



MONTESSORI WAY OF TEACHING PRESCHOOLERS: THE PANACEA FOR EFFECTIVE LEARNING AND SWIFT COMPREHENSION OF THE SUBJECT MATTER BY PRESCHOOLERS IN AKWA IBOM AND ABIA STATES

BY

**ATAKPA, ARIT OKONOBONG, Ph.D
DEPARTMENT OF EARLY CHILDHOOD EDUCATION,
AKWA IBOM STATE COLLEGE OF EDUCATION,
AFAHA NSIT**

AND

**JUSTINA NGOZI OWUSHI
DEPARTMENT OF EARLY CHILDHOOD/PRIMARY EDUCATION
FACULTY OF EDUCATION
UNIVERSITY OF PORT HARCOURT, NIGERIA**

ABSTRACT

The study investigated the effectiveness of the Montessori way of teaching preschoolers in Akwa Ibom and Abia states in Nigeria. A correlational survey design was employed, and 200 preschoolers were selected using stratified sampling. A structured questionnaire called the Montessori Way of Teaching Preschoolers and Effective Learning Questionnaire (MTPELQ) was used for data collection. Face and content validation of the instrument was carried out by an expert in test, measurement, and evaluation. The reliability coefficient obtained was 0.83. The researcher subjected the data generated for this study to appropriate statistical techniques such as descriptive statistics and simple regression analysis. The test for significance was done at 0.05 alpha levels. The results showed that the Montessori method, particularly the "Prepared environment," had the highest percentage value among the different teaching approaches. Furthermore, there was a high extent of learning observed as a result of the Montessori way of teaching. The study also revealed a strong to perfect relationship between Montessori teaching and effective learning. The calculated F-value indicated a significant effect of Montessori teaching on learning. The study concluded that the Montessori approach is beneficial for all children, fostering their natural curiosity and respect for knowledge. One of the recommendations was that the integration of Montessori principles and methodologies into the preschool curriculum in Akwa Ibom and Abia states to enhance active engagement and comprehension of subjects.

KEYWORDS: Montessori, Teaching, Preschoolers, Effective Learning, Swift Comprehension, Akwa Ibom and Abia States.

Introduction

Montessori is a method of education based on self-directed activity, hands-on learning, and collaborative play. In Montessori classrooms, children make creative choices in their learning, while the classroom and the highly trained teacher offer age-appropriate activities to guide the process. Children work in groups and individually to discover and explore knowledge of the world and to develop their maximum potential. Montessori classrooms are beautifully crafted environments designed to meet the needs of children in a specific age range. Dr. Maria Montessori discovered that experiential learning in this type of classroom led to a deeper understanding of language, mathematics, science, music, social interactions, and much more. Most Montessori classrooms are secular in nature, although the Montessori educational method can be successfully integrated into a



faith-based programme. Every material in a Montessori classroom supports an aspect of child development, creating a match between the child's natural interests and the available activities. Children can learn through their own experience and at their own pace. They can respond at any moment to the natural curiosities that exist in all humans and build a solid foundation for life-long learning.

Montessori education was developed in the first half of the 20th century by one of the first women physicians in Italy. Maria Montessori (1870–1952) started working with atypically developing children and with low-income children. Her work reached children of all social classes around the world. Dr. Montessori first developed her educational approach while working with a preschool population, in particular children with disabilities. She gradually extended her approach to children and youth of all ages and abilities. Today, some Montessori schools provide all levels of learning, from infant and toddler through the secondary (high school) level (Navarra, 2018). The Montessori Method is a child-centred approach in which children are viewed as active participants in their own development, strongly influenced by natural, dynamic, self-correcting forces within themselves, opening the way towards growth and learning. The teachers are considered nurturers, partners, and guides for the children. They depend on carefully prepared, aesthetically pleasing environments as a pedagogical tool. Montessori emphasises independent learning, letting children grow into lifelong learners and responsible citizens of the world. The children progress at their own pace and rhythm, according to their individual capabilities.

