

MONTESSORI'S PHILOSOPHY IN PRE-PRIMARY/PRIMARY EDUCATION FOR SUSTAINABLE EDUCATION IN NIGERIA



J. B. Okimedim,

*Department of Primary Education Studies,
Federal College of Education,
Zaria.*

Abstract

Maria Montessori was the originator of a timeless educational methodology that has influenced all areas of education and significantly contributed to the study of child development. Through her professional life, she was deeply committed to furthering human understanding and international peace movements. This paper therefore, will highlight Montessori's educational philosophy as it relates to pre-primary and primary education, ideas and sensitivity, methods, classroom setup and teachers role and make recommendation for sustaining pre-primary and primary education in Nigeria.

Maria Montessori was an Italian Physician and a graduate of anthropology and clinical psychiatry who later became educationist. She was born in 1870. She became the first woman to graduate in medicine from the University of Rome in Italy at age of 26 years. While in Rome, she came in contact with children who are subnormal intelligence and became interested in their education. She observed that mental deficiency results from the dullness of the sense and that training is the best method to achieve marvelous results in their education.

This paper therefore, will highlight Montessori's educational philosophy as it relates to pre-primary and primary education, ideas and sensitivity, methods, classroom setup and teachers role and make recommendation for sustaining pre-primary and primary education in Nigeria.

Montessori's Educational Philosophy of the Child

Montessori was born in 1870, in Italy. Montessori and attended a rural provincial elementary school for twelve years before going to a technical education studying mathematics and engineering. She entered the University of Rome as a student of mathematics and physics. While studying, she changed to medical school and concentrated on pediatrics. She graduated with distinction, the first woman to graduate from the University Of Rome Medical School. Following graduation, she was invited to

Journal of Assertiveness

return to the university medical school as a researcher in the psychiatric clinic. Her clinical study of children continued and so also did her academic study of educational theories appropriate for the treatment of the handicapped children. Some of the nineteenth century researchers and practitioners who influenced Montessori's educational philosophy are the following:

Jean Itard - (French Physician) Experimented with special education treatment to improve or ameliorate the mental condition of retarded children.

Edouard Seguin – (French Physician) student of Itard, have developed a series of sequential learning exercises and apparatus for educating retarded children.

Jean Jaccques Rousseau – (French) developed an educational theory based on sense of training with concrete experiences in the natural environment.

Johann Pestalozzi – (Swiss) educational research on sense of training and accurate observation of concrete objects as the basis of all thinking, established schools for impoverished children.

Friedrick Froebel – (German) Emphasized **PLAY** as a self-activity significant for education of young children, established the first kindergarten.

Hugo De Vries – (Dutch Botanist) studied plant evolution and suggested the use of his term “sensitive period” to describe Montessori's observations on stages in children's growth and learning.

Montessori was influenced by these and other thinkers. She continued her studies of child philosophy. She was attracted to those ideas that stressed the innate potential of the child and the child's ability, given guidance and direction, to develop along her/his natural lines. In 1900, Dr. Montessori was appointed Director of a demonstration school established by the Natural League for Retarded children. She had her first class of twenty-two children and an opportunity to experiment with teaching young, retarded children. These children were classified as sub-normal, incapable of learning. Many had been institutionalized from birth, abandoned and forgotten children. Dr. Montessori developed a method of scientific observation as she studied the children and their responses to specific learning experiences. Experimenting, recording data, analyzing as well as teaching individual lessons, Dr. Montessori worked to improve the education of the special children. When these retarded children passed national exams on a higher level with normal children, her educational method was recognized and acclaimed. Montessori was convinced that the same educational method would work with normal children. The opportunity to prove her point came when she was asked to organize and direct a program for young children of working mothers who lived in

Montessori's Philosophy In Pre-Primary/Primary Education For Sustainable Education In Nigeria- J. B. Okimedim,

the slum area of San Lorenzo, Rome. In 1907, the first class was opened. It was called 'Casa dei Bambini', a home for children. The success of her method of educating young children led to her international recognition. Her education philosophy and practice was supported by many well known contemporary innovators including Piaget, Sigmund and Anna Freud, Eric Erickson and Gandhi.

