

# **PRINCIPLES OF MONTESSORI EDUCATION- 31112**

## **UNIT I**

### **FREE LEARNING AND HEALTH**

#### **Structure**

- 1.0 Introduction
- 1.1 Objectives
- 1.2 Free Learning
  - 1.2.1 Definition
  - 1.2.2 Meaning
- 1.3 Health-improving their health and wellbeing
- 1.4 Teaching children to have sense of control
- 1.5 Freedom control
- 1.6 Free decision making-improving the skill
- 1.7 Sensitize in work- Nature of work and time bound work
- 1.8 Let us sum up
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#### **1.0 INTRODUCTION**

Universal health coverage is a broad concept that has been implemented in several ways. The common denominator for all such programs is some form of government action aimed at extending access to health care as widely as possible and setting minimum standards. Most implement universal health care through legislation, regulation and taxation. Legislation and regulation direct what care must be provided, to whom, and on what basis.

The logistics of universal healthcare vary by country. Some programs are paid for entirely out of tax revenues. In others tax revenues are used either to fund insurance for the very poor or for those needing long term chronic care. In some cases such as the UK, government involvement also includes directly managing the health care system, but many countries use mixed public-private systems to deliver universal health care. Alternatively, much of the provision of care can be contracted from the private sector, as in the case of Canada and France.

In some instances, such as Italy and Spain, both these realities may exist at the same time. The government may provide universal health insurance in the form of a social insurance plan that is affordable by all citizens, such as in the case of Germany and Taiwan, although private insurance may provide supplemental coverage to the public health plan. In twenty five European countries, universal healthcare entails a government-regulated network of private insurance companies.

## **1.1 OBJECTIVES**

After going through this unit, you will be able to

- Explain the definition and meaning of Free Learning
- Describe the Health-improving their health and wellbeing
- Describe the teaching children to have sense of control
- Describe the Nature of work and time bound work

## **1.2 FREE LEARNING**

Free learning is education funded through government spending or charitable organizations rather than tuition funding. Many models of free higher education have been proposed. Primary school and other comprehensive or compulsory education is free in many countries (often not including primary textbook as well as certain post-secondary administrative and sundry fees), including post-graduate studies in the Nordic countries. The Article 13 of International Covenant on Economic, Social and Cultural Rights ensures the right to free education at primary education and progressive introduction of it at secondary and higher education as the right to education.

### **1.2.1 Definition of free learning**

Free learning is learning in which all choices are made by the student. Free learning is usually based on self-learning that is self-directed and self-paced. In free learning there are no constraints of time, space, pace, method, direction, or subject matter.

Free learning is defined as the polar opposite of passive schooling or direct instruction.

### **1.2.2 Meaning of free learning**

Ivan Illich proposed the term deschooling, which means "abolishing compulsory education". John Holt proposed the term unschooling, which means "taking kids away from school". Many educators propose the term "life learning", "learning via living" or just "living". Others adhere to the concept of "natural learning", "experience-driven learning", "discovery learning", "independent learning", or limit the debate to the concept self-directed learning, which

is possible in prison too. Self-directed learning may be closest to the term free learning, however, it often raises opposition by implying that learning needs no teacher.

In addition, free learning has a major advantage over the terms self-directed learning and self-learning. The latter two have different definitions, can easily be confused, and are weak mnemonically. It is very easy to remember and use the term free learning even then when it is not defined as precisely as in this text.

Peter Gray in "Free to learn" emphasizes the importance of freedom in education and in the life of a child. Gray himself opted to promote the term self-directed education, which may be too unwieldy to become a good meme. Even its proponents often shorten it to SDE, which is a first step to make SDE texts cryptic.

Gray's philosophy is based on freedom, and stems from sheer love for children. Consequently, I became fond of the term "free learning" instead of unschooling or deschooling or SDE. It has been noticed long ago that deschooling and unschooling have many negative connotations. They are associated with rebellion and easily raise opposition from those who don't know the subject, but for whom knowledge or school matter. Even unschoolers object to the need to describe their formula for life by reference to schooling. Free learning refers to education that is funded through taxation or charitable organizations rather than tuition funding. Many models of free higher education have been proposed.

The Right of you to Free and Compulsory Education Act or Right to Education Act (RTE) is an Act of the Parliament of India enacted on 4 August 2009, which describes the modalities of the importance of free and compulsory education for children between the ages of 6 to 14 years in India under Article 21A of the Indian Constitution. India became one of 135 countries to make education a fundamental right of every child when the act came into force on 1 April 2010. The title of the RTE Act incorporates the words 'free and compulsory'. 'Free education' means that no child, other than a child who has been admitted by his or her parents to a school which is not supported by the appropriate Government, shall be liable to pay any kind of fee or charges or expenses which may prevent him or her from pursuing and completing elementary education. 'Compulsory education' casts an obligation on the appropriate Government and local authorities to provide and ensure admission, attendance and completion of elementary education by all children in the 6-14 age group. With this, India has moved forward to a rights based framework that casts a legal obligation on the Central and State Governments to

implement this fundamental child right as enshrined in the Article 21A of the Constitution, in accordance with the provisions of the RTE Act.17.

### **1.3 HEALTH-IMPROVING THEIR HEALTH AND WELLBEING**

At Endeavor Montessori, we believe that a child’s physical wellbeing is essential to their academic success and we want all our students to develop a healthful and physically active lifestyle. This includes a focus on nutrition, personal care, mindfulness and risk assessment. By focusing on these four topics, children learn the importance of health and self-care, which will benefit them for years to come.

#### **1.3.1 Nutrition**

The special attention to nutrition because we understand that the mind and body work together. To ensure our children get the proper fuel each day, we partner up with local food providers that make great-tasting meals out of wholesome ingredients that contain no artificial flavors, colors, MSG, nitrates, high fructose corn syrup, nuts, or trans-fats.

We also understand that many children have dietary restrictions and we pay special attention to their needs.

#### **1.3.2 Personal Care**

Maria Montessori’s son, Mario, was a strong advocate of teaching children personal care. In his book, Education for Human Development, Mario Montessori said that his mother believed in “education as a means whereby children might develop their personalities so as to eventually achieve and mature and independent childhood.” At Endeavor Montessori, we believe that teaching our children personal care habits will instill a strong sense of independence and responsibility within them.

Some of the skills we encourage children to learn include: nose-blowing; handwashing; brushing hair; brushing teeth; preparing food and beverages; first-aid techniques; and applying lotion and sunscreen.

#### **1.3.3 Mindfulness**

Mindfulness generally refers to paying attention to your moment-to-moment internal and external experience – thoughts, emotions, sounds, sensations and surrounding environment – with an attitude of openness and curiosity.

We use a literary curriculum that uses Mindfulness concepts during an age-appropriate and beloved school tradition: group time. Children's books are paired with Mindful activities to reinforce the mind-body connection and help frame learning in easy to understand themes.

For our older students, we use Mindfulness shelves, which offer hands-on opportunities to practice the skills they are learning. From calming jars to Zen gardens, these shelves are engaging and provide a unique learning experience.

We encourage mindfulness as a tool to support mental health. Many studies have shown that implementing mindfulness in the curriculum helps children to become lifelong learners, increase development of healthy emotional regulations, and adapt to changing classroom demands.

#### **1.3.4 Risk Assessment**

At Endeavor Montessori, we help children learn how to assess risk through recognition, evaluation and management. We do this by providing children with an outdoor learning environment and what is known as a Maker Space.

In our outdoor learning space, children can navigate dynamic but safe terrain. This gives them opportunities, with the support of adults and peers, to recognize, evaluate and safely manage developmentally appropriate risks. Children figure out answers to questions like, "What will happen if I jump from this height?" and "Can I balance across this beam?" When children take developmentally appropriate risks, they learn resiliency. As a result, they learn to adjust their approach to the risk and find success when they try again.

Our Maker Space is an exciting environment where children can use real tools. Each tool is introduced by the teacher. With support, children are invited to recognize the risks in using each tool, the severity of potential injury and, importantly, how to manage such risk by using the tools safely. Children also learn about protective gear and safety procedures within the space.

To continue this learning experience with their parents outside the classroom, we also offer guides with written tips on healthy "risky play" to further teach children important safety rules.

#### **1.4 TEACHING CHILDREN TO HAVE SENSE OF CONTROL**

The sense exercises constitute a species of auto-education, which, if these exercises be many times repeated, leads to a perfecting of the child's psycho-sensory processes. ~ Maria Montessori.

With ample opportunity for hands-on learning and freedom of movement throughout the day, the Montessori environment provides a safe, nurturing place for children to develop their

senses. Additionally, Montessori developed the Sensorial Activities to develop and heighten the awareness of the child's senses. Through repetition, the Montessori child is able to differentiate between the slightest differences and variations in the world around him. The Montessori Sensorial exercises isolate one specific sense at a time, maximizing its refinement.

- ❖ Visual Sense – The child learns to perceive differences in size, form, and color.
  - Montessori materials: the Pink Tower, Brown Prisms, Red Rods, Knobbed and Knobless Cylinders, Geometric Solids and the Geometric Cabinet
- ❖ Chromatic Sense – The child learns to perceive differences between primary and secondary, as well as the various gradations of each.
  - Montessori materials: Color tablets
- ❖ Stereognostic Sense - The child learns through his hands to perceive size and shape of objects.
  - Materials: Activities are conducted with the eyes closed.
- ❖ Tactile Sense – The child learns to perceive her world through touch.
  - Montessori materials: Sandpaper tablets, Fabric swatches
- ❖ Thermic Sense – The child learns to differentiate temperature by touch.
  - Montessori materials: Thermic tablets
- ❖ Baric Sense – The child learns to differentiate the weight of objects.
  - Montessori materials & activities: Baric tablets, moving child-sized furniture around the room
- ❖ Auditory Sense – The child learns to differentiate the sounds of her world.
  - Activities: The Silence Game.
- ❖ Olfactory Sense – The child learns to differentiate the smells of her world.
  - Montessori materials: Scent bottles
- ❖ Gustatory Sense – The child learns to differentiate the tastes of her world.
  - Activities: Food Preparation, food tasting

Children with SPD do best with a predictable routine. They like to know “what happens next”. Transitions are difficult if they are not adequately prepared ahead of time. They need a clear sense of order. All of these needs are clearly met within the Montessori environment. Materials are kept in the same order on the same shelves. Activities are set up in a left-to-right progression. While they are free to choose their work for the day, there is a certain routine to the

day: they greet the teacher and enter the classroom; they put away their coat; they get out a work; there is a three-hour work cycle; they may eat a snack when they are hungry; they have group time; they play outside; and they are dismissed to go home. There is a quiet underlying structure which supports their freedom to choose work and move about the Montessori classroom.

The Montessori teacher is a carefully trained observer who thoroughly constructs and prepares the environment and Montessori lessons to meet the needs of all children.

## **1.5 Freedom control**

Freedom of choice is fundamental to the Montessori approach. This is because choice allows children to discover their needs, interests and abilities. Furthermore, freedom of choice encourages children to be engaged in their learning, and thus discover the outcome of the activity.

### **1.5.1 Types of freedom in the Montessori environment**

#### **Freedom to move**

Within the Montessori classroom, children are free to move around the room, and move from one activity to the next. Children who move around the room are more likely to choose purposeful work when they have fulfilled their need for activity. In consequence, by allowing freedom of movement, children learn to explore their environment; and therefore discover their interests.

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#### **Freedom of time**

Freedom of time allows children to work with the same material for as long as they like. In effect, this encourages children to learn at their own pace, develop the skills of concentration, and learn patience to wait their turn.

#### **Freedom to repeat**

The three-hour work cycle gives students the opportunity to work with materials and achieve success through practice. Furthermore, through repetition, children learn to self-correct and problem solve.

### **Freedom to communicate**

Montessori encourages communication in the classroom. Children learn to discuss activities, problem solve, and develop their social skills.

### **Freedom to make mistakes**

Furthermore, the design of the Montessori materials encourages children to discover the outcome of the activity by themselves. Each material is designed with a visual control of error. This guides the child to understand the outcome of the activity through hands-on learning experiences.

## **1.6 FREE DECISION MAKING-IMPROVING THE SKILL**

The classroom environment offers a level of freedom. This has many purposes. The untrained eye could therefore mistakenly interpret the Montessori Method as a “laissez fair” method. However, the freedom offered always has built-in boundaries. It reflects real life, in which we can make our own decisions, as long as it does not put others at a disadvantage.

The classroom offers materials, activities and lessons related to the development of all characteristics of that age range. It is what we call a prepared, well thought-through environment for a specific level of development. Within this, children have a certain freedom to choose what they do, with whom, and for how long they do it. At the same time, boundaries are set in terms of the variety of work and that the work is done in a productive manner which is not disruptive to other’s work. As they go along during the day several decisions and choices need to be made.

Problem solving and decision-making processes are made in the neo cortex part of the brain. This is the area where logical thinking evolves. It involves both the left and right side of the brain. The left side is responsible for analysis and synthesis and the right side housing the creative processes. Allowing stimulation to both sides of the brain from an early age, stimulates higher brain functioning and integration of the two sides.

The development of logical thinking requires a lot of experiences and practice. Together with the emotional awareness of having a level of control in one’s own life gives the development a great boost!

## **1.7 SENSITIZE IN WORK- NATURE OF WORK AND TIME BOUND WORK.**

Maria Montessori recognized and categorized eleven basic sensitive periods of development:

- ❖ Movement
- ❖ Math patterns



- ❖ Emotional control
- ❖ Order
- ❖ Interest in small objects
- ❖ Vocabulary
- ❖ Sensations
- ❖ Letter shapes and sounds
- ❖ Music
- ❖ Writing
- ❖ Reading

**Movement:** Children are born with limited control of movement, but gain rapidly in areas of both gross and fine motor control. As they learn to use their bodies, children are also developing cognitive abilities.

**Math Patterns:** Incredible as it may seem, babies are born with mathematical minds. Montessori discovered that babies come into this world naturally hardwired to learn mathematics.

**Emotional Control:** Babies learn about relationships, communication, and emotional control from the moment they are born.

**Need for Order:** Very young children (6 months to 3 years) have an innate need for order. It is a deep psychological need. Many parents don't realize it is there, and with good reason. Certainly most of us parents have watched our little ones behaving in ways that seem anything but orderly. But Montessorians have proven, again and again, that once the standard is set, the child's internal desire for order is activated. Also, some of the unruly tantrums we witness are actually the result of the child's sense of order being disrupted.

**Interest in Small Objects:** Children between one and four years old are experiencing an intense sensitive period for small objects. This interest will ultimately lead to the development of fine motor control and the pincer grasp. These are fundamentals for writing and many other important skills.

**Vocabulary:** Children come into this world hard-wired for learning language. This inborn tendency makes the acquisition of language especially easy for children under six years old.

**Special Epoch for Sensation:** Children learn more easily and effectively through hands-on, physical sensation than by just watching or listening to a lesson. This is due to the sensitive period Montessori called the "special epoch for sensation."

**Letter shapes and sounds.** Children also become very sensitive to and interested in letter shapes and sounds. Between the ages of two and a half and five years, children are drawn to activities such as tracing textured (sandpaper) letters with their fingers and correlating the sound of the letter with its shape.

**Music:** Around age three, children experience a sensitive period for learning rhythm, pitch, melody, and more. Music develops the brain, leading to academic, social, and emotional growth.

**Writing and Reading:** Early literacy development is about the preparation of the child's mind. Young children are open to the right information at the right time. When children are given lessons, materials, and activities as they are ready for them, learning to read is a natural, continuous progression. This is one of the advantages of the Montessori Method. In the Montessori prepared environment, children choose from appropriate materials based on their own interests and readiness.

## **1.8 LET US SUM UP**

We have come to understand that Free Learning and Health. Montessori shares many elements of free learning, including overall structure, the use of small objects for learning, individualized lessons, free choice, peer involvement, fun, and lack of extrinsic rewards. It differs by having a specific set of materials, less free choice in interacting with materials, in calling children's activity "work," and, especially, in lacking any pretend play.

## **1.9 UNIT - END EXERCISES**

1. Define Free Learning.
2. How to teach children a sense of control.
3. Definition, Meaning and Scope of Free Learning and Health of Montessori Education.
4. How to improving the children's health and wellbeing.

## **1.10 SUGGESTED READINGS**

- Kramer, Rita. 1976. Maria Montessori: A Biography
- Renninger, K. Ann, Suzanne Hidi, and Andreas Krapp, eds. 1992. The Role of Interest in Learning and Development.
- Zilversmit, Arthur. 1993. Changing Schools: Progressive Education Theory and Practice, 1930–1960

## **UNIT II**

### **CONGENIAL LEARNING ENVIRONMENT**

#### **Structure**

- 2.0 Introduction
- 2.1 Objectives
- 2.2 Learning environment for Montessori Education;
- 2.3 Effective learning in congenial atmosphere
- 2.4 Environment promotes development on child
- 2.5 organized classroom
- 2.6 Physical Environment (layout)
- 2.7 Conceptual progressive learning (Effective use of material progress)
- 2.8 Let us sum up
- 2.9 Unit - End Exercises
- 2.10 Suggested Readings

#### **2.0 INTRODUCTION**

A congenial classroom is a one where all students are welcome, all students are seen and given importance and all are known. The teachers make efforts to see their students more than as academic vessels. They interact with students about the things students care about, to notice student's interests and talk about their life.

#### **2.1 OBJECTIVES**

After going through this unit you will be able to:

- Discuss the Learning environment for Montessori Education
- Explain the Effective learning in congenial atmosphere
- Discuss the Environment promotes development on child
- List the Conceptual progressive learning

#### **2.2 LEARNING ENVIRONMENT FOR MONTESSORI EDUCATION**

Montessori classrooms are peaceful, happy places designed to meet the developmental needs of each child in every stage of life. They contain many places for children to learn and play, in many different ways: by themselves, in pairs, in small groups, in large groups, inside, outside, at tables, on the floor. All items in the environment are scaled to the child's size,

including furniture, shelves, utensils, dishware, cleaning implements and the Montessori materials themselves. There is no focal center to the classroom; this reflects that the teacher is not the focus of the children's attention, but that they are all one community together. Bright and attractive colors, natural materials, fascinating cultural objects and interesting pictures on the wall all offer the children complex sensory and intellectual experiences. When children first enter a Montessori environment, there is an immediate and touching moment when they realize that this place is for them.