The school community as a whole, including the parents, works together to open the children to the integration of body, mind, emotions, and spirit that is the basis of holistic peace education. A Montessori teacher plays the role of unobtrusive director in the classroom as children, individually or in small groups, engage in self-directed activity. The teacher's goal is to help and encourage the children, allowing them to develop confidence and inner discipline so that there is less and less need to intervene as the child develops. Montessori developed a set of manipulative objects designed to support children's learning of sensory concepts such as dimension, colour, shape, and texture and academic concepts of mathematics, literacy, science, geography, and history. They are given the freedom to choose what they work on, where they work, with whom they work, and for how long they work on any particular activity, all within the limits of the class rules. No competition is set up between children, and there is no system of extrinsic rewards or punishments. These two aspects—the learning materials themselves, and the nature of the learning—make Montessori classrooms look strikingly different to conventional classrooms (Marshall, 2017).

Statement of the Problem

The education system in Akwa Ibom and Abia States faces challenges in providing effective learning and swift comprehension of subject matter for preschoolers. This problem can be attributed to the lack of implementation of the Montessori way of teaching, which has proven to be a panacea for effective learning in preschool education. Preschool education plays a crucial role in a child's development, setting the foundation for future learning and academic success. However, traditional teaching methods in these states may not adequately meet the needs of preschoolers, hindering their learning potential and comprehension of subject matter. The problem lies in the absence or limited utilisation of the Montessori way of teaching, which emphasises hands-on, experiential learning, individualised instruction, and a child-centred approach. This approach fosters active engagement, independence, and self-directed learning, enabling preschoolers to grasp concepts more effectively and comprehensively. Without the implementation of the Montessori method, preschoolers may experience challenges such as limited opportunities for exploration and discovery, a lack of personalised instruction, and a passive learning environment. This can lead to disinterest,



decreased motivation, and a hindered ability to comprehend the subject matter. Therefore, the problem statement revolves around the need for the Montessori way of teaching to be adopted and implemented in preschools in Akwa Ibom and Abia States.

Objectives of the Study

1. To find out different Montessori ways of teaching preschoolers in Akwa Ibom and Abia States.
2. To find out the extent of learning by the preschools as a result of the Montessori way of learning in Akwa Ibom and Abia States.
3. To find out the effect of Montessori way of teaching preschools on effective learning in Akwa Ibom and Abia States

Research Questions

1. What is the different Montessori way of teaching preschools in Akwa Ibom and Abia States
2. What is the extent of learning by the preschools as a result of the Montessori way of learning in Akwa Ibom and Abia States
3. What is the effect of Montessori way of teaching preschools on effective learning in Akwa Ibom and Abia States

Research Hypothesis

There is no significant effect of Montessori way of teaching preschools on effective learning in Akwa Ibom and Abia States

Conceptual Review

Concept of Montessori

Hands-on learning, independent play, and collaborative learning are the cornerstones of Montessori education. Teachers in a Montessori school environment give kids tasks that are appropriate for their ages. Additionally, kids are given the option to choose their own educational paths. To assist children realise their full learning potential, they can either work individually or in groups (Montessori School of Downtown, 2018). Children and teenagers who use the Montessori Method experience rigorous, self-driven growth in all facets of their development—cognitive, emotional, social, and physical. The self-directed, self-paced nature of the Montessori method is supported by experienced, caring teachers, peer leadership, and a supportive atmosphere. The goal of a Montessori education is to foster each child's innate desire for knowledge, understanding, and respect rather than merely supplying them with facts. Instead than using traditional teaching strategies, the Montessori Method of Education incorporates children's natural interests and activities. Children should respect and care for the people and things around them, have fun as they learn, and accept responsibility for their actions, all of which are goals shared by Montessori and many parents for their own children.

The development of practical skills and hands-on learning are prioritised in a Montessori classroom. It encourages independence and believes that children are capable of initiating learning in a learning environment that is adequately encouraging and equipped. It discourages the use of several common performance indicators, like grades and assessments. Public Montessori schools stand in stark contrast to regular public schools, even these high-achieving, strictly regulated



charter schools. There, the teacher serves as the de facto leader, the students stay seated, and learning is rigidly structured and standardised. Children in public Montessori schools, in contrast, work at their own pace on sequential lessons with individually personalised instruction. It encourages independence and believes that children are capable of initiating learning in a learning environment that is adequately encouraging and equipped. It discourages using several common performance indicators, like grades and tests (Wikipedia, 2023).

