

## CHAPITRE V

### EDUCATION AS THE DEVELOPMENT OF HUMAN POTENTIALITIES IN MARIA MONTESSORI'S "*EDUCATION FOR A NEW WORLD*"

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#### Introduction

This chapter focuses on how building human potentialities in education can enhance learning competencies in students for the development of the self and the society. Human potentials are those possibilities that human beings are capable of achieving. Montessori believes that the traditional system of education directs students to learn through memorization and recitation techniques and does not lay much emphasis on helping students bring out their maximum potential. What goal can we attribute to education today? What are the favorable conditions under which education can help build human potentialities? Is Montessori's view essential in enhancing creativity and building the necessary competencies of the learners in our society today? Education is a natural process carried out by the human individual. It is not what the teacher gives and is not acquired by listening to words but by experiences upon the environment. Montessori opts that education should help the learners develop confidence in their emerging abilities and offer them the opportunity to gain independence in daily tasks. The pedagogic significance of this work serves as a guide for the educational

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system in Africa and Cameroon in particular. It serves as a guide for curriculum developers and policy makers to bring out programs that will enhance the building of individual competencies for eventual development. Thus Montessori's idea of education to build human potentialities is indispensable to our educational system today.

In order to prepare our students for the responsibilities and privileges of life, Molagun argues that one must see education as the means through which individuals are equipped for life which involves exposure to society, approved knowledge, skills, attitudes necessary for human beings to live comfortably and contribute meaningfully to the development of the society.<sup>4</sup> In this case education does not consist only in banking knowledge in student's minds. Education should aim at producing, as Whitehead says, "men who possess both culture and expert knowledge in some special direction."<sup>5</sup> The most important needs of the nation are practical needs and they can easily be attained through an education that focuses on developing students' potentialities than in dumping dead knowledge in to their minds. This explains why for the past decades, many philosophers of education have tried to prescribe a definite standard under which they think education can help the individual to develop his or her self and the society at large. From a progressivist perspective, education should focus more on developing the child's nature and abilities. This works by focusing more on the child's potential so as to be able to harness his abilities and aptitudes for self-actualization.

According to Maria Montessori, education should help the child develop confidence in their emerging abilities and offer them the opportunity to gain independence in daily tasks. For her, every adopted system of education should help students to bring out their maximum potential.<sup>6</sup> We shall focus on the general overview of education and human potentialities, discovery-based learning and the four planes of development advocated for by Montessori as windows of opportunity in education. We shall also elaborate on the role of the environment in

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<sup>4</sup> H. M. Molagun, *Introduction to Philosophy of Education*, Integrity Publication, Ilorin : 2005.

<sup>5</sup> A. N.

Whitehead, *The Aims of Education and other Essays*, The Free Press, New York : 1967, p. 1.

<sup>6</sup> M. Montessori, *To Educate the Human Potential*, Adyar, Madras, India : Kalakshetra publications, 1961.

the process of knowledge acquisition, the idea of freedom and discipline in education as well as human tendencies as a driving force for continuous adaptation in education. We shall as such be preoccupied with answering the question ; what are the favorable conditions under which education can help build human potentialities ?

## **I/ The goals of education**

For the goals of education as an avenue for building human potentialities to be achieved according to Montessori, there are some basic tenets that education must be geared towards, these include the following ;

### **I.1 Education should serve as a process of drawing out what is already within each individual child.**

To teach the child according to individual needs does not only entail understanding and working on his/her personal attributes, but also to respect and incorporate a child's cultural background. Montessori places much emphasis and value on the personality of each and every child in the educational milieu. She urges learners to develop inner structures out of which their personality can evolve, on their own terms and according to their own experiences. As affirmed by Emile Durkheim, "by universal consent, the supreme goal of education is to develop in the child seeds of humanity which he contains."<sup>7</sup> Undoubtedly, the Montessori curriculum is designed to cultivate the human beings innermost potentials into actualization.<sup>8</sup> This shows that true education helps to bring out to full advantage, makes ready for full purpose and scope of human life all that is in the individual man. It brings out all that is best, most powerful, most intimate and living in the nature of the human being.<sup>9</sup> According to her, a rational education carries out three functions. It helps in acquiring techniques of observation and acquiring facts on which judgments must be made, it

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<sup>7</sup> E. Durkheim, *The Evolution of Educational Thought*, London : Routledge and Kegan Paul. Trans. by Peter Collins, 2005, p. 283.

