# ADOPTING MONTESSORI METHOD IN CONVENTIONAL SCHOOLS FOR THE 21<sup>ST</sup> CENTURY CHILD

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#### **Abstract**

The school should be an institution that inspires learners to learn more about the world they live in and not a place where learners are filled with some limited information ready to pass a test or examination. The conventional school system has been preparing children for excellent academic achievement. There is need to change this concept and prepare learners who will function successfully in the dynamic society we live in today. The Ability to adopt a learning method which inspires exploration and holistic development should be considered. One among these methods is the Montessori Method. The paper therefore highlighted the characteristics of Montessori Method as prepared environment, Montessori material, repetition, independence, uninterrupted work period, multi-age classroom and child-centered learning, characteristics of conventional schooling. The benefits of Montessori Method and conventional schooling were mentioned. The paper discussed how the Montessori Method can be incorporated into the conventional school by merging direct instruction with handson activities, rearranging the conventional classroom by creating a space within the classroom for locally sourced material, using play method while applying rote learning and also factoring the children's views when making the classroom rules. These suggest the possibility of adopting the Montessori Method to suit into the conventional school system.

Keyword Montessori Method, holistic development, direct instruction

#### Introduction

Adopting a child-centered educational approach for early childhood education cannot be overemphasized for teaching and learning of the 21<sup>st</sup> century child. One of such approach is the Montessori Method. The concepts that shape the Montessori approach are embedded in her background in psychology, observations and her belief that the education of children is a way to build a better and more functional society gave rise to her approach to education. The Montessori approach urges educators to place a child's natural developmental needs at the center of the teaching and learning rather than curriculum, testing, rubrics or the many other teacher-created activities so

prevalent in education today. Some of these teacher-created activities create confusion and distraction, while the testing shifts the goal from holistic development to mere passing of school test/external examinations. In order to promote learning, effort, and initiative during an individual's most formative years is a major reason for the creation of the Montessori educational method. Furthermore Montessori Method is aimed at problem solving, collaboration, critical thinking and communication required for the survival of the 21<sup>st</sup> century child.

It is quite uninteresting and boring for children to sit down passively while listening to a teacher standing in front of the class lecturing. Montessori Method appreciates the fact that there are different ways for children to learn so they equally accommodate different learning styles. It also enables Children with the ability to learn at a personal pace, using individualized learning plan, with the teacher guiding each child advancing as he/she is ready. The Montessori classrooms are intentionally designed with didactic materials using the child's curious nature to develop creativity in the child, Albert Einstein stated "I have no special talents. I am only passionately curious". So when these materials are readily available for children their curiosity will be of great advantage to explore, "Curiosity is the wick in the candle of learning." —William Arthur. Orderliness, cleanliness and proper organization are paramount in Montessori Method. This proper organization promotes individual discovery with a sense of order. In Montessori classroom, in order to instill cleanliness, orderliness, and correct organization in children, the children have to clear up their classroom, it can be by replacing activity materials in their designated spots at the end of the activities, mopping and/ or sweeping the classroom at the close of the school day. When children stay continuously in a clean, orderly and well organized environment, it becomes a way of life for them and when the children find themselves in a dirty, unorganised environment, they become uncomfortable and try to fix the environment. For the reason that there exists freedom, orderliness, cleanliness and proper organisation children naturally carry out their everyday tasks in a Montessori classroom with so much curiosity, interest, comfort and excitement, which boosts child-centered approach in teaching and learning of the 21st century child.

Manual and intellectual should be the two forms of work experienced by the same person when dealing with education. Hence it is important that this is understood through practical experience, that the two both manual and intellectual complement one another and are equally necessary for a civilized living (Montessori, 2008). This is what the 21<sup>st</sup> century child needs and it will be best for

our nation because it is an integrated, interdisciplinary, holistic system of education capable of addressing many of society's educational, environmental, and social concerns. Adopting Montessori Method will bring a paradigm shift from learning just to take exams for certificate to holistic development of an independent individual with a lifelong love of learning.

My vision of the future is no longer of people proceeding on certifications gained from exams taken... but of individuals passing on to higher stages of independence, by means of their own efforts, through their own effort of will, which constitutes the inner evolution of the individual (Montessori, 2008, opening).