The self-directed, self-paced nature of the Montessori method is supported by experienced, caring teachers, peer leadership, and a supportive atmosphere. Children appreciate multisensory learning and fervent inquiry within the community of a multi-age classroom created to create natural chances for independence, citizenship, and accountability. Individual students pursue their own interests at their own pace, spending the time necessary to comprehend each idea in depth and achieve their own unique learning objectives. When given the flexibility and encouragement to inquire extensively, draw conclusions, and ask questions, Montessori students develop into self-assured, joyful, and self-directed citizens who are responsible to both themselves and their community. They act bravely and honourably, think critically, and collaborate with others (American Montessori Society, 2023).

Concept of Teaching

The word "teaching" is used in three different contexts. Firstly, it is used to refer to anything that is taught as a doctrine or body of information. The terms "the teachings of Guru Nanak" or "the teachings of Tagore" refer to a body of information or a set of principles. Secondly, the term "teaching" can also refer to a job or a vocation. Thirdly, the term "teaching" is also used to describe the process of imparting knowledge to others. The process of teaching is social. 'To teach' is the definition of the word "teach." Through the curriculum, both the teacher and the student come to understand who they are as individuals (Chourasiya, 2022). However, by making a subject as a medium, we limit the definition of teaching to the mutual interaction or exchange of ideas between the teacher and the student.

Teaching can be defined as interaction with students that enables their comprehension and application of facts, ideas, and procedures. It consists of design, content choice, delivery, evaluation, and reflection. Teaching involves involving students in the active development of knowledge, since to teach is to involve students in learning. Teaching, according to this definition, is "intimate interaction between a more mature personality and a less mature one, intended to advance the education of the latter." The three main elements of teaching are content, communication, and feedback. Teaching is a scientific process. The instructional approach enhances student learning. Modification, development, and improvement are all always possible (Christensen, Garvin, and Ann Sweet, 2019). The new teaching-learning activities, and hence the flexibility, are built into the system, and "the terminal behaviour of the learner in terms of learning structures can be established by appropriate teaching environments. Teaching can be conceptualised as a form of problem-solving and decision-making that has many properties in common with the work of physicians. This conceptualization has led to a body of research that has investigated the decision-making process in teaching, focusing in particular on the information about pupils that teachers use to make decisions and the way they tailor instruction to individual pupils' needs (Rajagopalan, 2019).

The intricate process of teaching alters a person's social and behavioural patterns. However, "appropriate teaching environments can establish the learner's terminal behaviour in terms of learning structures" and it comprises flexible and creative teaching-learning activities. According to



the conventional definition, teaching is the process of giving instructions to students in a classroom setting. However, the goal of teaching in the modern sense is to help students learn and develop the information, abilities, and desired social behaviours. It is a procedure in which the student, teacher, curriculum, and other factors are arranged in a methodical and psychological fashion to achieve some predetermined goals. In order to alter a person in a way that meets the needs of the community and environment in which he lives, teaching is a necessary component of learning. Due to its dynamic nature, teaching is considered a process rather than an act. Additionally, because it is strongly impacted by social and human elements, it is not a fundamental idea (Scholarify, 2023).

Concept of Preschoolers

Preschoolers are children considered under the age of three or four years old. He is no longer a toddler, whether or not your child is enrolled in a structured preschool programme. Toddlers do not yet have the foundational life skills, independence, or understanding that preschoolers do (Rebecca Phillips 2013). Preschoolers are distinct from toddlers in this regard. Preschoolers are youngsters aged 3-5 who frequently attend school for the first time, posing difficulties for teachers, according to Natalie Boyd (2022). Preschoolers pick up pre-skills that set the stage for their future academic success. They can read, write, perform math and science, and succeed with the support of these abilities. The primary courses covered in a preschool curriculum include some of the early principles taught to preschoolers. The creative arts, social and emotional abilities, language and literacy, math, and science are among them. Learning through play is frequently given a lot of attention as a child develops. This means that rather than passively listening to lectures, preschoolers learn best while actively participating in activities. Every preschool is required to have a curriculum, which is crucial and should contain certain things.