<sup>8</sup> "Philosophy Regarding Montessori Education" April 17 2019, Retrieved February 4 2020 from <http://www.paperdue.com/essay/philosophy-montessori-education-term-paper-2173732>.

<sup>9</sup> Sri Aurobindo, *Early Cultural Writings*, (the complete works of Sri Aurobindo, vol.1, Sri Aurobindo Ashram Publication Department, Pondicherry, 2003, p.370.

helps in training the learners to use their knowledge and their thought effectively for their own good.<sup>10</sup>

In order to do this, the teacher needs to develop the ability to observe the children through a commitment to the process of observation and through the development of self-awareness that enables them to filter out their own inclinations and prejudices.<sup>11</sup> This means that the teacher should observe his or her learners without passing any prior judgments. Today, this observation entails a “diagnostic assessment”<sup>12</sup> that has risen to importance in the educational sector for the past years. However, at the level of the Montessori oriented observation, it is not limited to academic subject matter, but must entail careful monitoring of the social, physical and psychological progress of the child at the highest possible level.

## **I.2 Education should foster independence and encourage freedom with responsibility.**

Montessori saw the development of this independence as depending on two basic variables, that is the adults that guide the child and the environment in which the child lives. The ultimate objective of education is fostering independence where a learner becomes fully grounded on the dynamics of life. According to Jean Piaget, learners construct meaning through hands-on work and teachers should nurture inquiry and support the child’s own search for answers.<sup>13</sup> In the same light, Albert Einstein argued that “the school should have as its aim that the young man leaves it as a harmonious personality... The development of general ability for independent thinking and judgment should be placed foremost.”<sup>14</sup> Montessori’s approach has been considered scientific because she used her medical, anthropological and pedagogical knowledge to assess children’s development and learning. For her ;

Education must concern itself with the development of individuality and allow the individual child to remain independent not only in the earliest years of

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<sup>10</sup> *Ibid.*, p.198.

<sup>11</sup> S. Lillard, Montessori, *The Science behind the Genius*, *op. cit.*, p. 265.

<sup>12</sup> Diagnostic assessment is conducted at the beginning of a course, and is used to collect data on what students already know.

<sup>13</sup> C. G. Mooney, *Theories of Childhood : An Introduction to Dewey, Montessori, Erikson, Piaget and Vygotsky*, Saint Paul, MN : Redleaf Press, 2000, p.62.

<sup>14</sup> A. Einstein, *Out of my Later Years*, New York : Philosophical library, 1960.

childhood but through all the stages of his development. Two things are necessary : the development of individuality and the participation of the individual in a truly social life... the time must be furnished at all times with the means necessary for him to act and gain experience.<sup>15</sup>

Essentially, Montessori clearly did not endorse the absolute trust in student's actions that some progressive educators support.<sup>16</sup> Rather, she meant that the teacher should assume the role of a facilitator, attuned to the children's actions and intervene when needed to ensure that students are engaged in constructive activities. In essence, the goal of education in the light of Montessori is not for the teacher to direct, drill or instruct, rather it is to give children opportunities for independent mastery.<sup>17</sup> This method of teaching has provided a lasting legacy to early childhood education as best described in these words ;

The basis of our teaching is that... the child has to acquire physical independence by being self-sufficient, he must become of independent will by using in freedom his power of choice ; he must become capable of independent thought by working alone without interruption... we have to help the child act, will and think for himself.<sup>18</sup>

The teacher in this light has to provide guidelines within which the child should learn successfully. Guiding the child does not only help him or her to make sense of the world that he lives in, but should also open up possibilities for exploration and expansion on the part of the child's life.<sup>19</sup>

### **I.3 Education should prepare the child for a life of service to humanity.**

Montessori sees education as a tool for the development of world peace. This broadly stated belief rested on two basic components. First

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<sup>15</sup> M. Montessori, *From Childhood to Adolescence*, Oxford, England : Clio press, 1999, p.56.

<sup>16</sup> K. J Brehony., "Individual Work and Individuality in the Elementary classroom", *History of Education*, 2000, 29, p.115-128.

<sup>17</sup> R. A. Martin, "Philosophically based alternative in education", *Encounter*, 2004, p.22.

<sup>18</sup> M. Montessori, *The Absorbent Mind*, New York : Holt, Reinhart and Winston, 1971, p.281.

