beliefs about the Use and Study of Mother-Tongue in the Secondary Schools in Akinyele Local Government Area, Oyo State*, Nigeria**, International Journal of Education and Literacy Studies**, 7, no. 2, 2019, 82-93.

[18]. J. S. Trujillo, *The Use of Mother Tongue in Instruction: Pupil's Performance Across the Years*, **Globus Journal of Progressive Education**, vol. 10, no. 1, 2020, 59-67.

[19]. J. Akintoye, *A Survey of Teachers' Experience in Implementing Yoruba Medium of Instruction in the Lower Primary Schools of Ikire Nigeria,* **Journal of Language and Education,** 3, no. 4, 2017, 6-15.

[20]. H. Belhiah & M. Lamallam, *Mother Tongue Medium of Instruction in Morocco: Students' and Teachers' Perceptions***, Journal of Applied Language and Culture Studies**, 3, 2020, 91-111.

[21]. C. Ricohermoso; B. Abequibel & E. Alieto, *Attitude Towards English and Filipino as Correlates of Cognition Toward Mother Tongue: An Analysis among Would-Be Language Teachers,* **Asian EFL Journal**,26, no. 6.1, 2019, 5-22.

[22]. S. Areaya & D. Tefera, *Stakeholders' Perceptions Related to Transition from Mother Tongue to English Medium of Instructio*n, **The Ethiopian Journal of Education**, 40, no. 1, 2020, 93-132.

[23]. A. Azad,& R. Sahraee, *Comparing the Attitudes of Teachers and Educational Administrators about the Use of Mother Tongue in Educatio*n, **Research in Teaching**, 8, no. 1, 2020, 58-38.

[24]. S. T. Cheboi & I. N. Nyongesa, Instructional *Materials' Effect on Learners' Literacy Among Public Pre-Primary II in Webuye West Sub-County, Kenya,* East, **African Journal of Education Studies,** 2, no. 1, 2020, 86-91. https://doi.org/10.37284/eajes.2.1.187.

[25]. W. K. Abroampa*, Assessment of Kindergarten Teachers' Use of Learning Activities and Instructional Resources in the Implementation of the Curriculum in Central Region of Ghana,* **Ghana Abstract**, 7(6), 2018, 67–73.

[26]. N. Shakeel, *Challenges Primary School Teachers Face in Implementation of Early Childhood Education: Teachers' Perception***, Journal of Early Childhood Care and Education (JECCE)**, 3, 2020.

[27]. O. W. Akporobaroh; A. J., Odunayo & I. M, *Onyinye, Availability of Instructional Materials and Interest of Secondary School Students in the Study of Physics in Oredo Local Government Area of Edo State, Nigeria*, **Journal of Technology and Humanities**, 1(2), 2020, 1-10. https://doi.org/10.53797/jthkkss.v1i2.1.2020.

[28]. Yusuf, A. Wudil, *Availability and Use of Instructional Materials in Teaching Economics in Senior Secondary Schools in Kano State, Nigeria,* **Journal of Teaching and Teacher Education,** 6, no. 01 2018, 59-64.

[29]. Y. M. Mikailu; S. Usman & S. G. Amirikpa, *Availability of Teacher Use of Instructional Materials and Resources in the Implementation of Ecce Programme in Nasarawa State*, **Journal of Education and Leadership Development,** Volume 11, Number 1, 2019, 52-71.

[30]. N. Sephania; J. K. Too & K. J. Kipng'etich, *Perception of Teachers on Availability of Instructional Materials and Physical Facilities in Secondary Schools of Arusha District, Tanzania,* **Journal of Teachers**, vol. 4, no. 28, 2017, 68-102. https://www.journalissues.org/IJEPRR/https://doi.org/10.15739/IJEPRR.17.012.

[31]. C. M. Ile. & I. S. Ndubuisi. *Utilization of Modern Instructional Materials for Teaching Business Subjects in Secondary Schools in Anambra State, Nigeria,* **NAU Journal of Technology and Vocational Education**, 6, no. 1 2021, 49-59.

[32]. C. C. Ukala, *Evaluation of Available Educational Resources for Early Childhood Education in Rivers State, Nigeria,***Literacy Information and Computer Education Journal (LICEJ)**, Volume 8, Issue 2, June 2017, 2584-2591.

[33]. Y. Dzakadzie & S. Agbayisah, *Evaluation of Available Resources for Early Childhood Education Programme in Adaklu District, Volta-Region, Ghana*, **European Journal of Education and Pedagogy,** 3, no. 1, 2022, 84-88.

[34]. I. V. Obidike, *Production and Improvisation of Instructional Materials for Effective Teaching and Learning in Early Childhood Care and Education in*

Nigeria,**Sapientia Foundation Journal of Education, Sciences and Gender Studies (SFJESGS)**, Vol.3 No.2 June, 2021; pg. 243 – 255.

[35]. F. N. Ene. & E. C. Ngozi,*Assessment of Instructional Materials and Strategies for Teaching Montessori Pupils in English Language in Nigeria,* **Advance Journal of Education and Social Sciences**, 4(11), 2019. *https://aspjournals.org/ajess/index.php/ajess/article/view/20.*

[36]. M. M. Wambua., C. G. Murungi, and C. Mutwiri, *Physical Facilities and Strategies Used by Teachers to Improve Pupils' Performance in Social Studies in Makueni County, Kenya,* **International Journal of Pregnancy and Child Birth**, 4 (6), 2018, 241-245.

[37]. C. C. Osazuwa, *Assessment of Adherence to the Standard Specifications for Early Childhood Education in Anambra State,***International Journal of Innovative Psychology & Social Development**,6 (4), 2018,12-20, Oct.-Dec.

[38]. B. N. Odey, *Availability of Physical Facilities for Implementation of Universal Basic Education in Junior Secondary School of Ebonyi State, Nigeria*, **The Online Journal of New Horizons in Education-October**, 8 (4), 2018, 30-40.

[39]. M. C. Chepkonga, *Influence of learning facilities on provision of quality education in early childhood development centres in Kenya*, **International Journal of Education and Research**, 5, no. 6, 2017: 15-26.

[40]. F. C. Nwaogu, & A. O. Oyedele, *Facilities and Funding as Indices for Effective Teaching of Physical Education in Public Secondary Schools in Obio-Akpor LGA, Rivers State,* **International Journal of Physical Education, Sports and Health,** 6, no. 5, 2019, 79-82.

[41]. M. A. Ojeje&A. Adodo, Education Infrastructure in Nigeria: An Analysis of Provision of School Building Facility in Secondary Schools in Delta State, Nigeria. **Journal of Education and Entrepreneurship**, Vol. 5, No. 3, 2018, 12-21.

[42]. J. Nzarirwehi, & F. Atuhumuze, *In-Service Teacher Training and Professional Development of Primary School Teachers in Uganda***, IAFOR Journal of Education**, 7, no. 1, 2019, 19-36.

[43]. P. N. Mwangi, *Tutors'Characteristics Influencing Curriculum Implementation in Pre-school Colleges' in Murang'a East Sub County, Kenya*." PhD diss., University of Nairobi, 2017.

[44], J. Kagema, *The School Curriculum and Its Influence on Teacher Motivation in Curriculum Implementation in Kenya,* **Journal of Culture and Values in Education**, *1*(1), 2018 9-25. https://www.learntechlib.org/p/210567/.

[45]. E. Chebet, *Influence of Mother Tongue Usage on Acquisition of Literacy Skills in Rural Early Childhood Development Education Centres in Nandi County, Kenya*." PhD diss., Kisii University, 2020.

[46]. Ü. Kul; S. Çelik, & Z. Aksu, *The Impact of Educational Material Use on Mathematics0Achievement: A Meta-Analysis,* **International Journal of Instruction**, 11 (4), 2018, 303-324.

[47]. E. N. Nyakundi; P. A. Raburu &M. O. Okwara, *Influence of Teacher Motivation to Academic Performance of Pupils in Primary Schools in Kenya,***International Journal of Applied Psychology**, 9 (2), 2019, 74-79. http://ir.jooust.ac.ke:8080/xmlui/handle/123456789/9492.

[48]. D., Maingi; D. Mulwa; R. Maithya & J, Migosi, *Influence of School Physical Facilities on Students' Discipline in Public Secondary Schools in Makueni County, Kenya,* 2017. http://ir.mksu.ac.ke/handle/123456780/2157.

[49]. B. S. Gutaa, & W.M. Tarekegne, *The Contribution of Pre-School Education to Students' Academic Achievement in first cycle Primary Schools of Ethiopia.* **International Journal of Educational Researchers**, 9 (2), 2018, 24-36.

[50]. D.M. Onojah, *Effects of Early Childhood Education Experience on Academic Achievement of Primary Schools Pupils in Mathematics Benue State,* A Paper Presented at the **5TH**International Conference of Federal College of Education Okene, Between August 19th and 27th, 2019.

[51]. J. Kim, *Unpacking the Role of Early Learning in Student Learning Outcomes: Evidence from National Reform of Pre-primary Education in Ethiopia,* (Doctoral thesis), 2020. https://doi.org/10.17863/CAM.46120.

[52]. D. M. Onojah, *Influence of Pre-Primary Education Experience on Academic Achievement of Primary Schools Pupils in English Language in Oyo State*, A paper presented at the Colleges of Education Academic Staff Union (COEASU) South-West Zone, Held at FCE (Sp), Oyo. Between May 6th and 10th, 2019.

[53]. P. Mupa & T. C. Isaac, *Factors Contributing to Ineffective Teaching and Learning in Primary Schools: Why Are Schools in Decadence, 2019*. http://hdl.handle.net/123456789/2092.

Chapter Five

Conclusion

This chapter presents summary of the findings, conclusion, recommendations, contribution to knowledge and the suggested areas of further studies.

5.1 Summary of Findings

The results showed more female 853 to male 472 public primary school teachers. It also shows that more of the teachers 692 are within 40-49 age brackets. 674 of the teachers have within 11-20 years of teaching experience followed by 413 with 21-30 years of teaching experience. 855 of the teachers currently have National Certificate of Education (NCE) as their highest academic qualification.

The level of participation of preschool teachers in teacher professional development in public primary schools is low (Weighted Mean Value (SD) =1.601). The level of preschool teacher motivation in public primary schools is low (Weighted Mean Value = 1.808). The extent to which mother tongue is being used as a medium of instruction in public primary schools is low (Weighted Mean Value =1.615). The level of availability of instructional materials in public primary schools is low (Weighted Mean Value = 1.454). The condition of school physical facilities in public primary schools is bad (Weighted Mean Value = 1.409).

There is combined influence of teacher-related factors (teacher professional development and teacher motivation) and learning environment (mother tongue instruction, instructional materials and school physical facilities) as determinants of pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria ($F_{7,497}$ = 3.641; R^2 =.072; adjusted R^2 = .038; $p \leq 0.05$). Teacher professional development (β = .104, t = 3.071, sign. = .042), teacher motivation (β = .136, t = 3.534, sign. = .009) and mother tongue instruction (β = .082, t = 3.615, sign. = .031) were

relatively significant at the 0.05 level of significance. This study revealed a significant difference in academic achievement scores in Mathematics between ECE and Non-ECE pupils (calculated t=3.682, p=0.036 ≤ 0.05, at Df=421). There is also a significant difference in academic achievement scores in English Studies between ECE and Non-ECE pupils (calculated t= 3.610, p=0.011≤0.05, at Df=421).

The results of the structured oral interview questions administered to the preschool teachers revealed that current preschool curriculum is inadequate. Teacher professional development activities such as workshops, seminars, ICT training, conference, further study are inadequate. There are inadequate promotion opportunities, comfortable working environment with good infrastructure, recognition for outstanding performance, prompt payment of salaries, leave bonuses and etc as a form of motivation for teachers. Though teachers are aware of mother tongue education policy in preschool, they don't use it in teaching and learning. There are inadequate instructional materials such as chalk, chalkboard, flash cards, colorful wall charts, toys, building blocks, puzzles, abacus, television sets, reading and writing materials, radio set and etc for effective teaching and learning in the classroom. School physical facilities such as school compound, conducive classrooms, mini library, and ICT facilities playground, toilets for staff and pupils, playground equipment, drinking water are also inadequate. it is obvious in this that public primary schools lack the basic facilities for the implementation of pre-primary education curriculum.

