

The Work of the Hand in Education

By Anahita Gandhi

Understanding Education

The dictionary describes the term 'education' as, "Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits."

When we examine and understand that 'education' is a process of facilitating learning; we realise that this what we are doing through the Montessori method. We are facilitating a learning process for the child, assisting him in acquiring life-skills, helping him to adapt to the people, time and place of his culture through the values, beliefs and practices that are being followed. This type of education is not something that can be taught to children and is something that they acquire just by living amongst us; provided we create an environment that is both suitable for their development and satisfies their needs.

This child is born without any skills or language, his movements are not under his control, he is helpless and completely dependent on us. However, he is born with tremendous potentials to create himself, just like a tiny seed has the potential to become a massive redwood tree. He has the potential to become an astronaut, an artist, a musician, a dancer etc., and just as the gardener lovingly nourishes this seed, we need to support the child in his self-creation. We cannot create the child; that is the task of the child.

So, how does this young child create himself from nothing? It is through the work for his hands. This differs from how as adults think of work which is viewed as a completion of a task such as house-hold chores, office work etc. On the other hand, the work of the child is very different. His tasks are those of self-creation and adaptation. As an example, the adult sweeps the floor with the intention of cleaning a space, but when the child sweeps the floor he is interested in the process of sweeping. He is attracted by the movements of sweeping or the manner in which the broom is held. For the young child the process of sweeping is far more important than the clean floor.

As educators, this differentiation is important internalise and understand that the processes are far more important to the child than the final result.

Role of the Hand

In order to successfully complete a task, individuals need to have movements which are under our control. A new born baby is born only with reflexive movements and proceeds to have complete control over his movements by the age of six. How is it possible for this young child to bring about this tremendous achievement within such a short period of time? The answer lies in his hands.

The hands are the most important appendages for the human being. They enable man to create and bring about a change in his environment. The work of the human hand is evident all around us, in the houses we live in, in the monuments we build, in the art we create, in the dances we perform, in the stories we write. Without the hands, intelligence and will serve no purpose. It is when the hands are guided by the intelligence, then man is able to bring about a change in his environment, in the space that he occupies. Dr. Montessori said, "The hand has followed the intelligence, spirit, and emotions and has left traces of all behind...products of his wanderings. All changes in man's environment have been made by the hand of man. It is because the hands have accompanied the intelligence that civilization has been built, so it may well be said that the hand is the organ of that immense treasure given to man". Education for a New World. "It is thanks to the hand, the companion of the mind, that civilizations has arisen. The hand has been the organ of this great gift that we inherit." - The Absorbent Mind.

It is through the work of his hands that the child is able to create himself. The young infant has no control over his hands and not even aware of them. It is while grasping unintentionally, that the infant becomes aware of his hands. Once he becomes aware of his hands, his grasping becomes intentional. This leads him to starting to explore his environment with his hands, he begins to create a relationship with the environment and he begins to understand it. The child is drawn to the environment and every aspect of his surrounding which is evident in the manner in which explores his environment. It is through his hands that the child begins his exploration, he touches, he feels and he manipulates. As loving and concerned adults, we often discourage the child, we stop and sometimes we remove objects from his reach. Thereby taking away the opportunity to feel, to explore, to understand and to manipulate. Thus we need to provide the child the freedom to explore, to manipulate without interfering.

Supporting the Child's Acquisitions

Once we understand the importance of the role of the hand in the child's development, it then become our responsibility to create a space or environment where he can find opportunities to express himself through the work of his hands.

When we observe young children, we realise that they are almost always attracted to everything that we manipulate, whether it is a kitchen appliance, the broom used to sweep the floor, or other durables used across the house. Whatever we touch, whatever we use comes alive for this young child. He wants to and needs to be a part of the life we are living.