In Montessori classrooms, children are taught how to regulate their own social interactions. Through fun role-playing activities and appropriate modeling, the teacher demonstrates the best way to respond to arguments or new situations, giving the child the ability to act confidently and pro-socially when the actual problem arises. The result is a self-regulating classroom, in which natural social tensions are resolved mostly by the children themselves.

Children move freely throughout the environment, choosing activities that interest them, or working with the teacher, individually, or in small groups. Their movement is unrestricted by the teacher unless it endangers themselves, other people, or their surroundings. Outdoor environments are important in Montessori schools, and offer opportunities to engage with the natural world.

**Guiding Principles:** The guiding principles of Montessori education are the same across all age levels, and are grounded in over one hundred years of work with children around the world.

### **Respect**

Maria Montessori profoundly respected children and the developmental powers that drive them to seek certain experiences. Montessori education reframes the adult/child relationship to place the child at the center of his own learning. In Montessori classrooms, teachers respect children as separate and unique individuals. They guide children to respect the people and objects in their environment, and as the child grows older, to respect and understand the connectedness between all living and non-living things, leading to the adolescent's profound awareness of the complex web of human existence.

### **Prepared Environment**

Children's needs change as they move through stages of development. At each level of Montessori education, this difference is honored through the preparation of the classroom

environment. The environment is prepared in every way for optimal development: physically, cognitively, socially and emotionally. By aligning the activities in the environment with what each child needs at any moment, Montessori prepared environments liberate children's energy for growth and learning.

### **Hands-on Learning**

Montessori classrooms are interactive environments in which hands-on exploration is not only encouraged, it is necessary. By using the mind, the body, and the senses, learning becomes an activity that engages the whole self. Any parent will agree that children do; Montessori environments follow this natural inclination of children towards activity by offering an appropriate variety of objects and activities for meaningful engagement.

### **Discovery**

One of the most profound differences between Montessori education and conventional education is that, in Montessori, children are given the experience of discovering the answer for themselves. This leads to a much deeper learning experience, and creates a lifelong love of learning as a self-directed process of problem-solving and discovery.

### **A Montessori-Trained Adult**

The trained Montessori teacher links the child to activities and experiences in the prepared environment. Specialized training results in a deep knowledge of child development, the purposes and use of each activity, and an understanding of how to foster and maintain social harmony in the classroom. Learn more about Montessori teacher training at Montessori Northwest.

### **Imagination**

Montessori classrooms support the development of imagination and creativity at every stage of learning. The open-ended activities allow children to explore new ideas and relationships, providing a foundation for self-expression and innovation. In the early years, the building blocks of imagination are firmly established through sensory exploration of the world, launching both imagination and creative self-expression.

### **Freedom of choice**

Maria Montessori recognized that when allowed freedom of choice within clear, firm and reasonable boundaries, children act in positive ways that further their development. Freedom is frequently misunderstood, and many people take it to mean that children can do whatever they

want. Montessori believed that freedom without boundaries was abandonment. In Montessori classrooms, expectations are clear, and children experience the natural and logical consequences of their choices. This freedom within limits allows for the natural development of self-regulation within the society of the classroom, as well as mirroring behaviors expected by society in general.

### **Independence**

From the moment of birth onwards, humans strive towards independence. Children feel this need very strongly; they want to do things for themselves, and to participate in the world around them. In Montessori classrooms, this natural drive towards independence is fostered through practical, social and intellectual experiences. The child becomes an active agent in her own education, saying, “Help me to do it myself”. We honor this by helping children move to increasingly higher levels of independence and self-reliance.

### **Parent Resources**

Montessori’s goals for children are often in alignment with a parent’s own goals for their children: that children respect and care for the people and things around them, have fun while they learn, and take responsibility for their actions.

## **2.2.1 CHILD DEVELOPMENT AND MONTESSORI**

School should offer children more than just academic skills. It should help them grow into confident, independent, caring and self-motivated people. The goal of Montessori education is to develop the whole person; someone who is more than the sum of their test scores.

Equally important to the Montessori experience is the growth of the child’s character. Montessori teachers strive to engender in the child a sense of responsibility and the connectedness of people and things. Children learn that their choices have consequences, not only in their immediate interpersonal relationships, but also in the world at large. By allowing safe consequences to flow freely from the child’s choice, he learns to exert control over himself to limit negative results and promote positive ones. This development of executive function, most particularly self-regulation, is at the core of the child’s drive towards confidence and independence.

In Montessori classrooms, academic skills are integrated into the natural life of the classroom. Through hands-on play, the most basic foundations of mathematics and literacy are introduced through games, activities, and with special materials that appeal to children. Contrary

to many adults' schooling experiences, children in Montessori schools enjoy math, reading and writing, and enthusiastically look forward to their next lesson. This sets up a love of learning that the child will carry with her throughout life.

Understanding children's developmental needs is important in creating positive parent/child relationships. Children, especially very young ones, are intensely driven by their developmental needs, which can sometimes clash with the needs of parents and caregivers. By understanding the child's drive towards independence, we learn to offer her the time and skills she needs to complete the task herself. The intense effort she puts into small, repetitive tasks is deeply satisfying, and the end result gives her confidence and comfort in her skills. If she is not allowed to work through the task to completion, the child may react strongly. This kind of opposition, originated in the conflicting needs of the adult and the child, highlights one of the main obstacles to a harmonious relationship between adults and children.

One of the key tenets of Montessori theory is that this harmonious relationship can be achieved through understanding why children act the way they do, and by patiently offering them experiences that fulfill their deep, inner developmental drives. The entire Montessori environment is designed to meet these drives and satisfy them through the child's own activity. In Montessori schools, children have fun while they learn, respect and care for the people and things around them, and take responsibility for their actions. This is true preparation for real life.

### **2.3 EFFECTIVE LEARNING IN CONGENIAL ATMOSPHERE**



One of the first things you'll notice about a Montessori classroom is its welcoming, orderly and child-friendly atmosphere and décor. Every piece of furniture, activity area, and

aesthetic detail is well designed and well placed for a child's easy access, convenience and enjoyment.

Dr. Maria Montessori, founder of the Montessori child development and education more than 100 years ago, believed that children flourish in a calm, neat and natural environment where they can freely explore and engage in understanding and learning about the world around them. That's why you'll find these top ten features in a Montessori classroom:

- **Child-friendly classroom design** - All furniture, activity areas, and fixtures are child-sized and within easy reach and view to engage and accommodate children comfortably.
- **Multiple activity areas** - Children are encouraged to pursue their own, individual activities at their own pace. While some children may be independently exploring math exercises, others may be working together collaboratively on a reading project.
- **Freedom to learn**- Children are empowered to discover and explore the activities that interest them the most and spend as much time on that activity as desired. This freedom and focus fosters self-discipline, as well as creativity, problem-solving skills, and a lifelong appreciation for learning.
- **Observant teachers** - Unlike traditional classrooms where the teacher is at the center of the classroom giving instruction, Montessori teachers are specially trained "observers" helping to guide children as they pursue activities independently. Each child is at the center of the Montessori classroom. The teacher's role is only to facilitate the learning process and experience for each child.
- **Multi-age classmates** - Children are assembled in three-year age groups to help encourage relationship-building, trust, and mutually beneficial learning experiences. Younger children learn from older ones who act as role models, and older students take the responsibility to help mentor the younger ones.
- **Caring, compassionate community** - In a supportive, collaborative classroom environment, children learn self-awareness, self-discipline, as well as kindness and respect for others. Developing the social and emotional well-being of children is just as important as intellectual and academic development.
- **Engaging Montessori materials and lessons** - The Montessori approach encourages "hands-on learning." Your child learns by doing for themselves. This teaches valuable



lessons in self-reliance and builds self-esteem. Children quickly become proud of their achievements and strive to do more.

- **Wonders of nature** - A Montessori classroom is often outfitted with plants and objects of nature to help children gain an awareness and appreciation of the environment. Montessori was a proponent of experiential learning and respect for all living things. Exploring nature provides opportunities for sensorial experiences, a key feature of Montessori learning. Dr. Montessori believed in supporting the whole child—body, mind and soul.
- **Purposeful work** - Children participate in necessary tasks to maintain the order of the classroom, teaching life-long lessons of personal responsibility. From washing dishes and putting away toys to watering plants and sweeping floors, children learn to take responsibility for their own possessions and live in harmony with others.
- **Peaceful conflict resolution** - Children are taught to be respectful and show empathy for each other. By listening to one another and taking time out when problems occur, students learn to find solutions and resolve conflicts more readily.

At Apple Montessori Schools, we begin at an early age to help children develop skills and attitudes that will prove instrumental for future success in life. Research has shown that children of Montessori schools produce more mature, creative and socially adept children, out-performing those given a traditional education.

## **2.4 ENVIRONMENT PROMOTES DEVELOPMENT ON CHILD**

“The principal goal of education in schools should be creating men and women who are capable of doing new things, not simply repeating what other generations have done.” – Jean Piaget

The Montessori classroom is a home away from home, a happy place full of friends where you can be yourself. It is a place full of interesting things to do, but also a place where you can take time out and just be quiet if you want to. It is somewhere where you can grow up knowing that you belong and that you are special.

### **Careful preparation**

The layout of the classroom encourages exploration, communication and the development of relationships on all levels. Everything reflects a dedication to quality, beauty and to the children’s abilities to do things for themselves. Montessori saw that careful preparation of the environment is an essential ingredient for the successful development of children. She

realized that the child relies completely on the environment for the sensorial impressions through which he or she gains a sense of the world in which he or she lives. Montessori therefore paid a great deal of attention to the way in which her schoolrooms were laid out. She wanted the classroom to be a happy, friendly place where children felt at home, where they knew where everything was and where they didn't always have to rely on adults to help them.



### **Think child-sized**

Everything in a Montessori classroom is made to be easily accessible to the children. Montessori was the first educator to produce child-sized tables and chairs and to think about the fact that children need to have cupboards and shelves at their own height. She wanted the children to feel that the schoolroom belonged to them rather than the teachers. She knew that order is very important to children and she therefore ensured that everything had its place and that all materials were kept as neatly as possible. She created materials that she saw the children were drawn to and she removed those items in which they showed no interest. She tried to ensure that the materials provided met the interests of the children. It was the children who led her development of the materials and the children who showed her how the environment should be prepared.

### **Life skills**

Montessori saw that very young children are frequently frustrated in their attempts to do things for themselves and that what they need is to have specific exercises, as closely linked to real life as possible, that allow them to master the tasks that they see going on around them in everyday life. She also saw that, unlike the adults in their lives, the children are not interested in achieving end results as quickly as possible, but are far more interested in the learning processes.

As a result they will happily repeat exercises again and again until they feel satisfied. Practical life activities are therefore an important part of the Montessori environment. The young child is attracted to activities that he sees going on around him and that give him independence and control of his own life. She therefore introduced into her classrooms materials and exercises that allow children the maximum possible opportunity to learn how to both look after themselves and their environment. In the practical life area you will see things such as special frames to help children learn to do up and undo clothes, lots of spooning and pouring exercises, stirring, whisking and grating trays, cutting and threading activities and many other activities that children see going on around them at home. Practical life also includes helping children do other important tasks such as opening and closing doors, carrying trays and chairs, washing and drying hands, caring for books and blowing noses.



### **The sensorial materials**

The need for order, exactness, self-correction and quiet reflection are all qualities that Montessori saw are needed for children to develop as they should. When she saw that children are particularly drawn to certain activities she concentrated on developing materials that would extend that interest. She carefully took each of the senses and thought how best she could help the children to clarify and expand their existing experiences. By isolating specific qualities in the materials and by grading each set in ever-refined series, she was able to give the children the ability to increasingly refine each of their senses. Many of the exercises in this area are also indirect preparations for later mathematics and language work as they enable the child to order, classify, seriate and describe sensory impressions in relation to length, width, temperature, mass and colour.

## **Mathematics**

Montessori believed that children have mathematical minds and she revolutionised the way in which mathematics is taught. She developed a wonderful set of materials, many of which have now been copied by educators throughout the world. The mathematical concept is presented firstly in a very concrete form followed by the abstract written version. The materials for mathematics introduce the concept of quantity and the symbols 1 through to 10. Then, using a variety of beads and symbol cards, the child becomes familiar with the numbers as a decimal system by means including concrete experiences with the operation of addition, subtraction, multiplication and division. These operations not only teach the child to calculate, but they provide a deep understanding of how numbers function.



## **Language**

Montessori was a great believer in indirect preparation. By this, we mean that she found clever ways in which children can learn how to do things without even realizing that that is what they are doing. For example, she created sets of metal insets that children use for drawing but that actually help form the fine motor skills for subsequent writing. Many of the practical life and sensorial exercises were designed with this in mind. When the child is ready, we begin to teach the phonetic sounds of the letters; then we move on to word building and recognition, and then book reading. She found that writing comes as part of the child's natural desire to express his or her new knowledge and nearly always precedes reading. One of the most wonderful times for children and teachers is when the children share the excitement of finding that they can put their thoughts down on paper and there is a subsequent explosion into emergent writing.

## **Cultural studies**

Montessori saw that young children were full of curiosity and loved exploring new things for themselves. She also saw that they wanted to explore things in increasingly complex ways. When she experimented with what they might be interested in she was astonished just how much they wanted to know and how much they were able to remember. She therefore tried to find ways to help them understand the world beyond their own environments. She developed a wide

range of beautiful materials that allowed the children to gain an appreciation of biology, geography, simple science and history. Each of these areas then allowed the children to explore and experiment with concepts such as metamorphosis, life cycles, land formations, the planets and time lines. As in all other areas of her work she was careful to let the children lead her in their interests and she was surprised to find that they very easily learnt not only the simple, but also the technical names of the new things that they were introduced to. In fact, Montessori children frequently astonish adults with their in-depth knowledge of the subjects they are studying.



### **Art and creativity**

Montessori felt that it is very important for children to be allowed to express themselves freely. She was aware, however, that they are very often frustrated by the fine motor skills they need for such things as cutting and gluing. She therefore developed many indirect activities that help children develop the necessary abilities. The Montessori environment is full of opportunities to experiment with different and exciting materials. Whether involved in painting, singing, playing instruments or dancing, children are allowed to be individuals, free to express their feelings and emotions and free to enjoy the rich worlds of movement, sound, colour and sensation.

### **Imagination**

Montessori schools tend to offer the children activities that are based on real activities of the everyday world, because Montessori felt that very young children need such experiences. In a Montessori school, therefore, you are much more likely to see children actually washing, cleaning and cooking rather than pretending to do these activities.



## **Outdoors**

Being outdoors is very important. Children develop gross motor skills as they climb, jump and swing, and also social skills as they take turns on equipment and play hide and seek. Montessori believed strongly that children should be in touch with the substance of their world, encouraging work with clay, gardening and growing activities, and even building little houses. Contrary to the belief that a sandpit has no place in a Montessori nursery, it has been suggested that Maria Montessori invented the idea.

## **Social skills**

Children aren't born with an innate knowledge of why we shake hands, or kiss, or rub noses depending on our culture and in the Montessori classroom they learn appropriate greetings. As they become aware of other cultures they are encouraged to celebrate differences and value them equally. During circle time children are shown how to move quietly and carefully around the classroom, push in chairs, wait patiently before politely gaining someone's attention and are reminded how important it is to allow others to work undisturbed. These ground rules in the classroom give every child total security. Children also learn to notice if somebody needs help and that nobody is too small to be useful.



### **A loving community**

Above all, a Montessori environment is one where adults and children care for one other and aren't afraid to show it. It is somewhere where you can learn as much as possible about all the things that interest you without being scared about the things that don't. It is where you can be yourself and can learn to really love learning.

### **Teachers**

Montessori teachers are frequently referred to as directresses because it is a better summing up of what they do. They direct the child towards learning opportunities rather than teach. The staff in a Montessori school should be calm and unhurried and should move around the room discreetly and quietly. They should be responsive to the needs of individual children who should not have to wait until they become bored or upset before they get attention, but vigilance is maintained in a low-key way so the children do not feel as if they are being policed.

The teachers should never shout, never lose their tempers, never smack, shake or push a child or even speak crossly. They should be pleasant and polite, firm without anger and be able to deal with a misdemeanor with sympathy and assistance rather than with punishment. All children should be shown respect, never humiliated or laughed at, and their remarks should be listened to seriously and answered thoughtfully and courteously.

## **2.5 ORGANIZED CLASSROOM**

How the organization of the Montessori environment leads to greater learning



If the teacher has the ability to organize sincere respect for and interest in children and knowledge, there is no limit to the possibilities for a meaningful education in a Montessori elementary classroom.

In her essential handbook, *Montessori Today*, Paula Polk Lillard says organization is the key to being a successful Montessori elementary teacher. That and respect for children. She comes to this conclusion after in-depth observation in an elementary environment where, as Dr. Maria Montessori directed, the teacher is in the background. The children and their work are, and should be, front and center.

As an elementary Montessori teacher, I observed some profound differences between conventional students and Montessori students. Usually taken for granted, these differences were usually brought to my attention when we had a new student enter the classroom. Looking through a non-Montessori child's eyes, my classroom probably seemed very chaotic at first. Not noisy — never that — and not out of control. But rather, as Lillard states, a “veritable beehive of activity.” (Lillard, 1996)

In the Montessori classroom, the children take control of their own learning. They arrive early in the morning, hang up their coats, put away their lunches, and get straight to work. They may stop to say hello to a friend or two, but they quickly settle into their morning work cycle, without having to be told what to work on or when to start. In fact, it isn't unusual for elementary students to ask for lessons before the day has officially started.



## Designing your schedule for the child's success



When I first began teaching in the Montessori elementary environment, I tried to hold a morning circle time to take attendance and help outline our day. I was soon met with resistance; the children just wanted to get to work. Having a morning circle interrupted their natural inclination to work and learn. Bringing them together for circle time was for my convenience, not theirs. I soon realized that they worked better without the interruption, and I removed this from my morning routine. Instead, we came together right before lunch to discuss any issues and questions or do a little quick planning together.