Montessori Ideas about the Child

Montessori theory of child development determines her understanding of the child and this will guide in preparing the environment. On this basis, the role of the teacher is guided towards preparing the child's environment. Montessori x-rayed the child by stating that:

"Children are human being to whom respect is due, superior to us by reason of their, 'innocence' and of the greater possibilities of their future. Let us treat them therefore, with all the kindness which we would wish to help to develop in them".

Kramer, (1972). She continued by saying that, a child is natural, being living in the midst of adults. A child must start from nothing and make his way into the company of adults" (Montessori, 1964: 234). Montessori repeatedly underlined the important and qualitative difference in the mind of the child and that of the adult. She termed the child's mind as an *absorbent mind*.

"The child absorbs impressions not with his mind but with his life itself", Montessori (1967). The child constructs a unique personality as the absorbing mind feeds on the stimulation from the human and material environment. She held the view, that by the third year, the child has constructed the foundations of her/his personality, has structured a memory, established a power of will, learned habits of social interaction, and developed an approach to cognitive activity. The *absorbent mind* is animated, powered, by an inner psychic impulse energizing the child. The natural direction of the energy is towards development and perfection of potentialities. The role of adults (teachers and parents) gains significance as the child becomes increasingly conscious of self during the period from three to six years of age. During the second phase of the absorbent mind period, the child relies increasingly on guidance and assistance because the child is internalizing the structure of her/his culture, language, and place in time and space, which is a synergy for sustain development at the pre-primary and primary education in Nigeria.

Montessori Sensitivity about the Child

Montessori recognized that young children exhibited an increased interest in particular aspects of the external world during the period when the absorbent mind functioned. These interests were explained as a response to inner sensitivities motivating the child to selective activities in the environment. This period of increased sensitivity and awareness of aspects of the surroundings Montessori termed “sensitive periods”. The period of particular sensitivity can be likened to a psychic passion, focusing the attention of the child. The sensitive period provides opportunity for children’s exploration guided by adults. Assimilation is rapid, precise and constitutes the fundamental inner development of the mental, social and emotional structures. An outstanding example of a “sensitive period” is that of sensitivity of language. This is evident in all normal children. Their sensitivity for sound, speech-sounds, gains momentum from birth. The sensitivity develops rapidly with an explosive quality by the end of the third year. This sensitivity to language continues throughout the first six years. However, by age three the child will have internalized a sound-symbol system, attached meaning to speech, and have learned the structures of his/her mother-tongue. The young child’s creative use of language reveals the extent to which he/she has learned the deep structures of language in a remarkable brief period. The application of knowledge of “sensitive periods” provides the parent and teacher with a sequential and developmental guide to learning experiences more appropriate to the child’s particular needs that cement the learning of children.

Each child passes through these periods of sensitivity according to her/his personal developmental pattern influenced by environmental factor provided. Montessori observed thus, “A child’s different inner sensibilities enable him to choose from his complex environment what is suitable and necessary for growth,” (Lillard 1972: 42). She concluded that as the child selected objects from the environment he/she used those object”..... for his own growth, since, it is during the sensitive period that he makes his psychic adjustments, like that of being able to adapt himself to his environment or to move about with ever increasing ease and precision,”(Montessori 1967: 42).

It is important to stress that the pace and nature of concentration varies with each child. The adult’s responsibility is to be aware, to encourage, to provide experiences and to allow the child’s self-motivated activity freedom of choice. Montessori concluded that if environmental limitations and adult restrictions interfere, with the instinctive sensitivities of the child, irreparable damage occurred. During this period, if the child’s learning was frustrated during a “sensitive period”, that opportunity for development is lost, retrieval and repair becomes difficult.