5.2 Conclusion

On the basis of the findings of this study, it can be concluded that teacher-related factors (teacher professional development and teacher motivation) and learning environment (mother tongue instruction, instructional materials and school physical facilities) have significant positive influence on the implementation of pre-primary education curricula in public primary schools. Furthermore, it could also be concluded that the level of participation of teachers in teacher professional development is low; thelevel of teacher motivation is low;the extent to which mother tongue is use as a medium of instructions low; the level of availability of instructional materials is low and the bad condition of school physical facilities have negative influence on the pre-primary education curriculum implementation in public primary schools in Southwest, Nigeria. The results from the structured oral interview established the fact that preschool curriculums are inadequate and that many teachers do not participate in teacher professional development activities. The study also established that though teachers are aware of the mother tongue education policy in preschools, they don't use mother tongue as a medium of instruction for all subjects. The study further reviewed inadequate instructional materials in public primary schools for teaching preschool children while the condition of the school physical facilities in most public primary schools is bad. This may hinder adequate Implementation of pre-primary education curricula in public primary schools in Southwest, Nigeria. However, from the results obtained from the achievement test, the pupils that attended preschools have higher scores than those pupils who did not attend preschools before entry primary schools. This implies that when teachers are properly trained and also provided with adequate teaching and learning facilities, the preschool curriculum may be effectively implemented as indicated in the achievement scores of pupils who attended preschools.

5.3 Recommendations

The following recommendations have been made based on the study's findings.

1. Teachers should be encouraged by head teachers through nominations to embark on participationin professional development programmes for quality instructional delivery in preschools. Similarly, State Government, stakeholders in education and public spirited individuals should collaborate to promote teachers' participation in programmes such as workshop, seminars, conferences, etc. that will enhance quality implementation of pre-primary education curriculum in public primary schools in Southwest, Nigeria. Training allowance should be approved for teachers to enhance their participation in professional development programmes.

2. State Government, stakeholders in education and the general public should ensure adequate promotion opportunity, comfortable working environment with good infrastructure, adequate recognition for outstanding performance, prompt payment of salaries, leave bonuses and etc as a form of motivation for teachers in preschools.

3. Preschool teachers in public primary schools in Southwest should cultivate a positive attitude towards the use of mother tongue as a medium of instruction.

4. Curriculum developers at the Federal and State Ministries of Education together with experts in pre-primary education should come up with a policy guideline that will enhance provision of enough chalk, chalkboard, flash cards, colorful wall charts, toys, building blocks, puzzles, abacus, television sets, reading and writing materials, radio set and etc for effective teaching and learning in preschools.

5. Finally, State Governments, stakeholders in education and the general public should ensure adequate provisions of school physical facilities such as conducive school compound, conducive classrooms, Mini library, ICT facilities playground, toilets for

staff and pupils, playground equipment, drinking water and etc in preschools for effective curriculum implementation.

5.4 Contribution to Knowledge

1. Conceptual

This study conceptually provided a careful and well researched insight on the main concepts and constructs of the study which are - teacher professional development, teacher motivation, mother tongue instruction, instructional materials and school physical facilities. The study also showed a well-articulated relationship amongst the above concepts and constructs.

2. Theory

The study gave a rich insight on the application of Abraham Maslow's theory of Human needs to the influence of teacher-related factors (teacher professional development and teacher motivation) and learning environment (mother tongue instruction, instructional materials and school physical facilities) as determinants of pre-primary education curriculum implementation in public primary schools. Maslow's theory of human needs states that, people are motivated to achieve certain needs (such as physiological needs, security, social, esteem and self-actualization needs). When one need is fulfilled a person seeks to fulfill the next one and so on. It also states that human beings will only think about safety, esteem and self-actualization needs if only he or she is able to satisfy physiological need. This implies that there is tendency for people to be happy, motivated and satisfied whenever their needs are made. Therefore, this study contributed to the theory by showing that physiological needs of the teachers which may include teacher professional development, teacher motivation, mother tongue instruction, instructional materials and school physical facilities can influence quality pre-primary education curriculum implementation in public primary schools.

The study also contributed to the Brunner's Instructional Theory. In this theory, Bruner especially designed a teaching strategy to help learners understand and construct or expand upon their knowledge for example; in order for learning to take place instruction must incorporate relevant materials that draw the learner in many ways of interest. This theory suggested that teachers play an important role in classroom instruction. The teachers' role is to build an environment that allows learners to make choice which is done through learning interaction. Therefore, the teacher is required to be equipped with the content prepared well for the pupils in the learning atmosphere. This study contributes to this theory by showing the role of teachers in facilitating effective and efficient teaching and learning environment for the preschool children with adequate teachings aids as well as making the preschool learning environment child-centre and child friendly provide the teachers are professional trained and motivated to teach as the case may be.

3 Empirical

Empirical studies have to do with the influence of independent (predictor) variables on dependent variable (s) in an experimental fashion. Many empirical studies have been conducted similar to this present study however; there still remained a gap in empirical literature as to the joint influence of teacher-related factors and learning environment as determinants of pre-primary education curriculum implementation in public primary schools. This study therefore closed this gap in literature by reporting the joint influence of teacher-related factors and learning environment using indices that were not used in previous studies thus making this study far better than other similar studies that have been carried out previously or recently.

5.5 Suggested Areas for Further Studies

1. Methods

A similar research should be carried out on effect of teacher-related factors and learning environment as determinants of implementation of pre-primary education curriculum in public primary schools in other geographical areas. Pure experimental method can be used for data collection.

2. Research Design

In quantitative research design, there are many research designs that could be employed to determine the influence of the independent variable (s) on the dependent variable (s). This study adopted the commonly used descriptive survey research design. However, designs like ex post facto, correlational design, cross sectional design can be adopted in subsequent similar or exact study.

3. Demographic

This study analyzed the level of demographic characteristics of both the preschool teachers and primary school pupils. However, this study did not consider their roles in influencing the result of the study. Meanwhile, future similar studies can look into the intervening role of demographic characteristics like age, gender, qualifications and so on in influencing the outcome of the results of the study.

4. Industry

The research title teacher-related factors (teacher professional development and teacher motivation) and learning environment (mother tongue instruction, instructional materials and school physical facilities) as determinants of pre-primary education curriculum implementation can be examined in any educational sector be it secondary or tertiary sectors.

5. Population and Research Topic

Although this research topic on 'teacher-related factors and learning environment' concerns only preschool teachers in primary school pupils, the research topic could be adjusted in other studies so as to involve parents and preschool children as well. For instance, subsequent study could make adjustment to the population in the research topic by examining teacher-related factors and learning environment as determinants of social and emotional development of pre-primary school children.

Bibliography

Chapters in Books

Awopetu A. V. & Odewumi R. M., *Strengthening Professional Development of ECCE Teachers in Nigeria: Demands of Globalisation***,** In E. Oduolowu, I. A. Salami &M. D. Amosun (Eds), Fundamentals of Preschool and Primary School Teacher Preparation in Nigeria, 2019. ISPN 9789782860309.

Okehukola, P. A. O. Curriculum implementation in Nigeria, strategies for the 21st century in Noah, A. O. K Shonibare, D. O Ojo. A.& Olujuluon, T. (Eds)*Curriculum implementation and professionalizing teaching in Nigeria. Lagos: Central Educational Services*, 2004.

Journals

Abdulai, A. Activities at Early Childhood Centers in Ghana: Observations of Early Childhood Teacher-Trainees. *AsianJournal of Education and Training*, *3*(1), 2017, 74-81.

Abdulrahman, A. S., & Hui, X. *Implication of Motivation Theories on Teachers Performance in the Context of Education System in* Tanzania, **International Journal of Secondary Education**. vol. 6, no. 3, 2018, pp. 46-53. doi: 10.11648/jijsedu. 20180603.11.

Abiola, A. W. & Oluwatovin, C. F. *Professional Development Programme: A Veritable Tool for Improving Teachers' Productivity in North Central Zone Public Junior Secondary Schools in Nigeria,* **Bulgarian Journal of Science and Education Policy**, 10 (1), 2016, 39-52. http://www.bjsep.org

Abroampa, W. K. *Assessment of Kindergarten Teachers' Use of Learning Activities and Instructional Resources in the Implementation of the Curriculum in Central Region of Ghana,* **Ghana Abstract**, 7 (6), 2018, 67–73.

Abroampa, W. K. *Assessment of Kindergarten Teachers' Use of Learning Activities and Instructional Resources in the Implementation of the Curriculum in Central Region of Ghana,* **Ghana Abstract**, 7(6), 2018, 67–73.

Abubakar, A.U; Oche, O.M; Awosan, K. J.; Raji, I.A.; Abdullahi, A.M. & Kaoje, A.U. *Knowledge of School Health Programme among Public Primary School Teachers in Sokoto Metropolis, Northwestern Nigeria*, **Journal of Community Medicine and Primary Health Care,**33(1), 2021 128-139.

Achimugu, L. &. Onojah, P. K. *Factors Hindering Effective Production and Utilization of Teacher-Made Instructional Materials in Teaching Senior Secondary Chemistry in Federal Capital Territory Abuja, Nigeria*, **International Journal of Scientific Research in Education**, 10 (3), 2017, 352-361.

Achola, O. R; Gudo, C. O & Odongo, B. *Implications of Instructional Materials on Oral Skills among Early Childhood Learners in Central Zone, Kisumu County, Kenya,* **International J. Educ. Pol.,** Res. Rev, 3 (2), 2016, 20-28.https://kerd.ku.ac.ke/handle/123456789/676?show=full. Accessed on 24/3/2022.

Adejobi, A. O., Omoare, A. M. & Oyediran, W. O. ***C****omparative Assessment of the Implementation of the Early Childhood Education Curriculum in Public and Private Schools in Rural Areas ofOgun State, Nigeria***. International Journal of Education, Learning and Development**, Vol.5, No.8, 2017, 44-54.

Adeyanju, C. T. *Teacher Professional Development in Early Childhood Education*. *Kontagora,* **Journal of Early Childhood Care and Primary Education**, 2, 2020, 23-34.

Ajani, O. A. Teachers' Perspectives on Professional Development in South Africa and Nigeria: Towards an Anagogical Approach, **Journal of Educational and Social Research**, 11(3), 2021, 281-288. https://doi.org/10.36941/jesr-2021-0070. http://doi.org/10.1186/s40536-017-0053-7.

Ajayi, H. O. *Book Development for Under-fives*, Paper presented at 5th Pan-African Reading for All Conference, 6-10 August, 2007. University of Ghana, Legon.

Ajayi, H. O. *Early Childhood Education in Nigeria: A Reality or a Mirage?***Contemporary Issues in Early Childhood,** Volume 9 (4),2008. http://dx.doi.org/10.2304/ciec.2008.9.4.375.

Akintoye, J. *A Survey of Teachers' Experience in Implementing Yoruba Medium of Instruction in the Lower Primary Schools of Ikire Nigeria,* **Journal of Language and Education,** 3, no. 4, 2017, 6-15.

Akman, Y. *The Investigation of the Relationships between Organisational Justice, Work Motivation and Teacher Performance*, **Cukurova University Faculty of Education Journal**, 47(1), 2018, 164-187.

Akomolafe, C. O & Adesua, V. O.*The impact of physical facilities on students' level of motivation and academic performance in senior secondary schools in South West Nigeria*,**Journal of Education and Practice,** 7 (4), 2016, 1-10.

Akporobaroh, O. W., Odunayo A. J. &Onyinye,I. M, *Availability of Instructional Materials and Interest of Secondary School Students in the Study of Physics in Oredo Local Government Area of Edo State, Nigeria*, **Journal of Technology and Humanities**, 1(2), 2020, 1-10. https://doi.org/10.53797/jthkkss.v1i2.1.2020.

Akume, R. V. & Ogoda, A. A. *Early Childhood Development as a Tool for Achieving Sustainable Development Goals.* **Journal of Early Childhood Association of Nigeria,** 8 (2), 2019, 440-448.