#### **The Montessori Method**

The Montessori educational method is based on hands-on learning, self-directed activity and collaborative play. It is self-directed in that every child is allowed to choose an activity which he/she concentrates on and is given enough time to accomplish the work at his/her own pace. This allows the child to become fully absorbed in an idea and experience the joy of self-discovery. Welljorn (2020) suggests that children develop a healthy sense of self-confidence when they participate in self-directed activities because they are able to follow their natural inclinations while exploring; children will learn that there is much more that they are capable of accomplishing on their own, which gives them a confidence boost at a young age. It is hands-on learning when the learning is by touching, feeling and doing. Montessori is known for her development of educational tools for children, which she achieved through meticulous calculation and experimentation. Children are given the opportunity to work with concrete materials, and a child will learn something new whenever they find something new with their hands because they will ascribe more significance to their discovery and will experience learning. "What the hand does, the mind remembers." - Maria Montessori. In collaborative play, children solve problems together in order to reach a common goal. Children develop the ability of sharing, taking turns, obeying rules, negotiating and working as a team. It is vitally important to have the ability to take part in games involving cooperative play because it indicates that the child already possesses the skills that will be necessary for them in the future to work together with peers in a cooperate settings such as school and other typical social settings, such as sports. (Pelly, 2020).

#### **Characteristics of Montessori Method**

Dorer (n.r) suggested some characteristics of Montessori methods which include prepared environment, Montessori materials, repetition, independence, uninterrupted work period, multi age classroom, and child centered learning.

In using Montessori Method, the environment is carefully and well prepared for children. The environment and classroom is furnished with child size furniture, shelves to contain and organize the materials which children can reach and variety of interesting workstation for the children. These workstations provide differentiated learning opportunities in a Montessori classroom and are designed specifically to appeal to various learning styles. The materials used for learning are specially organized with logical grouping from left to right. These materials are not only physically proportionate but also mentally proportionate for the children while the grouping represents a topical area such as mathematics, sensorial, language arts or other such curricular subjects.

The Montessori Method encourages the use of concrete materials, and this in turn promotes hands-on activities for the teaching and learning process. "The hand is the instrument of intelligence." The child needs to manipulate objects and gain experience by touching and handling them. "- Maria Montessori. Hands-on materials are used across a variety of subject areas, they are enticing, colourful, simple to use and are designed to get children's brains working, inspire exploration, and makes the children excited about learning on their own, all of which will intentionally support children's learning and development. The fact that these Montessori materials are built with a 'control of error' that is self-evident one of the distinctive qualities that sets them apart from similar products. Because of this trait, children are able to recognize their own errors and come to their own conclusions about the learning outcomes that result from repetition and practice.

Montessori Method encourages repetition because it takes perseverance, determination and it brings about mastering. As stated by Montessori academy (2021), Repetition does not necessarily entail repeatedly reading the same story or performing the same activity. Instead, repetition refers to any type of work that allows the child to practice a skill or area of knowledge. This may include learning extensions and games that reinforce the same skill, peer tutoring, or passively observing a lesson or activity that another child has completed. Repetition may also result from habit or the surrounding environment. Knowing what to expect and having things occur in a predictable manner helps children anticipate and feel at ease. The optimal environment for learning is created when a child feels safe and secure in a predictable environment. (Montessori academy, 2021).

Another facet of Montessori Method is independence. Children are able to decide what work they are interested in though within limits. It is called freedom within limit. This is achieved by the teachers carefully preparing the classroom environment in such a way that all choices are within the boundaries desirable and safe for children to explore. This gives children the opportunity to develop individual learning potential, confidence in making choices and also build self-sufficiency and independence. "The child who has never learned to act alone, to direct his own actions, to govern his own will, grows into an adult who is easily led and must always lean upon others" – Maria Montessori.

This uninterrupted work period is fundamental to the Montessori approach, A Montessori work cycle is an uninterrupted block of time. The time is intended to not only teach children fundamental life skills, but also to give them opportunities to engage in activities that they find enjoyable. This period is one of the most important aspects of a Montessori approach because the children are given the opportunity to explore the environment that has been set up for them and to interact with materials of their own choosing during this time. Teachers do not interrupt a child's work unless the child asks for assistance. The amount of uninterrupted work time given depends on the child's age, though it is usually between one to three hours long.