The summary of Montessori’s “sensitive periods include:

Montessori's Philosophy In Pre-Primary/Primary Education For Sustainable Education In Nigeria- J. B. Okimedim,

SENSITIVE	AGE RANGE
Language acquisition	1 ½ to 3 years
Order, both internal and external	1 ½ to 5 years
Co-ordination of muscles, refinement of movement	1 ½ to 4 years
Interest in detail and small objects	1 ½ to 4 years
Sensory refinement	2 ½ to 6 years
Tactile sense	3 4 ½ years
Writing	3 ½ to 5 1/2 years
Reading	4 ½ to 5 ½ years
Grammar structures	6 to 7 years.

In the above, there is overlapping of sensitive period. She, in summary, grouped them in three planes of 3-6 (instinctive), 6-9 (absorbant mind), 12-18 (independence mind), (Kramer, 1972).

Characteristics of the Child

In addition to the “sensitive period” of childhood, Montessori observed that the child reveals common characteristics based upon a definite inner nature. These characteristics include:

Work

Work is the purposeful activity of the child. Work for the child is instinctive. To the adult is meaningless, but the child, gains independence and acquires self discipline. The child’s concentration on work reveals the child’s inner need to know him self and the external world through orderly activity for sustainable development of pre-primary and primary education in Nigeria.

Attention

The child becomes absorbed totally in exercises and activity. This can be seen in the attention a child gives while manipulating an object or things (internal impulse). The child’s attention will suddenly fix upon an object. The child becomes more and more interested and will experiment again and again by dismantling and assembling.” a complex exercise of his physical activities which makes way for an internal development” (Hinstock, 1978:153).

Independence

The normal progression of the human personality from birth to maturity is a process of developing greater personal independence. The child strives to do for her self/himself those things that further self-control and self-reliance. Montessori concluded that from approximately three years of age, the child’s psychic life becomes increasing self-conscious. As the child gains a more independent status, he/she gradually accepts

Journal of Assertiveness

separateness from others; Gaining greater functional independence nurtures the child's self-respect and self-esteem. "Let me do it myself:" The constant resign from the child expresses the basic drive towards independence. Montessori understood these characteristics to be extremely important because only the independent child is able to respond to an inner secret pattern for human development.

Inner Discipline

Montessori observed the gradual development of an inner control in young children. As the child became more capable to physical (movement) control, a parallel development of the will takes place. Purposeful activity in an ordered environment provides the stimulus for development of inner discipline. Montessori stated, "our little children are constructing their own wills when, by a process of self-education, they put in motion complex internal activities", (Montessori, 1917).

Imagination and Creativity

The child is constantly creating. The ability to utilize sense perceptions for the construction of abstract concepts is fundamentally imaginative and creative. The essential task of the child is to create her/his unique personality through interaction with the complex of people and objects in the immediate environment. Montessori explained this creative process as incarnating, the making of the man.

Intellectual Development

Montessori recognized intelligence in the young child as ".....the sum of those reflex and associative or reproductive activities which enable the mind to construct itself", (Montessori, 1917). The child must have the freedom to follow his inner impulse to activity, to movement. "The bodily movement most intimately connected with man's intelligence is those of the tongue which he uses for speaking, and those of his hands, which he employs for working", (Montessori, 2006:80).

It is through the activity of the hands that the child first takes possession of the environment. Through the work of his/her hands, the child develops the characteristics of intelligence which are the ability to distinguish, to classify and to order the images of consciousness. Montessori's central position on self-education is based upon this believe that only the individual's activity results in education.

Emotional and Spiritual Development

Montessori observed that along with intelligence to guide development, the child has emotional and spiritual potentialities. Given the opportunity for moral expression in the course of development, qualities will reveal themselves; the child develops a capacity for loving and understanding.