This same busy pace could be seen right up until it was time to go home. Then, they would quickly and efficiently tidy up the classroom and get ready for dismissal. Unfinished work was neatly labeled with the child's name tag and left in place for the next day, whether it was on a table or on a floor mat. No one disturbed it; even the custodians knew to vacuum around work left on the floor. This sense of on-going work helps children know there is no rush to finish. Learning doesn't follow a 9 a.m. to 3 p.m. time frame. It is continuous. Some learning is big and takes a tremendous amount of time and effort. Other learning is shorter and can easily be put away. Long or short, neat or messy, learning is happening on all levels at individual paces throughout the day.

### **Planning to support the child's learning**

Organizational planning also looks different in the Montessori elementary environment. Lillard tells us that the Montessori teacher "has to resist the temptation to create her own curriculum on topics that capture her attention...Her personal interests and knowledge are of little use to the children. She serves as a catalyst to the children's explorations, not as an authority on specific subject matter." (Lillard, 1996) At first glance, the Montessori classroom

looks full of learning and didactic materials. This is especially true in the areas of math and language. But the elementary cultural shelves consist of nothing more than timelines, impressionistic charts, maps, and nomenclature cards.

I have heard parent's voice concerns over the lack of science materials or history texts on the shelves. However, we could never put enough materials on the shelves to satisfy the child's own natural curiosity. Montessori cultural materials are not teaching tools like textbooks. Like the teacher, they serve as an introduction or catalyst to further learning and research. They are merely a place to start, not a means to an end. They call the child to pull them off the shelves to use, and in their simplicity, they spur the imagination so that children are encouraged to seek out more information on their own.

The teacher must understand this, have the materials available to the child, and be organized enough to know that the materials alone will drive learning. By having the materials close at hand, the teacher is ever ready to present lessons and encourage further study. Follow-up work is not given in the form of formal assignments but as suggestions written in a journal after a lesson.

If children are truly not sure what to do next, they can refer to their journals for ideas and motivation.



True organization is being able to keep track of student interests and progress. I did this every Friday afternoon after lunch. I left my assistant in charge of helping students if necessary, and I found a quiet corner. There I met with each child individually to discuss what they had

worked on during the week as well as what their plans were for the following week. Having 35 children in class meant I did not meet with every child every week. I usually divided the class in half, meeting with one half one week and the other half the next. If a child truly needed to meet with me, I would make room in the schedule for them. This long-term strategic planning helped the children take control and responsibility for their own learning, a great time management and organizational skill that they will carry forward into adult life.

In all of this, the teacher is not the expert. Our job is not as teacher but as guide. As Montessori says, this is a help to life. We teach children to rely not on the adult to lead the way but on themselves to find the way.

## **2.6 PHYSICAL ENVIRONMENT (LAYOUT)**

### **Indoor and Outdoor Play Spaces**

Education is a natural process carried out by the human individual, and is acquired not by listening to The Prepared Environment At IMCH we have nine beautifully prepared classrooms catering for children 6 weeks to pre-prep (school entry age). The whole environment provides children with the freedom to follow their natural tendencies towards independence, exploration, co-operation, order, repetition, imagination and communication.

Our learning spaces are carefully planned and prepared to take full advantage of the self-motivation and unique learning abilities of all children. The building design, both indoors and outdoors, all the equipment and materials suit the needs of the children at each stage of their development. All our rooms are beautiful, ordering enticing and accessible to children.

Our physical environments have been planned with appropriate levels of challenge to encourage children to explore, experiment and take appropriate risks in their learning. Children are provided with many open-ended opportunities to engage and explore natural and man-made materials and educators carefully plan the environment and equipment to provide flexibility when responding to children's self-initiated play.



### **Wilderness Playground**

We have an extensive architecturally designed nature-based outdoor learning environment which contrasts with the existing more traditional style playground by including uneven surfaces, natural climbing areas, trails, native gardens, slopes, steps, small scaled spaces and numerous opportunities for 'risky' play.



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### **1. Free-Choice Time**

Children need many opportunities to engage in play and to follow their interests. An easy and effective way to provide these opportunities in the preschool classroom is to give children free-choice time. Free-choice time is time during the school day in which children make their own choices about what activities they engage in. Typically, this involves children choosing to play at one or more interest areas in the classroom (see the Introduction lesson for more about interest areas). The teacher’s role during free-choice time is to make sure each child has the opportunity to pursue their interests and to make the most of these learning opportunities. This can involve monitoring the number of children at each interest area to ensure certain areas are not overwhelmed, and making yourself available to children to support their activities. Children learn best during free-choice time when teachers actively scaffold their learning (Chien et al., 2010).

According to research that has looked at preschool children’s behavior in different settings and activities throughout the school day, children are more involved in activities that allow them independence and the opportunity to make choices. For example, Vitiello et al. (2012) found children are more engaged with activities during free-choice time than during teacher-structured activities. This can likely be explained by the fact that children are more likely to remain interested and to keep working at an activity when they chose the activity in the first place, rather than the teacher choosing the activity for them. In free-choice time, preschoolers were also more engaged with their peers (Vitiello et al., 2012). Research tells us children who are more engaged in activities and with their peers early on do better in school when they are older.



A substantial portion of the day should be dedicated to free-choice time in the classroom because this time is especially important for preschoolers. In most programs that operate eight hours or more, this means at least 60 minutes (Cryer, Harms, & Riley, 2003) should be dedicated to free-choice activities. This amount of time is critical for preschool-age children to engage in lengthy play ideas. The goal is active engagement. The materials you provide and your interactions with children can help them become and stay engaged, and can help children reach learning goals in this more unstructured time.

## **2. Outdoor Time**

Like indoor free-choice time, outdoor time is also an important part of the preschool day. Outdoor time is similar to free-choice time as it often allows children to direct their own play and learning and to follow their interests. In addition, preschool children are highly engaged with activities and in play with other children during outdoor time (Vitiello et al., 2012). However, unlike free-choice time in the classroom, outdoor time allows for greater opportunities to strengthen large muscles and interact with the natural world. Research shows children who spend more time outdoors are more physically active and, therefore, less likely to suffer from health problems in the future (Hinkley, Crawford, Salmon, Okely, & Hesketh, 2008).



At least 60 minutes per day should be spent outdoors, weather permitting, for programs that operate eight hours or more (Cryer, Harms, & Riley, 2003). In full day programs, this amount of time should be spent outdoors in both the morning and the afternoon (Dodge et al., 2010). Outdoor time can take different forms. In some preschools, children may have access to an outdoor fixed playground area in which they can choose where and how to play. Children often are most physically active when they play with portable equipment such as balls and bicycles, regardless of whether or not they have access to fixed playgroup equipment. (Kreichauf et al., 2012). Teachers can provide these types of equipment, as well as other traditional outdoor toys like chalk and bubbles, and create outdoor interest areas for children to choose from.

Many of the same materials you provide indoors can be used to promote engagement outdoors as well. In addition to traditional outdoor toys like bikes, balls, and chalk, consider providing dramatic play props, sand and water tables, pencils and paper, a basket of books in the shade, and blocks or natural materials for building. Also consider bringing the class pet (like a rabbit) outdoors if appropriate. Doing these things will help children stay actively engaged and provide opportunities for extended learning.

### **3. Large-Group Activities**

Preschool children also benefit from large-group activities that are initiated by a teacher. These activities involve instruction or discussion focused on building children's academic and social skills. Many interesting things can happen during large-group time. This time provides an opportunity to read stories to the group, sing songs, discuss the daily schedule or calendar, and encourage children to share special events, welcome a guest visitor or new child and build

classroom community. Preschool teachers' instruction is often more effective in large-group settings than in other settings. (Cabell, DeCoster, LoCasale-Crouch, Hamre, &Pianta, 2013).



Research shows that teacher-guided, large-group time may be especially important for helping preschoolers develop early literacy skills. Large-group time can also help children strengthen their skills in paying attention and learning to control their behaviors (Dickinson &Porche, 2011). It's important to remember that teacher-directed, large-group times should be kept short. Young children learn best if group times are 15–20 minutes or less (Hemmeter, Ostrosky, Artman, & Kinder, 2008).

#### **4. Small-Group Activities**

Small-group activities offer a chance to focus on important learning goals in a personal setting. These types of activities are ideal for promoting children's active engagement. Wait time is reduced because fewer children are involved, and children get to spend more time actively manipulating materials. Small-group activities also allow children to interact with their peers combined with one-on-one attention from the teacher.



Unfortunately, small groups are not used as often as they could be in preschool classrooms (Cabell, DeCoster, LoCasale-Crouch, Hamre, &Pianta, 2013). However, there are



many ways teachers can use small-group activities to promote engagement and learning. Teachers may read a story during small groups, offer a science experiment, work on an art project, play a board game with children, or do any other activity that requires extra adult attention. Similar to large-group activities, small-group time should be kept to 15 minutes or less per group. Small groups are a perfect option to have available during center or free-choice time.



## 5. Transitions

Transitions are unavoidable in preschool classrooms. There are times during the day when children must stop one activity and start another, for example, cleaning up interest areas and lining up to go outside. Transitions are often a difficult part of the preschool day, and child engagement can be low during this time (Vitiello et al., 2012). Even though some transitions are necessary, teachers can do their best to minimize transitions and keep children engaged during transitions.

To minimize transitions, consider all of the activities in your day that require all children to do the same thing at the same time. First, ask yourself: Are all of these transition times necessary? For example, the importance of small-group time was mentioned above. But, this does not mean that small-group time needs to be a separate block of time in the preschool day. Instead, you could make children's free-choice time longer and include small-group activities as choices within the free-choice time period. That would allow you to eliminate the transition between free-choice time and small-group time.

## 6. Routines

Routines are an important part of the classroom day. Routines in preschool classrooms include things such as arrival time, bathroom time, cleanup time, naptime and departure time. Many routines, such as meals or group time, are necessary and helpful to building a consistent classroom community. Planning is the key to successful routines. Routines should match the

child's stage of development. For preschool children, this means that routines should support children's developing abilities to do things on their own but should not be too complicated for preschoolers to learn and remember.



Some children engage in these routines with no problems. Other children have a harder time. There are things you can do to help all children make the most of these daily routines. First, you need to think carefully about what you want children to do. Think of a routine like morning arrival. What exactly do you want children to do when they enter the room? For some teachers, the answer is: Come in quietly and get started. Unfortunately, this kind of answer doesn't give children much information. What does it mean to "get started?" Think about this sequence instead: Sign in, put coat in cubby, wash hands, and find a quiet activity in an open interest area. See how these details could help all children be more successful?

## **2.7 CONCEPTUAL PROGRESSIVE LEARNING (EFFECTIVE USE OF MATERIAL PROGRESS)**

### **The Use of Objects**

Direct instruction typically lacks any materials that children manipulate to learn. Teachers might illustrate a triangle on a blackboard, for example, but not employ a physical triangle. Such instruction is designed for learning through the eyes and ears, not through the hands. In contrast, playful learning typically involves objects with which children play to learn. Children learning shapes, for example, handle objects of different forms, perhaps tracing the forms with their fingers in addition to seeing them. In this way, playful learning embodies cognition. A wealth of evidence suggests that learning is enhanced when it is embodied across modalities (Barsalou et al. 2003; Lillard, 2005); and there are specific benefits when hands are involved (Beilock and Goldin-Meadow 2010; Lagnado and Sloman 2002; Sobel and Kushnir 2006; Wagner Cook, Kuangyi Yip, and Goldin-Meadow 2010). Using objects to engage children

in learning ensures manual involvement. In addition, objectbased learning is active rather than passive, and activity is also associated with better learning (Glenberg et al. 2004). Research on preschool programs in seven countries found that learning involving a variety of manipulable objects fosters cognitive development (Montie, Xiang, and Schweinhart 2006).

### **Interactive Lessons**

Michelene Chi suggests that the best learning comes from contexts that are not just active or constructive (2009), but also interactive. Conventional school lessons are sometimes interactive, sometimes not, depending how many questions. A Montessori student plays with the Wooden Cylinders to learn dimensional concepts she will later apply to studying mathematics.

A teacher asks. Playful learning often proves interactive when it is more guided and less interactive as it becomes freer. In guided play, the teacher tells or shows the children how to handle learning materials. In the lesson dealing with shapes, for example, a teacher extends the initial lesson by asking children to consider the ways in which all the triangles are alike, and through such questions, helps the children arrive at a definition of triangles. All the while, the children interact with the materials.

Montessori lessons are also interactive. Most Montessori lessons involve individuals or groups of two to six children, depending on the age of the children and how many in a class are ready for a particular lesson. Younger children are more apt to get one-on-one lessons. The teacher typically determines the children's readiness by watching their interactions with materials they learned about in prior lessons. When the teacher sees that children have mastered one lesson in the sequence, the teacher considers them ready to move on to the next. For most lessons, the teacher sits at a table or on a rug on the floor and shows children how to use the materials. The children take turns. A teacher might show children a sandpaper "b," for example, and demonstrate how to trace the letter while saying "Buh. Buh. Can you think of a word that starts with buh?" The children trace the letter, often first using the teacher's hand as a guide. Thus, Montessori lessons involve a great deal of interaction, as does more guided playful learning.

Freely Chosen In conventional school programs, teachers typically choose activities for children. The children have little say, although in some preschool settings "free choice" occurs during "stations" time, when children spend a set amount of time (e.g., seven minutes) at a "station" or table offering a particular activity and then move on to another station. With playful

learning, children's own interests drive the agenda. An adult provides the activities and objects and guides the children's engagement with the materials, but an aura of free choice pervades. Important to this aura in playful learning, no one forces children to engage if they choose not to do so. If children choose to engage in some way other than expected, the adult follows the children's lead and tries imperceptibly to return the youngsters to the learning agenda. Choice in Montessori education varies by level (Lillard 2005). Free choice exists at the macrolevel of classroom environment: most of the time,

### **Peers**

Conventional education calls for children to learn by sitting alone at desks and listening to a teacher. Although some conventional educational activities are social (like peer tutoring or group work), these tend to be exceptions. Playful learning can occur one-on-one with an adult or involve one or more peers. This is inherent in the definition of playful learning proposed by Hirsh-Pasek and her colleagues, a definition which includes two types of social free play—sociodramatic and rough and tumble. Montessori lessons can involve individuals or small groups. Apart from these lessons—which might typically take twenty minutes for each child—children usually may choose whether to work alone or with peers. At younger ages, many children prefer to work alone, but as they grow older (especially as they reach the elementary-school level), they often choose to work with peers, just as children do at different ages in natural settings (Hartup 1983). Both Montessori education and playful learning, then, accommodate peer interaction. Although in free play, playful learning might occur only with peers, in both the guided play and Montessori classes it occurs initially with a teacher and later with individuals or in small groups. In a Montessori classroom, for example, you will find long chains of glass beads that can be linked together to stretch across the entire floor space. The children use these bead chains for counting and then for skip counting (counting by fives, for example). A child might work with these chains alone, stretching the beads along the floor and then placing a numbered arrow every five beads. Or a child could work collaboratively with one or more other children. The point here is that playful learning and Montessori education resemble one another in allowing as much peer interaction as a child chooses.

### **No Extrinsic**

Rewards In conventional didactic instruction, teachers often use gold stars and grades to inspire children to behave well and to learn material. Behind these rewards lies a behaviorist

model of children and learning, perhaps because public schools became widely established in the early 1900s when behaviorism was popular among educators. In contrast, playful learning occurs for its own sake. Children are intrinsically motivated to play. In Montessori education as well, the intrinsic reward of learning is an end in itself. It was not always so: Montessori originally thought children needed rewards, and she offered them nice toys to play with after they successfully read words (Montessori [1912] 1965). But when she saw children cast aside the toys and request more words to read instead, Montessori came to believe that, under conditions of free choice, learning was its own reward. She then eliminated extrinsic rewards from the program.

## **Fun**

Many of us assume conventional school is no fun. Hence, people who see children out and about during school hours frequently say, “Aren’t you lucky you are not in school!” It is a time-honored reaction. A well-functioning Montessori classroom is full of deeply engaged children enjoying themselves, though the fact that they look like they are concentrating rather than, say, laughing while dancing sometimes gives the impression they are not having fun. Yet (as I describe later) children in Montessori programs seem to like school, even in middle school, when conventionally schooled children often come to strongly dislike classwork .

## **2.8 LET US SUM UP**

We have come to understand that Congenial Learning Environment for Montessori Education. Congenial classroom is a one where everybody has a role to play. Teachers can create a classroom environment that encourages cooperative experiential learning. There are opportunities for students to work with each other and discover how to work in respectful and meaningful ways when there are differences in thoughts and opinions.

## **2.9 UNIT - END EXERCISES**

1. How did you enhance the congenial atmosphere for effective learning in Montessori Education?
2. Write about Conceptual Progressive Learning in Montessori Education.
3. How to Environment promotes development on childin Montessori Education.
4. Discuss the Learning environment for Montessori Education.

## 2.10 SUGGESTED READINGS

- P. Ramsden, learning to teach in higher education, Routledge, London (1992)
- N.J. Entwistle, P. Ramsden, Understanding student learning, Croom Helm, London (1983)
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## **UNIT III**

### **LEARNING INTEREST**

#### **Structure**

- 3.0 Introduction
- 3.1 Objectives
- 3.2 Intrinsic motivation
- 3.3 Learner and learning interest
- 3.4 Children's rights and their feeling with strength and courage
- 3.5 Superficial learning and goal oriented test
- 3.6 Creating interest for better learning
- 3.7 Let us sum up
- 3.8 Unit - End Exercises
- 3.9 Suggested Readings

#### **3.0 INTRODUCTION**

Montessori education encourages children to engage in learning about things that are interesting to them. The activities, materials, and lessons in Montessori education have been developed to appeal to a child's interest. Maria Montessori spent years developing educational materials that appeal to interests of children. Such materials often correspond to interests that she observed were common to children at certain ages. After creating a material, she would observe how children interacted with it. Materials that did not capture a child's interest were revised or ultimately rejected. Lessons were also developed with care to appeal to the child.