Aliñab, J. M; Aguja, S. E. & Prudente, M. S, *Improving Pupils' Mathematics Achievement Through Mother Tongue Based-Multilingual Education*, **Advanced Science Letters**, 24, no. 7 2018, 4840-4843.DOI: https://doi.org/10.1166/asl.2018.11213.

Alsubaie, M. A. *Curriculum Development: Teacher Involvement in Curriculum Development*, **Journal of Education and Practice** Vol.7, No.9, 2016, 106-107.

Amadioha, S. *Challenges of Early Childhood Education in Nigeria: Implication for Assessment of Early Childhood Curriculum Implementation in Port Harcourt, River State University of Science and Technology,* **Australian Journal of Arts and Scientific Research**, 22, 2018, 125-129.

Andersson, C. & Palm, T. *The Impact of Formative Assessment on Student Achievement: A Study of the Effects of Changes to Classroom Practice after a Comprehensive Professional Development Programme*, **Learning and Instruction,** 49,2017,92-102. https://doi.org/10.1016/j.learninstruc.2016.12.006.

Areaya, S., & Tefera, D. *Stakeholders' Perceptions Related to Transition from Mother Tongue to English Medium of Instruction*. **The Ethiopian Journal of Education**, *40* (1), 2020, 93-132.

Arewa, O. O. & Onojah, D. M. Early Childhood Education Teachers' Perception of the Roles of Guidance and Counseling in Preschools in Benue State, *Nigerian,* **Journal Educational Research and Development Issues**, 3 (1), 2017, 56-64.

Arshad, M., Qamar, Z. A., & Gulzar, F. H. *Effects of Physical Facilities at Public Schools on Students' Achievement in Punjab, Pakistan.* **Global Social Sciences Review,** 3(4), 2018, 102-113.

Atta, G. & Mensah, E. *Exploring Teachers' Perspectives on the Availability of Professional Development Programs: A Case of One District in Ghana***, International Journal of Humanities and Social Science**, 5 (7), 2015, 48–59. http://www.ijhssnet.com on 27th May, 2021.

Azad, A. & Sahraee. R. *Comparing the Attitudes of Teachers and Educational Administrators about the Use of Mother Tongue in Educatio*n, **Research in Teaching**, 8, no. 1, 2020, 58-38.

Baafi, R. K. A. *School Physical Environment and Student Academic Performance*, **Advances in Physical Education**, 10, 2020, 121-137. doi: 10.4236/ape.2020.102012.

Barenthien, J; Oppermann, E; Anders, Y. & Steffensky, M.*Preschool Teachers' Learning Opportunities in their Initial Teacher Education and In-Service Professional Development – Do they have an Influence on Preschool Teachers?, Science-Specific Professional Knowledge and Motivation,* **International Journal of Science Education**, 42:5, 2020, 744-763.

Bautista, A. & Ortega-Ruíz, R. *Teacher Professional Development*, **International perspectives and approaches. Psychology, Society, and Education**, **7** (3), 2015, 240-251.

Bawa N. & Ibrahim, A. A. *Improvisation of Instructional Materials for Innovative Second Language Teaching in the 21st Century,***International Journal of Operational Research in Management, Social Sciences & Education**, 5 (1), 2019, 230-242.

Belhiah, H. & Lamallam, M. *Mother Tongue Medium of Instruction in Morocco: Students' and Teachers' Perceptions***, Journal of Applied Language and Culture Studies**, 3, 2020, 91-111.

Benjamin, C. K. Onuegbu, C. & Abiata, E. A. *Early Childhood; a tool for Sustainable Development*. **Journal of Early Childhood Association of Nigeria**, 3,2017, 147-151

Bourdesa, N. *The Importance of Teachers' Training and Professional Development Programs in the Algerian Educational Context: Toward Informed and Effective Teaching Practices*, **Expériences Pédagogiques***,* 1, 2016, 1-15.

Bright, A. K., & Christiana, B. J. Availability of instructional materials in teaching Economics in Secondary Schools in Obio/Akpor Local Government Area of Rivers State. **Islamic University Multidisciplinary Journal** Vol. 6 (5), 2019, pp. 179-189. ISSN: 2617-6513.

Brunette, T; Piper, B; Jordan, R; King, S. & Nabacwa, R. *The Impact of Mother Tongue Reading Instruction in Twelve Ugandan Languages and the Role of Language Complexity, Socioeconomic Factors, and Program Implementation,***Comparative Education Review,** vol. 63, no. 4, 2019, 591-612.

Buendía, X. P. & Macías, D. F. *The Professional Development of English Language Teachers in Colombia: A Review of the Literature*, **Colomb. Appl. Linguist. J.,**21(1), 2019, 98-111.

Casil-Batang, P. G. & Malenab-Temporal, C. *Language Attitude and English Proficiency of ESL learners*, **Asian EFL Journal,** 20 (2), 2018, 186-200.

Charles, G. E., Madu, S., & Adigun, F. A. Appraisal of the implementation of early childhood education in Owerri education zone 1 of Imo State, Nigeria. **Journal of Research and Methods in Education**, *6* (2), 2016 80-85.

Cheboi, S. T. & Nyongesa, I. N. Instructional *Materials' Effect on Learners' Literacy Among Public Pre-Primary II in Webuye West Sub-County, Kenya,* East, **African Journal of Education Studies,** 2, no. 1, 2020, 86-91.https://doi.org/10.37284/eajes.2.1.187.

Chepkonga, M. C. *Influence of learning facilities on provision of quality education in early childhood development centres in Kenya*, **International Journal of Education and Research**, 5, no. 6, 2017: 15-26.

Danladi, S. S. *Language Policy: Nigeria and the Role of English Language in the 21st Century,***European Scientific Journal**, 9 (17), 1-12. https://files.eric.ed.gov>fulltext/E.J797605.pdf.

Didion, L., Toste, J. R. & Filderman, M. J. Teacher Professional Development and Student Reading Achievement: A Meta-Analytic Review of the Effects, **Journalof Research on Educational Effectiveness**, 13 (1), 2020, 29-66. https://doi.org/10.1080/19345747.2019.1670884.

Drossel K. & Eickelmann, B. *Teachers' Participation in Professional Development Concerning the Implementation of New Technologies in Class: A Latent Class Analysis of Teachers and the Relationship with the Use of Computers, ICT Self-Efficacy and Emphasis on Teaching ICT Skills, **Large-scale Assessments in Education,** 5, no. 1 2017, 1-13*. http://doi.org/10.1186/s40536-017-0053-7.

Dzakadzie, Y. & Agbayisah S. *Evaluation of Available Resources for Early Childhood Education Programme in Adaklu District, Volta-Region, Ghana*, **European Journal of Education and Pedagogy,** 3, no. 1, 2022, 84-88.

Egboro, P. M. *The Influence of Teachers' Professional Development on Mastery of Subject Matter. Sapientia Foundation,***Journal of Education, Sciences and Gender Studies (SFJESGS)**, 3(2), 2021,137 – 146.

Ene, F. N. & Ngozi, E. C.*Assessment of Instructional Materials and Strategies for Teaching Montessori Pupils in English Language in Nigeria,* **Advance Journal of Education and Social Sciences,** 4 (11), 2019. https://aspjournals.org/ajess/index.php/ajess/article/view/20.

Eric, A. & Ezeugo, C. R., *PhysicalResources Availability and The Academic Performance of Students in the Universal Basic Education Scheme, Rivers State,* ***International Journal of Innovative Development and Policy Studies***, 7 (1), 2019, 13-23. https://www.researchgate.net/publication/332607029.

Esia-Donkoh, K., & Baffoe, S. *Instructional Supervisory Practices of Head teachers and Teacher Motivation in Public Basic Schools in Anomabo Education Circuit*, **Journal of education and E-Learning Research**, 5 (1), 2018, 43-50.

Etale, O., Agnes, O. & Felicity, M. Influence of Physical Facilities on the Teaching-Learning Process in Public Primary Schools in Bungoma County, Kenya. *Africa Journal of Technical and Vocational Education and Training*, *5* (1), 2020, 187-195. http://afritvet.org/index.php/Afritvet/article/view/115.

Eze, P. I. *Effectiveness of Improvisation of Instructional Materials 6n Students' Academic Achievement and Retention in CRK*, **International Academic Journal of Innovative Research,**4 (1), 2017, 54-57.

Ezeokoli, F. O. & Ugwu, E. O. *Teachers' and Students' Beliefs about the Use and Study of Mother-Tongue in the Secondary Schools in Akinyele Local Government Area, Oyo State*, Nigeria**, International Journal of Education and Literacy Studies**, 7, no. 2, 2019, 82-93.

Fischer, C; Fishman, B; Dede, C; Eisenkraft, A; Frumin, K; Foster, B; Lawrenz F; Levy, A. J. & McCoy, A. *Investigating Relationships Between School Context, Teacher Professional Development, Teaching Practices, and Student Achievement in Response to a Nationwide Science Reform,* **Teaching and Teacher Education,** 72, (i) 2018, 107-121. https://doi.org/10.1016/j.tate.2018.02.011.

Gatsinzi, P; Jesse, R. &.Makewa, L. N, *Work and School Related Variables in Teacher Motivation in Gasabo District, Rwanda*, **Journal of Education and Training,**Vol. 1, No. 2, 2014, 262-275.http://dx.doi.org/10.5296/jet.v1i2.4747.

Ghazi, S. R., Ajmal, M., & Saeed, A. Effectiveness of Early Childhood Education: A Case Study from Remote District of Central Punjab. *Journal of Early Childhood Care and Education*, *2*(1), 2018, 75-86.

Gutaa, B. S. &. Tarekegne, W. M. *The Contribution of Pre-School Education to Students' Academic Achievement in first cycle Primary Schools of Ethiopia.***International Journal of Educational Researchers**, 9 (2), 2018, 24-36.

Han, J. yin, H. *Teacher motivation: Definition, research development and implications for teachers,* **Cogent Education***,* 3 (1), 2016.

Henry, G. & Namhla, S. *Continuous Professional Development for Inclusive ECD Teachers in Chiredzi Zimbabwe: Challenges and opportunities***, ScientificAfrican**, 8, 2020, 1-12, e00270.

Herzberg, F. One more time: How do you motivate employees?**Harvard Business Review***,* 65 (5), 2008, 109-120.http://www.hbr.org.

Ibhaze, F. O. Issues and challenges of implementation of early childhood education in Nigeria. *International Journal of Scientific and Research Publications*, *6*(5), 2016, 176-179.

Ige, O. O; Omotuyol, C. O. & Sebili, O. T. *Education For All (EFA): A Focus On Public Primary Schools' Facilities, Curriculum and Teachers' Professional Development in Lagos and Ogun States, Nigeria,***KIU Journal of Humanities, Kampala International University**, 5(3), 2020, 2`89–297.

Igiri, C. E. & Effiong, O. E. *Impact of Instructional Materials in Teaching and Learning of Biology in Senior Secondary Schools in Yakurr LGA,***International Letters of Social and Humanistic Sciences,** 62, 27-33, 2015. https://doi.org/10.18052/www.scipress.com/ILSHS.62.27.

Ile, C. M., & Ndubuisi, I. S. *Utilization of Modern Instructional Materials for Teaching Business Subjects in Secondary Schools in Anambra State, Nigeria,* **NAU Journal of Technology and Vocational Education**, 6, no. 1, 2021, 49-59.

Jacob, O. N., Jegede, D., & Solomon, A. T. Education policies of early child education programme in Nigeria: Challenges of implementation and the ways forward, ***European Journal of Humanities and Educational Advancements (EJHEA),*** Vol. 2 No. 3, 2021, 1-10. https://www.scholarzest.com.

Jacob, R; Hill, H. & Corey, D. *The Impact of a Professional Development Program on Teachers' Mathematical Knowledge for Teaching, Instruction, and Student Achievement,* **Journal of Research on Educational Effectiveness**, vol. 10, no. 2, 2017, 379-407. https://doi.org/10.1080/19345747.2016.1273411.

Kagema, J. *The School Curriculum and Its Influence on Teacher Motivation in Curriculum Implementation in Kenya,* **Journal of Culture and Values in Education***,* 1 (1), 2018. https://www.learntechlib.org/p/210567/.