It is through the daily life experiences offered to our children, that they are able to adapt. Dr. Montessori said that the child (at this age) is continuously happy and light-hearted if always busy working with his hands. She said that adults often misunderstand his idea of work and we refer to this age of the child as the "blessed age of play", where we give the child many toys to keep him engaged. The child may engage himself with the toys for a while, but will lose interest. She said that the toys though they might be attractive and expensive, they do not in many ways spark the child's interest nor stimulate his intelligence. It is when he is not engaged in something productive, that the child misbehaves and sometimes even destroys the toys he is playing with. These toys do not satisfy his developmental needs and are not engaging his hands, mind, and nor his spirit. The child needs to be engaged in work which motivates his hands, sparks his interest and stimulates his intelligence.

So, how do we create an environment that does all three?

We need to look around our homes and re-evaluate the spaces with our children in mind. We often realise that everything that was created, has been created for the comfort of the adults as it satisfies our needs.

Thus, the first thing we need to do is to become aware of the child's need to be a part of the daily life and create spaces that are accessible to his hands. He needs to be a part of an environment where he is given opportunities to co-ordinate his mind and body through the work of his hands. Dr. Montessori said, "The work of his small hands demands 'motives of activity' in the form of suitable objects".

When we offer the child objects which are proportionate to his size both physically and psychically, we see the enormous effort that is being made

by him. We have observed toddlers who love to carry objects from one place to another. When we see their movements, we realise the amount of effort they are putting in making sure that they do not drop the object they are carrying. Their entire being is focused on that particular task. The child does not find satisfaction till he has successfully completed it by himself. It is not only the objects which he is going to use that needs to be child sized, but also the furniture that he is going to use, for example, his bed, the shelves on which his toys and books are placed, his wardrobe etc. These call out to the child and invite him to interact with them. It's a silent invitation to the hands to explore them. It is through this interaction with the environment through his hands, that the child is able to bring his movements under control.

As human beings we are attracted to things that are beautiful. When we walk into a shop, we want to touch all those beautiful items that are placed on the shelves, our hands want to touch them, feel them. In a similar manner, the young child is attracted to beautiful objects too. The items that he is going to use should be set up in such a manner that they are attractive in shape, colour and form. It is this outward appeal that will initially attract the child to perform activities using them, for example, the dishes that the child eats in, drinks water in etc. Why don't we offer beautiful and delicate Chinaware to our young children instead of the plastic plates and glasses usually given them? It is because we feel that the child will be careless and will not be able to handle these delicate items well. On the contrary, these delicate and beautiful items call out to the child and say, 'Look I am so delicate, handle me carefully'. Thus, when young children are offered items to handle which are delicate and beautiful, it calls out to their entire being to handle them carefully. We observe the birth of control coming into being!

Order

Order is another important aspect which supports the child's developmental needs. The young child is extremely attracted to order and it is from experiencing external order that he will be able to create internal order. Order needs to be present in every aspect of the child's life, in the routines he follows, in the manner in which the environment is set up, order and consistency in the rules that are followed in the household. This kind of order helps the child to create a relationship with the environment and it helps him to comprehend social relationships. Order and evidence of logical thinking are essential aspects of all our lives and are evident in the manner in which we move, the way we carry out tasks such as following a specific order (aka recipe) when preparing a dish to cook it successfully.

The child creates this internal order within himself through the work of hands and intelligence.

A young girl I once observed in class wanted to 'arrange flowers'; an activity that the adult must have recently presented to her. There are many steps that need to be followed in a specific order to be able to perform this activity successfully, starting with the arrangement of materials on the table such as the manner in which bowl, the scissors, the jug, the drying cloth, the vase are arranged. This orderly arrangement of the materials helps the child to understand the sequence of actions that need to be performed one after the other. This young girl brought the set to the table and kept rearranging the materials on the table, until she was satisfied with the order of her materials. Every time she arranged the materials she would pause and examine the arrangement and then begin to rearrange the materials. She did this till she was satisfied with the order. One could observe the working of her mind through the movements of her hands.

Although it is essential to offer the child's hands work that is meaningful and purposeful, it is equally important to offer the child the time, space and opportunities to do so. The perfection in the work of the hands comes through repetition and practice. Learning a skill requires us to practice it repeatedly till we mastered it. Similarly, the child needs opportunities to be able to repeat his movements till he has mastered them. A toddler picks up every small grain of rice and tries to put it in his mouth when he is learning to feed himself and often fails. When we next look at the same child at 6 years of age, he is able to feed himself independently, without spilling any food either on himself or around him. This evolution happened through the child's repetitive work and through his own efforts in a state of freedom; in a state where there is limited interference from the adults around him.