#### **3.1 OBJECTIVES**

After going through this unit you will be able to:

- Discuss the learner and learning interest in Montessori Education.
- Explain the Children's rights and their feeling with strength and courage.
- Discuss the Superficial learning and goal oriented test.

#### **3.2 INTRINSIC MOTIVATION**

Children are born with an innate curiosity, a desire to learn and need to explore. That's what makes children the way they are and why they come up with never-ending streams of

questions about the world they are observing around them. That intrinsic motivation is the driving force behind a child's early development.



When a child is born, within the child there is an innate need to interact with the environment. Now imagine a school environment where choices are made based on the needs and wants that come from within the child. That is a Montessori education.

The Montessori environment is created specifically for a child to succeed. The Children's House is designed to encourage independence, coordination, concentration, and order which help to develop focus, attention span, and increases their desire to learn.

A Montessori education helps a child become independent, develop their own potential, build confidence, and make them a lifelong learner. With so much focus on independence in Montessori, it only makes sense that a child's motivation comes from within themselves, also known as intrinsic motivation. Too often children feel pressure to perform for their parents or their teachers.

As a Montessori guide, I want to encourage my students to love learning and become lifelong learners. I believe that when a child discovers their intrinsic motivation they will achieve a love for learning, which will, in turn, allow them to be lifelong learners. When a child comes to the realization that they enjoy learning, they seek out more knowledge, set goals, and are never satisfied.

Montessori education fosters a child's natural inclination to learn. As a Montessorian, I guide the child, rather than instruct the child. I link each student with activities that meet their interests, needs and developmental level. Allowing a child to be free from external expectations, allows them to set their own goals and aspirations.

The Montessori environment is set up to allow your child to succeed the moment they walk into the room. Everything is in its rightful place, clean, neat and organized. There are no



toys or distractions in the environment. The environment is organized and prepared with purposeful materials. The materials are beautiful and in good condition to draw the child to them.

The Montessori guide takes your child where they are, learns their interests, and guides them on their own educational path. The skills in Montessori build on each other. The guide observes the child and presents new materials that they are ready for, then when the child has mastered the material, it's time for the next material.

The Montessori materials are designed so the child can check their own work; this is called the control of error. This way the child checks their own work and they are motivated to correct any mistakes they have made. The control of error allows the child to determine if their work is right or wrong, without having a guide pass judgment on their work, allowing intrinsic motivation to be in control. The guide acknowledges what the child has achieved, the focus is on the process, not the end result.

When a child struggles to master a skill, the Montessori guide reminds the child that sometimes things are hard and we just need to keep trying. Traditional education focuses too often on the end result, while a Montessori education focuses on the process. Montessori encourages children to try new approaches, experiment, explore, and never give up.

Montessori helps children develop essential skills already within him or her to master the creative learning process throughout their life. The desire is already within your child. The Montessori Method of education helps your child discover the joy of learning.

### **3.3 LEARNER AND LEARNING INTEREST**

The love of learning is a powerful gift to give any child. And one of the greatest benefits of enrolling your child in an authentic Montessori classroom is the way it enriches your son or daughter's learning experience. The students who attend Primary Montessori Day School come out of our classes with more than skills and knowledge; they also develop a thirst for discovery that leads them to a lifetime of growth and success.



Our Montessori teachers use a rich curriculum and an engaging range of activities in the classroom to bring out the best in your son or daughter every day, in any area of study or interest that appeals to them. Here's a closer look at how the teaching style and approach at Primary Montessori equips your child for a lifetime of achievement.

### **Sparkling a Child's Interests**

A key tenet of Montessori education is that we encourage every child to pursue their interests. This helps them develop discipline and self-awareness as well as allowing their natural gifts and interests to rise to the surface.

While encouraging your child to choose their own learning activities, we also pay close attention to their interests and talents. We give them opportunities to do more of what they love, such as inviting them to:

- Write a song if they love music
- Write a story or a play about a person or place that has caught their interest
- Learn more about how Montessori provides a balanced approach to education.
- Guiding Them to New Interests

As appropriate, we guide your child to try out activities they may not have chosen on their own—activities we believe will spark their love of learning in a new way. For example: We may introduce a student to a counting game they have not yet tried, making it fun so they learn to appreciate numbers.

Lower elementary students meet with teachers daily to confer on the activities they will do that day.

Students and teachers share a dialogue by writing back and forth on daily study plans.

Guiding toward Discovery

Teacher guidance extends even to the materials and lessons available to students in our classrooms. After all, it doesn't serve your son or daughter to study something if they don't learn effectively.

Our Montessori materials are designed to make errors obvious to a child as they work with the materials.

For example: when a large peg can't fit into small holes, a puzzle won't be complete until the child matches the right size peg to the right size hole.

This type of “correction for error” makes it easy for children to learn from mistakes and be guided to the right solution, while still maintaining their sense of independence and self-direction.

### Practicing Independence

Children love to tackle activities they can do on their own - and giving them chances to do so helps them develop a sense of independence and competence. At Primary Montessori, our teachers encourage students to:

- Put away their own shoes, jackets, and book bags
- Help prepare and serve snacks
- Water classroom plants
- Feed birds and fish
- Use the copying machine
- Put away learning materials when done with them
- Developing Confidence and Enthusiasm

Joyful learning and interacting with the world are the result of great lessons. Our Montessori teachers know they play a key role in providing the hook between our classroom environments and your child’s active learning experience. To aid in this process, we’ll help spark joy in your son and daughter in all kinds of everyday activities:

- ❖ Young children get to play with activities such as dusting and stacking bowls, which encourages them to perform these activities joyfully at home.
- ❖ While studying math, students play stamp booklet games and are encouraged to write their own math problems.
- ❖ Cultural studies are made fun to spark your son or daughter’s interest in learning more about a culture’s music, art, and food.
- ❖ When your child expresses such interests, our teachers encourage them—letting them know exploration and growth are valuable.

### **Taking on Leadership Roles**

The earlier that children step into leadership roles, the earlier they learn how to work effectively in groups and appreciate their own inner voice. With teacher guidance, your son or daughter enjoys many leadership opportunities in our classrooms:

Older children assist younger children during arrival, dismissal, lunch, and other transition times.

- ❖ Children work independently and in groups to prepare and share snacks and lunches.
- ❖ Students are invited to help teachers by gathering supplies and caring for the classroom.
- ❖ Our students run the pizza club and assist with the uniform table
- ❖ Leadership activities are rotated from child to child so everyone can participate
- ❖ Kind Conversations and Gracious Interactions

As your child moves toward successes in the greater world, having the ability to be kind, considerate and gracious is essential. In our classes, our Montessori teachers model positive interactions and promote active practice in positive teamwork.

Teacher-student interactions - Montessori teachers provide positive, encouraging comments and invite self-evaluation, such as:

- “I noticed you working hard on that math activity.
- “Which part would you like my help with?
- “What do you think about your work?”

**Student-student interactions** - To encourage social graces and collaboration, children receive teacher guidance in how to approach teamwork and resolve conflicts. We:

Invite students early in the school year to discuss and share what they want the class to be like - “I want friends,” “I want to share my ideas,” etc. - and then use this discussion to guide the year’s activities.

Remind everyone to use their inside voices when talking.

Point out what works, such as, “Look how fun that activity is when everyone listens to each other.”

Have a “compliment circle” every afternoon so children can share what they enjoy about each other.

Encourage students to take the “talking stick” before talking so they actively practice sharing the conversation.

### **3.4 CHILDREN’S RIGHTS AND THEIR FEELING WITH STRENGTH AND COURAGE**

#### **1. Accepting individuality**

One of the best ways for a young child to develop a sense of confidence is to simply let the child be himself. Rather than trying to force your son or daughter to do things your way, encourage them as they pursue what interests them. A child with a strong sense of who they are as a person, including their passions and strengths, is more likely to be confident than a child who hasn’t developed a strong sense of themselves as individuals. In our classes, for example, students are invited to choose projects that spark their curiosity and creativity, to foster their sense of individuality.

#### **2. Making decisions**

It’s all too easy to tell a child what to do, but in doing so, we don’t give our child practice in the vital, lifelong skill of decision-making. Even young children can begin to learn the process of thinking through a decision and considering what makes a wise choice. Rather than just asking your son or daughter to clean their room or put away toys, for example, chat with them about why these things matter. Ask them what they think, and allow them to come up with answers. This models critical thinking skills, which every child needs to develop.

#### **3. Learning practical skills at a young age**

Parents are often tempted to do things for their preschool-aged child rather than giving the child a chance to practice new skills until they master them. But when you do tasks for your child instead of coaching them as they do it themselves, you rob them of the sense of competence. Montessori teachers coach young students in developing not just academic skills, but also practical skills like tying shoes, zipping up coats, and straightening up the classroom — all simple tasks that help children learn they can do things well with enough practice.

#### **4. Keeping up the encouragement**

An important element of confidence is a sense that we can pick ourselves back up when we fail, and try again. Failure is often a part of life, especially for preschool-aged children who are learning all sorts of new skills and facts for the first time. When we frame those failures for them in positive terms, it helps them to see that making mistakes and being imperfect are not the end of the world. Montessori classrooms are designed so that teachers can take time with

students one-on-one to offer encouragement, and older students can also offer encouragement and help to younger ones.

### **5. Acknowledging emotions**

Often, young children feel strong emotions that they don't even know how to name, much less channel. As parents and teachers, we can do much good for our preschoolers by acknowledging, accepting, and talking about emotions in a positive way. Rather than labeling an emotion as good or bad, or ignoring emotions that we don't like, we can encourage children with the truth - emotions come and go, and they don't have to be scary.

### **6. Maintaining boundaries**

Preschool aged children benefit greatly from clear, kindly but firmly enforced boundaries. Knowing what is acceptable and what isn't is important for them, and it enables them to make good choices and feel secure in what is often a confusing, overwhelming world of new information. At home, you can set rules and stick to them — with kindness, of course! In the classroom, we do the same, so children always feel confident that they know how to be a successful student.

### **7. Impacting their world**

From the time your child is very young, it's a good idea to help them develop a sense of their own ability to make a difference. Children who are given regular opportunities to help others not only develop a sense of confidence and control, but they also develop empathy — a key social skill that will aid them in the classroom, on the sports field, with family and friends, and later on, at work and other adult pursuits. Montessori classrooms teach even the youngest children to impact their world by encouraging them to help each other with tasks like preparing for lunchtime and cleaning up afterwards. It's simple, but it's effective.

### **3.5 SUPERFICIAL LEARNING AND GOAL ORIENTED TEST**

Montessori guides have four principle goals:

- ❖ to awaken the child's spirit and imagination; to encourage his normal desire for independence and high sense of self-esteem;
- ❖ to help him develop the kindness, courtesy, and self- discipline that will allow him to become a full member of society; and
- ❖ to help the child learn how to observe, question, and explore ideas independently.

Montessori teachers rarely present a lesson to more than a handful of children at one time, and they limit lessons to brief, efficient presentations. The goal is to give the children just enough to capture their attention and spark their interest, intriguing them enough that they will come back on their own to work with the materials. Lessons center on the most clear and simple information necessary for the children to do the work on their own: the name of the material, its place on the shelf, the ground-rules for its use, and some of the possibilities inherent within it. Montessori guides closely monitor their students' progress, keeping the level of challenge high. Because they normally work with each child for two or three years, guides get to know their students' strengths and weaknesses, interests, and anxieties extremely well. Montessori guides often use the children's interests to enrich the curriculum and provide alternate avenues for accomplishment and success.

### **Homework, Tests, and Grades**

Many parents have heard that Montessori schools do not believe in homework, grades, and tests. This is really a misunderstanding of Montessori's insights. Whenever students voluntarily decide to learn something, they tend to engage in their work with a passion and attention that few students will ever invest in tasks that have been assigned. This doesn't mean that they can do whatever they want academically, possibly electing to learn to read and possibly not. Montessori students have to live within a cultural context, which for us involves the mastery of skills and knowledge that we consider basic. Montessori gives students the opportunity to choose a large degree of what they investigate and learn, as well as the ability to set their own schedule during class time.

### **Competition**

In Montessori, students learn to collaborate with each other rather than mindlessly compete. Students discover their own innate abilities and develop a strong sense of independence, self-confidence, and self-discipline. In an atmosphere in which children learn at their own pace and compete only against themselves, they learn to not be afraid of making mistakes. They quickly find that few things in life come easily, and they can try again without fear of embarrassment. Children compete with each other every day both in class and on the playground. Montessori, herself an extraordinary student and a very high achiever, was never opposed to competition on principle. Her objection was to using competition to create an artificial motivation to get students to achieve. She argued that for an education to profoundly

touch a child's heart and mind, he must be learning because he is curious and interested, not simply to earn the highest grade in the class. Montessori allows competition to evolve naturally among children, without adult interference unless the children begin to show poor sportsmanship. The key is the child's voluntary decision to compete, rather than having it imposed on him by the school.

### **3.6 CREATING INTEREST FOR BETTER LEARNING**

Do you hope to ignite your young child's love of learning and lay the foundation for a fulfilling future? The Montessori approach to early childhood education will begin that process in a joyful, secure, and loving environment in which your young child will thrive.

The Early Childhood level, for children ages 2 ½ – 6, encourages preschoolers to explore and discover, to collaborate with classmates, and to take ownership of their education. The Montessori Method encourages self-directed learning that promotes self-confidence, independent thought and action, and critical thinking, while fostering social-emotional and intellectual growth.

Education for peace is a foundational component of Montessori education at all levels. At the Early Childhood level, the teaching of peace, social justice, and global citizenship is based on fostering respect for all people and living things, and helping children learn the tools for peaceful conflict resolution.

#### **The Early Childhood Environment**

In a Montessori Early Childhood classroom, highly trained teachers create a customized environment crafted to her unique abilities, interests, and learning style.

This approach to learning is “hands-on.” Dr. Maria Montessori believed (and modern science has affirmed) that moving and learning are inseparable. In the prepared classroom, children work with specially designed manipulative materials that invite exploration and engage the senses in the process of learning.

All learning activities support children in choosing meaningful and challenging work at their own interest and ability level. This child-directed engagement strengthens motivation, supports attention, and encourages responsibility.

Uninterrupted blocks of work time (typically 2+ hours in length) allow children to work at their own pace and fully immerse themselves in an activity without interruption. Your child's work cycle involves selecting an activity, performing it for as long it remains interesting,



cleaning up the activity and returning it to the shelf, and making another work choice. This cycle respects individual variations in the learning process, facilitates the development of coordination, concentration, independence, and a sense of order, while facilitating your child's assimilation of information.

### **A Welcoming Space**

A Montessori Early Childhood classroom feels more like a home than a school. You won't see desks, nor will a teacher stand at the front of the room delivering a lesson to the whole class. Instead, you'll see children happily working individually or in small groups, at tables or on the floor near small mats that delineate their own space.

Specially designed learning materials are displayed on open shelves, easily accessible to the children. Classrooms also include low sinks accessible to the children, child-sized furniture, cozy spaces for quiet reading, reachable shelves with work available for free choice, and child-sized kitchen utensils so the students can eat, prepare, and clean up their snack on their own. Teachers gently guide students to help maintain the organization and cleanliness of this environment to keep it orderly and attractive, and to help your child understand how to care for materials and clean up after themselves—skills you will be happy to observe carrying over in your home.

### **Kindergarteners the leadership**

During the first 2 years in an Early Childhood classroom, Montessori students look forward to their turn to be a leader. In their third year—often known as Kindergarten—children get their turn and take pride in being the oldest. They serve as role models for younger students; they demonstrate leadership and citizenship skills. They reinforce and consolidate their own learning by teaching concepts they have already mastered to their peers. In their Kindergarten year, they express confidence, develop self-esteem and self-sufficiency, and show responsibility.

Kindergarteners are introduced to progressively more advanced Montessori materials and sophisticated, fascinating lessons. And they experience an important period in which their previous learning from working with concrete Montessori materials begins to become permanent knowledge. A Montessori Kindergarten student sees and feels their personal growth as they watch others learn information they have mastered themselves.

Kindergarten is the culmination of the Early Childhood program. Children exhibit the independence, critical thinking, collaboration, and leadership that they have been practicing

during their previous years in the Early Childhood classroom, exercising them independently as they prepare to transition into an Elementary program.

### **Montessori Kindergarten: Essential & Empowering**

See Kindergarten-level children at work in their Montessori classrooms, as Montessori educators share thoughts on why the Kindergarten year is a vital part of the Early Childhood program.

### **What Your Child Will Learn**

Rigorously trained teachers carefully observe their children in the Early Childhood environment, identifying their interests and abilities and developing personalized learning plans tailored to each child's needs. They guide the learning, introducing new lessons and levels of difficulty as appropriate. The teacher offers the encouragement, time, and tools needed to allow children's natural curiosities to drive learning, and provides choices that help them learn, grow, and succeed.

After participating in a demonstration of a material from a teacher, your child is free to choose activities and to work on her own or with a partner for as long as she wishes. Since there is usually only one of each material, your child will develop patience and self-control as she waits for a material to become available.

The Montessori Early Childhood curriculum follows a 3-year sequence. Because the teacher guides your child through learning at her own pace, her individualized learning plan may exceed the concepts she would be taught in a classroom environment in which all children learn the same concept at the same time.

As children move forward, they develop the ability to concentrate and make decisions, along with developing self-control, courtesy, and a sense of community responsibility.

In Montessori schools, academic growth is seen as just one part of children's healthy development. The method nurtures their social, emotional, and physical growth, ensuring that they are, as Dr. Maria Montessori put it, "treading always in the paths of joy and love."

### **The Curriculum**

The Early Childhood classroom offers your child 5 areas of study: Practical Life, Sensorial, Math, Language, and Cultural Studies. What are the lessons in these areas?

## **Practical Life**

Children learn daily-life skills, such as how to get dressed, prepare snacks, set the table, and care for plants and animals. They also learn appropriate social interactions, such as saying please and thank-you, being kind and helpful, listening without interrupting, and resolving conflicts peacefully. In addition to teaching specific skills, Practical Life activities promote independence, and fine- and gross-motor coordination.

## **Sensorial**

Children refine skills in perceiving the world through their different senses, and learn how to describe and name their experiences—for example, rough and smooth, perceived through touch. Sensorial learning helps children classify their surroundings and create order. It lays the foundation for learning by developing the ability to classify, sort, and discriminate—skills necessary in math, geometry, and language.