Kagema, J. *The School Curriculum and its Influence on Teacher Motivation in Curriculum Implementation in Kenya,* **Journal of Culture and Values in Education**,1 (1), 2018, 9-25. https://www.learntechlib.org/p/210567/.

Kamil, R. *Exploring Teacher's Scaffolding to the Students in Teaching Writing,* **Journal of English and Education**, 5(2), 2017, 187-193.

Karacabey, M. F. School principal support in teacher professional development. **International Journal of Educational Leadership and Management**, 2021, 54-75.

Kaur, A. *Maslow's Need Hierarchy Theory: Applications and Criticism,* **Global Journal of Management and Business Studies***,* Volume 3, Number 10, 2013, pp. 1061-1064. http://www.ripublication.com/gjmbs.htm,

Kayode-Olawoyin, O. B. *Assessing the Implementation of Early Childcare Development and Education Policy in Oriade Local Government Area of Osun State,* **Journal of Early Childhood Association of Nigeria***,* 3, 2018, 197-210.

Kazu, I. Y., & Is, A. *An Investigation about Actualization Levels of Learning Outcomes in Early Childhood Curriculum*. **Journal of Education and Training Studies**, *6*(3), 2018, 66-77.

Khatete, I., Riechi, A., & Muthanje, K. A. *Instructional Materials Provision on Learners' Participation in Early Childhood Development and Education in Public Primary Schools in Embu County, Kenya*, **African Educational Research Journal***,* 8(2), 2020, 248-257.

Kul, Ü., Çelik, S., & Aksu, Z. *The Impact of Educational Material Use on Mathematics0Achievement: A Meta-Analysis,***International Journal of Instruction**, 11 (4), 2018, 303-324.

Kutaka, T. S; Smith, W. M; Albano, A. D; Edwards, C. P; Ren, L; Beattie, H. L; Lewis, W. J; Heaton, R. M. & Stroup, W. W. *Connecting Teacher Professional Development and Student Mathematics Achievement: A 4-Year Study of an Elementary Mathematics Specialist Program*, **Journal of Teacher Education**, 68, no. 2 2017, 140-154. https://doi.org/10.1177/0022487116687551.

Mahdum, M., Hadriana, H., & Safriyanti, M. Exploring Teacher Perceptions and Motivations to ICT Use in Learning Activities in Indonesia, **Journal of Information Technology Education: Research***, 18,* 2019, *293-317*.

Maingi, D; Mulwa, D; Maithya, R. & Migosi, J. *Influence of School Physical Facilities on Students' Discipline in Public Secondary Schools in Makueni County, Kenya,***American Journal of Education and Learning**,Vol. 2, No.1, 2017, 34-42. URL: www.onlinesciencepublishing.com.

Makovec, D. *The Teacher's Role and Professional Development***, International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)***,* 6 (2), 2018, 33-48.

Mandillah. L. *Kenyan Curriculum Reforms and Mother Tongue Education: Issues, Challenges and Implementation Strategies*, **Education as Change**, 23 (1), 2019, 1-18. https://dx.doi.org/10.25159/1947-9417/3379. on 21st April, 2021.

Mduma E. R. & Mkulu, D. G. *Influence of Teachers' Professional Development Practices on Job Performance in Public Secondary Schools: A Case of Nyamagana District, Mwanza-Tanzania*, **International Journal of English Literature and Social Sciences,** Vol-6, Issue-1; Jan-Feb, 2021.

Mikailu, Y. M; Usman, S. & Amirikpa, S. G. *Availability of Teacher Use of Instructional Materials and Resources in the Implementation of Ecce Programme in Nasarawa State*, **Journal of Education and Leadership Development,** Volume 11, Number 1, 2019, 52-71.

Mohammed, R. I; Iliyasu, A; Egunsola, A. O. E. & Yusuf, S. I. *Perceived Effectiveness of Audio Instructional Materials for Teaching Agricultural Science at Senior Secondary Schools level*, ATBU **Journal of Science, Technology and Education,** 7, no. 3 2019, 71-77.

Nasucha, Z. &. Khotimah, I. A. Y. *Outstanding Educator Performance: Professional Development in Early Childhood Education*, **Jurnal Pendidikan Usia Dini,** 14 (2), 2020, 379-400.

Ndifon, O. F; Peters, V. V. & Agba, R. U.*Innovation of Universal Basic Education and Early Childhood Education Teachers' Efficiency in Creativity*, **Journal of Research and Practice in Childhood Education**, Vol. 5, 2019.

Nishanthi, R, *Understanding of the Importance of Mother Tongue Learning*, **International Journal of Trend in Scientific Research and Development**, 5 (1), 2020, 77-80.

Nkirote, V. & Thinguri, R. *Influence of Teachers' Motivation on Learning Outcomes among Pre- Primary Learners in Maara Sub County, Kenya*, **African Journal of Education and Practice**, vol. 6, no. 2, 2020, 33-43.

Noormohamadi, R. *Mother Tongue, A Necessary Step to Intellectual Development,* **Pan-Pacific Association of Applied Linguistic**, 12 (2), 2008, 25-36.From https://files.eric.ed.gov>fulltexPDF.

Ntumi, S. *Challenges Pre-School Teachers Face in the Implementation of the Early Childhood Curriculum in the Cape Coast Metropolis*, **Journal of Education and Practice,** 7, no. 1 2016, 54-62.

Nwaogu, F. C. & Oyedele, A. O. *Facilities and Funding as Indices for Effective Teaching of Physical Education in Public Secondary Schools in Obio-Akpor LGA, Rivers State,* **International Journal of Physical Education, Sports and Health,** 6, no. 5, 2019, 79-82.

Nyakundi, E. N; Raburu, P. A. &Okwara, M. O, *Influence of Teacher Motivation to Academic Performance of Pupils in Primary Schools in Kenya,***International Journal of Applied Psychology**, 9 (2), 2019, 74-79. http://ir.jooust.ac.ke:8080/xmlui/handle/123456789/9492

Nzarirwehi, J. & Atuhumuze, F. *In-Service Teacher Training and Professional Development of Primary School Teachers in Uganda***, IAFOR Journal of Education**, 7 (1), 2019, 19-36.

Obidike, I. V. *Production and Improvisation of Instructional Materials for Effective Teaching and Learning in Early Childhood Care and Education in Nigeria*,**Sapientia Foundation Journal of Education, Sciences and Gender Studies (SFJESGS)**, Vol.3 No.2 June, 2021; pg. 243 – 255.

Obiegbu, I. *Mother Tongue Education: A Panacea to Effective Teaching and Learning of English in Nigeria Primary Schools,***An International Journal of Language, Literature and Gender Studies**, 5 (2), 2016, 50-59.

Obiweluozor, N. Early childhood education in Nigeria, policy implementation: critique and a way forward.African Journal of Teacher Education, Vol. 4, No. 4, 2015, PP. 1-9, 2. https://www.researchgate.net/publication/283573329.

Odey, B. N. *Availability of Physical Facilities for Implementation of Universal Basic Education in Junior Secondary School of Ebonyi State, Nigeria*, **The Online Journal of New Horizons in Education-October**, 8 (4), 2018, 30-40.

Oenyi, E. C; Ugwuanyi, C. S & Ugwu, G. C, *Appraisal of the Status of Instructional Materials, Water and Environmental Sanitation in Early Childcare Centres in Public Primary Schools in Udenu Local Government Education Authority*, **Journal of Research & Practice in Childhood Education**, Vol. 4, 2018, 1-13.

Ogunde, N. J; Jegede, D. & Ajape, T. S. *Education Policies of Early Child Educationprogramme in Nigeria: Challenges of Implementation and the Ways Forward*, **European Journal of Humanities and Educational Advancements (EJHEA),** Vol. 2 No. 3, 2021, P:1-10 13.

Ogunniye, J. O. *Early Childhood Education Care and Education in Nigeria: Problems and Prospects Vis-À-Vis Vision 2030,* **Journal of Colleges of Education Academic Staff Union (COEASU) South-West Zone**, 10 (1), 2019, 112-117.

Ogunniye, J. O. *Implementation of Integrated Early Childhood Education Policy for Sustainable Development in Nigeria*, **Journal of Early Childhood Care, Primary, Adult and Non-Formal Education**, 1 (1), 2018, 34-45.

Ogunode, N. J. & Ojo, I. C. *Management of Early Childhood Education in Nigeria: Problems and the Way Forward,* **Middle European Scientific Bulletin,** 16, 2021, 45-54. https://creativecommons.org/licenses/by/4.0/

Oguntuasi, S. C. Ayodele M. B. and Nwarunta N. F. Quality Teacher Education in Indigenous Languages for the Attainment of 2030 Educational Agenda, **Southwest Journal of Teacher Education (SOWESJTED)**, 10 (1), 2019, 168-171.

Ohakamike, O. N. *Use of Instructional Media as Determinant of Students' Achievement and Attitude in English Language*. **International Journal of English Language and Linguistics Research,** Vol.8, No 2, 2020, pp. 76-90.

Ojeje, M. A.& Adodo, A. *Education Infrastructure in Nigeria: An Analysis of Provision of School Building Facility in Secondary Schools in Delta State*, Nigeria. **Journal of Education and Entrepreneurship**, Vol. 5, Noi. 3, 2018, 12-21.

Oke, E.B. Managing *Leadership Skills for Teacher Effectiveness in the Implementation of Early Childhood Education in Federal Capital Territory, Abuja, Nigeria.***International Journal of Innovative Business Strategies (IJIBS)**, 5 (1), 2019.

Okediadi, N. Literacy in the Mother Tongue: Police Vs Preference. in the Perspective of Language and Literature: Essay in Honour of R. U./ Uzoezie. **UJAH Unizik Journal of Arts and Humanities**, 2008, 1-6.hppts://www.journals.sfu.ca>viewfile.PGF.

Okusun, C. J. & Onyeizu, R. *Early Childhood and Achievement of Sustainable Development Goals in Nigeria*. **Journal of Early Childhood Association of Nigeria,** 8 (2), 2019, 450-462.

Olufemi, A. S. & Adeusi, A. A. *School Size and Facilities Utilization as Correlates of Secondary School Students' Academic Performance in Ekiti State, Nigeria,* **European Journal of Alternative Education Studies**, 2 (1), 2017, 69-82. doi: 10.5281/zenodo.495179

Olufumilayo, C. D. Teacher's Motivation Techniques as Determinants of Students' Academic Performance in English Language in Selected Government Secondary Schools in Oyo State, **International Journal of Secondary Education,** Vol. 8, No. 2, 2020, pp. 36-46. doi: 10.11648/j.ijsedu.20200802.

Oluwole, D., Bawa, Y. J., & Owobu, J. *Influence of Teachers' Professional Development on Students' Academic Achievement in Secondary Schools in Benue and Nasarawa State,* **Nigeria. International Journal of Academia***,* 4 (1), .2017. 1-13.

Oluwole, D; Bawa, Y. J. & Owobu, J. *Influence of Teachers' professional Development On Students' Academic Achievement in Secondary Schools in Benue and Nasarawa State, Nigeria,* **International Journal of Academia**, Vol. 4 No.1, 2017, 1-13.

Omar, M. Early childhood care and education as a tool for achieving sustainable development, **Journal of Early Childhood Association of Nigeria***,* 8 (2), 2019, 618-630.

Omotuyole, C. & Okudo, A. R.*Professional Development of Early Childhood and Language Education Teachers for Sustainable Development,* **Journal of Research & Method in Education,** 4(2), 2014, pp.1-6.DOI: 10.9790/7388-04210106.

Onojah, D. M., Onoja, E.U and Ibrahim, A. I. Relevance of Instructional Materials in Teaching of English Language as a Second Language in Early Childhood Education in Nigeria, **SPED Journal of Science Education***,* 8 (2), 2018, 150-160.

Osazuwa, C. C. *Assessment of Adherence to the Standard Specifications for Early Childhood Education in Anambra State,***International Journal of Innovative Psychology & Social Development**,6 (4), 2018,12-20, Oct.-Dec..

Osei-Poku, P., & Gyekye-Ampofo, M. Curriculum delivery in early childhood education: Evidence from selected public kindergartens in Ashanti region, Ghana. **British Journal of Education**, 5(5), 2017, 72-82.