The Montessori Method encourages multi age classrooms because children get a lot of information simply by observing their peers, and when older children are present in the classroom with younger children, it ensures that the younger children are constantly being taught by older children. Watching older children complete their assignments not only teaches younger children how to proceed but also inspires them to put in the effort necessary to become proficient in their own work by way of repeated practice and study. "A three-year-old educated according to Montessori pedagogy becomes master of his hand and undertakes with joy a variety of human activities." These activities allow him to develop the power of concentration"—Maria Montessori.

Since the Montessori Method practices independence, freedom of choice, repetition and interrupted work period in a prepared environment with various concrete materials for hands—on learning, it is evidence that it is a child centered learning method. By determining their own activities, seeking out resources, and planning their time and assignments, children develop independence, research skills, persistence, and a desire to learn, all these are geared towards holistic development of the child.

#### **Benefits of Montessori Method**

Montessori Method of education is a scientific method which focuses on the key developmental stages of cognitive, emotional, social and psychomotor domain, which children must transit through, on their way to adulthood. This method provides children with the experiences and opportunities needed to explore, practice and develop various skills. Children explore best when they play, Montessori Method also uses play to bring out the best in the children.

In Montessori Method, "Play is the work of the child." In other words, the method believes that children learn and grow through play, so it allows children move freely in the classroom, and choose to take part in any activities that they are most interested in. These activities are in area of practical life, sensorial, language, mathematics, geography, history, nature and science. Children use concrete material to understand the entire concepts using play.

These concrete materials have control of error features. Self-correction and self-assessment are an essential part of the Montessori learning experience. The materials have control of error meaning that children realize their mistake when using Montessori materials. The teachers are facilitators not dictators. The facilitator helps to facilitate the learning experience, so the teacher in a Montessori Method is an observer, a presenter, a role model, a resource, and a facilitator.

#### **Conventional school**

The conventional school also known as traditional school, is based on teacher-centered methods with an emphasis on the academic achievement of the child, through rote learning and memorization (Wikipedia, 2021). The focus is on excellent academic achievement of children; attention is placed more on cognitive development. Children's performances are motivated when they score well on an examination or test. Additionally, a competitive atmosphere can also increase the ambition of children to achieve (or at least try to achieve) better results, academically as well as in extracurricular activities. The conventional method of schooling believes that a strong academic foundation established at a young age can pave the way for continued academic success in higher education, which will create an opportunity for increased self-assurance and achievement in later years. Wikipedia (2021) suggests that the primary goal of traditional education is to instill in children the knowledge, skills, and norms of moral and social behavior that their parents and teachers deem essential for the development of their children's intellectual and emotional capacities. The dissemination of this

information and the upholding of these behavioral expectations are both the responsibilities and the roles of the teaching staff. (Wikipedia, 2021).

#### Characteristics of conventional school

The characteristics of Conventional School are: teacher-centered learning, black/white board, and chalk/maker, Rote Learning and Memorization, Test and Examination.

The teacher presents information to the children, who are expected to passively receive the knowledge being presented. The teacher is in full control of the class activities, and the children are taught a predetermined curriculum according to a uniform time table. All the children are made to follow the rules, routine, and consequences that the teachers have established, which allows the teachers maintain control over the children. The teacher makes sure the syllabus or scheme of work is properly taught to the children. The main focus is on cognitive development and academic excellence. To achieve focus on the teacher, the physical design of the classroom often limits children's activity, so the rooms are often organized so that desks face the teacher. Hence, this method is teacher-centered learning.

In a conventional school, the teachers uses the board for illustration and writing of note and learning is subject-base and is restricted to what is provided through textbooks and written materials. Children learn from a whiteboard and worksheets, workbooks and textbook while seated at a desks. The board is use to engage the children and capture their attention, the act of getting up and walking to the whiteboard is use to trigger alertness in the children.

Rote learning and memorization are the major method of learning in conventional schools. Rote learning is process of memorization base on repetition. This technique is use for learning by which one repeats facts or figures over and over again to instill them in their memory banks. Betterhelp (2021) suggests that, Rote memory works primarily with short-term memory. When one engages in rote learning, the individual is repeating information again and again to memorize it, which means the information, is being committed into the short-term memory banks. This method is often used for success in tests and examinations in conventional schools because it develops the ability to quickly recall basic facts and furthermore, it helps develop foundational knowledge.