## **Math**

Through hands-on activities, children learn to identify numerals and match them to their quantity, understand place-value and the base-10 system, and practice addition, subtraction, multiplication, and division. They also explore patterns in the numbering system. With an exploratory approach, children do more than just memorize math facts; they gain a firm understanding of the meaning behind them.

## **Language**

Activities throughout the Early Childhood classroom teach language, help children acquire vocabulary, and develop skills needed for writing and reading. The ability to write, a precursor to reading, is taught first. Using hands-on materials, children learn letter sounds, how to combine sounds to make words, how to build sentences, and how to use a pencil. Once these skills are acquired, children spontaneously learn to read.

## **Cultural Studies**

A wide range of subjects, including history, geography, science, art, and music, are integrated in lessons in the cultural area of the curriculum. Children learn about their own community and the world around them. Discovering similarities and differences among people and places helps them develop an understanding and appreciation of the diversity of our world, and a respect for all living things.

## **Montessori Learning Materials**

Montessori materials are not only beautiful and inviting, but ingenious. They teach only 1 skill at a time to allow the child to work independently and master the intended concept. The materials are also “self-correcting.” This means the child is able to identify if they have done an activity accurately and try again without intervention from a teacher. For example, if a large block is stacked atop a tower of shorter blocks, the tower will fall down. Working with self-correcting materials helps children develop confidence and self-sufficiency and promotes critical thinking. In a sense, they become their own teachers—a skill that will last for life.

### **3.7 LET US SUM UP**

We have come to understand that Learning Interest in Montessori Education. Children in Montessori schools learn because they are interested in what they are learning about – they are not merely memorizing information to achieve grades or pass tests. LMS is a school that provides an atmosphere to create personal interest in topics, and to capitalize on the interests of the children, thereby enhancing learning.

### **3.8 UNIT - END EXERCISES**

1. Define Intrinsic Motivation.
2. How to predict the Children’s Interests in Montessori Education.
3. Write short notes on Superficial Learning.
4. Discuss Learning Interest in Montessori Education.
5. As a teacher how will you create an organized classroom?

### **3.9 SUGGESTED READINGS**

- Bodrova, Elena, and Deborah Leong. 2007. *Tools of the Mind: The Vygotskian Approach to Early Childhood Education*. 2nd ed.
- Csikszentmihalyi, Mihaly. 1997. *Finding Flow: The Psychology of Engagement with Everyday Life*
- Elkind, David. 2007. *The Power of Play: How Spontaneous, Imaginative Activities Lead to Happier, Healthier Children*.
- Kramer, Rita. 1976. *Maria Montessori: A Biography*

## **UNIT IV**

### **GROUP LEARNING**

#### **Structure**

- 4.0 Introduction
- 4.1 Objectives
- 4.2 Peer tutoring
- 4.3 Using imitation model in Montessori classroom
- 4.4 Mixed age class
- 4.5 Young learning from old
- 4.6 Questioning
- 4.7 Observing the work
- 4.8 Repetitive learning
- 4.9 Reciprocal learning
- 4.10 Knowledge enhancement to promote learning skills
- 4.11 Social skills
- 4.12 Let us sum up
- 4.13 Unit - End Exercises
- 4.14 Suggested Readings

#### **4.0 INTRODUCTION**

A collection of persons who are emotionally, intellectually, and aesthetically engaged in solving problems, creating products, and making meaning - an assemblage in which each person learns autonomously and through the ways of learning of others. Montessori is a method of education that is based on self-directed activity, hands-on learning and collaborative play.

In Montessori classrooms children make creative choices in their learning, while the classroom and the highly trained teacher offer age-appropriate activities to guide the process. Children work in groups and individually to discover and explore knowledge of the world and to develop their maximum potential.

#### **4.1 OBJECTIVES**

After going through this unit you will be able to:

- Discuss the Peer tutoring
- Explain the using imitation model in Montessori classroom

- Discuss the Knowledge enhancement to promote learning skills
- Discuss the Repetitive learning and Reciprocal learning
- List out the Social Skills in Montessori Education

## **4.2 PEER TUTORING**

Peer learning can take many forms. Those discussed here include learning from peers by observation and imitation, peer tutoring, and collaborative learning. This type of learning is inherently a part of Montessori education. Children in Montessori schools are free to work together, and often do, especially as they become older and more socially inclined.

Research shows that children often learn from observing and then imitating others. In one study, toddlers were shown how a special stick could be used in a particular way to retrieve an object from a tube. Children as young as two years old could then repeat the precise actions necessary to retrieve the object. Other findings demonstrate how effective subliminal modeling can be, such as observing and then imitating yawning or scratching. Even thinking about particular things leads people to behave in particular ways.

The hands-on nature of Montessori work enables learning by observation and imitation. Children learn, by observation, the steps taken with the materials. By manipulating these concrete objects, the children are led to discover more abstract concepts. Many children entering a Montessori pre-school or 3-6 year old classroom spend a lot of time watching older children work. By observing and imitating others, children eventually gain an understanding of the concepts associated with specific materials. Studies have also shown in multi-age classrooms where interaction with different age peers occurs, children benefit greatly in terms of motor, cognitive, communicative and overall development. The three-year age grouping in Montessori schools offer a wide spectrum of ability level in peers from which to observe and imitate.

Educational research has found that situations in which children learn from their peers, via peer tutoring, are beneficial to both the tutor and the child being tutored. In a study comparing a peer tutoring model to a standard teaching method, children who participated in the peer tutoring program performed significantly better in reading, math, and language than those participating in the standard method of teaching. Studies have also found that students who expected to tutor or teach gained a better understanding of the topic, as well as becoming more actively engaged and more interested.

Peer tutoring occurs naturally in Montessori classrooms, both formally and informally. These types of interactions are built into the structure of the classroom. Informally, children learn from peers by asking questions while watching them work. More formally, at the teacher's discretion, children can teach one another a specific lesson. As children work together, as they often do in the Elementary Classrooms at LMS, there is ample opportunity to teach and learn from one another.

Another way to learn from peers is through collaborative learning, where a group of two or more children work together. Several studies have shown that people learn better when working together than when working alone. Researchers have found that children participating in collaborative learning programs engage in higher levels of reasoning and learning and score significantly higher on conceptual understanding than students in traditional programs. Additionally, research has found that children learn the most in collaborative exchanges when they collaborate with those whom they have a deeper and more positive relationship.

At LMS, children in the Elementary Program often choose to work with others on topics or projects that mutually interest them. These topics can be inspired by a prior lesson, or motivated by an interest outside of the classroom. Whether these children are working on classification of plants, constructing models, researching animals, mastering multiplication facts, or analyzing the grammatical structure of sentences, they are often working in self-formed groups of two to four children. The structure of the classrooms and the design of the materials are extremely conducive to working and learning together.

#### **4.3 USING IMITATION MODEL IN MONTESSORI CLASSROOM**

Montessori is a scientifically based education approach that emphasizes independence, freedom within limits, and respect for a child's natural psychological, physical, and social development. It was developed by Italian physician and educator Maria Montessori.

Montessori education is based on the belief that all children are unique individuals, that they all have immense potential, that they want to learn and be busy. Therefore the teacher needs to guide each child through the learning process by using materials that fit their specific needs and pace.

A Montessori education is based on the seven principles:



## **FREE CHOICE**

Learning and well-being are improved when children have a sense of control over their lives. Although Montessori programs impose definite limits on this freedom, children are free to make many more decisions than are children in traditional classrooms: what to work on, how long to work on it, with whom to work on it, and so on.

## **ORDER**

Recent research in psychology has proven that order in the environment is indeed very helpful to learning and development. Montessori classrooms are much organized, both physically (in terms of lay-out) and conceptually (in terms of how the use of materials progresses).

## **INTEREST**

Your gut feeling is right: Research has shown that when people learn with the goal of doing well on a test, their learning is superficial and quickly forgotten. Children (and yes, adults, too) learn better when they are interested in what they are learning.

## **LEARNING FROM PEERS**

Children in Montessori classrooms learn by imitation models, through peer tutoring, and in collaboration. In mixed age classes, younger children learn from older ones by asking them questions while watching them work. Older children who are teaching younger children repeat and consolidate their knowledge and skills and obtain social skills.



## **MOVEMENT**

Our brains evolved in a world in which we move and do, not a world in which we sit at desks. Movement and cognition are closely entwined. Education, therefore, would involve movement to enhance learning.

## **CONTEXT**

Rather than learning largely from what teachers and texts say to them, children in Montessori programmes learn largely by doing. Because they are doing things, rather than merely hearing and writing, their learning is situated in the context of actions and objects. For example, children go out of the classroom and into the world to research their interests.

## **TEACHER GUIDANCE**

Montessori teachers provide clear limits but set children free within these boundaries. They sensitively respond to children's needs while maintaining high expectations. This kind of 'authoritative parenting' seeks a middle ground between a traditional, authoritarian attitude ("Do it because we say so") and an overly permissive, child-centered approach of other progressive schools.

## **4.4 MIXED AGE CLASS**

The mixed age class is a cornerstone of the Montessori system of education at every level, as well as part of the secret to its success. Dr. Montessori observed early in her work that children learn not only from their teacher but also from their interactions with their peers. Learning in the Montessori setting is seen as a highly social activity. The Mixed- Age class allows the younger children to learn from the experiences and to inherit the class culture from their older peers, while it allows the older children to gain the experience of being leaders in the classroom. At all levels of learning, the three year mixed age group community is a fundamental characteristic of the Montessori classroom. Dr. Montessori divided children into these groups based on her research that showed distinct periods of cognitive development, each with its own specific needs and behaviours.

In a mixed-age group setting (ages 0-3, 3-6- 6-9, 9-12), there are children at the beginning, middle, and end of each plane of development. From a young age, a child gets to continually experience being a learner, an observer, and a mentor. These learning environments are meant to mimic the family or workplace environment, where members are different ages, have diverse skill sets, and varying needs. As any parent of more than one child can attest, there

is a great contrast between the capacities of a six year old and a nine year old. This is one of the reasons Montessori classrooms can accommodate large numbers of children with two guiding teachers: all the students are helping each other, in one way or another.

#### **4.5 YOUNG LEARNING FROM OLD**

The interactions and positive communication also benefits all of the children; older students exercise patience, compassion, and empathy through their language, while the younger ones listen and engage in higher levels of conversations than they are currently capable of. Social interactions between peers involve kindness and grace.

**Casa dei Bambini:** The students in a Casa classroom range in age from 3 to 6 years old. Many of the early children are experiencing a Montessori setting for the very first time, and the care that they receive from their older peers is very important for their development. By observing the other students in the class, the younger children quickly adjust to the classroom expectations as they emulate the older children. The older children, in turn, get their first experience of leadership as they take their turn to care for the younger children.



#### **4.6 QUESTIONING**

This heavy verbal technique is the teacher asking the child a question, such as “What are you doing?” It is most effective when you must initiate interaction with a child who is otherwise absorbed in fantasy behavior, detached from reality in the present moment. A simple question, focused on reality in the present moment, usually opens up further interaction to resolve the problem at hand. Problem-solving and critical thinking are among the most crucial skills a child

can learn. They provide children with the foundations for decision making, logical reasoning, categorizing, analytical thinking, negotiation, and creativity.

Providing children with a caring environment that is rich in appropriately challenging activities is the key to developing problem-solving and higher-order processing skills.

### **Name the problem**

If you can see a child struggling with an activity, give them the language to express what they are finding difficult.

Once you have named the problem, follow up with a prompting question that encourages them to take the next step to solve the problem.

For example, if a child spilled water and can't find a cloth to clean it up, you could say: "That looks like a big spill of water. What should we do next?"

### **Answer with a question**

When a child asks a question, resist the urge to answer immediately.

Instead, think about how you could use their query to encourage them to take the next step.

For example, if a child asks: "Where are my shoes?" ask them: "What were you doing when you were wearing them last?"

Prompting questions will encourage them to track back, problem-solve, and find the solution on their own.

Use prompting questions such as:

- ❖ What do you think about that?
- ❖ What do you think comes next?
- ❖ Which part are you finding difficult?
- ❖ Is there another way you could try that?
- ❖ Have you looked at it this way?
- ❖ Where could we find the answer?

### **Set the right level of challenge**

Develop problem-solving and critical thinking skills by providing children with activities that are challenging but not impossible. Activities should be a little out of reach and account for the child's stage of development, skill level, and interests. For example, you would introduce a child who is interested in name writing to the developmentally appropriate language materials, as

opposed to presenting a counting activity. A task that is interesting and appropriately challenging will encourage persistence, which ultimately leads to problem-solving and critical thinking skills, as opposed to frustration and discouragement.

### **Slow down and stand back**

Children are often more capable than we think. Sometimes, all it takes is to slow down, stand back, and observe. Take your cues from the child. Are they asking for help? Are they getting visibly upset? If not, allow them the time and space to persist. They will discover the learning outcome on their own. If a child asks for help, offer the minimal level of assistance to get them to the next step, without solving the problem for them. For example, if a child can't figure out how to put on their jumper the right way, show them that the tag goes to the back and encourage them to try again.

### **Focus on effort**

To encourage the development of problem-solving skills, focus on effort, as opposed to the result. Using phrases such as “Good job!” and “You got everything right!” praise the outcome as opposed to the meaningful learning that occurred. It also encourages children to continue to seek external validation as opposed to enjoying the process and seeing learning as its own reward.

Instead, use phrases of encouragement such as “I can see you have been working hard, or “That looks tricky! You worked hard on that. Maybe we can try again tomorrow.”

Focusing on the child's effort, as opposed to the result, encourages them to try challenging things.

## **4.7 OBSERVING THE WORK**

Observation in the Montessori Classroom



## **Skills Required to Observe**

We must learn to sit silently and motionless - conscious immobility. In our fast paced world this is something that many of us rarely do. Our constant physical motion means we're missing out on cues (physical, verbal, and social) from the children around us. As well, often times the adult unconsciously becomes the center of the environment; constantly directing instead of allowing the children to direct themselves. As the adult it's important to step back, slow down, and silently view the environment with fresh eyes.

We should examine ourselves introspectively; how often would you normally want to interrupt the children while they are in the 3 hour work cycle? Are the interruptions really necessary? It's easy to inject our thoughts and interfere when we see a child struggling with a concept. Our inner impulses to help, to do it faster, to do it more efficiently are unnecessary and take the action away from the child.

Are we speaking too much? Are our voices constantly interrupting the precise work of our hands while presenting lessons? Are we over-explaining materials instead of allowing the child to spend time with the materials and investigate further on their own? Montessori materials are beautiful didactic (self-correcting) learning materials that most often do not require excessive speech/language - unless it's a language lesson!

## **Record you're Observations**

After sitting back and observing it's important to make notes and record your observations for each child and for the group as a whole. Which materials are being used and which ones haven't been used in a long while? Is a child avoiding a particular area and why? What is the atmosphere like? Has the class normalized? If not, why not? Is there a sense of respect and community in the environment?

## **Allow for the Possibility of Change**

Allow your mind to be open to change. After recording your observations it's all in front of you in black and white. You can't deny the scientific and objective truth. Open your mind to accept the possibility that the environment isn't well prepared enough, or that you're interfering too much, or that you've not guided the children carefully enough to create the community with respect and peace. As the 'head' of your community it's up to you to use your observations to improve the community.

## **4.8 REPETITIVE LEARNING**

## **What is Repetition?**

Repetition doesn't necessarily mean reading the same story, or completing the same activity, over and over again. Instead, repetition refers to any form of work that provides the child with opportunities to practice a skill or knowledge area. Repetition comes in many forms. This may include reading the same story one hundred times, learning extensions and games that repeat the same skill, peer tutoring, or passively observing a lesson or activity completed by another child.

Repetition may also come from routine or the environment. Knowing what to expect, and having things happen in an ordered way, helps children to know what to expect and feel at ease.

When the environment is predictable, a child feels safe and secure, which establishes the optimal environment for learning.



## **How Montessori Supports Repetition**

The Montessori environment is specifically designed to support learning through repetition and practice. In fact, repetition is a key symptom of 'sensitive periods', which Montessori characterized as a time where children are most likely and willing to learn a key knowledge area or skill with ease. One example of how Montessori support repetition is the Montessori work cycle. This three-hour cycle provides children with the opportunity to choose their own work, follow their interests, and work uninterrupted.

During the work cycle, it is common for children to return to the same activity with frequency, repeating it until they have perfected it. This sustained period of repetitive activity encourages children to develop the concentration and self-discipline required for more advanced work. In addition, the Montessori materials, which are multi-sensory learning tools, teach children how to problem solve and self-correct through repetition and practice.

By working with the Montessori materials, children develop an understanding of abstract concepts, such as science and mathematics, through hands-on experiences. Further, the repetition of activities from the Practical Life curriculum area, assist children in developing the coordination and body awareness they need to undertake more complex thinking. A child must first learn to sit still and concentrate before they can develop the neurological connections required for reading, writing and mathematics.

## **Supporting Repetition at Home**

### **Provide the opportunity for repetition**

You can support your child by providing them with opportunities to repeat activities that interest them. During play time, don't encourage them to pack away if they are in the middle of activity. Allow them as much time as possible to complete the activity.

### **Learning Extensions**

Encourage learning extensions based on repetition of your child's favourite story, movie, activity or song. Invite your child to repeat the activity, and extend by drawing pictures, reflecting on similarities and differences, and encouraging them to pre-empt words or actions. This repetitive learning will help them to forge the neurological connections they need for more complex learning.

### **Multi-sensory Instructions**

Promote repetition using multi-sensory instructions. Ask questions such as: "What does it look like?" "What does it smell like?" "What does it sound like?" These instructions will encourage your child to retain new information.

### **Self-Reflection**

Reinforce the positive aspects of repetition by asking your child about what they enjoyed doing at preschool throughout the day. On your way to preschool the next day, remind them about what they enjoyed the previous day. This will encourage them to self-reflect, which will assist them in learning things more completely and quickly.