Owala, Z. M.;Odongo, B. & Raburu, P.A.*Motivational Factors Influencing Teachers Job Performance in Pre-School Centres in Kenya*, **International Journal of Innovative Research & Development,** 5, (5), 2016.https://repository.maseno.ac.ke/handle/123456789/1688.

Owojori, M. G. & Gbenga-Akanmu, T. O. *Government Commitments and Teaching Strategies for Effective Quality Early Childhood Education in South Western Nigeria*, **International Journal of Child Care and Education Policy**, 15, no. 1 2021, 1-10.

Owoyemi, S.O; Uchendu, O.C. & Olabumuyi, O.O. *Knowledge, Attitude and Practice of Public Primary School Teachers on Primary Prevention of Child Sexual Abuse in Southwestern Nigeria,* **American Journal of Educational Research,** 8(8), 2020, 536-542.

Patrick, O.B. *Analyzing the Job Motivation Level of Primary School Teachers in Nigeria*, **International Journal of Research and Innovation in Social Science (IJRISS).** 4 (7), 2020, 455-46.

Pianta, R.; Bridget, H; Downer, J; Burchinal, M; Williford, A.; Locasale-Crouch, J; Howes, C; Paro, K. L. & Scott-Little, C. *Early Childhood Professional Development: Coaching and Coursework Effects on Indicators of Children's School Readiness,* **Early Education and Development,** 28, no. 8, 2017, 956-975. https://doi.org/10.1080/10409289.2017.1319783

Piper, B; Zuilkowski, S. S; Kwayumba, D. & Oyanga, A. *Examining the Secondary Effects of Mother-Tongue Literacy Instruction in Kenya: Impacts on Student Learning in English, Kiswahili, and Mathematics,* **International Journal of Educational Development**,59, 2018: 110-127.

Ricohermoso, C; Abequibel, B. & Alieto, E. *Attitude Towards English and Filipino as Correlates of Cognition Toward Mother Tongue: An Analysis among Would-Be Language Teachers,* **Asian EFL Journal**,26, no. 6.1, 2019, 5-22.

Salami, I. A. *Nigerian Early Childhood Education Policies and Practices for Sustainability*, **European Journal of Research and Reflection in Educational Sciences,**4 (5), 2016.

Sandilos L. E; Goble, P; Rimm-Kaufman, S. E. & Pianta, R C. *Does Professional Development Reduce the Influence of Teacher Stress on Teacher–Child Interactions in Pre-Kindergarten Classrooms?* ***Early Childhood Research Quarterly,*** 42, 2018, 280-290. https://doi.org/10.1016/j.ecresq.2017.10.009.

Schick, B., de Villiers, J., de Villiers, P., & Hoffmeister, B. Theory of mind: Language and cognition in deaf children. *The ASHA Leader*, *7*(22), 20026-14.

Sephania, N; Too, J. K. & Kipng'etich, K. J. *Perception of Teachers on Availability of Instructional Materials and Physical Facilities in Secondary Schools of Arusha District, Tanzania,* **Journal of Teachers**, vol. 4, no. 28, 2017, 68-102. https://www.journalissues.org/IJEPRR/https://doi.org/10.15739/IJEPRR.17.012.

Shakeel, N. Challenges Primary School Teachers Face in Implementation of Early Childhood Education: Teachers' Perception, **Journal of Early Childhood Care and Education (JECCE)**, 3, 2020, 15-18.

Souck, E. N. & Nji, M. G. *The Effects of School Facilities on Internal Efficiency: The Case of Selected Bilingual Secondary Schools in Yaoundé Centre*. ***World Journal of Research and Review****, 4, no. 4, 2017, pp. 41-48.*

Stentoft, D. From Saying to Doing Interdisciplinary Learning: Is Problem-Based Learning the Answer? **Active Learning in Higher Education**, 18 (1), 5, 2017, 1-61.

Sumita, V. & Devi, R. *Impact of Pre-Primary Education on the Development of Students in Himachal Pardesh,***International Research Journal of Modernization in Engineering Technology and Science***,* 03 (03), 2021, 715-729.

Taylor, J. A; Roth, K; Wilson, C. D; Atuhsatz, M. A. & Tipton, E. *The Effect of an Analysis of Practice, Videocase-Based, Teacher Professional Development Program on Elementary Students' Science Achievement,***Journal of Research on Education Effectives',** vol. 10, no. 2, 2017, 241-217. https://doi.org/10.1080/19345747.2016.1147628.

Tonio, J. & Ella, J. *Pre-service Teachers' Attitudes Towards the Use of Mother Tongue as Medium of Instruction,* **Asian EFL,** 21, no. 2.3, 2019, 231-253.

Trujillo, J. S. *The Use of Mother Tongue in Instruction: Pupil's Performance Across the Years*, **Globus Journal of Progressive Education**, vol. 10, no. 1, 2020, 59-67.

Ubom, I. U., & Joshua, M. T. *Needs Satisfaction Variables as Predictors of Job Satisfaction Variables as Predictors 6f Job Satisfaction of Employees:* **Implications for Guidance and Counselling Educational Research Journal***,* 4 (3), 2004, 234-243.

Ukala, C. C. *Evaluation of Available Educational Resources for Early Childhood Education in Rivers State, Nigeria,* Literacy **Information and Computer Education Journal (LICEJ)**, Volume 8, Issue 2, June 2017, 2584-2591.

Ukpong, E. M. *Effective Approach to Childhood: Connecting Theory and Practice*. **Journal of Early Childhood Association of Nigeria (JECAN)**, 4, 2019, 1-19.

Viatonu, O. A; Usman-Abdulqadri, T. & Dagunduro, O. M. *An Assessment of Implementation Strategies of Integrated Early Childcare and Development (IECD) in Epe Local Government Area of Lagos State,***An International Multidisciplinary Journal, Ethiopia,** Vol. 5 (4), Serial No. 21, 2011, Pp. 501-510.https://www.ajol.info/index.php/afrrev/article/view/69299.

Waigera, J; Mweru, M. & Ngige, L. *Relationship between Teachers' Demographic Characteristics and Levels of Utilization of Instructional Materials in Pre-Primary Schools in Kenya, East* **African Journal of Education Studies**, 2(1), 2020, 67-77. ??Doi: 10.37284/eajes.2.1.179.

Wambua, M. M., Murungi, C. G., & Mutwiri, C. *Physical Facilities and Strategies Used by Teachers to Improve Pupils' Performance in Social Studies in Makueni County, Kenya, International* **Journal of Pregnancy and Child Birth**, 4 (6), 2018, 241-245.

Wangila, V. M. *The Challenges Facing the Implementation of Early Childhood Development and Education Policy in Bungoma County, Kenya,* **Journal of Education and Practice**, 8, no. 15, 2017, 217-223.

Weli, S. E. &Nyimejie,A.*Teachers' Participation in Professional Development Programme and its Impediments for Quality Instructional Delivery in Secondary Schools in Rivers State*, **International Journal of Innovative Education Research**, 9 (1), 1-8, 2021.

Wolf, S. & Peele, M. *Examining Sustained Impacts of Two Teacher Professional Development Programs on Professional Well-Being and Classroom Practices*, **Teaching and Teacher Education**, 86, 2019, 1-11, https:// doi.org /10.1016/ j.tate. 2019.07.003IMPERATIVES.

Wolf, S., Turner, E. L., Jukes, M. C., & Dubeck, M. M. *Changing Literacy Instruction in Kenyan Classrooms: Assessing Pathways of Influence to Improved Early Literacy Outcomes in the HALI intervention September*, **International Journal of Educational Development**, 2018. DOI: 10.1016/j.ijedudev.2018.02.004.

Yasmin, S., Rumi, M. A & Robert, S. Impact of pre-primary education on children in Bangladesh: A Study on government primary schools in Sylhet City, **American Journal of Educational Research**, vol. 8, no. 5, 2020, 251-258. doi10.12691/education-8-5.

Yusuf, A. W. *Availability and Use of Instructional Materials in Teaching Economics in Senior Secondary Schools in Kano State, Nigeria,* **Journal of Teaching and Teacher Education,** 6, no. 01 2018, 59-64.

Zahnd, W. E; Smith, T; Ryherd, S. J; Cleer, M; Rogers, V. & Steward, D. E. *Implementing a Nutrition and Physical Activity Curriculum in Head Start Through an Academic-Community Partnership*, **Journal of School Health**, 87(6), 2017, 465–473.

Zhaohui, C. & Anning, A. S. *Impact of Teachers' Professional Development on Students' Academic Performance in Higher Education,* **International Journal of Advanced Education***,* 5 (2),2020,50-57.

Periodical Articles

Akhtar, S. N; Iqbal, M, & Tatlah, I. A. *Relationship between Intrinsic Motivation and Students' Academic Achievement: A Secondary Level Evidence*, **Bulletin of Education and Research**, 39, no. 2 2017, 19-29.

Awopetu, A. V. *Impact of Mother Tongue on Children's Learning Abilities in Early Childhood Education Classroom*, **Annual International Scientific Conference 12-14 May. Moscow Russia** 2016. http:// creativecommons.org //licences/by-ng.nd140/.58-63.

Benson, C. *The Importance of Mother Tongue-Based Schooling for Educational Quality, Commission Study for EFA Global Monitoring Report 2005*, Stockholm University: Centre for Research on Bilinqualism, 2004. https:/unesdoc.uneso.org/images/0014/001466/146632e.

Bukoye, R. O. *Utilization of Instruction Materials as Tools for Effective Academic Performance of Students:Implications for Counselling***.**A paper presented at the **2nd Innovative and Creative Education and Teaching International Conference (ICETIC2018**), **Badajoz, Spain**, 20–22 June 2018.

Campbell, C; Osmond-Johnson, P; Faubert; B. Zeichner, K. & Hobbs-Johnson A.; Brown, S.; Dacosta, P.; Hales, A.; Keuehn, L.; Sohn, J.; Steffensen, K. *The State of Educators' Professional Learning in Canada***,** Final research report. Oxford, OH: Learning Forward*,* 2017. http://www.learningforward.org/Canadastudy.

Kedzior, M. & Fifield, S. *Teacher Professional Development,*Delaware Education Research & Development Center*,*The Education Policy Brief series, 2004.http://www.rdc.udel.edu.

Kolawole, C. O. O. *Language, Education and the Curriculum Nexus: Pathway to Achieving Sustainable Development in Nigeria***, An Inaugural Lecture Series, 2015/2016. Ibadan: University Press, Ibadan, 20**16.

Komba, S. C. & Mwakabenga, R. J. *Teacher Professional Development in Tanzania: Challenges and Opportunities, in Educational Leadership*. Intech Open, 2019. http://dx.doi.org/10.5772/intechopen.90564.

Lu, M; Loyalka, P; Shi, Y; Chang, F; Liu, C. & Rozelle, S. *The Impact of Teacher Professional Development Programs on Student Achievement in Rural China*, Stanford Center for International Development, 2017, 1-34. http://www.reap.fsi.stanford.edu.

Mvuyekule, P. *Management of School Physical Facilities for Pupils' Academic Performance in Uvinza District Public Primary Schools in Tanzania,* A Dissertation Submitted in Partial Fulfilment of the Requirements for the Degree of Master of Education in Administration, Planning and Policy Studies of the Open University of Tanzania, 2017.

Nordic Council of Ministers, *Pedagogy in ECEC Nordic Challenges and Solutions*, **Copenhagen**, 2016.

Onyeachu, J.A.E. *Implementation Issues in Secondary Education Curriculum in Nigeria:Problems and Prospects,* A paper presented at the International and 7thAnnual Conference of National Association for Research Development, F.C.T College Education Zuba, Abuja, 6th-10th October, 2008.

Reynolds, D. *Teachers' Continuing Professional Development: A New Approach, 2018.***20th Annual World ICSEI of International Congress for Effectives and Improvement.**

Salami, I. A. *Repositioning Early Childhood Education Personnel Matters in Nigeria for Global Competitiveness-Focus on Staff Selection and Professional Development,* **Proceedings of the National Conference of ECAN. Ilorin,** 2017, 96-108. 2017.

Tulyakul, S; bin Omar-Fauzee, M. S; bin Hussin, F & Khun-inkeeree, H. *The Relationship Between Teachers Motivation and Physical Education Teaching Strategies among Primary School Teachers in Southern Thailand,* Conference**: The 10th Hatyai National and International Conference, Thailand,** 2019. https://www.researchgate.net/publication/335679978.