<sup>19</sup> C. Massey, *Cultural Relevance and Montessori*, thesis submitted to the Faculty of the Graduate school of the University of Maryland, master of Arts, Department of Curriculum and Instruction, 2006, p.27.

that education develops an inter-cultural understanding among students. She believed that the child's adaptation to one's own time, place and culture involves the capacity to meet new situations and to have the intelligence and courage to transform them when change is needed.<sup>20</sup> Secondly, that it nurtures within the children the desire to grow up and become 'stewards' of their environment. She believed that children are inherently good and are the major hope for a better and more peaceful world.<sup>21</sup> Her education embodies the concept that respect for the child will teach the child to be respectful in the world at large. This reiterates the belief that learners who are allowed to be creative, free, independent will evolve into creative adults who would ensure a society devoid of wars, with abundance kindness and peace. According to Covington Packard,

A child gains self-confidence as he feels able to participate usefully in the society around him... in practical work, self-discipline and competence are gradually developed. They come as the child and adult live in mutual respects... The efforts to respond to ones needs, to the environmental needs and to the needs of others, as much as competence allows, brings a kind of self-discipline that is known as responsibility. From this kind of discipline, comes a sense of true liberty.<sup>22</sup>

The classroom should be based on cooperation, caring, communication and appreciation of diversity, appropriate expression of feelings, and responsible decision making for the betterment of the individual and society at large. No doubts Montessori believed that "preventing conflicts is the work of politics ; establishing peace is the work of education."<sup>23</sup> Montessori believed that if mankind was going to create a new order of society with morality and social values rather than conquest power and profit at its cores, then adults including educators should have faith in the fresh vitality and vision of the child as a messiah.<sup>24</sup>

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<sup>20</sup> P. Lillard, *Montessori Today : A Comprehensive Approach to Education From Birth to Adulthood*, New York : NY : Schochen Books, 1996.

<sup>21</sup> M. Powell, Social and emotional learning in Montessori education. *Montessori LIFE*, 2001, 13 (1), p.32-34.

<sup>22</sup> P. Covington, *The Hidden Hinge*, Notre Dame : Fides Publishing Inc, 1972, p.60-61.

<sup>23</sup> M. Montessori, *From Childhood to Adolescence*, Oxford, England : Clio press, 1999, p.24.

<sup>24</sup> Montessori Method of Education Essay, July 2007. Retrieved February 4 2020, from <http://phdessay.com/montessori-method> of education-essay.

## II/ The four planes of development as windows of opportunity

The four planes of development entail Montessori's overall view of the development of the individual from birth right through maturity. This vision of the development provides a holistic view of developing human beings<sup>25</sup> and it explains and justifies the importance of education as a "help of life." To this effect, Montessori wrote ;

According to modern psychologist who have followed children from birth to university, there are in the course of their development different and distinct periods, corresponding curiously to different phases in the development of the physical body. The changes are so great that certain psychologists, exaggerating in the attempt to render them clear, have expressed themselves thus : "Growth is a succession of birth." It seems as if, at a certain period of life, one psychic individual ceases and another is born.<sup>26</sup>

She discovered to this effect that the true function of childhood in the development of the human being is that the child passes through certain phases, each of which has its own particular needs.<sup>27</sup> With respect to this, Montessori takes into account the social, cognitive, moral and biological changes of the individual. Understanding the characteristics and needs of the child at each stage allows the adult to support the natural unfolding of life. This explains the reason why Montessori saw these planes of development as windows of opportunity for building human potentialities in education. The child becomes an active agent and the adult a support.

These stages are grouped into six year cycles, which include ; infancy or early childhood (from birth to the age six), childhood from the ages six to twelve, adolescence from the ages twelve to eighteen and early adulthood from eighteen to twenty-four. According to her, each of these planes starts a fresh, bringing up new set of characteristics, needs and behaviors. As one plane reaches its peak, it makes way for the beginning of the transition to a new stage. Montessori called this

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<sup>25</sup> Montessori's view of human development is holistic in two senses ; firstly Montessori considers all aspects of development (physical, intellectual, emotional). Secondly, Montessori considers all the phases of developing life.

<sup>26</sup> M. Montessori, *Education for a New World*, Adyar, Madras, India : Kalashretra Publications, 1946, p.17

<sup>27</sup> *Id.*, "The Four Planes of Education" Mario Montessori, ed., Amsterdam : AMI, p. 1.