Thus, when we offer the child the right environment, it is then we observe the child mastering his environment through the work of his hands. He is able to bring his movements under control, concentrate on tasks, become independent, help himself, extend his services to others around him and look after his surroundings. It is through the work of his hands that he has created the man he is going to be in the future.



Anahita Gandhi is an AMI primary trainer. She has earned a bachelor's degree in philosophy from the University of Mumbai. Anahita received her AMI Montessori Diploma at the 3-6 level at the RTI Montessori Course, Mumbai in 2001. Since then she has worked at the Arunodoy Montessori House of Children in Bangalore and at the Activity High School in Mumbai. Anahita helped start and found the l'Ecole Montessori International in

Mumbai. Anahita completed her AMI Training of Trainers in 2016 and currently serves as the Co-Director of the AMI Primary Course the Montessori Institute of Bangalore and as a AMI faculty member in Hangzhou and Chongqing, China. She has served as a part of the training team at the RTI Montessori Course in Mumbai and assisted as a member of faculty on the 3-6 course in Thrissur, Kerala. Along with her colleagues, Anahita has run several Assistant Courses across Mumbai and China. Further, she has spoken at various Montessori workshops in Mumbai and Bangalore. Since 2007 Anahita has been a National Examiner at Mumbai, Chennai and Hyderabad in India in addition to Moscow (Russia), Hangzhou (China) and in Thailand. Further, Anahita has been a speaker at national conference as well as other forums.

This article is based on a webinar organised by the Indian Montessori Foundation presented by Anahita Gandhi on Saturday, June 27, 2020. Below are answers provided by the author to some of the questions raised by participants.

Question: The work of the hand is so visibly and directly linked to the intelligence. How about the other body parts the feet, and the movement of body? Do they have an impact on the intelligence?

Answer: Dr. Montessori talks about the development of movement in which she explains that human beings are the only mammals that are capable of walking on their feet. This is a process that has taken place over a period of time and as such all human beings are destined to walk on their feet irrespective of the time, place and culture they are born in. While the development of all of the limbs is connected with the intelligence, it is the hands that are critical. Each child develops the movements of his hands in an individualistic manner. Some children might grow up to be artists, some surgeons and some writers. Hence it is the combined development of the mind and the body together. Once the child has brought about balance and equilibrium to his body, he is able to begin work on coordinating his movement. Human movements are created under the direction of the intelligence.

Question: If despite encouraging the work of hands during the early years, if for some reason if there have been obstacles caused by the lack of awareness of the situation, are corrections possible later between 5½ to 6½ years?

Answer: When Dr. Montessori speaks of the development of the human being, she explains that development occurs in four distinct phases, from birth to six, six to twelve, twelve to eighteen, and eighteen to twenty-four. She says that each stage lays a part of the foundation for the development that is going to unfold in the subsequent plane. In each plane the child has certain needs that to be satisfied. When favourable conditions are provided

that support those developmental needs, it is then the child experiences natural development. However, if the child's development in a particular plane is hampered and the needs not met, then the development would be incomplete. Do note that it is always possible to rectify problems with awareness of the child's needs. However the development will always take additional time and effort on the part of the child and the adult. It will not be a part of the child, part of the child's personality as the development which occurred at the appropriate age.

Question: How do we understand the hand and eye coordination has started in the child?

Answer: When the child is born, he is born only with reflexive movements, his movements are not under his control. But gradually as the will of the child begins to emerge and strengthen, we are able to observe the coming together of the mind and body in the movements that he creates. We can see this in the manner in which he interacts with the environment. The child from around the age of two and half becomes an active participant in the environment. He becomes aware of his environment. We are able to see this when we observe the child handling a piece of material. It is observed in the choices he makes, the duration of time spent on a piece of work, the level of interest the child shows, or the level of perseverance that the child has. These are some of the observable factors which indicate that the child has begun the process of coordinating his movements.