



The principles listed below are adapted from *Montessori: The Science Behind the Genius* by Angeline Lillard.

## **1. Movement and Cognition**

Movement and cognition are closely entwined, and movement can enhance thinking and learning. Make sure there are interesting activities or toys in view, and within reach, so your child can play without your assistance. Involve children with household chores - setting the table, one piece at a time, for the youngest child; or chopping veggies, pouring the drinks, or washing the dishes for the older child. When you are busy, set your child up with an activity nearby, such as painting at an easel or building with blocks on a small rug.

After a ride in the car, take a little walk up the street or around the block before you enter the house.

Helping your child learn how to be in control of his movements will stimulate his physical and mental development. Placing the plate on the table without making a sound is a challenge, but when you demonstrate this and your pleasure is obvious, your child will enjoy imitating.

Primary: Children are learning controlled movements and body awareness — activities such as walking on the line, and the silence gameplay a part in student learning. There is a lot of individual work at this age, but with other people around. The materials are real and concrete – there is nothing abstract here — the focus in reality and not fantasy.

Elementary: Walking on the line and the silence game continue, but in a different pattern; as they approach adolescence, walking on the line takes on a new depth of need, centering they're hormonal. Group work is now a part of the child's experience. The children are moving into abstraction and will have more and more abstract-like materials, including a good deal of work for which no materials are required.

## **2. Choice**

Learning and well-being are improved when people have a sense of control over their lives. Children freely choose their work. They work it for as long as they are inspired to, then they put it away and select something else. The cycle continues all day. Occasionally children, particularly the young ones, might need some guidance in their choices. But, for the most part, children's choices are limited only by the set of materials they have been shown how to use, by the availability of the material (since with few exceptions there is only one of each), and by what is constructive both for the

self and society. They may choose to engage in learning by themselves, in pairs, or groups. Give your child choices in clothes to wear, what to eat for a snack, and even creating their schedule.

Primary: Free choice as long as respect is maintained. Children can also choose to observe.

Elementary: Now, free choice with respect includes a sense of responsibility – it is still showing respect because now it is respect for the growing young person before us. The elementary child is showing respect to himself when he follows a child/adult planned work plan and notes his work in a work journal.

### **3. Interest**

People learn better when they are interested in what they are learning. Montessori education is designed to awaken interest and to allow children to pursue learning about issues that already personally interest them. This is a natural corollary to a system of education based on choice: one chooses to do what one is interested in doing. It is also necessary to a system that is based on intrinsic motivation, rather than on extrinsic motivators such as grades. The Montessori curriculum presents learners tasks and subjects of study that are designed to be either personally or topically of interest to a child. A child who is interested in skateboarding might be encouraged to learn about gravity, friction, and entrepreneurship through this interest.

Create a learning environment at home that supports your child's interests. Allow for new interests to come from your child and build a learning environment that allows them to explore. This may include taking them to the library, trips to museums, going to explore natural environments.

Primary: The Adult presents the keys, and the children continue to explore.

Elementary: With the developing responsibility to balance out freedom, the child takes ownership of planning out those interests, no longer relying solely on the adult – it is now a team effort to create one's materials, own work choices, own extensions, own follow-ups, and own conclusion. The adult still presents the keys particularly to entice new interests, but also to lay a foundation of knowledge so that all possible interests will have the fullest possible experience.

### **4. Extrinsic rewards are avoided**

Tying extrinsic rewards to an activity, like money for reading or high grades for tests, negatively impacts motivation to engage in that activity when the reward is withdrawn.

Research shows that children who are given rewards for learning are more likely to rush through a learning activity, less likely to return to that activity and to have shorter retention of the learning in which they engaged than are children who are not given rewards for engaging in a learning activity. In other words, that gold star has been identified as contributing to that child becoming a less successful learner. Adults have

their ways of encouraging children to develop intrinsic motivation in the child. Our children engage in learning because learning is the learner's reward.

At home, do not use external rewards. Even words such as a "good job" take away from the child's own motivation for doing something. We hope to build the child as a whole without seeing a need to satisfy an external reward.

## **5. Learning from and with peers**

Collaborative arrangements can be very conducive to learning. Children are in multi-age learning groups instead of being grouped by grades. This enables children to teach and learn from each other. A child who has mastered a learning objective reinforces her/his learning by teaching that lesson to a younger child. A younger child can excel and teach his or her peers. Children learn at an early age to depend on and help each other.

Primary: There are limited groups at the primary age – the focus being on individual development. However, the young child can observe peers and learn through observation.

Elementary: The elementary child is expected to work during work-time individually and in groups.

## **6. Learning in context**

Learning situated in meaningful contexts is often deeper and richer than learning in abstract contexts. Learning situated in context is often deeper and richer than learning in abstract contexts. It is why the materials have concrete properties where Montessori developed both the isolation of difficulty and the isolation of quality. The control of error built-in with the materials aids the child in a critical thinking process. The children learn to think and discover on their own with the materials. Once they successfully master a material, the pride of their accomplishment stirs them into a desire for additional learning.

Give your child real-world learning opportunities and tasks. Your child should participate in all family chores and have their responsibilities. If you are doing something to help the family, bring your child with you so they can learn about the activities that are required to support the family. These would include taking them grocery shopping, washing laundry, preparing meals, washing dishes, etc.

Primary: At this age, the child learns in concrete and real-world works.

Elementary: The child is connecting individual pieces and allowing them to explore the pieces that are of most interest to them, while always emphasizing where/how those pieces together with the big picture.

## 7. Adult Interaction

Particular forms of adult interaction are associated with more optimal child outcomes.

**Primary:** The adult presence is more environmental; setting the atmosphere and the physical environment, while also being present for the emotional needs of the child. Parents spend time with their children, and all work together to help the child gain skills for independence.

**Elementary:** Focus on interdependence. The child knows he can stand strong on his own AND he has a solid home base – thus, he can trust enough to give himself up for others in group project dynamics. The adult is a guide and a mentor for the child. The adult trusts the child, and the child trusts the adult.

One of Maria Montessori's tenets was that the interaction between children and teachers is that it should be neither too much nor too little. It must be just right. Allow your child to struggle with a project or a problem long enough for them to learn about difficulties. Your child needs to learn this skill and not be protected from them.

Engage in conversation about your child's daily interactions and learning.

## 8. Order in environment and mind

Order in the environment is beneficial to children. Help to create order with daily routines that satisfy the basic needs of your child as discussed by Maslow.

**Primary:** Order is external at this age; the environment should be beautiful, neat, uncluttered, and inviting.

**Elementary:** Now, the order has been internalized, and the outer work of the child is messy; he has it straight inside of himself, so all is well. That is the ideal.