“*the constructive rhythm of life.*”<sup>28</sup> These planes will be succinctly explained below.

## **II.1 The first plane of development, from birth to the age of six.**

This plane is divided into two sub planes (from birth to three) and (from three to six). Here, Montessori refers to the child at the sub plane of birth to three as the “unconscious creator”. This is because during this important period, the child is not conscious of learning but is able to create a person she is to become. She remembers a little at this time but what happens during these early years eventually becomes part of her forever. During the first three years of this six year period, the mind operates unconsciously. The child simply takes in the environment with an absorbent but unconscious mind. Montessori explained this in the following words :

An unconscious mind does not mean an inferior mind. You will find this type of intelligence everywhere at work in nature. Every insect has it for instance ; but theirs is not a conscious intelligence, even though sometimes it appears to be so.... In those first few months of the child's life, before he is able to move, he takes in the whole of his environment by means of the absorbent power of the unconscious mind. The child seems to take in these things, not with his mind but with his life. The absorbent mind works rapidly, taking in everything without effort and without conscious, will ... it begins deep down in the darkness of the subconscious mind ; it is developed and “fixed” there ; and finally emerges into consciousness, where it remains a fixed and permanent procession.<sup>29</sup>

With the developed skills learned during this period, the child continues his/her development in a more conscious effort through the conscious period (from three to six years). The faculties such as memory, thinking, writing, and other processes, are now available for expansion. The first plane can be viewed as the period when the human individual develops and perfects new functions. By the time the child is six, she/he has been transformed from a rather unconscious, immobile creature into a new psychic individual. This process is described by Montessori as “revelation of the child”.<sup>30</sup>

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<sup>28</sup> Ibid., p. 1.

<sup>29</sup> E. Standing, *Maria Montessori, Her Life and Work*, New York : American Library, 1957.

<sup>30</sup> *Ibid*



At this stage, Montessori says it's not a question of development but the creation from nothing.<sup>31</sup> She went on by noting that; "psychologists who have observed children from their first year have announced the discovery that it is in this period that the construction, the building up of man takes place."<sup>32</sup> As the child reaches three and above, Montessori called him the "conscious worker". This is because at this stage, the child begins to put to use the abilities he has been constructing unconsciously. His hand is the instrument of his mind.

As the first plane draws to its close, we see the child who is confident, capable and independent.<sup>33</sup> Here, the child strives for functional independence where he or she can affirm "help me to do it by myself." She termed it the most important period of life as she affirmed that the most important period of life is not the age of university studies, but the first one, the period from birth to the age of six. For that is the time when man's intelligence itself, his greatest implement is being formed. But not only his intelligence, the full totality of his psychic powers.<sup>34</sup> For this reason, there is need to think of the skills the child can acquire at this stage so as to make it fulfilled. The child in this case will learn in accordance to natural drives and responses.<sup>35</sup> Intelligence is greatly formed as the child is always anxious to learn.

## **II.2 The second plane of development, ages six to twelve**

Here, there is a great deal of intellectual work that takes place in the individual. During this period, the child shows great stability as physical and psychic growth continues along the same line. There is very little transformation or metamorphosis during the second stage. Montessori believes much mental work can be accomplished, (i.e., storing a great deal of cultural information). Mentally, a great development of reasoning abilities is also taking place. Socially, the child develops an individual ego strength as well as group consciousness (i.e., the gang stage or herd instinct). Also, a great

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<sup>31</sup> M. Montessori, *Education for a new world*, Adyar, Madras, India : Kalashretra Publications, 1946, p.16.

<sup>32</sup> *Ibid.*

<sup>33</sup> *Id.*, "The Four Planes of Education" Mario Montessori, ed., Amsterdam : AMI

<sup>34</sup> *Id.*, *The Absorbent Mind*, New York : Holt, Reinhart and Winston, 1971, p.22.

<sup>35</sup> *Ibid.*

interest in fairness and right versus wrong will surface in the mind of the child.