Textbooks

Ayo, A; Adeniran, K; Akana, A & Akinpelu, T*, English Studies for Primary School Book 1: Universal Basic Education Edition*, Ibadan: University Press, 2017.

Bruner, J. S. *Toward a Theory of Instruction*, Vol. 59, 1966. Harvard University Press, Darling-Hammond, L; Hyler, M. E. & Gardner, M. *Effective Teacher Professional Development*, Palo Alto, CA: Learning Policy Institute, 2017. https://learningpolicyinstitute.org/product/teacher-prof-dev.

David-Osuagwu, M. N. *Understanding Mathematics for Nigeria 1*, Onitsha: Africana First Publishers PLC, 2018.

Fafunwa, A. B. History of Education in Nigeria. London: George Alien and Unwin, 1967.

Federal Republic of Nigeria, *National Policy on Education*, Lagos: NERDC Press. 8th edition, 2014. https://issuu.com/esspin/docs/national_policy_on_education.

Kolawole, C. O. O. *Language Education and the Curriculum Nexus: Pathway to Achieving Sustainable Development in Nigeria.* Ibadan: Ibadan University Press,2016.

Ministry of Education, *Te Whāriki*, *Child Research Net*. Wellington: Ministry of Education, New Zealand, 2017. https:// www. education.govt.nz/assets/Documents/Early-Childhood/Te-Whariki-Early-Childhood-Curriculum-ENG-Web.pdf.

Rosa, M. T. *Without Reform of Teachers: There will be no Reform of Education*, Paris: Prospect UNESCO, Vol. 35, No. 3, 2011.

Sandefur, J. *Internationally Comparable Mathematics Scores for Fourteen African countries (Working Paper No. 444).* Washington, DC: Center for Global Development, 2016. https://doi.org/10.2139/ssrn.2893768.

Tor-Anyiin, S. A.*Origin, Growth and Development of Pre-Primary/Primary Education in Nigeria*, Makurdi: Selfers Academic Press Ltd, 2008.

Ugwude, D. I. & Ekweozor, C. *The Role of Early Childhood Education for Sustainable Development in Nigeria*, In F. A. Anyogu; C. A. Eme & J. A. Ogbodo (Eds), *University-Led Knowledge and Innovation for Sustainable Development,* Abuja: Boldscholar Research Ltd, 2021.

Thesis/Dissertation (Unpublished)

Aleke, D. I. *Development of Professional Skills Improvement Programme for Early Childhood Education Teachers in South East, Nigeria, An* unpolished Doctoral

Thesis of the Department of Educational Foundations, University of Nigeria, Nsukka, 2016.

Adamu, N. *Impact of Learning Environment on the Performance of Students in Social studies in Junior Secondary Schools in Taraba State, Nigeria*, Master Degree Thesis, School of Postgraduate Studies, Ahmadu Bello University, Zaria,Nigeria, 2015.

Ajayi, M. A. *Effect of Learning Environment on Students' Academic Achievement in Lagos State Secondary Schools.* Unpublished MED Thesis University of Nigeria, 2001.

Amatokwu, T. A. *Motivational Factors as a Correlate of Staff Job Performance in Lead City University, Ibadan in Oyo State*, A Thesis Submitted to the Department of Arts and Social Science Education, Faculty of Arts and Education, Lead City University, Ibadan, Oyo State, Nigeria in partial fulfillment of the requirement for the award of M.Ed in Educational Management, 2020.

Byaruhanga, E. *Effectiveness of Teachers' Motivation on Job Performance in Public Primary Schools in Kitagwenda County, Kamwenge District, Uganda,* PhD diss., 2019.

Byaruhanga, E. *Effectiveness of Teachers' Motivation on Job Performance in Public Primary Schools in Kitagwenda County, Kamwenge District, Uganda*, PhD diss., 2019.

Chebet, E. *Influence of Mother Tongue Usage on Acquisition of Literacy Skills in Rural Early Childhood Development Education Centres in Nandi County, Kenya*." PhD diss., Kisii University, 2020.

Chuma, P. C. *Challenges Affecting Teaching-Learning in Primary Schools in Kenya. A case study of Central Division Mandera East District,* Executive Med Project, Moi University, 2012.

Doggoh, B. T. *Assessment of the Implementation of Universal Basic Education (UBE) Programme in North Central Geo-Political Zone of Nigeria (1999-2011),* (Doctoral dissertation, Ahmadu Bello University) Zaria, Nigeria, 2014.

E. L. Bawani, *Preschool Teachers' Experiences and Reflections in Implementing a Pre-Primary Curriculum for Five to Six Year Olds in Francistown*, Botswana, PhD diss., 2019.

Gitonga, D. W. *Influence of Teachers' Motivation on Students' Performance in Kenya Certificate of Secondary Education in Public Secondary Schools in Imenti South District Kenya,*A research project submitted in partial fulfillment of the requirements for the Degree of Master of Education in Educational Administration University of Nairobi, 2012.

Hanushek, E. A. & Woessmann, L. *The Economic Impact of Educational Quality*, In P. Dixon; S. Humble & C. Coutain (Eds), Handbook of international development and education, Edward Elgar Publishing, 2015, pp. 9-16. DOI: 10.4337/9781783473540.

Kim, J. *Unpacking the Role of Early Learning in Student Learning Outcomes: Evidence from National Reform of Pre-primary Education in Ethiopia,* (Doctoral thesis), 2020. https://doi.org/10.17863/CAM.46120.

Kiptum, J. K. *Influence of School Physical Environment on Teachers' Satisfaction in Selected Public Primary Schools in Elgeyo Marakwet County, Kenya*, A Thesis Submitted in Fulfillment of the Requirements for the Award of the Degree of Doctor of Philosophy in Education of Kenyatta University, June, 2018.

Kiptum,J. K. *Influence of School Physical Environment on Teachers' Satisfaction in Selected Public Primary Schools in Elgeyo Marakwet County, Kenya*, A thesis submitted in fulfillment of the requirements for the award of the Degree of Doctor of Philosophy in Education of Kenyatta University, 2018.

Kofa, L. *Elementary Teachers' Perceptions of Mathematics Instruction in Montessori and Traditional Classrooms*, Walden University, 2017.

Lyayuka, R. J. *An Assessment of the Quality of Pre- Primary Education Offered in Public and Private Schools in Musoma Municipality,* Masters' Thesis, The Open University of Tanzania, 2020.

Mwangi, P. N. *Tutors'Characteristics Influencing Curriculum Implementation in Pre-school Colleges' in Murang'a East Sub County, Kenya*." PhD diss., University of Nairobi, 2017.

Nafi'u, T. K. *Influence of Early Childhood Education on Academic Achievement, Moral and Social Behaviour of Primary School Pupils* in Kano State, Nigeria, An unpublished Phd thesis submitted to School of Postgraduate Studies, Ahmadu Bello University, Zaria,

Nyokabi, K. J. *Teacher Factors Affecting the Implementation of Early Childhood Development and Education Curriculum* in Mathira East Sub-County, Nyeri County, Kenya.A research project report submitted in partial fulfillment of the requirement for the award of Degree of Master of Education (Early Childhood Education), in the School of Education of Kenyatta University, 2018.

Onojah, D. M. *Contemporary Issues in Early Childhood Education in Nigeria*. An Unpublished Lecture Note of Federal College of Education (Special), Oyo, 2020.

Onojah, D. M. *Early childhood education curriculum in Nigeria,*An Unpublished Lecture Note of Federal College of Education (Special), Oyo, 2020.

Onojah, D. M. *Influence of Pre-Primary Education Experience on Academic Achievement of Primary Schools Pupils in English Language in Oyo State*, A paper presented at the Colleges of Education Academic Staff Union (COEASU) South-West Zone, Held at FCE (Sp), Oyo. Between May 6th and 10th, 2019.

Onojah, D.M. *Effects of Early Childhood Education Experience on Academic Achievement of Primary Schools Pupils in Mathematics Benue State,* A Paper Presented at the 5TH International Conference of Federal College of Education Okene, Between August 19th and 27th, 2019.

Opoola, A. F. *Influence of Supervision and Stakeholders' Attitudes on Mother Tongue Education Policy Implementation in Lower Primary Schools in Southwest, Nigeria,* An unpublished PhD thesis Faculty of Arts and Education, Lead City University Ibadan, Nigeria, 2020.

Sa'adatu, H. *Evaluation of the Implementation of Early Childhood Care Development and Education Curriculum in North-West Geo-Political Zone of Nigeria (2004-2015),* A Dissertation Submitted to the School of Postgraduate Studies, Ahmadu Bello University, Zaria, in Partial Fulfilment of the Requirement for the Award of Doctor of philosophy in Education (Curriculum and Instruction). Department of Educational Foundations and Curriculum, Ahmadu Bello University, Zaria, Nigeria, July, 2016.

Ugwu, C. L. *Assessment of Utilization of Instructional Materials in Teaching and Learning of Business Education Subjects in Secondary Schools in Enugu Education Zone of Enugu State*, PhD diss., 2017. http://repository.unn.edu.ng:8080/xmlui/handle/123456789/5415.

Vygotsky, L. S. *Mind in Society: The Development of Higher Psychological Processes*. Edited by S. S. and S. E. C. M. John-Steiner V, London: Harvard University Press, 1978. doi: 10.1007/978-3-540-92784-6.

Websites

Ayoola, N. O; Ojoko, B. A. & Olowe, P. K. A*vailability and Implementation of National Early Childhood Curriculum for Ages 0-5 in Pre-Primary Schools in Ondo West Local Government Area of Ondo State,* 2019, https://www.researchgate.net/publication/331310529.

Elvis, B. *Overview of Early Childhood Education,* 2018. http://edgist.org/overview-of-eaarly-childhood-education/.

Hargreaves, A. *The Sharp Edge of Education Change: Teaching, Learning and the Realities of Reform:* London: Rutledge Falmer, 2000. Dspace.nmmu.ac.za: 8080/…/…http://www.healthofchildren.com/E-F/ early-childhood-education.

Maingi, D; Mulwa, D; Maithya, R. & Migosi, J. *Influence of School Physical Facilities on Students' Discipline in Public Secondary Schools in Makueni County, Kenya,* 2017. http://ir.mksu.ac.ke/handle/123456780/2157.

Mazur, L. *Early Childhood Education,* 2017. http://www.healthofchildren.com/E-F/ early-childhood-education.

Mupa, P. & Isaac, T. C. *Factors Contributing to Ineffective Teaching and Learning in Primary Schools: Why Are Schools in Decadence, 2019*. http://hdl.handle.net/123456789/2092.

Ndijuye, L. G. & Tandika, P. B. *Timely Promotion as a Motivation Factor for Job Performance among Pre-Primary School Teachers: Observations from Tanzania*, Vol. 3 912), 2019, pp. 440-456http://hdl.handle.net/20.500.12661/2449.

Nyakundi, E. N; Raburu, P. A. & Okwara, M. O. *Influence of Teacher Motivation to Academic Performance of Pupils in Primary Schools in Kenya,* 2019.http://62.24.102.115:8080/handle/123456789/2.

Partreena, C. *What is Early Childhood Education*? *7 Things to Know About the Field Forming Future Generation,* 2017. httpsci//blog.wheeock.

UNICEF Nigeria, *Early childhood care and education*, 2018. https://www.unicef.or/nigeria/children1931.html.

Appendix I

Letter of Permission

Department of Arts and Social Science,
Lead City University Ibadan,
Oyo State, Nigeria.
6th July, 2021.

Dear School Head,

Request for Permission to Administer Instruments in your School

I am a postgraduate student of Educational Management in the Department of Arts and Social Sciences, Lead City University Ibadan. I am carrying out a research on "Teacher-related Factors and Learning Environment as Determinants of Pre-Primary Education Curriculum Implementation in Public Primary Schools in Southwest, Nigeria". I humbly request for your permission to administer my Questionnaire to Preschool teachers in your school. I wish to also conduct oral interview for pre-primary schoolteachers and to also administer achievement test to pupils in Mathematics and English Studies. The interview will be arranged in such a manner that the normal school programme will not be interfered with. Be sure that all responses from your school will be treated with high sense of confidentiality and will be used strictly for the research work.