A preschool curriculum ought to offer a range of opportunities for children to learn new skills, explore new ideas, and express their creativity. Preschool curricula can be approached in a variety of ways, but some aspects are common:

- ❖ Literacy-based activities such as stories, rhymes, and simple books
- ❖ Math concepts such as counting, sorting, and patterns
- ❖ Science experiments and activities exploring the natural world
- ❖ Creative arts such as painting, music, and movement
- ❖ Social skills such as cooperation and communication

In addition to these particular activities, it is critical to provide kids the chance to play unstructured, where they can be creative and free to explore. This kind of play is essential for a child's development since it teaches children how to solve problems, adjust to new circumstances, and control their own behaviour (Kokotree Inc., 2022).

Concept of Effective Learning

The phrase "effective learning" refers to teaching and learning strategies that actively include kids in their own education and growth as people. Instead than just repeating facts or imitating other kids' or teachers' methods, think of it as kids learning how to learn. It has been demonstrated to assist kids in building strong language, focus, and exploratory skills. Teaching strategies that enable students to take responsibility for their own learning result in effective learning. Children should have as many opportunities as possible to interpret events for themselves, make decisions, and plan actions in a variety of situations (Twinkl Blog, 2023). In order to track progress and determine whether these tactics are effective in achieving the desired results and Early Learning Goals (ELGs), effective learning practises include the usage of effective learning tracking



documents. You can determine whether there is a more efficient way to accomplish goals for each individual child by tracking. You can strike a balance between leading and guiding students and letting them solve problems and draw their own conclusions. It is widely acknowledged that the teacher is the most important individual in an educational system, and that the entire educational system revolves around him or her.

The "improvement of learning" is a topic on which educational practice and research are constantly focusing. Effective teaching has come to be recognised as one of the elements that significantly enhances learning. The teacher frequently controls the conversation in the classroom. The majority of individuals would concur that good teachers are supportive, kind, interested in the wellbeing of their pupils, knowledgeable about their subject, able to communicate with parents, and really enthusiastic about their work. Students can learn with the aid of effective teachers (University of Sargodha, 2022). The term "Effective Teaching" refers to a variety of practices that when put together effectively promote learning. The majority of individuals concur that the primary goal of teaching is to facilitate learning. To meet the demands of today's young in a society that is knowledge-driven and where information is rapidly expanding at a large scale, this concept needs to be elaborated. Therefore, the idea of teaching should go beyond the lower order skills of information acquisition and fact reproduction. Students need to be given more recent and advanced knowledge, as well as the ability to apply, update, and create knowledge.

There are various aspects of effective teaching, such as:

- Effectively managing a classroom,
- Starting each class with a clear objective,
- Engaging students with questioning strategies,
- Consolidating the lesson at the end of a period, and
- Diagnosing common student errors and correcting them that can be measured by observing classrooms and by asking students.

Concept of Learners Comprehension

Comprehension simply means understanding. Actually, the word comprehension is derived from the Latin *comprehensionem*, which is defined as "a seizing." Comprehending a subject means, you have taken in information and assimilated it into your own understanding. Any mental grasp of a concept or subject qualifies as comprehension. The process by which a student draws knowledge from a text—spoken, written, or visual—is known as learner's comprehension (Vocabulary.com, 2023). However, learners' comprehension refers to the ability of individuals to understand and make meaning from the information presented to them. It involves their capacity to grasp, interpret, and retain knowledge or concepts, as well as apply them in relevant contexts. Comprehension is a fundamental aspect of learning and is essential for acquiring new skills, solving problems, and engaging in critical thinking.