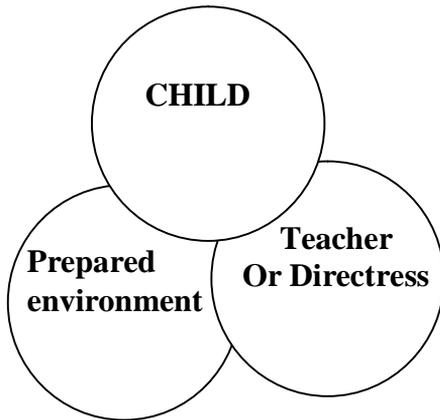
Montessori's Philosophy In Pre-Primary/Primary Education For Sustainable Education In Nigeria- J. B. Okimedim,

The elaboration of the method of educating children based upon these characteristics was Montessori's unique contribution to early childhood education. The role of the teacher and the nature of the classroom environment flow logically from her understanding of the nature and characteristics of the young children.

Montessori's Method for Educating the Young Children

The first book explaining her teaching method appeared in 1909, entitled, *the method of scientific pedagogy applied to the education of young children in the case dei bambini*. (The English translation of the Italian title was summarized as in "the Montessori methods and secretes of the children". This formulation of her theory and practice has been the source for understanding her unique contribution to early childhood education. The Montessori philosophy of child centred Method of Education may be represented by the following diagram.

The Child-Centred Education



The diagram identifies the essential components an active, inter-dependent relationship of the elements. In Montessori's program the child, the directress, and the prepared environment constitute a structured unity. Each familiar component is however, understood in very specific terms by Dr. Montessori. It is essential that one grasps the fundamental principals summarized in the diagram in order to comprehend the uniqueness of this educational method for sustainable development in pre-primary and primary education.

Montessori's Classroom

Montessori classroom elementary classroom is an exciting place to be. There are many interesting books on a wide assortment of topics. Books on insects, plants, animals' different countries and history. However, textbooks and ditto sheets are not used. Instead, children work with many different concrete materials which help them to learn through an active process.

In using these materials, the children may make their own books, draw their own maps of time lines and develop their projects. As a result, the classroom is a busy, happy place to be. Since the classroom is well organized, with the intention of making all materials visible and accessible for the children; they can find what they want and work without having to wait for the teacher. Some children may be reading while others are doing math. Some people may be studying about ants while others are listening to classical music on headphones. The children are all engaged in purposeful activity which leads and develops the intelligence (Leesburg Net). The materials set out in the room have been carefully designed with educational purpose in mind. Because of this, the children are free to move from activity to activity. They don't need to wait for assignment from the teacher. Meanwhile, the teacher is free to help individuals or small groups. The teacher is not tied to a routine of having to present a series of large group lessons to the whole class. The materials to be learned are orderly arranged in the classrooms for children to manipulate with teacher and observe the children. The teacher does not need to test the children because it is easy to see how the children are doing by observing their activities. In this way, the teacher can have immediate, up-to-date information about any child without time being taken away from learning and without threat of failure being imposed upon the child. Without the threat of failure, and with so many things to do, discipline problems disappear and a friendly, cooperative social community forms. Cooperation rather than competition becomes the tone of the room and adversary relationships fade away, becoming friendship.

Pupils are assigned their own personal workstations designed with educational items that correspond to the daily lesson plans and activities. Pupils are responsible for setting up the work area, choosing the learning activity, applying the physical materials, and returning the materials back to the shelves (Pickering, 2004). Children are always free to move around the room and are not given deadlines for the various learning tasks. Desks are arranged into open networks that encourage meaningful group discourse, as well as independent learning. Children network together with the teachers to organize the learning program in order to complete the necessary learning tasks of the day. The number of teachers in the classroom varies based on the class size, but usually two teachers are used for sections with thirty or more students.