Thanks for your anticipated cooperation.

Yours faithfully,

David, ONOJAH.

Appendix II

Questionnaire Teacher-related Factors and Learning Environment (QTFLE)

Section A: Teachers' Biodata

1. **Name of School:** ……..……
2. **Age (Yrs):** (i) 20-29….( ) (ii) 30-39….( ) (iii) 40-49…..( ) (iv) 50 and above…...( )
3. **Gender:** Male ( ) Female ( )
4. **Qualification:** i. NCE ( ) ii. HND/Bachelor. ( ) iii. Master Degree ( )
   iv. M.Phil ( ), v. PhD ( ) vi. Others (Specify) ( )
5. **Years of Teaching Experience** i. 1-10 years ( ) ii. 11-20 years ( ) iii. 21-30 ( ) iv.31 years and above.

Section B:

Part A: Level of Teachers' Participation in Professional Development Activities in Preschools

Keys: 4= Very High Level (VHL), 3=High Level (HL), 2=Low Level (LL) and 1= Very Low Level (VLL)

S/N	Statement	VHL	HL	LL	VLL
1	Workshops				
2	Educational Conferences				
3	ICT Training				
4	Sandwich Programme				
5	Full Time In-Service				
6	Seminars				
7	Newly Recruited Teachers Programme				

Part B: Level of Teacher Motivation in Preschools

Keys: 4= Very High Level (VHL), 3=High Level (HL), 2=Low Level (LL) and 1= Very Low Level (VLL)

S/N	Statement	VHL	HL	LL	VLL
1	Incentives for learning and career development				
2	Available promotion opportunity				
3	Comfortable working environment with good infrastructure				
4	Adequate recognition for outstanding performance				
5	Prompt payment of salaries				
6	Opportunity for interpersonal relationship				
7	Housing allowance				
8	Leave bonuses				
9	Car allowance				
10	Pension scheme				

Part C: Extent of Mother Tongue Usage as a Medium of Instruction in Preschool

Keys: keys: 4= High Extent (HE), 3=Moderate Extent (ME), 2=Low Extent (LE) and 1= Very Low Extent (VLE).

S/N	Statement	HE	ME	LE	VLE
1	Mother tongue is used as medium of instruction for all subjects in preschool class.				
2	Mother tongue is used for classroom interaction.				
3	Mother tongue is allowed to be used a medium of interaction within the school compound.				
4	Teachers ask and respond to pupils' questions in class through mother tongue.				

Part D: Level of Availability of Instructional Materials in Preschools

Keys: 4=High Available (HA), 3=Moderate Available (MA), 2=Low Available (LA) and 1= Very Low Available (VLA).

S/N	Statement	HA	MA	LA	VLA
1	Curriculum				
2	Caregivers manual				
3	Teacher guide				
4	Toy making manual				
5	Time table				
6	Chalk				
7	Chalkboard				
8	Cardboard				
9	Teachers lesson book				
10	Television Sets				
11	Radio Sets				
12	Audio/Visual players				
13	Lego building blocks				
14	Charts and colorful posters				
15	Counters/Abacus				
16	Pencils				
17	Crayon/coloring paint				
18	Brushes				
19	Drawing books				
20	Reading materials				
21	Writing materials				
22.	Children's works on the walls				
23	Musical instruments (Flutes, drums, whistles, gunge)				

Part E: Condition of School Physical Facilities in Preschools

Keys: 4= Very Good (VG), 3=Good (G), 2=Bad (B) and 1= Very Bad (VB)

S/N	**Statement**	**VG**	**G**	**B**	**VB**
1	School compound				
2	School buildings				
3	Sick bays				
4	Toilet for pupils				
5	Drinking water				
6	Mini library				
7	ICT facilities				
8	Child-sized chair and desk				
9	Teachers Tables and chairs				
10	Sanitary facilities				
11	Wash hand basin				
12	Refuse disposal				
13	play ground				
14	Measuring equipment (such as weighing scales, heighteners, roller meter/infant meter and shake arm strap and tape measure)				
15	Playground equipment (Swing Climbing frames and Rocking boats)				
16	Cupboards and cabinets				

Appendix III

Preschools Teachers' Interview (PTI)

Section A: Teachers' Biodata

1. **Name of School:** ……..……
2. **Age (Yrs):** (i) 20-29….( ) (ii) 30-39….( ) (iii) 40-49…..( ) (iv) 50 and above…...( )
3. **Gender:** Male ( ) Female ( )
4. **Qualification:** i. NCE ( ) ii. HND/Bachelor. ( ) iii. Master Degree ( )
   iv. M.Phil ( ), v. PhD ( ) vi. Others (Specify) ( )
5. **Years of Teaching Experience** i. 1-10 years ( ) ii. 11-20 years ( ) iii. 21-30 ( ) iv.31 years and above.

Section B: Kindly provide answers and detail explanations for each of the following structured interview questions:

Keys: 2 = Yes (Y), 1= No (N)

S/No	Items	Yes	No
1	Do you have the current preschool curriculum in your school?		
2	Do you have access to the current preschool curriculum in your school?		
3	Do you participate in professional development activities such workshops, seminars, ICT training, conference, further study and etc on preschool education?		
4	Are you responsible for their professional development activities?		
5	Are there available promotion opportunity, comfortable working environment with good infrastructure, adequate recognition for outstanding performance, prompt payment of salaries, leave bonuses and etc as a form of motivation for teachers in your school?		
6	Are you aware of the mother tongue education policy in preschool?		
7	If yes, do you use mother as a medium of instruction for all subjects in your class?		
8	Are you provided with adequate instructional materials such as chalk, chalkboard, flash cards, colorful wall charts, toys, building blocks, puzzles, abacus, television sets, reading and writing materials, radio set and etc for teaching and learning?		
9	Are there adequate school physical facilities such as school compound, conducive classrooms, Mini library, ICT facilities playground, toilets for staff and pupils, playground equipment, drinking water and etc in your preschools?		

Appendix IV

Mathematics Achievement Test for Primary One Pupils (MATPOP)

Name of Pupils ……

Gender: i.Boy ( ), ii. Girl ( ).

Age: i. 4-5 years ( ), ii. 6-7 years

Class: ……

Pupils Categorization: i. ECE Pupils ( ), ii. Non-ECE Pupils ( ).

Name of School: …… **Duration:** 30 mins

Instruction: Answer all the questions

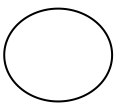
Section A: Write the missing letters

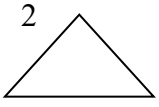
1. ⟶ on ___
2. ⟶ tw ___
3. ⟶ th ___e ___
4. ⟶ f ___ ___ r
5. ⟶ f ___ v ___
6. ⟶ s___ x

Section B: Provide appropriate answers to the following questions

1. 4 x 5 =
2. 7 x 3 =
3. 9 x 2 =
4. 5 x 5 =
5. 4 x 4 =

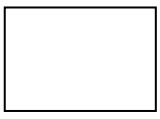
Section C: Write the names of shapes beside diagram using these words; – Triangle, Circle

1.  _____

2  _____

Write the names of each shape beside diagram using these words; Square, Rectangle

3  _____

4  _____

Section D: Provide appropriate answers to the following questions

1. 13 – 8 =
2. 19 - 9 =
3. 23 -15 =
4. 15 - 10 =
5. 8 - 5 =

Appendix V

English Studies Achievement Test for Primary One Pupil (ESATPOP)

Name of Pupils ……

Gender: i.Boy ( ), ii. Girl ( ).

Age: i. 5-6 years ( ), ii. 7-7 years

Class: ……....

Pupils Categorization: i. ECE Pupils ( ), ii. Non-ECE Pupils ( ).

Name of School: …… **Duration:** 30 mins

Instruction: Answer all the questions

Section A: Fill in the gaps with appropriate letters

1. c __ p 
2. p __ t 
3. c __ r 
4. f __ n 
5. b __ d 
6. j __ g 

Section B: Fill in the space using the words in the box to indicate activities perform daily.

brush, eat, pray, take,wake,

1. Every day, I … ……. Up by 6 am.
2. I …… ……. To God in the morning.
3. I … …… my teeth every day.
4. I …… …… my bath every day.
5. I …… …… my breakfast every morning.

Section C: Match the pictures with the right words.

ball

dog

cow

ant

egg

cup






Section D: identify each activity below using words; bathing, cooking, washing clothes, drinking

1

_____

2

_____

3

_____

4

_____

Appendix VI

Marking Scheme for Mathematics Achievement Test

Section A: Write the missing letters

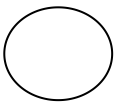
1. ⟶ on e_
2. ⟶ tw o_
3. ⟶ th r e e
4. ⟶ f _o_ _u_ r
5. ⟶ f _i_ v _e

Section B: Provide appropriate answers to the following questions

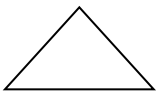
1. 4 x 5 = 20
2. 7 x 3 = 21
3. 9 x 2 = 18
4. 5 x 5 = 25
5. 4 x 4 = 16

Section C: Write the names of shapes beside diagram using these words; – Triangle, Circle

2. a b



Circle



Triangle

3. Write the names of each shape beside diagram using these words; Square, Rectangle

a b

Rectangle

Square

Section D: Provide appropriate answers to the following questions

1. 13 – 8 = 5
2. 19 - 9 = 10
3. 23 -15 = 8
4. 15 - 10 = 5
5. 8 - 5 = 3

Appendix VII

Marking Scheme for English Studies Achievement Test

Section A: Fill in the gaps with appropriate letters

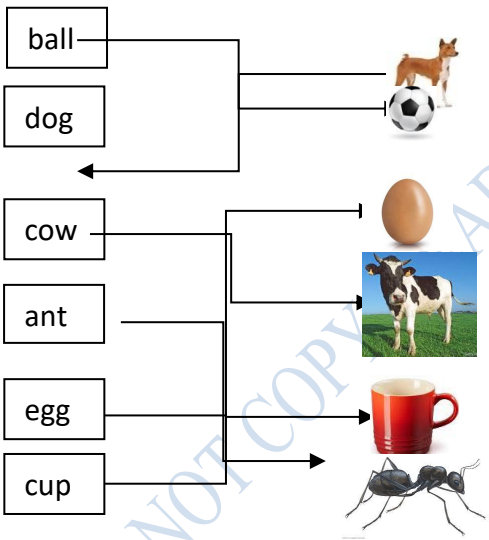
1. c _u_ p 
2. p _o_ t 
3. c _a_ r 
4. f _a_ n 
5. b _e_ d 
6. j _u_ g 

Section B: Fill in the space using the words in the box to indicate activities perform daily.

wake, pray, take, brush and eat

6. Every day, I … wake…. Up by 6 am.
7. I …… …pray……. To God in the morning.
8. I … ……brush…… my teeth every day.
9. I …… …take…… my bath every day.
10. I …… …eat…… my breakfast every morning.

Section C: Match the pictures with the right words.