The process of extracting and creating meaning from text is a crucial part of learners' active and intricate comprehension. When readers and learners use deliberate problem-solving and thought processes, they derive meaning from the text. This is more than just a semantic component of meaning formation; it is a social, cultural, and intellectual practice that is lived and institutionally located (Vocabulary.com, 2023). It is also the act or action of a learner grasping with the intellect, understanding children who have difficulty with comprehension of spoken language. It is also the knowledge of a learner gained by comprehending or having the capacity to understand fully. It is the



ability for a learner to understand completely and be familiar with a situation, facts, etc. (State Government of Victoria, Australia, 2019)

Reading Comprehension

According to Wikipedia (2023), reading comprehension is the ability to process written text, understand its meaning, and integrate it with what the reader already knows. Reading comprehension relies on two abilities that are connected to each other: word reading and language comprehension. Comprehension is specifically a "creative, multifaceted process" dependent upon four language skills: phonology, syntax, semantics, and pragmatics. Reading comprehension is the ability to read text, process it, and understand its meaning. It relies on two interconnected abilities: word reading (being able to decode the symbols on the page) and language comprehension (being able to understand the meaning of the words and sentences) (Oxford University Press, 2023). Reading comprehension occurs when readers construct meaning as they interact with the written word in an exchange of ideas between themselves and the message in the text (Encyclopedia, 2010). Reading is not only a necessity of life but also an activity from which to derive enjoyment. However, in an educational setting, simply decoding words is not enough. Instead, one must understand what they are reading. This is the gist of reading comprehension, of which there are several types (Study.com, 2023).

Different Montessori Way of Teaching Preschoolers

Preschoolers can learn in a unique and cutting-edge way thanks to the Montessori Method of Education, which was created by Dr. Maria Montessori in the first half of the 20th century. This educational concept places a strong focus on individualization, experiential learning, and self-directed learning. Rathunde (2019) asserts that the Montessori approach has been widely embraced in preschools all around the world and has significantly influenced early childhood education. The following are some essential elements of the Montessori approach to preschool education:

- **Prepared Environment:** In a Montessori classroom, the environment is carefully designed to promote independent learning and exploration. It is organised into various learning areas with age-appropriate materials that children can freely choose from. The materials are arranged on low shelves within the reach of the children, fostering a sense of autonomy and encouraging self-directed learning.
- **Mixed-Age Groups:** Montessori classrooms typically have mixed-age groups, where children of different ages, usually spanning a three-year age range, are placed together. This allows younger children to learn from older peers, and older children can reinforce their own knowledge by teaching younger ones. Mixed-age groups promote collaboration, empathy, and social development among children.
- **Self-Directed Learning:** The Montessori approach emphasises the importance of allowing children to follow their own interests and pace of learning. Teachers act as facilitators, guiding children towards appropriate activities and materials while giving them the freedom to choose what they want to work on. This fosters a sense of independence, intrinsic motivation, and a love for learning.
- **Hands-On Learning Materials:** Montessori classrooms are equipped with a wide range of specially designed hands-on learning materials that encourage active engagement and sensorial exploration. These materials are designed to be self-correcting, allowing children



to independently identify and correct their mistakes. They cover various areas of learning, including language, math, science, practical life skills, and cultural subjects (Lillard, 2017).

- **Focus on Practical Life Skills:** Practical life activities form a significant part of the Montessori curriculum for preschoolers. These activities include tasks such as pouring, dressing, washing, and cleaning. Practical life activities help children develop fine motor skills, concentration, independence, and a sense of order and responsibility.
- **Individualised Instruction:** Montessori teachers observe each child's developmental needs and provide individualised instruction accordingly. They understand that children have different learning styles, interests, and paces. By observing and interacting with children, teachers can tailor their teaching strategies to meet the unique needs of each child.
- **Emphasis on Grace and Courtesy:** Montessori education places great importance on fostering social and emotional development. Children are taught to respect one another, communicate effectively, and practice good manners. Grace and courtesy lessons help children develop empathy, conflict resolution skills, and a sense of community (Kamii, Devries, & Hwang, 2019).

Effect of Montessori Ways of Teaching Preschoolers on the Effective Learning

Montessori education, which supports the development of children in many respects, attaches great importance to language development, and in Montessori education classrooms, there are all types of materials that will improve the language the child acquires in the linguistic area. Montessori education initially ensures that the child becomes aware of the sounds through sound games in order to support children's verbal language and to help them discover the structures of their mother tongue (Buldur & Icla, 2021). Thus, their receptive-expressive language skills develop. Teaching reading and writing, which are seen as the direct extension of verbal language, starts indirectly in Montessori education.