The child always wants to know the reason behind things. It does not imply that the child is now intelligent enough to learn everything rather, the child's mind is now something that the adult can understand, approach and influence. The absorbent mind gradually changes to the "reasoning mind". There will be the desire to explore and understand things for himself not just accepting facts as facts. He wants to use his own rationale, his own judgment and make his own decisions.<sup>36</sup> The mind here wants to understand how all the components in the world work together. Montessori used the phrase "the acquisition of culture" but she was not referring to 'arts'. The child here is introduced to human culture, the whole of the universe including sciences, history, music, mathematics and all other things that tie to human culture. This is because she believed that when ideas about the universe will be introduced at this stage, the child's interest, admiration and wonder would cause him want to learn more. Montessori called her plan for this stage "cosmic education." This is the period when the child's mind is like a fertile field, ready to receive what will germinate into culture.<sup>37</sup> At this stage, the child moves towards intellectual independence as he can affirm "help me to think for myself." Montessori described this stage as the calm stage of uniform growth. In other words, she described it as a period marked by serenity and docility.<sup>38</sup>

### **II.3 The third plane of development, from the ages twelve to eighteen**

It is during this stage that puberty leads to a change from childhood to adulthood. It brings another rebirth which is that of a social man, with a psychological change from the child in the family to the adult in the society. There is a great deal of change experienced in the life of the individual during this period that affects his learning patterns. According to Montessori, new psychological characteristics emerge in the mind of the individual such as doubts, hesitations, violent emotions, discouragement, and an unexpected decrease in intellectual capacity.

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<sup>36</sup> The four planes of development, May 2017. Retrieved February 8 2020 from <https://phdessay.com/the>

<sup>37</sup> M. Montessori, *To Educate The Human Potential*, Adyar, Madras, India : Kalashetra Publications, 1961, p.5.

<sup>38</sup> *Id.*, *Education for a new world*, 1946, p. 18.

During this period there is also a tendency toward creative work and a need for the strengthening of self-confidence.

Current brain research shows that certain areas of the brain grow and change during adolescence for instance, the prefrontal cortex located behind the forehead and controls planning, working memory, organization and modulating mood.<sup>39</sup> These changes affect the way teens deal with social issues as well as perform academically. Montessori also noticed that during this stage, adolescents become unstable, experience violent emotions, doubts and hesitations as well as become sensitive to criticisms, ridicule and humiliation.<sup>40</sup>

This means that at the time when we will expect increase in responsibility, capability, academic performance and independence, the adolescent appears to instead regress. This is explained as Montessori wrote ; “during the third period, the character is not steady ; there is often indiscipline and some sort of rebellion...”<sup>41</sup> For this reason, Montessori thinks that to be able to aid the adolescent at this stage to succeed in education, there should be a social and economic preparation for life in a safe and protected environment. She believed that if young people at a certain point are called upon to take an active part in the life of humanity, they must first feel that they have a great mission to accomplish and prepare themselves for it.<sup>42</sup> At this plane, the adolescent moves towards social/emotional independence where one can affirm “help me to find myself”. The young person realizes that he can do adult work as he can succeed in life his own efforts and on his own merits, and at the same time it would put him in direct contact with the supreme reality of social life.<sup>43</sup>

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<sup>39</sup> Dr. Jay Gield, Frontline, “Inside the Teenage Brain”, 2002. In a ‘frontline’ interview, he said, if a teen is doing music or sports or academics, those are the cells and connections that will be hardwired.

<sup>40</sup> M. Montessori, *From Childhood to Adolescence*, Oxford, England : Clio press, 1999, p.63.

<sup>41</sup> *Id.*, *Education for a New World*, Adyar, Madras, India : Kalashretra Publications, 1946, p.18.

<sup>42</sup> *Id.*, *Peace and Education*, Adyar, India : Theosophical Publishing House, 1975, p.70.

<sup>43</sup> *Id.*, *From Childhood to Adolescence*, op. cit., p. 64.

## II.4 The fourth plane of development, from the ages eighteen to twenty-four

At this point in time, the society considers the individual as an adult. Here, there is the development and consolidation of the creations formed in adolescence. The adolescent is now a “formed person.”<sup>44</sup> Here, the success of an individual depends on how he or she develops her potential in the earlier stages of life. If the preceding levels of independence have been realized, the adult would be able to make her own ‘choice of action’ while being aware of the possibilities and responsibilities.

The young adult strives for economic independence where he can affirm ; “help me to support myself.” To this effect, Montessori writes as follows ; “culture and education have no bounds or limit ; now man is in a phase in which he must decide for himself how far he can proceed in the culture that belongs to the whole of humanity.”<sup>45</sup> For this reason, Montessori shows that if man understands his mission, and knowingly and wisely he will discover that he can be able to change his life at this stage and experience joy.