The Role of the Teacher

The title changes, the role are transformed. The teacher becomes a *directress*. This title implies there is an altered relationship between the adult and child. The directress functions in a dramatically changed manner. The directress is a guide, introducing the individual child to experiences, activities, exercises, opportunities and models that are developmentally appropriate and of interest to the child. The lessons are primarily individual, brief, simple and objective. The main objective of the lesson will be to demonstrate precise and orderly movements which will enable the child to use the objects in the environment to educate him/her. The directress frees the child to learn. It is essential that a directress be a student of child development, knowledgeable of the characteristics and stages of growth and development. A thorough understanding of the “sensitive periods” operating during the childhood years is essential. Attitudinally, the directress must be totally convinced that the spontaneous activity of the child is inner directed., and that, given opportunity and a nurturing environment, every child will reveal himself/herself and develop to the fullest as an integrated and unique personality.

The directress plays an active role in the initial stages of orientation to the classroom. The child requires more attention in order to become acquainted with the structure and procedure of the prepared environment. Only very gradually will the child's inner resources respond to the experiences offered. Eventually, the child will discover the satisfaction of self-motivated activity; the child's interest will be aroused and this needs met through physical and mental activity. Now, the role of the directress will not interrupt the activity of the child. The teacher carefully observes while creating a cooperative and supportive setting that is well organized and aesthetically pleasing to the learners. The teacher performs the “overseer role” by directing the “spontaneous “actions of the students (Ruenzel, 1997). According to Montessori, “education is not something which the teacher does; but rather a natural process which develops spontaneously in the human being” (Weissglass, 1999:45). Montessori teachers introduce materials with a brief lesson and demonstration and then passively guide the audience through a period of student-centered inquiry. The objective of the instructor is to motivate students, “allowing them to develop confidence and inner discipline so that there is less and less of a need to intervene as the child develops” (Edwards, 2002:6). On average, most teachers spend less than one hour of the daily class on group instruction (Lopata, Wallace & Finn, 2005). Curriculum topics are strategically linked by the teacher so that no subject is taught in isolation. Instead of exhibiting expertise in specific discipline, instructors use more of a Renaissance approach to learning. When introducing new subjects, instructors use demonstration lessons that increase in complexity as the students are able to advance in the sequence of self-correcting problems and life skills.

Journal of Assertiveness

The directress does observe, record and study the development of the child. The conclusions drawn from the observations will provide insights into the child's needs and encourage experimentation that allows the environment to respond to each child, to each social group, to each cultural moment. Montessori provides detailed suggestions on the preparation of the classroom. Montessori claimed that, "what is most characteristic of our system of education is that the emphasis is placed upon the environments" (Montessori 1964:110). "There are six basic components to the Montessori classroom environment. They deal with the concepts of freedom, structure and order, reality and nature, beauty and atmosphere and the Montessori materials, and the development of community life", (Lillard 1972:51).

The interplay of the six components of the prepared environment creates an atmosphere of respect and responsibility. The identification of these particular six components demonstrates the serious consideration of essential objects, attitudes and values that will determine the Montessori inspired prepared environment. The child's freedom is limited in the sense that respect for other's activity in the environment places the child in relationship to others exercising their freedom of choice and activity. The structure and order of the environment is maintained by the self-controlled exercise of individual activity. The reality principle of community responsibility explains environmental restrictions and limitations of personal or individual freedom. The developing community life of the social group informs the child of roles and functions for contributing members.

The child learns to exercise individual freedom in the environment and does so in progressive stages. The child's work activity generally begins in area of practical Life Exercises. They engage the child's interest because they introduce the proper use of tools, equipment and materials associated with the work of the adult. The child is shown how to pour, polish, scrub, cut, hammer, fold, wash, sweep, cook and serve. The range of daily exercises of the nature is endless and determined by local custom and culture. These Practical life Exercises introduce the children to ordered work habits as well as to task completion within a work cycle. The activities freely chosen by child, increase the child's independence and self-control. The child uses the objects in environment to build competencies and self-esteem. As the objects of the child's environment take on new possibilities for activity, the child's attention focuses on the attractive Montessori self-education apparatus. These materials are available, on open shelves, so the child can select that which corresponds to their interest. The child is free to manipulate, arrange and to discover the inherent relationships of serration, graduation and classification. Montessori explained that these didactic materials offered the means for "sensory education". "The didactic material, in fact, does not offer the child 'content' on the mind, but the 'order for the content' " (Hainstock 1978: 22).