In a Montessori school, children are primarily prepared for writing by getting experience in the areas of "daily life exercises, sensory development, motor development, and language development" through various materials. In the Montessori reading-writing approach, the critical element is that teaching and preparing for writing should precede teaching reading. Writing skills are a prerequisite for the development of reading skills, and the work done in order to develop writing skills also constitutes the basis for the development of reading skills. In order to develop a child's writing skills, indirect exercises that will develop muscle structures for them to hold and use a pencil must be performed. Upon the completion of these works, letters should be introduced. Children should learn the shape of the letters both visually and tactilely by using sandpaper letters, by watching the way the letter representing the sound produced by the teacher is written, by following the letters in how they are written with their fingertips, and by associating the sound with the letter (Richardson, 2015).

Positive Effects of Montessori Ways of Teaching Preschoolers on their Attitude and Performance

It is interestingly obvious that Montessori Method is very different from the traditional school set-up and that makes it better as can be seen below:

- **Montessori Cultivates Independence**

Montessori students get to make their own decisions about what they do within the classroom. Even with a little guidance from you, much of their learning is self-directed, meaning they'll be way more engaged in class. In this type of teaching, your little ones are encouraged to set



up and clear away their own activities. This simple act is so empowering; it gives kids the ability to take control of their own education. And as your child grows older, they will begin to look critically at their work and self-correct. All of this encourages students' sense of independence and pride in their own accomplishments.

- ***Hands on Learning***

Most Montessori resources have a sensory element, which means kids get a really hands-on style of education. They're always an active participant in whatever they're studying. From number rods in math class to sandpaper letters in English, Montessori resources are designed to build a concrete foundation in all of your kid's topics. This helps them keep up when you move onto more abstract ideas.

- ***Tailored Education***

Children in a Montessori environment don't have to keep pace with the rest of the class. For kids who work at a slower pace, this style of teaching can be super beneficial no more feeling pressured to keep up with their peers, and no more rushing to complete work. And for kids who work a little faster, the Montessori Method can prevent boredom and loss of interest as children don't need to wait to move onto other areas they find fun.

- ***It's Non-Competitive***

Because groups are mixed-age, and because the Montessori Method uses a non-traditional grading system, children are less likely to compare themselves to others. Without the pressure of classroom competition, kids are able to focus on their learning journey.

- ***A Sense of Community***

Many Montessori families say that the school is like a second home. Children stay with the same teacher and classmates for a three-year period, which means strong bonds, are formed all-round. It's also common to see kids of different ages working together, with older children mentoring their younger classmates.

- ***A Love of Learning***

Children in a Montessori school choose activities that genuinely engage them. They don't ever have to sit in a class they don't enjoy. This means they're so much more likely to see school and the process of learning as something to love. And if they see school as a positive, they'll probably want to keep learning long after they "graduate". That curiosity will serve them well, throughout their life.

- ***Are there any downsides to the Montessori Method?***

A Montessori education won't suit every family. Here are a few of the downsides associated with Montessori learning.

- ***Too Much Independence can be Problematic***

Montessori students are encouraged to be independent and think for themselves. And while this equips them with the skills to become entrepreneurs, leaders, and innovators, it doesn't necessarily prepare them for work within a more traditional organization. Being able to collaborate with others and work within existing structures can be important in a career. And these aren't skills prioritized by the Montessori Method.

- ***Lack of Routine***

Some children (and parents and teachers for that matter) actually like routine. The structure and order of a traditional classroom with scheduled classes can help kids to feel safe and secure. A Montessori classroom and the Montessori school day undeniably lack structure. Kids who are used to routine at home may find this unnerving, and for some, it just might not be a great fit.

- ***Transition to Conventional School can be Tricky***

As we've seen, a Montessori school is very different from a conventional school. And children generally move from their Montessori experience to a "traditional" high school. Transitioning from an unstructured setting to one where expectations are very different can be a challenge for Montessori kids, (KidsKonnnect2020).