Montessori shows that we cannot change the world by working with adults, but that we must start from childhood. It explains the reason why she emphasized on the idea of stages of development as windows of opportunity in education. She concluded this by affirming that ;

We must take man himself, take him with patience and confidence, across all the planes of education. We must put everything before him, the school, culture, religion, the world itself. We must help him to develop within himself that which will make him capable of understanding. It is not merely words, it is a labor of education. This will be a preparation for peace, for peace cannot exist without justice and without men endowed with a strong with a strong conscience and personality.<sup>46</sup>

She further noted that learners in her own point of view displayed sensitivity towards learning particular concepts during all these planes of development. Her instructional method and teaching materials evolved as a result of meeting the needs of her students.

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<sup>44</sup> *Ibid*, p.90

<sup>45</sup> M. Montessori, “*The Four Planes of Education*” Mario Montessori, ed., Amsterdam : AMI, p.14.

<sup>46</sup> M. Montessori, “*The Four Planes of Education*” *op. cit.*, p.15-16.

### **III/ The role of the environment in the process of knowledge acquisition**

In order for children to realize their potentials in education, Montessori stated that they needed a suitable learning environment. With this in mind, she advocated for an educational learning environment that will meet the needs, interest, abilities and development of the learners. She emphasized on the structuring of the environment because she believed that it will allow the natural manifestations of the innate tendencies in the child.<sup>47</sup> With this every child is made aware of the fact that he or she can carry his study far beyond the reach of the teacher's own knowledge, given the right 'ecology of resources' in a well prepared environment.<sup>48</sup> Montessori made this important discovery as she affirmed ;

Scientific observation, then, has established that education is not what the teacher gives ; education is a natural process spontaneously carried out by the human individual, and acquired not by listening to words but by experiences upon the environment. The task of the teacher becomes that of preparing a series of motives of cultural activity, spread over a specially prepared environment, and then refraining from obtrusive interference. Human teachers can only help the great work that is being done, as servants help the master. Doing so, they will be witnesses to the unfolding of the human soul and to the rising of a New Man who will not be the victim of events, but will have the clarity of vision to direct and shape the future human society.<sup>49</sup>

If the child's experiences in the environment are so significant as Montessori affirms, it becomes essential that we also understand not only the development of our learners but the nature of the environment in which they learn. This is because what the learners find around them will greatly influence their learning patterns. In order to support the spontaneous development, learners should be allowed the freedom to experience the world their own way, to explore and to assimilate the world and all its principles. Adults must construct a bridge between their world and that of the child. This bridge should be provided through the prepared environment. The prepared environment should bring the world at large, and thus the adult world within the reach of the child at

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<sup>47</sup> S. O. Oremeyi, "Montessori Education and The Prepared Environment" *International Journal of Innovative Research and Studies*, vol 3, 2014, ISSN 319-9725, p.652.

<sup>48</sup> R. Luckins, *Ecology of Learning resources*, London, Routledge, 2010.

<sup>49</sup> M. Montessori, *Education for a New World*, *op. cit.*, p.3-4.

whatever stage of development it is, at a given moment.<sup>50</sup> In her book concerning the secret of childhood, she outlined the following as key components of a prepared environment.

Firstly, freedom of choice which is achieved through the learner's exploration, movement and social interaction with peers. This is evident as she affirmed ; "the environment must meet the demand for the fundamental principle of scientific pedagogy... the liberty of the pupil for such liberty shall permit the development of individual spontaneous manifestations of the child's nature."<sup>51</sup> The teacher or facilitator will in this light keep a close watch and correct the learners where ever needed. This helps to improve the process of knowing, thinking, learning and judging skills in the learners.

Secondly, the structure and order as well as the beauty of the environment also play a primordial role. It is very important to keep the environment clean, neat and inviting for learning. This will make the learners to concentrate on what they are learning. Montessori saw that beautiful surroundings did not distract the learners but instead promotes concentration of thought and offers refreshment to the tired spirit. It also provides care and respect for the environment during the process of learning. This is confirmed as she wrote ; "the things in his environment seem to awake in the child an intense interest, an enthusiasm that penetrates into his very life."<sup>52</sup>

Thirdly, nature and reality should be considered in the learning environment. Montessori believed that nature should always be used as reference to inspire children to learn. Teachers should as such cultivate the habit of taking their students out into nature to explore the best teaching supports. This works more specifically when it has to do with subjects that study nature and the environmental issues.