Repetition in learning is one of the most important fundamentals in child development. To support and reinforce this important building block of neurological connections, save up some extra patience for those days when your little one wants to read "Possum Magic" for the umpteenth time. Trust in your child's internal development drive that repetition is what they need to learn and succeed. It will pay off!

## 4.9 RECIPROCAL LEARNING

Reciprocal teaching refers to an instructional activity in which students become the teacher in small group reading sessions. Teachers model, then help students learn to guide group discussions using four strategies: summarizing, question generating, clarifying, and predicting. Once students have learned the strategies, they take turns assuming the role of teacher in leading a dialogue about what has been read.

When to use:     Before reading         During reading         After reading

How to use:      Individually         With small groups      Whole class setting

### Why use reciprocal teaching?

It encourages students to think about their own thought process during reading. It helps students learn to be actively involved and monitor their comprehension as they read. It teaches students to ask questions during reading and helps make the text more comprehensible.

### How to use reciprocal teaching

Before Reciprocal Teaching can be used successfully by your students, they need to have been taught and had time to practice the four strategies that are used in reciprocal teaching (summarizing, questioning, predicting, clarifying).

One way to get students prepared to use reciprocal teaching: (from Donna Dyer of the North West Regional Education Service Agency in North Carolina)

### Put students in groups of four.

Distribute one note card to each member of the group identifying each person's unique role:

- Summarizer
- Questioner
- Clarifier
- Predictor

Have students read a few paragraphs of the assigned text selection. Encourage them to use note-taking strategies such as selective underlining or sticky-notes to help them better prepare for their role in the discussion.

At the given stopping point, the Summarizer will highlight the key ideas up to this point in the reading.



### **The Questioner will then pose questions about the selection:**

- ❖ Unclear parts
- ❖ Puzzling information
- ❖ Connections to other concepts already learned

The Clarifier will address confusing parts and attempt to answer the questions that were just posed. The Predictor can offer predictions about what the author will tell the group next or, if it's a literary selection, the predictor might suggest what the next events in the story will be.

The roles in the group then switch one person to the right, and the next selection is read. Students repeat the process using their new roles. This continues until the entire selection is read. Throughout the process, the teacher's role is to guide and nurture the students' ability to use the four strategies successfully within the small group. The teacher's role is lessened as students develop skill. For more information, see the article Reciprocal Teaching for the Primary Grades: "We Can Do It, Too!".

### **Download blank templates**

Here's a bookmark for students to use that prompts them about each of the four strategies used in reciprocal teaching. This worksheet incorporates all four strategies into one page that students can fill out. Similar to the bookmark above, this four-column handout prompts students with questions and statements related to the four strategies.

### **Watch reciprocal teaching in action**

At Frank Love Elementary School, reading expert Shira Lubliner uses reciprocal teaching to guide students in learning to lead a classroom discussion. But first, Ms. Lubliner shows them how to guide a conversation about a book.

## **4.10 KNOWLEDGE ENHANCEMENT TO PROMOTE LEARNING SKILLS**

### **1. Montessori Education Creates Enthusiastic, Self-Motivated Learners**

When children are given the space to learn at their own pace and in their own way, they actually enjoy learning! Montessori methods are designed to help your child develop a life-long love of learning and insatiable curiosity about the world around them. Dr. Montessori created the program in 1907, which means it's been around for more than 100 years. Its longevity speaks volumes toward its success in teaching students more than just basic reading, writing and arithmetic.

## **2. Montessori Education Results In Improved Social and Problem-Solving Skills**

Because of the multi-age classroom atmosphere, children who study under a Montessori program typically interact better with their peers. They learn positive ways to resolve differences and find connection and camaraderie in their joint pursuit of discovery. Because of Montessori's emphasis on cultural diversity, children also grow up learning the importance of connecting with others from different perspectives and backgrounds, a skill that will serve them well for the rest of their lives.

## **3. Montessori Students Possess Advanced Reading and Mathematical Abilities**

Reading is a huge part of Montessori education. Montessori kids love to read! We put a huge emphasis on literacy because it's a foundational component of discovery. You'll also find that Montessori students display an advanced understanding of abstract and practical mathematical concepts. In a 2017 study of 140 students - some in Montessori programs, others in traditional classrooms - the students who were enrolled in Montessori programs displayed a more advanced set of literacy and math skills than their non-Montessori peers by the end of their third year in a Montessori program.

## **4. Montessori Students Become Compassionate, Confident and Polite Children**

Montessori is designed to do more than teach children to read and write. Montessori students typically display high self-esteem and great respect for others around them. Not only are they more self-confident, but they also demonstrate more kindness and compassion toward their peers. An interesting benefit of our emphasis on these areas in school is that it translates into their home life as well. Parents of Montessori students report that their children show great improvement in organization, cleaning and household chores. As they grow, their abilities to help and maintain their spaces at home grows.

### **4.11 SOCIAL SKILLS**

Ask any parent why they think preschool is important and you'll probably hear "socialization" listed among the highest priorities—and with good reason. It's very important for children to develop social skills, especially in the first six years of life. But it isn't enough for the child to simply "be around" other children. Good social skills, including basic manners, etiquette, problem solving, emotional control, and patience, must be taught as deliberately as reading or math. That is why "grace and courtesy" lessons are an integral part of the Montessori classroom.

“...we must begin our work by preparing the child for the forms of social life, and we must attract his attention to these forms.” ~ Dr. Maria Montessori, the Montessori Method

“Grace and courtesy” refers to a specific set of lessons designed to help children interact politely with one another and with adults. It’s more than just learning to say, “please” and “thank you” (important though that is). It’s about giving children the tools they need to interact with kindness and confidence. Here are some examples:

- ❖ Greetings–
- ❖ Shake hands (if customary)
- ❖ Greet with words, i.e. “Good morning”
- ❖ Eye contact

In Montessori classrooms, children learn how to be courteous, polite, and respectful according to their local culture. At home, parents can teach social skills by demonstrating courteous behavior and guiding children through the practices of grace and courtesy.

#### **4.12 LET US SUM UP**

Group learning of children are a unique classroom component of the Montessori program. The reason for Group learning within the classroom is twofold: Younger students naturally learn more from their older peers, and older students tend to retain more information when they teach it to younger ones. Besides that, having children of different ages and stages together in the classroom mimics the real world, teaching students how to get along with people of different ages and interests.

#### **4.13 UNIT - END EXERCISES**

1. What is Group Learning?
2. State Reciprocal Learning.
3. Define Social Skills?
4. Deeply explain about the Group Learning in Montessori Education.
5. Explain the difference between Learning Skills & Social Skills in Montessori Education.

#### **4.15 SUGGESTED READINGS**

- Ali Mohamad: “Food and Nutrition in India”, K.B. Publications, New Delhi.
- “National Seminar on Nutrition Education”, NCERT, 1975.
- Rirchie A S Jean, “Learning Better Nutrition”, Raner, Italy, 1967.
- Holmes C Alan, “Visual Aids in Nutrition Education”, FAO, Rome, 1969.

## UNIT V

### COGNITION AND LEARNING BY DOING

#### Structure

- 5.0 Introduction
- 5.1 Objectives
- 5.2 Relationship of cognitive and physical activities
- 5.3 Physical classroom environment is not for learning
- 5.4 Learning is for physical classroom
- 5.5 Enhancement of Learning
- 5.6 Negligence of Teacher and Text in child learning
- 5.7 Montessori programs
- 5.8 Classroom learning with objects and action
- 5.9 Predicting the children's interests.
- 5.10 Let us sum up
- 5.11 Unit - End Exercises
- 5.12 Suggested Readings

#### 5.0 INTRODUCTION

According to Cognitive Learning Theory, certain thinking processes can lead to more knowledge retention. Cognitive learning can help you achieve mastery in your career by highlighting the best ways you learn. In this unit, we'll define cognitive learning and explain how you can use it to improve performance at work and other aspects of your life.

Cognitive learning is a style of learning that focuses on more effective use of the brain. To understand the process of cognitive learning, it's important to know the meaning of cognition. Cognition is the mental process of gaining knowledge and understanding through the senses, experience and thought. Cognitive learning theory merges cognition and learning to explain the different processes involved in learning effectively.

#### 5.1 OBJECTIVES

After going through this unit, you will be able to:

- Discuss the Relationship of cognitive and physical activities.
- Explain the Physical classroom environment is not for learning.
- Discuss the Negligence of Teacher and Text in child learning

## **5.2 RELATIONSHIP OF COGNITIVE AND PHYSICAL ACTIVITIES**

Unlike traditional preschools, a Montessori preschool focuses on developing every aspect of the whole child. This includes a child's physical development. From the enhancement of hand-eye coordination and sensorial abilities to the development of gross and fine motor skills, a Montessori preschool will make sure that each child develops the skills they will need to gain a sense of order and independence.

### **Fine Motor Skills and Hand-Eye Coordination**

In the Montessori preschool classroom, children participate in practical life activities, which are known to improve a child's fine motor skills (coordinated small muscle movements in the hands, wrists, and fingers) and hand-eye coordination (the use of the eyes to guide movements). Actions, like grasping, reaching and releasing an object, and turning the wrist, are the types of fine motor movements that children learn in a Montessori preschool, in order to prepare them for the daily tasks of life. Fine motor development begins almost right away in babies, as they use their reflexes to grasp a rattle or your finger.

As children grow, they will be able to engage in sewing and weaving activities, which develop their manual dexterity. The action of picking up objects with small tongs or tweezers develops a child's pincer grip, which is a necessary precursor for learning how to write later on.

### **Gross Motor Skills**

To develop the large muscles of the body, it's important to reach gross motor milestones – such as walking, running, jumping and climbing. Montessori preschools recognize how gross motor development presents many health benefits, boosts confidence and self-esteem, and the ability to assess risk. That's why Montessori preschools provide many activities that build muscle memory, creative movement, and motor planning.

### **Sensorial Development**

In a Montessori preschool, one of the main focuses of the curriculum is on refining all of the child's senses including visual, tactile, thermic, auditory, baric, stereognostic, olfactory and gustatory. The purpose of this is for the child to gain a sense of order by making clear and conscious classifications of her environment through the senses.

For example, children learn to sort tablets by slight differences in color and shade, which is done in order to sharpen their visual perception and sense of order. They also learn to sort fabrics by touch, thus enhancing the child's tactile sense.

## **Physical Development at MASS**

At Montessori Academy at Sharon Springs, we provide a beautiful preschool environment filled with practical life materials to develop fine motor skills and hand-eye coordination. We encourage the exploration of the senses through music and movement accompanied by freedom of choice. Our toddlers and primary children have the opportunity to jump around, balance, crawl, and skip to enhance gross motor skills. Our primary students engage in many sensorial activities in order to begin understanding the world around them during these formative years.

### **5.3 PHYSICAL CLASSROOM ENVIRONMENT IS NOT FOR LEARNING**

Montessori Prepared Environment: Purpose, Set-Up and Classroom Features. One of the factors that contributed to the success of Montessori education was in Montessori's scrutiny of the traditional educational environment. At that time, schoolrooms held adult-size furniture that was usually arranged in rows and bolted in place. Closets and shelves were placed at adult height so even the simplest of tasks had to be carried out by adults.

Montessori's analysis led her to create schools that were truly suited for children. By adapting the environment and surroundings to the child's size and nature, the Montessori classroom became a place where children could relax and learn. She had carpenters build child-sized tables and chairs which could easily be moved about without adult help. She also brought in rugs and mats because she'd observed that young children like to lie and work on the floor.

Learn more about what makes the perfect Montessori prepared environment, and how it helps children achieve success and joy in learning.

#### **Montessori Prepared Environment: Purpose, Set-Up and Classroom Features**

Montessori stated that young children process (absorb) everything through their senses. A well-prepared, child-centric environment is a sensorial one which reflects beauty, simplicity, and order. It provides well-chosen materials and activities which are required for learning. Everything is carefully chosen by the Montessori teacher in order to best facilitate the child's learning. Unlike many overly-stimulating childcare centers which rely on the use of color, sound and movement, the Montessori classroom is designed to minimize things that may over-stimulate and distract. The Montessori classroom uses physical space and time that allows for concentration, design which allows children to find, use, and replace materials easily. Walls are

painted in neutral colors. Shelves display a few objects at a time. This prepared environment provides a calm, neutral, quiet background that encourages and supports learning.

Beautiful objects come in a variety of means: curtains on the windows, fresh flowers and non-toxic plants in pretty containers and vases, a few carefully chosen pictures on the walls. It should be noted that the goal of artwork in a Montessori classroom is to add interest to the room, not cover the walls. These pictures should be at the children's eye level and not the adults'. The pictures should show real-life people, objects or scenes. Since children need to learn to think about that which is real, the Montessori environment provides materials that are real and not 'pretend'.

Since Montessori infants and toddlers are not confined to playpens or carriers, it is important to have ample room (45-55 square feet) of open space per child. These spaces provide areas for children to develop their gross motor skills. It's also important to have smaller, more confined areas for non-mobile infants, well-lit areas for reading, and quiet areas feeding and rocking infants.

The Montessori outdoor environment is prepared just as carefully as indoors. Since infants and toddlers are apt to put almost anything in their mouth, caregivers must survey the area regularly for any dangers. Outdoor areas require space for running, jumping, throwing, climbing, lying, sitting, balancing, watching, building, digging, playing with water, and exploring. It is not necessary to purchase expensive playground equipment for this age, though many Montessori outdoor spaces to have a sandbox. Ideally, there are a variety of hard and soft surfaces to meet the differing needs of children.

Helps children gain confidence and independence by encouraging them to choose their own activitiesBecause preparing the environment is such an important task, the Montessori teacher needs to become familiar with every detail of the classroom, and provide a well-prepared environment.

## 5.4 LEARNING IS FOR PHYSICAL CLASSROOM



“Education is a natural process carried out by the child and is not acquired by listening to words but by experiences in the environment.”- Maria Montessori

Montessori is an innovative, child-centered approach to education, developed a century ago by a woman ahead of her time. Working with institutionalized and inner-city youngsters, Dr. Maria Montessori was struck by how avidly the children absorbed knowledge from their surroundings. Given developmentally appropriate materials and the freedom to follow their interests, they joyfully taught themselves.

The goal of Montessori education is to foster a child’s natural inclination to learn. Montessori teachers guide rather than instruct, linking each student with activities that meet his interests, needs, and developmental level. The classroom is designed to allow movement and collaboration, as it also promotes concentration and a sense of order. Unique learning materials beckon from accessible shelves, inviting small hands to take on new challenges, 1 concept or skill at a time.

The intent of this course is to give you a glimpse of what a Montessori classroom looks like, feels like, and operates like. We will take a look at three main components. These topics will include the physical environment, the peaceful environment and the pupil's environment. A basic introductory to Montessori education is also provided so that you will feel more comfortable with the unique philosophy that Montessori provides to some of our students. As you explore these units, I hope that you will become more familiar with the Montessori pedagogy which focuses upon the whole child: spiritual, psychological, emotional and mental. I would love for you to be able to take some of the basic ideas seen here and apply them to your own classroom. Whether you take them all or you modify them to meet your needs, it is my goal



to bring the Montessori history and some of the practices from the past to the forefront of today's education system.

## **5.5 ENHANCEMENT OF LEARNING**

Here have been many early childhood education types of research over the years. It is known that children have different mind and they learn differently, so there would be various methods and theories of education teachers can engage in their classroom. Among these methods, one popular method is Montessori Education. It was established by Dr. Maria Montessori in 1907. It is a child-centric education method that includes child-oriented activities, classrooms with children of different age groups and educators who inspire freedom among their learners.

The Montessori education system is founded on the belief that children learn best in their own way and at their own pace. To allow them to do this, Montessori schools of nursery allow children to discover a set of educational games and toys as they choose in an unstructured manner. Each class contains children with three-year age group so that older children and younger children can learn from one another. A Montessori education may be the most suitable primary education for your kids. Defining what method of education philosophy you want to adopt can be tough and it is very significant to consider all features. Look at these Montessori education's pros and cons that can help you to start:

### **1. It provides hands-on learning**

Montessori classrooms are to some extent well-known for their beauty. In this classroom design, lots of sunlight and enough space are important in the design of the classroom. All this for providing children a beautiful and friendly atmosphere as kids can direct their own learning with the help of exactly intended learning benefits. This environment helps children to understand complicated vocabulary and detection of intellectual thoughts through the use of objects designed for the purpose. One great thing about this education is that it permits learners to work, grow and learn at their own pace. This education system helps children to explore activities, lessons, and things that build upon their expertise, and they develop them as an individual. All these things provide learners with the chance to improve their coordination and concentration along with more traditional academic learning.

## **2. Enhanced Social Interaction**

Kids are captivated by what other kids achieve. Montessori education provides it by grouping children of different age groups together in the same environment. Most of the Montessori classrooms are mixed-age and aimed to develop peer to peer group. The mixed aged groups authorize children to learn from each another, communicate one another and improve life skills like acceptance and inclusion.

## **3. Learning Environment**



Montessori education provides a unique learning environment for children in whom they can learn with fun and interest. The multi-age learning environment is unique and a key factor to this educational method. Younger children have a great opportunity to develop their social, communication, leadership and emotional skills by working with older children. Older children also benefited from this approach.

## **4. It develops soft skills**

The Montessori philosophy inspires learners to enhance their soft skills and the countless life skills such as responsibility, independence, fairness, adaptability, and positivity. Montessori educators believe that allowing children to describe the ways they spend time their classroom help them to be self-independent in a future life. Various researchers show that students of Montessori nursery students do have superior soft skills in comparison to other children of their age group displaying better behavior and greater inclination to cooperate and collaborate with their peers.

## **5. It provides independence**

Montessori education system offers a sense of confidence and creativity that develops knowledge and skills of students like self-confidence, sense of freedom and confidence in their

abilities. Students of Montessori education have a tendency to be more competent to manage them and think freely.

## **5.6 NEGLIGENCE OF TEACHER AND TEXT IN CHILD LEARNING**

Montessori is a method of education that is based on self-directed activity, hands-on learning and collaborative play. In Montessori classrooms children make creative choices in their learning, while the classroom and the highly trained teacher offer age-appropriate activities to guide the process. Children work in groups and individually to discover and explore knowledge of the world and to develop their maximum potential.