Methodology

A correlational survey design was adopted as the study. The targeted population for the study comprised preschoolers in nursery schools in Akwa Ibom State and Abia State. Stratified sampling technique was used to select 100 preschoolers in nursery schools in Abia State and 100 Preschoolers in nursery schools in Akwa Ibom State. This gave a total of 200 respondent used for the study. The instrument used for data collection was a structured questionnaire titled "Montessori Way of Teaching Preschoolers and Effective Learning Questionnaire" (MTPELQ). Face and content validation of the instrument was carried out by an expert in test, measurement, and evaluation in order to ensure that the instrument has the accuracy, appropriateness, and completeness for the study under consideration. The reliability coefficient obtained was 0.83, and this was high enough to justify the use of the instrument. The researcher subjected the data generated for this study to appropriate statistical techniques such as descriptive statistics meant to answer the research questions and simple regression analysis meant to test the hypothesis. The test for significance was done at 0.05 alpha levels.

Results and Discussion

Research Questions

Research Question One: The research question sought to find out the different Montessori way of teaching preschools in Akwalbom and Abia States. To answer the research question, percentage analysis was performed on the data (see table 1).

Table 1: Percentage analysis of the different Montessori way of teaching preschools in Akwa Ibom and Abia States.

Ways	Frequency	Percentage (%)
Prepared environment	56	28
Mixed-Age Groups	22	11
Self-Directed Learning/individualised instruction	35	17.5
Hands-On Learning Materials	37	18.5
Focus on Practical Life Skills	43	21.5
Emphasis on Grace and Courtesy	7	3.5
TOTAL	200	100%

** The highest percentage frequency

* The least percentage frequency

SOURCE: Field Survey



The above table 1 presents the percentage analysis of the different Montessori way of teaching preschools in Akwalbom and Abia States. From the result of the data analysis, it was observed that the tagged “Prepared environment” 56(28) was rated the most type of digital information resources with the highest percentage value as affirmed by the respondents, while the tagged type “Emphasis on Grace and Courtesy” 7(3.5) was rated the least percentage of the different Montessori way of teaching preschools.

Research Question Two: The research question sought to find out the extent of learning by the preschools as a result of the Montessori way of learning in Akwa Ibom and Abia States. To answer the research question, percentage analysis was performed on the data (see table 2).

Table 2: Percentage analysis of the extent of learning by the preschools as a result of the Montessori way of learning in Akwalbom and Abia States.

Extent	Frequency	Percentage (%)
HIGH	63	31.5
VERY HIGH EXTENT	137	68.5
TOTAL	200	100%

** The highest percentage frequency

* The least percentage frequency

SOURCE: Field Survey

The above table 2 presents the Percentage analysis of the extent of learning by the preschools as a result of the Montessori way of learning in Akwa Ibom and Abia States. From the result of the data analysis, it was observed that there is a very high extent 137(58.5) of learning by the preschools as a result of the Montessori way of learning.

Research Question Three: The research question sought to find out the effect of Montessori way of teaching preschools on effective learning in Akwa Ibom and Abia States. To answer the research question, percentage analysis was performed on the data (see table 3).

Table 3: Descriptive statistics of the effect of Montessori way of teaching preschools on effective learning in Akwa Ibom and Abia States

Variable	N	Arithmetic mean	Expected mean	R	Remarks
MONTESSORI	200	13.74	12.5	0.87	*Strong to Perfect Relationship
LEARNING		15.60	12.5		

Source: Field Survey

The above table 3 presents the result of the descriptive analysis of the effect of Montessori way of teaching preschools on effective learning in Akwa Ibom and Abia States. The two variables were observed to have Strong to Perfect Relationship at 0.87%. The arithmetic mean for promoted Montessori (13.74) was observed to be greater than the expected mean score of 12.5. In addition to that, the arithmetic mean as regards learning (15.60) was observed to be higher than the expected mean score of 12.5. The result therefore means that there is remarkable effect of Montessori way of teaching preschools on effective learning in Akwa Ibom and Abia States.