More so, environmental organization is also of capital importance to guide the learners through the five areas of the Montessori curriculum (practical life, sensorial, language, mathematics and cultural subjects). Sensorial materials should be hierarchically introduced from simple to

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<sup>50</sup> M. Mario. Jr, *Education for Human Development*, New York, Schocken Books, 1977, p.20.

<sup>51</sup> M. Montessori, *The Montessori Method. Scientific pedagogy as applied to child education in "the children's houses"* trans. A. E. George, London : William Heinemann, 1912, p.28.

<sup>52</sup> M. Montessori, *Education for a new world, op. cit.*, p.20.

complex, and from concrete to abstract. This will accord the learners freedom to fully develop intellectually with correspondence to the prepared environment.<sup>53</sup>

#### **IV/ Freedom and discipline**

Montessori thought that the fundamental problem of education which is that of character formation was being neglected to some extent. It was through her idea of freedom and discipline that she meant to meet the crying educational need of the time ; that of character formation. She went on to affirm that ;

It has been established that moral education means only the development of character, and that faults can be made to disappear without the need of preaching, punishment or even setting a good example by the adult. Neither threats nor promises are needed, but conditions of life.<sup>54</sup>

She views discipline as a force within the child. It comes from within the child ; it is not imposed externally.<sup>55</sup> When adults force the child to be silent or obedient, the child is passive and the adult's will dominates the child and this is not how Montessori sees discipline. Discipline comes when the learner is active and willingly chooses the right path. By this, a person is disciplined only when he is the master of himself, and is able to control himself when he needs to.<sup>56</sup> Looking at discipline as an active force coming from within the child presents a very different relationship between discipline and education from the traditional one of dominance and coercion.<sup>57</sup> Education should not teach the child how to be passive and submissive, education must help the child to become active. Albert Joosten, a trainer who worked with Maria and Mario Montessori, writes,

The task of the adult then, is not to inject or teach discipline, but to offer the child suitable forms by means of which he can individually and socially follow and express the dictates of his inner discipline. This help must take very

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<sup>53</sup> Michelle. I, "The Six Principles of the Montessori Prepared Environment Explained", Montessori Teacher Training Blog, march 2009. Retrieved February 10 from <https://montessoritraining.blogspot.com>

<sup>54</sup> M. Montessori, *Education for a new world, op. cit.*, p.93

<sup>55</sup> *Id.*, *The Montessori Method, op. cit.*, p. 95

<sup>56</sup> *Id.*, Basic Ideas of Montessori's Educational Theory, "Keys to the World," p. 74.

<sup>57</sup> M. Montessori, On Discipline – Reflections & Advice. *AMI Communications*, No. 4, 1991, p.16-23

concrete forms. It requires not only ever increased efforts at self-discipline and respect for the inner discipline of the child, but also the preparation and organization of an environment where the child can, and is helped to, obey his inner discipline. It should be help offered, not violation inflicted.<sup>58</sup>

Here, Montessori considers freedom as ability, an ability or capacity that is independent of external coercion. She goes on to tell us that “Real freedom is a consequence of development ; it is the development of latent [dormant] guides, aided by education. Development is active. It is the construction of the personality, reached by effort and one’s own experiences.”<sup>59</sup> According to her, the teacher has to study his learners as individuals and must also give them the type of help that will make it possible for them to achieve satisfaction of their own individual aims and desires.<sup>60</sup> She discovered that discipline comes from work as she affirmed ;

The first dawning of real discipline comes from work. At a given moment, it happens that the child becomes keenly interested in a piece of work, showing it by the expression in his face, and by his intense attention, by his perseverance in the same exercise. That child has set foot on the road leading to discipline.<sup>61</sup>

According to this view, discipline is within, and obtained through freedom and concentration. So Montessori saw that the problem was solved as she wrote “...to obtain discipline, give freedom. It is not necessary for the adult to be a guide or mentor in conduct, but to give the child opportunities to work that have been hitherto denied.”<sup>62</sup> The more the capacity to concentrate is developed, the more often the profound tranquility and concentration in work is achieved by the learner, the manifestation of discipline is seen.<sup>63</sup>

Seen in this light, freedom and discipline both are active processes that are developed through the child’s own activity and effort. This is very different from the idea of freedom as letting children do whatever they want. Montessori writes in the *Absorbent Mind* that, “If freedom is understood as letting the children do as they like, using, or more