Montessori classrooms are beautifully crafted environments designed to meet the needs of children in a specific age range. Dr. Maria Montessori discovered that experiential learning in this type of classroom led to a deeper understanding of language, mathematics, science, music, social interactions and much more. Most Montessori classrooms are secular in nature, although the Montessori educational method can be integrated successfully into a faith-based program.

Every material in a Montessori classroom supports an aspect of child development, creating a match between the child's natural interests and the available activities. Children can learn through their own experience and at their own pace. They can respond at any moment to the natural curiosities that exist in all humans and build a solid foundation for life-long learning.

The Association Montessori Internationale (AMI) was established by Maria Montessori in 1929 to protect the integrity of her work and to support high standards for both teacher training and schools. Today, AMI continues to uphold Maria Montessori's vision while collaborating with contemporary research in neuroscience and child development. Montessori Northwest is proud to be an official teacher training center of AMI, training teachers to work with children from birth to age twelve.

## **5.7 MONTESSORI PROGRAMS**

Montessori classrooms are multi-aged learning environments, based on Dr. Montessori's stage theory of human development, which she called The Four Planes of Development. In the first plane from birth to age six, the child is characterized by his or her "absorbent mind", absorbing all aspects of his or her environment, language and culture. In the second plane from age six to twelve, the child uses a "reasoning mind" to explore the world with abstract thought and imagination. In the third plane from twelve to eighteen, the adolescent has a "humanistic mind" eager to understand humanity and the contribution he or she can make to society. In the

last plane of development, from age eighteen to twenty-four, the adult explores the world with a "specialist mind" taking his or her place in the world. Maria Montessori believed that if education followed the natural development of the child, then society would gradually move to a higher level of co-operation, peace and harmony.

### **Birth to 3 years Programme**

The first three years of life are the most fundamental in the development of human beings and their potential. The infant's physical development is phenomenal and apparent and inspires our care and attention. Yet a profound and less obvious development is taking place within the child.

During the first three years of life the child's intelligence is formed. They acquire the culture and language into which they have been born. It is a period when the core of personality and the social being are developed. An understanding of the child's development and the development of the human mind allows environments to be prepared to meet the needs of the infant and foster independence, motor development and language acquisition.

### **Nido (Italian for 'Nest')**

This the name given to the early childhood setting for children from eight weeks old to the developmental milestone of walking independently. This programme is created especially to support working parents.

### **Infant Community**

After they begin to walk, children join the toddler group where their primary motor coordination, independence and language are cultivated. Rather than a classroom, it is a nurturing community where very young children experience their first structured contact with other children.

### **Parent-Infant / Parent-Toddler Programme**

The Parent-Infant Programme provides an environment in which parents and children from 8 weeks to 3 years interact with the guidance of a trained Montessori educator. Parents learn how to observe what their children are doing, do in order to know what experiences to offer them. Increasingly, these programmes are offered in Montessori Early Learning Centres as part of a long day care format.

### **3 to 6 years Programme**

Montessori 'school' starts at 3 years of age. The 3 to 6 year old child is undergoing a process of self-construction. The application of the Montessori philosophy and the specifically designed Montessori equipment aids the child's ability to absorb knowledge and continue this path of self-construction. Acquisition of one's own first culture is the child's central developmental drive in the first plane of development.

The pre-school environment serves this drive abundantly, bringing the world to the child. Globes, maps, songs, land forms, collections of pictures of life in different cultures, and much more, is offered, with the aim of helping the child to grow as an individual appreciating the larger context of his or her world.

### **Children's House**

The 'Children's House' is the pre-school and/or long day setting for children from three to six years of age. Often called 'Stage 1', children in a Montessori Children's House preschool will normally attend 5 days a week, with 3-4 year olds attending morning sessions, then moving to the full day session in the final year (extended day). Montessori Early Learning Centres offer this programme within their long day care settings.

There are four main areas in the pre-school program: Practical Life, Sensorial, Language and Mathematics. Considerable emphasis is also placed on Creative Arts, Music, Science, Geography and Cultural Studies.

**Practical Life:** The Practical Life component of the Montessori approach is the link between the child's home environment and the classroom. The child's desire to seek order and independence finds expression through the use of a variety of materials and activities which support the development of fine motor as well as other learning skills needed to advance to the more complex Montessori equipment. The practical life materials involve the children in precise movements which challenge them to concentrate, to work at their own pace uninterrupted, and to complete a cycle of work which typically results in the feelings of satisfaction and confidence. Practical life encompasses four main areas: Control of Movement, Care of Person, Care of Environment, and Grace and Courtesy.

**Sensorial:** From an early age children are developing a sense of order and they actively seek to sort, arrange and classify their many experiences. The sensorial component provides a key to the world, a means for a growth in perception, and understanding that forms the basis for abstraction in thought. The sensorial materials give the child experience initially in perceiving distinctions

between similar and different things. Later the child learns to grade a set of similar objects that differ in a regular and measurable way from most to least. Each piece of equipment is generally a set of objects which isolate a fundamental quality perceived through the senses such as color, form, dimension, texture, temperature, volume, pitch, weight and taste. Precise language such as loud/soft, long/short, rough/smooth, circle, square, cube and so on is then attached to these sensorial experiences to make the world even more meaningful to the child.

**Language:** Maria Montessori did not believe that reading, writing, spelling and language should be taught as separate entities. Pre-primary children are immersed in the dynamics of their own language development and the Montessori approach provides a carefully thought-out program to facilitate this process. Oral language acquired since birth is further elaborated and refined through a variety of activities such as songs, games, poems, stories and classified language cards. Indirect preparation for writing begins with the practical life exercises and sensorial training. Muscular movement and fine motor skills are developed along with the ability of the child to distinguish the sounds which make up language. With this spoken language background the directress begins to present the alphabet symbols to the child. Not only can children hear and see sounds but they can feel them by tracing the sandpaper letters. When a number of letters have been learned the movable alphabet is introduced. These cardboard or wooden letters enable the child to reproduce his or her own words, then phrases, sentences and finally stories. Creativity is encouraged and the child grows in appreciation of the mystery and power of language. Other materials follow which present the intricacies of non-phonetic spelling and grammar. Because children know what they have written, they soon discover they can read back their stories. Reading books both to themselves and others soon follows.

**Mathematics:** Mathematics is a way of looking at the world, a language for understanding and expressing measurable relationships inherent in our experience. A child is led to abstract ideas and relationships by dealing with the concrete. The child's mind has already been awakened to mathematical ideas through the sensorial experiences. The child has seen the distinctions of distance, dimension, graduation, identity, similarity and sequence and will now be introduced to the functions and operations of numbers. Geometry, algebra and arithmetic are connected in the Montessori Method as they are in life. For instance the golden bead material highlights the numerical, geometrical and dimensional relationships within the decimal system. Through

concrete material the child learns to add, subtract, multiply and divide and gradually comes to understand many abstract mathematical concepts with ease and joy.

These programme are also offered in Montessori Early Learning Centers as part of a long day care format.

### **Primary School**

The primary school year's programme incorporates either separate classrooms for children aged from six to nine years (Stage 2) and nine to twelve years (Stage 3), or single classrooms for children aged from six to twelve years.

Children work in a research style of learning, in small groups on a variety of projects which spark the imagination and engage the intellect. Lessons given by a trained Montessori teacher direct the children toward activities which help them to develop reasoning abilities and learn the arts of life.

Children, at this age, are driven to understand the universe and their place in it and their capacity to assimilate all aspects of culture is boundless. Elementary studies include geography, biology, history, and language, mathematics in all its branches, science, music and art. Exploration of each area is encouraged through trips outside the classroom to community resources, such as library, planetarium, botanical garden, science centre, factory, hospital, etc. This inclusive approach to education fosters a feeling of connectedness to all humanity, and encourages their natural desire to make contributions to the world.

### **Secondary School**

The Montessori program for children aged 12 to 18 years is based on the recognition of the special characteristics of adolescence. Adolescence is an age of great social development, an age of critical thinking and re-evaluation, and a period of self-concern and self-assessment. It is a transition from childhood to adulthood with the corresponding physical, mental and sexual maturation. In early puberty the adolescent finds it hard to concentrate on academic and structured learning. Above all adolescence is like an odyssey - an arduous yet exciting adventure - where the adolescent tries to find his or her place in the world.

## **5.8 CLASSROOM LEARNING WITH OBJECTS AND ACTION**

What sets Montessori apart in the Elementary years—ages 6 – 12—is the individually paced curriculum that challenges children academically and safeguards their well-being and sense of self. Engaging as contributing members of a respectful community, they learn to

question, think critically, and take responsibility for their own learning—skills that will support them in later education and in life.

As at all Montessori levels, the Elementary program is based on the belief that children learn best through movement and work with their hands, and provides cognitive, social, and emotional support to help them reach their full potential.

This includes addressing their needs as they enter a new period of development characterized by:

- A transition from concrete to abstract thinking
- Growing interest in socialization
- Thinking and memory that is enhanced by creativity and imagination
- An interest in fairness, social justice, and compassion

#### The Elementary Classroom

In a Montessori Elementary classroom, students work individually or in small groups, at tables or on mats on the floor. Natural lighting, soft colors, and uncluttered spaces set the stage for activity that is focused and calm. Learning materials are arranged on accessible shelves according to curricular area, fostering independence as students go about their work. Everything is where it is supposed to be, conveying a sense of harmony and order that both comforts and inspires.

Children who are new to Montessori quickly feel at home with the inspired teaching that appeals to their deepest interests, and with the distinctive, hands-on learning materials that teachers introduce sequentially according to the students' developmental needs. For students who have completed Montessori Early Childhood programs, the environment offers continuity with familiar routines and learning materials that offer new lessons and opportunities for more complex exploration and discovery.

The classroom is a happy community. Students are focused. They take joy in their work. They invent, explore, experiment, confer, create, prepare snacks, and curl up with books; sometimes they might even reflect in a peaceful, meditative corner. Meanwhile, teachers circulate throughout the room, observing the students and making notes about their progress, ever ready to offer support or introduce new material, as appropriate. Expectations are both exquisitely clear and engagingly open-ended.



## **Multi-Age Learning**

Multi-age groupings of children ages 6 – 9 and 9 –12 (or 6 –12) provide a heterogeneous mix in which children can collaborate and socialize. These inter-age relationships strengthen the entire community.

Older children are seen as role models within the community. They support the growth and development of younger children through socialization, assisting with new work, or teaching skills they have mastered themselves. They can also work with younger students in areas of the curriculum in which they themselves may need more practice, without stigma.

Younger children follow the example set by the older students, and have peers to work with in areas of the curriculum in which they may be more advanced. This multi-age community provides opportunities for all individuals to learn from each other, at times leading, sharing, or serving as role models. It also develops an appreciation of differences. Within this supportive, inclusive community, children work through the curriculum at their own pace, accelerating during some tasks or taking additional time with others.

## **Learning to Be Change Makers**

“For parents who invest in a Montessori education beyond the earliest years, you are gifted with a child who goes into the world able to reach their highest potential—not only academically and eventually in their careers, but as human beings who are going to give back and make it a better world. — Michelle Morrison, Head of School, Princeton Montessori School

Mutual respect and careful learning are hallmarks of Montessori Elementary programs. For returning Montessori students, the Montessori Elementary program expands upon the learning fostered in an Early Childhood program. For students new to Montessori, it orients them to the joys of responsible participation.

Teachers guide children through a rigorous curriculum individually tailored to their own interests, needs, and abilities. Teachers monitor progress against established benchmarks and expectations for student learning, including: academic preparedness, independence, confidence, autonomy, intrinsic motivation, social responsibility, and global citizenship.

### **Curricular Areas**

The Montessori Elementary curriculum contains the following areas of learning:

## **Practical Life**

Within the Elementary program, the Practical Life curriculum expands from the foundation laid in Early Childhood. Practical Life at the Elementary level shifts from a focus on self-care and fine motor skills, to skills that help children connect with their interests in the outside world, organize their time, and take part in their community.

While self-care and appropriate social interactions continue to be supported, lessons that teach responsibility are the focus. Use of tools, such as work plans, to support organization and time management skills, are incorporated into the daily routine.

Teachers and students often work together to post reminders about assignments, projects, and ideas. Using these, children make independent work choices, prioritize activities, and meet deadlines.

## **Math**

The ideas of number concepts, place value, numerals, and related quantities are reinforced and expanded upon within the Elementary program. Newfound purposes for familiar math materials provide children with the means to consider number concepts, mathematical operations, and more complex functions, helping to expand advanced mathematical knowledge and understanding.

## **Language**

Reading and writing are integral to all subjects in Montessori Elementary, as children express their interests and satisfy their curiosity. Students master conventions with thorough studies of grammar, spelling, and mechanics. They produce final copies with careful penmanship and keyboarding. They read, analyze, think critically, and compare and contrast literature to support personal opinion and perspective. Using these reading and writing skills, they present ideas through formal and informal presentations.

## **Cultural studies**

Cultural studies are interdisciplinary and integrate zoology, botany, geography, geology, physical and life sciences, and anthropology. Through these lessons, children explore the interconnectedness of all living things. Additionally, in-depth studies of history, physical and political world geography, civics, economics, peace and justice, the arts, world language, and physical education are introduced.

## **Science and Social Studies**

Interdisciplinary and integrated studies of geology, geography, physical and life sciences, anthropology, and history are built around “Great Lessons,” a series of dramatic stories that explore the origins of the universe, our planet, and the continuous development of human advancement. The laws of physics and chemistry reveal the interdependency of all living things. Beginning with a study of civilization, students explore the contributions of history and what it means to be a responsible citizen and to seek ways to make the world a better, more peaceful place.

## **Montessori Learning Materials**

Montessori students don’t just memorize facts and figures. They also learn the “hows,” “whens,” and “whys,” ensuring that learning takes place on a deep and fundamental level. Specially designed learning materials that use real objects and actions to translate abstract ideas into concrete form support them in this learning.

Teachers introduce materials to students according to their level of development and readiness. Students then work with the materials to make exciting discoveries such as why, when dividing fractions, we invert and multiply. Inherent in the use of Montessori materials is the understanding of the power of discovering answers on one’s own.

## **5.9 PREDICTING THE CHILDREN’S INTERESTS**

Clearly babies come into the world remarkably receptive to its wonders. Their alertness to sights, sounds, and even abstract concepts makes them inquisitive explorers and learners, every waking minute. Well before formal schooling begins, children's early experiences lay the foundations for their later social behavior, emotional regulation, and literacy. Yet, for a variety of reasons, far too little attention is given to the quality of these crucial years. Outmoded theories, outdated facts, and undersized budgets all play a part in the uneven quality of early childhood programs throughout our country.

What will it take to provide better early education and care for our children between the ages of two and five? *Eager to Learn* explores this crucial question, synthesizing the newest research findings on how young children learn and the impact of early learning. Key discoveries in how young children learn are reviewed in language accessible to parents as well as educators: findings about the interplay of biology and environment, variations in learning among individuals and children from different social and economic groups, and the importance of

health, safety, nutrition and interpersonal warmth to early learning. Perhaps most significant, the book documents how very early in life learning really begins. Valuable conclusions and recommendations are presented in the areas of the teacher-child relationship, the organization and content of curriculum, meeting the needs of those children most at risk of school failure, teacher preparation, assessment of teaching and learning, and more. The book discusses:

- Evidence for competing theories, models, and approaches in the field and a hard look at some day-to-day practices and activities generally used in preschool.
- The role of the teacher, the importance of peer interactions, and other relationships in the child's life.
- Learning needs of minority children, children with disabilities, and other special groups.
- Approaches to assessing young children's learning for the purposes of policy decisions, diagnosis of educational difficulties, and instructional planning.
- Preparation and continuing development of teachers.

Eager to Learn presents a comprehensive, coherent picture of early childhood learning, along with a clear path toward improving this important stage of life for all children.

## **5.10 LET US SUM UP**

We have come to understand that Cognition and Learning by Doing. Cognitive learning is an excellent way to achieve mastery in your profession. It helps optimize the use of your brain, thoughts, emotions and experiences. Cognitive strategies condense your learning activities into a fully immersive event that builds on past information while applying it to future scenarios. If you want to become an effective learner who enjoys seeking knowledge for a lifetime, practice the cognitive learning strategies above to achieve excellence at work and in every area of life.

## **5.11 UNIT - END EXERCISES**

1. What do you mean by Negligence of Teacher?
2. Write about the relationship between Cognitive and Physical Activities.
3. Discuss Classroom learning with objects and action Montessori Education.
4. Discuss about the enhancement of Learning.

## **5.12 SUGGESTED READINGS**

- Gordon Ira J, "Human Development", D.B.Taraporevala, Mumbai, 1970.
- Todd V E and HelersHeffernon, "The Years before School", Macmillan, London, 1970.
- Ali Mohamad: "Food and Nutrition in India", K.B. Publications, New Delhi.
- "National Seminar on Nutrition Education", NCERT, 1975.
- Rirchie A S Jean, "Learning Better Nutrition", Raner, Italy, 1967.

## UNIT VI

### TEACHER IS A GUIDE

#### Structure

- 6.0 Introduction
- 6.1 Objectives
- 6.2 Teacher is a director for making boundary for child learning
- 6.3 Sensitive interaction between teacher learners based on learner's needs
- 6.4 Levels of aspiration
- 6.5 Authoritative parenting
- 6.6 Traditional attitudes and Authoritarian attitude
- 6.7 Let us sum up
- 6.8 Unit - End Exercises
- 6.9 Suggested Readings

#### 6.0 INTRODUCTION

The teacher should always have smiling face and work with sincerity and dedication and love the profession chosen by them. The teachers should have good communication and behavioral skills. This will help the students reciprocate in a similar way. The teacher should have thorough knowledge of the subject he/she is teaching and should act as facilitators. The text book should be used only as a guide line.

The teacher should teach beyond the text books so that the students enjoy learning the subject thoroughly not only from the examination point of view but as a process of expanding their knowledge.