Hypothesis Testing

The null hypothesis states that there is no significant effect of Montessori way of teaching preschools on effective learning in Akwa Ibom and Abia States. In order to answer the hypothesis, simple regression analysis was performed on the data (see table 4)

TABLE 4: Simple Regression Analysis of the effect of Montessori way of teaching preschools on effective learning in Akwa Ibom and Abia States

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change
1	.870 ^a	.757	.755	.84722	.757

***Significant at 0.05 level; df= 198; N= 200; critical R-value = 0.197**

The above table 4 shows that the calculated R-value (0.870) was greater than the critical R-value of 0.197 at 0.5 alpha levels with 198 degrees of freedom. The R-Square value of 0.757 predicts 76% of the effect of Montessori way of teaching preschools on effective learning. This rate of percentage is highly positive and therefore means that there is significant effect of Montessori way of teaching preschools on effective learning in Akwa Ibom and Abia States. It was also deemed necessary to find out the influence of the variance of each class of independent variable as responded by each respondent (see table 5).

TABLE 5: Analysis of variance of the effect of Montessori way of teaching preschools on effective learning in Akwa Ibom and Abia States

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	441.880	1	441.880		
Residual	142.120	198	.718	615.625	.000 ^b
Total	584.000	199			

a. Dependent Variable: LEARNING

b. Predictors: (Constant), MONTESSORI

The calculated F-value (615.625) and the P-value as (.000b). Being that the P-value (.000b) is below the probability level of 0.05, the result therefore means that there is significant effect exerted by the independent variables i.e. Montessori on the dependent variable which is learning. The result therefore means that there is significant effect of Montessori way of teaching preschools on effective learning in Akwa Ibom and Abia States. The result therefore is in agreement with the research findings of Buldur & Icla (2021) who noted that Montessori education, which supports the development of children in many respects, attaches great importance to language development, and in Montessori education classrooms, there are all types of materials that will improve the language the child acquires in the linguistic area. It initially ensures that the child becomes aware of the sounds through sound games in order to support children's verbal language and to help them discover the structures of their mother tongue. The significance of the result caused the null hypotheses to be rejected while the alternative was accepted.

Conclusion

The Montessori method of learning is good not only for children at risk of social exclusion but for all children. Rather than simply filling children with facts, Montessori education strives to nurture each child's natural desire for knowledge, understanding, and respect. The Montessori Method of Education involves children's natural interests and activities rather than formal teaching methods.



This study helps facilitate their understanding and application of knowledge, concepts, and processes. Finally, the evidence reviewed here shows that when Montessori programmes are of high fidelity, outcomes in social and cognitive realms are superior to those of conventional and less authentic Montessori programmes. Montessori's goals for children are often in alignment with a parent's own goals for their children: that children respect and care for the people and things around them, have fun while they learn, and take responsibility for their actions. Therefore, the study revealed that there is significant effect of Montessori way of teaching preschools on effective learning in Akwa Ibom and Abia States.

Recommendations

1. Education policymakers and curriculum developers should incorporate Montessori principles and methodologies into the preschool curriculum in Akwa Ibom and Abia states. This should involve a child-centered approach, hands-on learning materials, and individualized instruction to promote active engagement and swift comprehension of subject matter.
2. Teachers and preschool staff should receive training and professional development opportunities on the Montessori method. This will equip them with the necessary knowledge, skills, and strategies to effectively implement the Montessori approach in their classrooms. Workshops, seminars, and ongoing support can help educators understand and embrace the principles of the Montessori way of teaching.
3. Parents and Guidance should enroll and developed their children in Montessori schools to inspire confidence, nurture the child's innate desire for learning, discovery, and social interaction skills in an environment where teachers are encouraging, engaging and value the individual child.
4. Adequate provision of Montessori learning materials and resources is essential to support the implementation of the Montessori method. This includes age-appropriate manipulatives, sensory materials, and learning aids that facilitate hands-on exploration and active learning. Schools and policymakers should allocate resources for the acquisition and maintenance of these materials.
5. Parents should engage their children in Montessori activities or platforms in order to enable their understanding and application of knowledge, concepts and processes.



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