A control-of-error is integral to the didactic apparatus. This allows the child to discover mistakes and to experience problem-solving. The directress does not interrupt, interfere or direct the child's activity with apparatus as long as the child respects the properties of apparatus. The child is freed from helping hand, advice and direction. When an individual has chosen a particular exercise and is involved in that activity he/she is free to work with that material as long as he/she wishes and is free to enjoy numerous repetition that perfect movement and establish clear images. The child is not asked to share or to "take turn" because the individual has the right to the material until a personal cycle of activity reaches completion. The Montessori auto-didactic material introduce the child to a series of activities that build from the simplest concepts to more abstract concepts and symbols incorporated in writing, reading and mathematics. The learning materials are graded and sequential providing a match for the child's growing interests and abilities.

Conclusion

In summary, in the interdependence of the prepared environment, the directress and the child is paramount the Montessori Method. These three elements of trial have been explored in the sense that she elaborated and understood each element. For further understanding, one must consult Montessori's publications particularly. Over the years, there have been periods of greater and lesser interest in the Montessori Method. The contemporary period is one of a pronounced resurgence of interest and that on a world wide basis. It is evident that Montessori's insights continue to enjoy relevance for early childhood educators. Even though new ideas have emerged because of continuing research and practice, what is amazing is that in many instances Montessori's basic insights have been confirmed or, at least, they have shown to retain their fundamental importance. This is the case, for example, whether one is discussing theories in child psychology, learning, perceptual studies or language acquisition.

Recommendations

From the forgoing, it has been observed that Montessori's philosophy has tremendous impacts on children education. For the future of education, pre-primary and primary education, need to imbibe some if not all tenate of Montessori for the sustainable future of education in Nigeria. The following are recommended as the way forward:

1. The Montessori philosophy and methods should be fully integrated into the system of education in Nigeria.
2. Be fully educated in the Montessori ideologies so that they can prepare pre-teachers who will put the philosophy in actual practice in the pre-primary and primary education.

Journal of Assertiveness

3. Universities should start departments of pre-primary/primary education and Montessori philosophy and methods be include in the, in course content of study.
4. The National Commission for Colleges of Education (NCCE) should organize re-fresher courses for lectures of Colleges of Education (COE) concerning Montessori philosophy and method.
5. Conferences and workshops should be organized for the awareness of Montessori methods for teacher trainers who will in turn train would-be teachers of the pre-primary and primary school for substantial development in education and the nation.
6. The various schools be encourage to adopt the Montessori approach in operating the pre-primary and primary education and sufficient.
7. Adequate facilities and equipment be provided in pre-primary/primary schools for the talk of Montessori approach.
8. The y should be a well define policy on the methodological approach in our pre-primary/primary education.

References

- Hainstock, Elizabeth, G. (1978), *The Essential Montessori*, Mentor Books, 1978.
- Kramer, Rita (1972), *Montessori, A Biography* Capricorn Books.
- Less burgmonstessori version Net.
- Lillard, pork, Paul (1972), *Montessori, A Modern Approach*. Schocken Books
- Montessori, Maria (1976), (*Translated by Claude Clarement*). Delta Books
- Montessori, M. (1967), *The discovery of the child* New York Ballatin.
- Montessori, M. (2006), *The Montessori Method*. New York cosimoclassic
- Montessori, Maria (1917), *Spontaneous Activity in Education*, (*Translated by Florence Simmonds*).
- Montessori, Maria (1964), *The Secrete of Childhood*, (*Translated by M. Joseph Costelloe*). Ballattine Books
- Montessori, Maria (1967),*The Montessori method*, (*Translated by Anne E. George*). Schocken Books
- Standing, E. M. (1957), *Montessori, Maria, Her Life and Work*. Mentor Books.