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<sup>58</sup> A. M. Joosten, *Education as a Help to Life*. Montessori Research and Development Center, 1994, p.58

<sup>59</sup> M. Montessori, *The Absorbent Mind*, op. cit., p.205

<sup>60</sup> M. Montessori, *The Montessori Method*, op. cit., p.88

<sup>61</sup> *Ibid.* p.92

<sup>62</sup> M. Montessori, *Education for a new world*, Adyar, Madras, India : Kalashretra Publications, 1946, p.94

<sup>63</sup> M. Montessori, *The Child in the Family*, Oxford, England : Clio Press, 1989, p.38



likely, misusing the things available, it is clear that only their “deviations” are free to develop”<sup>64</sup> This is why in many traditional classrooms when teachers give the learners freedom, as they think they are supposed to, and “follow the child ;” they see only chaos. When Montessori demands that the child be given freedom, she is sometimes misunderstood.<sup>65</sup> Rather than being opposites, freedom and discipline are very much alike. They are both internal states and processes developing within the human being.

## Conclusion

It is generally held that all humans are born with diverse potentials. Regardless of whether evident or not, it is necessary for education to work towards releasing individual potentials in learners. Vardin tells us that for Montessori children can be very successful regardless of background or apparent ability, if they are placed in the right environment.<sup>66</sup> This is why education should no longer consist only of imparting knowledge, but must take a new path, seeking the release of human potentialities.<sup>67</sup> It was when she discovered that children have a remarkable ability to absorb knowledge and teach themselves that she was inspired in her life-long pursuit of educational reform, curriculum development and methodological reform.<sup>68</sup> She observed that children are characterized by an emphasis on independence, freedom within limits and respect for a child’s natural psychological, physical and social development.<sup>69</sup> The method advocated for by Montessori is essentially a model for the development of a complete human being. It is based on the assumption that ; children and developing adults engage in psychological self-construction by means of interaction with their environment. Children who are at liberty to choose and act freely within a well prepared environment would spontaneously develop at an

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<sup>64</sup> *Ibid.*

<sup>65</sup> Joosten, *Education as a Help to Life*, *op. cit.*, p.18-19

<sup>66</sup> P.A. Vardin. “Montessori and Gardner’s Theory of Multiple Intelligences”. *Montessori LIFE*, 2003, 15 (1) p. 40-43.

<sup>67</sup> M. Montessori, *Education for a New World*, Adyar, Madras, India : Kalashretra Publications, 1946, p.2.

<sup>68</sup> V. B. Ngalim, *An Introduction to Philosophy of Education in the African context*, PEP, Bamenda, 2014 p.107.

<sup>69</sup> P.L Paula., *Montessori Today : A Comprehensive Approach to Education from birth to Adulthood*, Knopf Doubleday Publishing Group, p. 2011.

optimal level. “Each child carries within him/her the potentialities of the man he can become.”<sup>70</sup> Her goal is for the child to become a responsible, secure, and balanced human being who thinks for himself and who has discovered the joys of self-education.<sup>71</sup>

Educators have for the past decades realized that for students to be successful, it is necessary to help them and their society at large. Discovery based learning can be defined as an active, hands-on style of learning where the learner participates actively in the learning process rather than passively receiving knowledge as if he were an empty vessel to be filled by the instructor.<sup>72</sup> As affirmed by Conway Judith,

In order to succeed in the 21<sup>st</sup> century, schools must graduate students who are prepared to be lifelong learners. This challenge necessitates a pedagogical shift from transmitting a body of expected knowledge that is largely memorized to one that is largely process oriented.<sup>73</sup>

The direct method of instruction that was used in the earlier part of the century, though effective for some skills is giving way to a more cooperative approach. One that involves the students working for a common good, teachers serving as coaches and facilitators, letting students discover things for themselves.<sup>74</sup> In Montessori’s own view, discovery can be well utilized within the context of a well prepared environment. This refers to the classroom environment designed to provide children with materials they are cognitively ready to explore and use to develop skills.

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<sup>70</sup> V. B. Ngalim, *An Introduction to Philosophy of Education in the African context*, 2014, p.115.

<sup>71</sup> *Ibid.*

<sup>72</sup> B. Emily, *Discovery learning in the classroom*, Oakville, Sheridan college, 2006.

<sup>73</sup> C. Judith, Educational Technology’s Effect on Models of Instruction, <http://copland.udel.edu/conway/EDST666.htm>, 1997.

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