#### 6.1 OBJECTIVES

After going through this unit, you will be able to:

- Discuss about the Teacher is a director for making boundary for child learning.
- Explain the Sensitive interaction between teacher learners based on learner's needs
- Explain the Levels of aspiration
- Discuss about the Traditional attitudes and Authoritarian attitude

#### 6.2 TEACHER IS A DIRECTOR FOR MAKING BOUNDARY FOR CHILD LEARNING

**The Montessori Teacher and Her Role: Learning More about the Method**

Working as a guide and facilitator, the Montessori teacher creates a well-prepared Montessori environment and an atmosphere of learning and inquisitiveness designed to move students from one activity and level to the next. A Montessori teacher often steps back while the children are working, allowing them to learn from their own discoveries and draw their own conclusions. Rather than supplying children with answers, the Montessori teacher asks them how they would solve the problem, actively engaging children in the learning process and enhancing critical thinking skills. In most cases, children learn directly from the environment and other children, rather than the teacher.

Dr. Montessori believed that the teacher should focus on the child as a person rather than on the daily lesson plans. Although the Montessori teacher plans daily lessons for each child, she must be alert to changes in the child's interest, progress, mood, and behavior.

Subjects are interwoven and the Montessori teacher must be facile at presenting and understanding history, art, music, math, astronomy, botany, zoology, chemistry, physical geography, language, physics, geometry, and practical life works. The Montessori teacher is trained to give one-on-one or small group lessons and spend little time giving large group lessons. Lessons are brief and precise, meant to intrigue the minds of children so that they come back to learn more on their own. Montessori lessons center around the most basic information necessary for the children to do the work: the name of the materials, where it can be found in the classroom and on the shelf, how to use the materials, and what can be done with them.

Montessori teachers are scientific observers of children. They avoid using rewards and punishments for good or poor work. Montessori teachers never criticize or interfere in a child's work. It is only in a trusting atmosphere that a child's personality has room to grow. Children must have the freedom to choose their own activities and learn to behave without restriction. Dr. Montessori thought this was real work and that the child would reveal his/her true nature once he/she found work that commanded his/her full attention.

In *The Absorbent Mind* (pp. 277-81), Maria Montessori offered some general principles of behavior for teachers in the Montessori classroom.

The teacher becomes the keeper and custodian of the environment. She attends to this instead of being distracted by the children's restlessness. All the apparatus is to be kept meticulously in order, beautiful and shining, in perfect condition... This means that the teacher also must be...tidy and clean, calm and dignified...The teacher's first duty is therefore to watch

over the environment, and this takes precedence over all the rest. Its influence is indirect, but unless it be well done there will be no effective and permanent results of any kind, physical, intellectual or spiritual.

The teacher must...entice the children... The teacher, in this first period, before concentration has shown itself, must be like the flame, which heartens all by its warmth, enlivens and invites. There is no need to fear that she will interrupt some important psychic process, since these have not yet begun. Before concentration occurs, the [Montessori teacher] may do more or less what she thinks well; she can interfere with the children's activities as she deems necessary... She can tell stories, have some games and singing, use nursery rhymes and poetry. The teacher who has a gift for charming the children can have them do various exercises, which, even if they have no great value educationally, are useful in calming them. Everyone knows that a lively teacher attracts more than a dull one, and we can all be lively if we try... If at this stage there is some child who persistently annoys the others, the most practical thing to do is interrupt him...to break the flow of disturbing activity. The interruption may take the form of any kind of exclamation, or in showing a special and affectionate interest in the troublesome child.

Finally the time comes in which the children begin to take an interest in something: usually, in the exercises of Practical Life, for experience shows that it is useless and harmful to give the children Sensorial and Cultural apparatus before they are ready to benefit from it. Before introducing this kind of material, one must wait until the children have acquired the power to concentrate on something, and usually...this occurs with the exercises of Practical Life. When the child begins to show interest in one of these, the teacher must not interrupt, because this interest corresponds with natural laws and opens up a whole cycle of new activities... The teacher, now, must be most careful. Not to interfere means not to interfere in any way. This is the moment at which the teacher most often goes wrong. The child, who up to that moment has been very difficult, finally concentrates on a piece of work... Praise, help, or even a look, may be enough to interrupt him, or destroy the activity. It seems a strange thing to say, but this can happen even if the child merely becomes aware of being watched. . . . The great principle that brings success to the teacher is this: as soon as concentration has begun, act as if the child does not exist... The duty of the teacher is only to present new things when she knows that a child has exhausted all the possibilities of those he was using before.

Anne Burke Neubert, in *A Way of learning* (1973), listed the following elements in the special role of the Montessori teacher:

- Montessori teachers are the dynamic link between children and the Prepared Environment.
- They systematically observe their students and interpret their needs.
- They are constantly experimenting, modifying the environment to meet their perceptions of each child's needs and interests, and objectively noting the result.
- They prepare an environment meant to facilitate children's independence and ability to freely select work that they find appealing, selecting activities that will appeal to their interests and keeping the environment in perfect condition, adding to it and removing materials as needed.
- They carefully evaluate the effectiveness of their work and the design of the environment every day.
- They observe and evaluate each child's individual progress.
- They respect and protect their students' independence. They must know when to step in and set limits or lend a helping hand, and when it is in a child's best interests for them to step back and not interfere.
- They are supportive, offering warmth, security, stability, and non-judgmental acceptance to each child.
- They facilitate communication among the children and help the children to learn how to communicate their thoughts to adults.
- They interpret the children's progress and their work in the classroom to parents, the school staff, and the community.
- They present clear, interesting and relevant lessons to the children. They attempt to engage the child's interest and focus on the lessons and activities in the environment.
- They model desirable behavior for the children, following the ground-rules of the class, exhibiting a sense of calm, consistency, grace and courtesy, and demonstrating respect for every child.
- They are peace educators, consistently working to teach courteous behaviors and conflict.



- They are diagnosticians who can interpret patterns of growth, development, and behavior in order to better understand the children and make necessary referrals and suggestions to parents.

### **6.3 SENSITIVE INTERACTION BETWEEN TEACHER LEARNERS BASED ON LEARNER'S NEEDS**

The Montessori Method of education is based on Doctor Maria Montessori's (1870-1952) scientific observations about how children learn as they progress from birth to adulthood. Montessori discovered that children avidly absorb information from their surroundings, and that if these surroundings provide opportunities for learning, that children would readily teach themselves. Over more than 50 years, Montessori perfected the teaching principles, key learnings, and educational materials that provided children with the optimal learning environment.

#### **Respect for the child**

The unique developmental needs and interests of each child are respected. Children are not compared based on merit, they are valued for their individuality. Montessori education embraces multiple styles and pathways to learning, and understands that each child's early learning journey is different.

#### **Sensitive Periods**

Children pass through specific stages in their development when they are most able to learn specific skills. In Montessori education, these are called 'sensitive periods'. The Montessori learning environment supports these periods by providing children with hands-on learning experiences that encourage repetition and problem solving to maximize learning during these windows of opportunity.

#### **The Absorbent Mind**

The first six years of life are crucial in a child's development as they establish an understanding of themselves and their world. The Montessori environment supports children in this task by providing them with learning experiences that promote their sense of belonging, confidence, independence and agency.

## **Teaching Roles**

Children are the centre of the Montessori classroom. The role of the teacher is to observe and guide, being mindful of children's changing interests, developmental needs, and emotions. Teachers plan daily lessons for each child.

## **Montessori Materials**

Montessori materials are sensory-based learning tools that are designed to isolate one skill or concept. The materials encourage hands-on learning, independent problem solving, and analytical thinking. Especially unique, is that each Montessori material is designed with a visual control of error?

## **Prepared Environment**

The Montessori classroom is a prepared environment designed to optimise learning. Characteristics include: low open shelves, left to right display of Montessori materials in progression order, defined curriculum areas, child-sized furniture, freedom of movement, and freedom of choice.

## **Three Hour Work Cycle**

Students participate in a three-hour work cycle every day. This period of individual learning provides children with the opportunity to choose their work and progress at their own pace.

## **Five Curriculum Areas**

The Montessori Curriculum is divided into five key areas of learning: Practical Life, Sensorial, Mathematics, Language and Culture. Each curriculum area has a dedicated space in the prepared environment.

## **Normalization**

Normalization describes the process where young children come to focus and concentrate on a task for a sustained period of time. This period of development is characterized by: love of work, concentration, self-discipline, sociability.

## **6.4 LEVELS OF ASPIRATION**

The level at which a person sets his significant goals; the level of performance to which he aspires. An individual's aspiration level has an important bearing on his personality and adjustment. It is a basic component of his self-image, the way he appears in his own eyes. Generally speaking, most normal individuals have been found to set their significant goals just a

little higher than they are sure of attaining. There may be an element of self-flattery in this tendency, but it is considered healthy since it is a sign of self-acceptance and self-confidence.

Relatively high goals also act as a motivating force, since they give us something to reach for. Nevertheless, the level must remain within reasonable limits, as Coleman has pointed out: “Well-adjusted people tend to have a reasonably accurate evaluation of themselves in relation to their world and hence a fairly realistic level of aspiration. Maladjusted people, on the other hand, tend to be unrealistic - to set their aspirations either too high or too low—leading to inevitable failure or to wasted opportunities and, in either case, to unhappiness.” (Coleman, 1964). Level of aspiration is a universal feature of personality, but it appears to be particularly relevant in a society like our own in which the pressure to achieve is so great and feelings of success and failure so crucial. Too often parents set goals for their children on the basis of their own ambitions, with little regard to the young person’s own capabilities or realistic appraisal of himself. They also tend to be over influenced by comparisons with other people’s children, or interpret too rigidly the “growth gradients” they find in textbooks.

Some parents develop feelings of rejection toward their children when they are not measuring up even during infancy or early childhood, and in some environments it is not unusual for a father or mother to warn a third-grader that he won’t get into a “good” college unless he studies harder. If the child continues to fall even slightly behind, such parents apply still greater pressure and run the risk of inflicting severe psychological damage on him. Many children cannot do well under constant pressure, and some develop an intense feeling of failure which leads them to set unrealistically low goals for themselves throughout life. Experiments have thrown a good deal of additional light on aspiration level.

Lewin et al. (1944) have shown that a history of repeated success leads to an increased level of aspiration: the more we accomplish, the higher our goals. Experiences of failure, on the other hand, have more complex effects. Infrequent failures tend either to lower the aspiration level or to cause it to rise less rapidly than under conditions of repeated success. Continuous failure motivates the individual either to set his goals so low that success is guaranteed, or so high that his inability to achieve them does not produce a feeling of failure. In either case, the person is setting up a shield against self-exposure, and is deceiving himself about his abilities in order to protect his ego. This situation can usually be prevented if parents and teachers are

careful to give children tasks that allow them a distinct possibility of success. Such tasks should be challenging without pushing them beyond their capabilities.

An approach of this kind helps them establish a realistic level of aspiration that will carry over to adulthood. Other studies have shown that group standards have a significant effect on individual levels of aspiration. In one experiment, several groups of college students worked on simple arithmetic problems. The time it took each group to finish a page was publicly announced, and directly afterward each student privately recorded the score he expected to make on the next test—that is, his level of aspiration. It was found that these private levels were influenced by the group’s performance. Students who scored above the group average tended to lower their estimates; those who scored below average expected to do better.

They were apparently exhibiting a tendency to conform, or at least a “safety in numbers” psychology. Another important fact is that we carefully select the groups with which we compare ourselves. A good golfer chooses people who shoot in the seventies or eighties as his “reference group”; a duffer compares himself with people who shoot well over a hundred. To test this idea, college students were given intelligence test problems and were later told whether their scores were above or below those of high school, college, or graduate students. Each subject was then asked to estimate his score on a subsequent test. It was found that students who found that their scores were below those of high school students raised their level of aspiration, while those who scored higher than the graduate students lowered their estimates most (Festinger, 1942). These results are further evidence not only of a tendency to conform to one’s own group, but also to be influenced by the factor of prestige.

## **6.5 AUTHORITATIVE PARENTING**

Authoritative Parenting may be your style if you openly discuss with your children why the rules you have are intact. You may have a strong reward system in place, and provide both positive and negative reinforcement.

To your right, there is a grandmother listening to the story being told and holding her granddaughter in her lap. Together they are engaged in the story, completely in sync with one another. (Authoritative Parenting)

### **Traits of Authoritarian Parenting include:**

- Specific rules that must be followed, no exceptions
- Children lack the flexibility to express their opinion or share their ideas

- One-way dialogue is common
- “This is way we do it and always have” may be a frequent expression a child will hear.

## 6.6 TRADITIONAL ATTITUDES AND AUTHORITY ATTITUDE



Have you heard of Montessori education but were unsure exactly what that means? Today, we are addressing that question to give you a complete overview of why Montessori education is so effective. In fact, every Montessori school has a common belief that children can learn at their own pace and develop the skills they need in life through hands-on learning.

In a Montessori school, you’ll find children who are well-adjusted, eager to learn, and respectful of their teachers. However, teachers have a less traditional role in Montessori education. Instead of being authoritarian figures who rule the classroom, they are the child’s guides to learning. They are available at all times to answer questions, solve problems, and intervene when needed.

### Overview of Montessori Education Principles

Does that sound too good to be true? It’s not! Indeed, Montessori education is an effective proven teaching method that’s been around for over 100 years!

Montessori methodology was founded in Italy by Dr. Maria Montessori, who established her first school in 1903.

Dr. Montessori was a woman who defied the odds and became the first female doctor in Italy. She was an expert in early childhood development, and her research proved that children under 6 years of age flourished in a supportive environment that embraced diversity and allowed children to learn by exploring. She introduced children to sensory-stimulating materials and toys and they learned through these specific, playful experiences.

This was a radical idea at the time, but Dr. Montessori persisted despite the odds, and her methods still stand over a century later.

## **The 5 Goals of Montessori Education**

Montessori educators today still believe that children are the aptest to learn when they are empowered to do so. The Montessori classroom allows them to foster friendships, learn, and develop critical thinking skills.

We're going to outline the specific goals that we Montessori educators set for ourselves. Please notice that these are the goals that we set in place for ourselves. While they are aimed at educating our children, these are program goals that are common across every Montessori school.

### **Make Learning Joyful**

Montessorians believe that learning should be joyful for young children. It shouldn't be about a letter grade or a percentage. Learning should be accomplished through educational toys that teach children how to get along with others, solve problems for themselves and as a team, and learn through a fun hands-on approach.

Children eventually develop an appreciation for learning and become eager to continue on their educational journey when they learn in this setting.

### **Grow Self Confident Children**

Montessori educators also want to help children become self-confident. A lack of self-confidence can inhibit the ability to learn. Children who are afraid of failure often fail for lack of trying to master a task.

Children in Montessori settings are guided by teachers who reinforce positive outcomes with praise. In addition, they applaud children for strong efforts, even if they fail. They build the children back up after a failure, and they set them on a path that will lead to an eventual successful outcome.

The result is that Montessori educated children have a self-confidence not only in their ability to learn new things but in themselves overall.

### **Encourage Curiosity**

Children are naturally curious beings. It's how they learn. Our goal is to provide educational toys, games, and materials that continually encourage children's curiosity. This is what motivates them to explore their world, interact with new people, and discover how things work.

The result of curiosity is learning. These children learn abstract principles through their classroom interactions with learning materials.

For example, when they push a button on a learning toy, they quickly realize it makes a certain sound. To make that sound again, they must depress the exact same button for if they press the wrong button it will make a different sound. The child has just learned the abstract principle of cause and effect, even without having the language to express the terminology. You could never explain that to a child. They need to figure it out for themselves through curiosity.

### **Set Children up for Educational Success**

We want children in Montessori programs to be set up for long-term educational success. Think of some things that made students successful. You probably thought of points such as self-confidence, good habits, a love of learning, working well with others in the classroom.

All of these are hallmarks of Montessori principles. We know that children are capable of learning. Our job is to help them become the best learners that they can be from an early age. Those will become instilled values that will guide them throughout the rest of their educational journey and extend into adulthood.

### **Establish “Can Do” Attitudes**

Children in Montessori programs are able to learn at their own pace even within a group setting. Because of this, they are able to interact with the learning materials as much as they need to, for as long as they need. We don't place value on how quickly children master a skill or task, we place focus on whether or not they accomplish it eventually.

This teaches Montessori children to be persistent, never give up, and develop a “can do” attitude. This is a skill that will prove to be very valuable in life. After all, critics certainly told Dr. Montessori herself that she couldn't be a lady doctor. But her persistence and diligence in her studies along with her can do attitude left a legacy that our children still benefit from today.

### **The Bottom Line**

The Montessori story is far from over. In fact, many of us believe that it's more relevant now than ever before.

We are living in a world of uncertainty and chaos. Our young children are tomorrow's leaders. Should we not teach them in a diverse classroom that transcends social, economic, gender, religious or other biases? In a Montessori classroom, we believe that all children can

learn. It's up to us, as adults, to guide them in the process and establish the environment in which they will succeed.

If you're interested in learning about the Montessori program at Montessori School of Sugar Land, please schedule a tour. We want to meet you and learn more about that amazing child of yours.

## **6.7 LET US SUM UP**

We have come to understand that Teacher is a director for making boundary for child learning. The teacher should teach beyond the text books so that the students enjoy learning the subject thoroughly not only from the examination point of view but as a process of expanding their knowledge.

As a student spends a major amount of time in school, the teacher should shoulder the responsibility of a parent in the school. The students should have the same comfort zone in the school like home and they should be able to share their feelings with the teachers. This will go long way for the overall development of the student and help them to bring out his/her hidden talents and skills and become a good human being.

## **6.8 UNIT - END EXERCISES**

1. What is Traditional Attitude?
2. Write the difference between Traditional Attitudes and Authoritarian Attitude.
3. How to Develop Level of Aspiration in Montessori Education.
4. Explain about Authoritative Parenting.
5. Explain the role of the Teacher in Montessori Education.

## **6.9 SUGGESTED READINGS**

- Erikson H Erick, "Childhood and Society", Penguin, 1969.
- George G Thompson, "Child Psychology", The Times of India, 1965.
- Issacc Susan, "The Nursery Years", Routledge, London, 1956.
- Craig Grace J, and Marguerite Kermis, "Children Today", Allyn and Bacon, New Jersey, 1995.
- Gordon Ira J, "Human Development", D.B.Taraporevala, Mumbai, 1970.