Since conventional school is based on teacher centered method, oftentimes formal tests and examinations are used to check children's ability to recall and reproduce the content studied during a teaching/learning process. The conventional method is characterized by being summative,

focusing on the final product, expecting standardized responses, and providing feedback based on a grade, as well as focusing on the result of assessment rather than the learning process.

### The benefits of conventional schooling

In conventional schools, there is high competition among learners. One of the major strategies of the conventional school system is to encourage a higher level of competitiveness among learners. It creates a consciousness of high academic achievement in children, children work hard to be the best in class by making good grades and getting excellent results.

Teachers find it easier to implement the direct instruction teaching method because the curriculum has already been established and a lot of teachers are familiar with this method. Teachers most of the time just recopy their previous lesson note without much or no adjustment, and this is very convenient for teachers. Through the conventional school system, children experience a more seamless progression from early learning to primary level, then secondary level, and finally university. This is because many different schooling systems operate within the framework of conventional schools.

# **Incorporating the Montessori Method in Conventional Schools**

The discussion is supported by John Dewey Education Theory (1938). According to Dewey's theory, the experience of students and teachers working together to produce new knowledge is more likely to be beneficial to both parties than the individual student alone. According to Dewey, education can only be considered successful if it provides students with the opportunity to learn in a way that allows them to connect what they are learning in the present with what they have experienced and learned in the past. (Janse, 2019). There are ways to incorporate or adopt the Montessori Method into the conventional schools and still achieve academic excellence and holistic development.

In conventional school, rather than the teacher standing in front of the children talking and coping note throughout the period, direct instruction and hands-on activities can be incorporated. The teacher can use both methods side by side, firstly giving detail explanation to the children for about 10 to 15 minutes, then the next 30 minutes the teacher can engage the children with concrete material related to the topic; this will help the children transform abstract concepts into concrete concepts. This concrete material could be source from the environment or the teacher request that

the children get it from their homes. For example instead of drawing stripes on the white /blackboard to teach addition, the teacher can get pebbles or plastic bottle covers and make the children do the addition by counting the pebbles. These materials enable children learn by using hands-on activities and encourages active participation in the classroom.

A teacher can use both the play method and rote learning during lessons. Firstly, the teacher makes the children play out what they are supposed to memorize and next, make them keep repeating the information while they play. One of the major advantages of rote learning is being quick, though it takes more effort to memorize something, especially if that thing is long or complicated. The teacher can make the children proficient with the basic concepts of a topic quickly by using rote learning, and then the play method will be used to reinforce the concept to meaningful ideas. For example a teacher might teach buoyancy by first using rote learning to master the definition of floating and sinking object then use play method to give a practical example of floating and sinking object.

In the conventional classroom the table and desk are all arrange facing one direction. There can be a rearrangement of these classrooms by incorporating prepared environment and conventional classroom, this can be done by creating space within the classroom where locally sourced materials can be kept in shelves, plants or flowers placed in vases, and books donated by pupils can be properly organized. This will change the look of the classroom and make it more child friendly.

Rulemaking and Rule keeping should be done by both teacher and children. As a role model, the teachers should communicate with the children using courteous statement. A courteous approach should be implemented using a well-mannered technique through expression (facial and gesture), voice tone and body language. It is preferable for teachers to ensure that peace and compromise are practiced with mandatory grace and courtesy during the process of rulemaking and rule keeping by both the teacher and the children. This should be done rather than teachers exerting their authority through the use of strict punishment, routines, and rule systems. The instructor ought to explain to the children, and ensure that they comprehend the necessity of each regulation, as well as the reasons behind the consequences that are attached to breaking rules and regulations.

### Conclusion

Adopting Montessori methods into the conventional classroom does not seem like an impossible thing to do. Though there will be great work, but it is worth trying for the children holistic development. Both the Montessori and the conventional classroom settings have the beneficial goal, which is giving the children the both excellent academic achievement and holistic development. It is important to integrate several Montessori principles into the philosophy of conventional schools. Thus, it is recommended that; Hands-on activities should be inculcated in lessons for children active participation. Space should be created within the classroom where locally sourced material can be kept in shelves, plants or flowers placed in vase; The teacher should explain to the children, make them understand the need for each rule and reasons for the consequence attached to breaking rules and regulation. Teacher can make the children play out what they are supposed to memorize and make them keep repeating the information while they play.

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