Section D: identify each activities below using words; bathing, cooking, washing clothes, drinking

1 2 3 4

drinking

cooking

washing

bathing

Bio-data

1. Name:	ONOJAH, David Monday
2. Date and Place of Birth:	23rd November, 1983, Jos
3. Nationality:	Nigerian
4. State of Origin and Local Government:	Benue State/Ogbadibo.
5. Marital Status:	Married
6. Number and Ages of Children:	Three (3) (7 yrs, 5 yrs and 1 yr)
7. **Language Spoken:**	Hausa, Igala, Idoma, Yoruba and English
8. Permanent Home Address:	No. 53, Jeruslem Street, Otukpo, Benue State.
9. Email/GSM Number	onojahdave12@gmail.com/08101784853

10. Educational Institutions Attended with Dates

i. Lead City University, Ibadan	2019 - 2022
ii. University of Ibadan, Ibadan	2014- 2016
iii. Benue State University Makurdi	2005 –2009
iv. Benue State University Makurdi	2002 –2004
v. Nigeria Institute of Management	2009–2010
vi. Ultimate Computer's Akwanga	2009 –2010
vii. Government Secondary School, Gudi	1994 –2000

11. Academic and Professional Qualifications with dates

i.	PhD Educational Management	2022
ii.	M.Ed Early Childhood Education	2016
iii.	B. Ed (Hons) Pre-Primary & Primary Education (Social Studies)	2009
iv.	Diploma in Law	2004
v.	Proficiency Certificate in Management	2010
vi.	Diploma in Computer	2010
vii.	Senior School Certificate Examination (SSCE)	2000

Membership of Professional Bodies

i. Graduate Member-National Institute of Management (NIM) Charter
ii. Member-Institute of Professional Managers and Administrators of Nigeria (IPMA)
iii. Member-Teachers Registration Council of Nigeria (TRCN)
iv. Member-Early Childhood Association of Nigeria (ECAN)

Working Experience

i. POWA Nursery/Primary School Kastina

National Youth Service Corps (NYSC) 2009-2010

ii. Department of Early Childhood Care and Education,
School of ECPA Education,
Federal College of Education (Sp), Oyo 2011-Date

12. List of Publications:

Attendance at Learned Conferences:

1. **Onojah, D.M.** (2012).Functional early childhood education in ensuring a viable and stable democracy in Nigeria. A paper presented at the COEASU National Conference Held at Federal College of Education (Special), Oyo. Between July 17th and 19th.

2. Abioye, J.A.I. & **Onojah, D.M.** (2013). Enhancing the quality of early childhood education for a stable and national security in Nigeria. A paper presented at the School of Education Bi-Annual Conference. Held at School of Education Multipurpose Hall. FCE (Sp) Oyo. Between March 18th and 22nd.

3. **Onojah, D.M. (2015).** Creativity in early childhood education in Nigeria. A paper presented at the School of Education Bi-Annual Conference Held at New Special Education Hall. FCE (Sp) Oyo. Between May 4th and 8th.

4. **Onojah, D.M. (2016).** Teacher education in Nigeria: Implications for early childhood education. A paper presented at the Colleges of Education Academic Staff Union (COEASU) South-West Zone Held at College of Education, Ikere, Ekiti State. Between December 28th and 2nd.

5. **Onojah, D. M.(2018).** Factors influencing gender enrolment disparity in pre-primary and primary schools in Benue State. A paper presented at the Colleges of Education Academic Staff Union (COEASU) South-West Zone. Held at Adeyemi College of Education. Ondo. Between March 12th and 15th.
6. **Onojah, D.M**. (2018). Science and technology in early childhood education for sustainable development in Nigeria. A paper presented at the 1st National Conference of School of ECPAE, FCE (Sp), Oyo. Between December 2nd and 6th.
7. **Onojah, D.M**. (2020). Teacher preparation for inclusive preschool children with special needs in Nigeria. A paper presented at the Colleges of Education Academic Staff Union (COEASU) South-West Zone. Held at FCE (Sp), Oyo. Between May 6th and 10th.
8. **Onojah, D.M.** (2019). Quality early childhood education for stable national security in Nigeria: Issues and Prospects. A paper presented at the 16th Annual National conference of the Primary and Tertiary Teacher Education Association of Nigeria (PATTEAN). Held at FCE (Technical), Gausu, Zanfara State. etween July 8th and 11th.
9. **Onojah, D.M.** (2020). Promoting inclusive early childhood education for national security in Nigeria. A paper presented at the 5TH International Conference of Federal College of Education Okene. Between August 19th and 27th.

Articles in Learned Journals:

1. **Onojah D.M**.,Abioye, J.I.A. and Oleye-Akinlabi, G.O. (2016). Microteaching experience among students of early childhood education programme in Federal College of Education (Special), Oyo, *A Journal of Multidisciplinary Studies, 7(1), 13-31.*
2. **Onojah D.M**.,Abioye, J.I.A. and Oleye-Akinlabi, G.O. (2016). Assessment of child-friendly environment for pre-school children in Benue State*, A Journal of Multidisciplinary Studies, 7(2), 76-92.*
3. **Onojah, D.M.** (2016). Relevance of girl-child education to national development in Nigeria, *Journal of Adult & Non Formal Education* 1(1), 188-193.

4. Leye-Akinlabi, G.O. and **Onojah, D.M.** (2016). Corporal punishment and violence among school children in Nigeria, *International Journal of Primary Education Studies, 1(1),164-171.*

5.**Onojah D.M**. (2017). The universal basic education and the challenges of early childhoodeducation in Nigeria*, International Journal of Early Childhood, Primary, Adult and Non-Formal Education 1(1), 166-173.*

6.Arewa, O. and **Onojah D.M**. (2017). Early childhood education teachers' perception of the roles of guidance counseling in preschools in Benue State, *Nigerian Journal of Educational Research and Developmental Issues (NJERDI), 3 (1), 56-65.*

7. **Onojah, D.M**. Onoja, E.U and Ibrahim, A.I. (2018). Language policy implementation in early childhood education in Nigeria, *SPED Journal of Science Education, 8 (2),141-149.*

8. **Onojah D.M**., Onoja, E.U. and Ibrahim, A.I. (2018). Relevance of instructional materials in teaching of English language as a second language in early childhood education in Nigeria, *SPED Journal of Science Education, 8 (2), 150-160.*

9. **Onojah D.M**., Abioye, J.A.I and Agada, A. (2018). Assessment of science learning and learning environment in preschool education, *International Journal of Special and General Education, 13, 196-207.*

10. **Onojah D.M**. (2018). Early childhood education for sustainable development in Nigeria, *Journal of Early Childhood Care, Primary, Adult and Non-Formal Education. 1 (1), 205-214.*

11. **Onojah, D.M.** (2018). Influence of preschool teachers' characteristics on the use of music as a medium of instruction in North-Central Nigeria, *Journal of Issues in Special Education (JISE). A Publication of Federal College of Education (Special), Oyo.16 (2).*

12. Alabi, G.O., Abioye, J.A.I. and **Onojah, D.M.** (2018). Opinion of people on gender imbalance in universal basic education for special needs children in Nasarawa State. *Journal of Issues in Special Education (JISE). A Publication of Federal College of Education (Special), Oyo. 16(2).*

13. **Onojah, D.M**., Umar, M. and Agada, A. (2019). Science in early childhood education in Nigeria, *International Journal of Primary Education, 2 (1), 98-108.*

14. Ambi, H.M**. Onojah, D.M**. and Guma, H. (2019). Challenges and prospects of teaching Nigerian languages in early childhood education in Nigeria, *International Journal of Special and General Education, 14 (59-68).*

15. **Onojah, D.M**. (2019). Prospects and challenges of E-learning and retraining of early childhood education teachers in Nigeria, *International Journal of Early Childhood Care, Primary, Adult and Non-Formal Education. 2 (1), 152-157.*

16. Onojah, D.M. (2022). Early childhood education for national development in Nigeria, *Okene Journal of Education (OJED), 12 (1), 7-16.*

17. Onojah, D.M. & Omoboriowo, J.G. (2021). Assessment of guidance and counseling in early childhood education in Benue State, *Journal of Teacher Education, 21 (1), 35-45.*

18. Onojah, D.M., Aduoboula, O.E, Egbinola, O.Y. & Leye-Akinlabi, G.O. & Bamisile, A.A. (2022). Factors influencing gender disparity enrolment in early childhood education in Benue State, *Okene Journal of Education (OJED), 9 (1),179-188.*

19. **Onojah, D.**M. (2020). Assessment of early childhood education learning environment for children with visual impairment in Oyo Metropolis, *Journal of Colleges of Education Academic Staff Union (COEASU) South-West Zone, 10 (1), 112-117.*

20. Abioye, J.A.I., Leye-Akinlabi, G.O. and **Onojah, D.M.** (2020). Relevance of assistive technology devices for early childhood education with special needs in Nigeria, *Journal of Teacher Education, 20 (1), 184-196.*

Chapters in Books:

1. **Onojah, D.M.** (2013). Principles and practice of child friendly schools. In I.A. Alade& O.O. Okunola (Eds.). *Recipe for educational and social upbringing learner in child friendly schools*. Ibadan: Constellation (Nig) Publisher. 50-72**.**

2. **Onojah, D.M.** (2013). Teacher preparation and approaches to teaching and learning in child friendly schools. In I. A. Alade & O.O. Okunola (Eds.). *Recipe for educational and social upbringing of learners in child friendly schools.* Ibadan*:* Ibadan: Constellation (Nig) Publisher. 78-95.

3. **Onojah, D.M.** (2013). Child development: Benefits, stages, principles and theories. In I.T. Eweniyi & V.I. Aleburu (Eds.). *The child development*. Ibadan: Sufl Publications Limited. 40-57.

4. Okunola, O.O., **Onojah, D.M**., Adubola, E.O., Abioye, A.I. & Gbadegesin, M.A. (2013). Theory and practice of child-friendly school. In O.K. Omoniyi & A.A. Adejumobi (Eds.). *Fundamentals of Education*. Oyo: Odumatt Press & Publishers. 136-160.

5. **Onojah, D.M.** (2014). Issues on social and moral development. In S.A. Taiwo & A.F. Opoola (Eds*.). Essentials in early childhood education care and learning*. Lagos: Okin & Sons Enterprises. 26-39.

6. Gbadegesin, M.A. & **Onojah, D.M.** (2014). Issues on physical development. In S.A. Taiwo & A.F. Opoola (Eds.). *Essentials in childhood care and learning.* Lagos: Okin & Sons Enterprises. 26-39.

7. **Onojah, D.M.** (2014). Child development. In S.A. Atolagbe (Ed*.). Fundamentals of Early Childhood Care and Education*. Oyo: Odumatt Press & Publishers. 38-51.

8. **Onojah, D.M.** (2014). Socia and moral development. In S.A. Atolagbe (Ed*.). Fundamentals of Early Childhood Care and Education*. Oyo: Odumatt Press & Publishers. 152-165.

9. **Onojah, D.M**. (2020). Roles of teachers in developing creativity in preschool children in Nigeria. In S.O. Olaniyan (Ed*.). Education for Rural Development: Essay in Honour of J. Adetunji & F.M. Awoleye. (in Press).*

10. **Onojah, D.M**., Abioye, J.A.I. and Abidoye. (2020). Prospects and challenges of girl-child education in Nieria. In S.O. Olaniyan (Ed*.). Education for Rural Development: Essay in Honour of J. Adetunji & F.M. Awoleye. (in Press).*

11. **Onojah, D.M**., Onafuye, A.O. and Abidoye. (2020). Relevance of entrepreneurship education for sustainable development in Nigeria. In O.A. Taiwo.,A.B. Ikporukpo., M.A. Oladimeji., M.E. Edo., S.S. Abdulramon, E.U. Wanbani. And D. Amoah. (Eds.). *Trending Issues in Education. 577-595.*

12. Onojah, D.M. (2022). Language Policy: An imperative for quality early childhood education in Nigeria. In K. O. Usman., O. K. Omoniyi & A. O. A bdulsalaam. (Eds.). Language policy: An imperative for quality education in Nigeria. A Book of Reading in Honour of Mrs. Moriamo Adenike Abimbola.

13. Names and Addresses of Referees.

1. **Dr. ADEWOLE, Wonuola Adekolarin**
   Director of Academic Planning,
   Lead City University, Ibadan,
   Oyo State.
   Phone No: 08023451241.

2. **Alhaji GANIYU, Akeem Adesina.**
   Tinubu Legacy Forum Board of Trustees Chairman,
   Nigeria and Diaspora.
   Phone No: 08037253167.

Signature **Date**

Administering Structured Oral Interview Questions to one of the Preschool Teacher

Administering Questionnaires to the Preschool Teachers

Administering Structured Oral Interview Questions to Preschool Teachers

Supervision of Achievement Test in Mathematics and English Studies given to the Primary One Pupils

Supervision of Achievement Test in Mathematics and English Studies given to the Primary One Pupils

Playground Equipment

Dilapidated classrooms

School Toilet

School Toilet

Picture of Teachers, Research Assistants, Pupils and Researcher

The University Compliance Certification

This is to certify that the thesis by David Monday ONOJAH in the Department of Arts and Social Science Education, Faculty of Arts & Education, Lead City University, Ibadan, Oyo State is in full compliance with approved University Format and style.

Signature **Date**