

PEDAGOGICAL ASPECTS AND APPROACHES IN MONTESSORI EDUCATION-

31113

UNIT I

LIFE ACTIVITY METHOD

Structure

- 1.0 Introduction
- 1.1 Objectives
- 1.2 Practical life activities
- 1.3 Child Promotes activities and learn to Interact with environment
- 1.4 Real life projects
- 1.5 Promote five Motor skills
- 1.6 Concentration of mind
- 1.7 Independent nature (transferring, sorting, Personal hygiene, grooming, Dusting and sweeping).
- 1.8 Let us Sum up
- 1.9 Unit-end exercises
- 1.10 Suggested Readings

1.0 INTRODUCTION

Dr. Maria Montessori believed in the learning environment of the teachers whom she called as the ‘Directress’. Experiences and positive physical environment has an impact on auto education. Thus, Dr. Maria Montessori approach has a pedagogy which is, purposeful, empowers the child into a holistic, purposeful development and the child remains connected to the environment.

Montessori provides learning experiences for children by providing appropriate materials which would take them from the known to the unknown. i.e. “Concrete to Abstract”.

1.1 OBJECTIVES

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

- Discuss the Practical life activities
- List out the Real life projects
- Explain the Promote five Motor skills
- Discuss the Concentration of mind

1.2 PRACTICAL LIFE ACTIVITIES

“The only language men ever speak perfectly is the one they learn in babyhood, when no one can teach them anything!”

Practical life activities are applicable for all ages, even infants, and the activities change depending on what the child can do at each stage of development. Every day to day activities small or big must be performed in order to be self-independent is the purpose of EPL.

When taken seriously and presented as an approachable, impactful challenge, these activities hold inherent dignity. It's not “just” getting dressed or "just" juicing an orange if one is doing it oneself. The child is learning to follow a complex motor sequence, independently, in order to fulfill his or her own desires and needs.

These skills, when taught early in life, allow children to believe in themselves as well as develop the self-discipline, self-confidence and self-dependent skills that are needed for success throughout their lives.

Practical life activities allow the children to believe in themselves as well as develop self-discipline needed for success. These activities provide the child to become physically independent. It allows the children to believe in themselves.

The activities of Practical life are as follows:

- Washing hands
- How to use a tooth paste
- How to brush teeth
- Dressing and Undressing
- Combing their own hair
- Holding a spoon
- Helping with food or snack preparation /serving etc
- Blowing their nose with a handkerchief
- Folding a handkerchief
- Using and folding a quilt
- Arranging books in a school bag
- Arranging the lunch basket
- To open and close a lunch box
- To use the serviette (table napkin)
- To sit on a chair
- To put back a chair

- Hanging clothes to dry and fold when dry
- Opening and closing a door
- Walking on a line without dragging feet
- Cleaning house and cleaning classroom
- Washing their plate
- Rolling a mat and placing it back in place
- Arranging a flower vase



The Role of the Teacher

In Montessori education the role of the teacher is to understand and guide children in their learning without becoming an obstacle, and without stressing themselves too much into the natural learning process. Therefore, the Montessori teacher is a facilitator. Montessori teachers encourage children to learn by placing the pupils as the centre of the experience. Montessori teachers manage classroom behaviours for all children and their work, by observing and using sensitive periods, interests and abilities to plan activity, and by diverting inappropriate behaviour to meaningful tasks.

Social Graces / Relations:

These exercises enable the children to have the understanding of social conventions through individual group, discussions, and practice daily in the classroom. The teacher here must be the excellent example /role model to practice these manners / social graces. When we respect young learners with dignity and etiquette it will incorporate manners and common courtesy.

“We must teach children the elements of social behaviour so that their interest is around and as a consequence, their attention are directed to these aspects of life”

In the children’s house, sessions on social graces could include:

- ❖ How and when to use the importance of words like “Thank you” “Excuse me”, Sorry, May I, respecting elders etc...

One of the main goals of education is to get students to be successful and good quality valued global citizens. This is an excellent tool in which they need their life to be valued, preserving the human relationship.

The Garden:

The garden must be cultivated and maintained as far as possible by the children. The teacher guides the children into a course of self-education. She must show the children how to use the materials at every stage of development. The environment is her responsibility. It must be maintained in perfect order. She should mend everything she can with the children.

Knowledge of seeds and planting seeds are important, ecological balance, care for the environment. It’s a wonderful learning process to watch seeds germination and observe their growth connects him with nature. It paves for a lifelong learning. The tools must suit their age, then they should understand the importance and usage of water, food, ecological balance, care for the environment we live etc.

1.3 CHILD PROMOTES ACTIVITIES AND LEARN TO INTERACT WITH ENVIRONMENT

i)The Montessori Method

The Montessori Method is characterized by providing a prepared environment: tidy, pleasing in appearance, simple and real, where each element exists for a reason in order to help in the development of the child. A Montessori classroom integrates children of mixed ages that are grouped in periods of 3 years. This promotes socialization, respect and solidarity among them naturally.

The prepared environment offers the child opportunities to commit to interesting and freely chosen work, which brings out long periods of concentration that should not be interrupted. Freedom develops within clear limits, and this allows children to live in harmony with others in the small society they belong to in the classroom.

Children work with concrete materials that were scientifically designed, which provide them the keys to explore our world and develop basic cognitive abilities. The materials are designed to allow the child to recognize the error by him/herself and become responsible for his/her own learning.

The adult is an observer and a guide: he/she helps and stimulates the child with all his/her effort. This allows children to act, want and think by themselves, and helps them to develop confidence and inner discipline. The Montessori education covers all periods in education, from birth to 18 years old, providing an integrated curriculum.

ii)The Montessori Environment

The Montessori environment is a spacious, open, tidy, and pleasing in appearance, simple and real place, where each element exists for a reason in order to help in the development of the child. The environment is proportional to children's height and size, and it has low shelves and tables and chairs of different sizes where children can sit individually or in groups. The classroom is divided into theme areas where related materials and bibliography are exposed on the shelves, allowing great freedom of movement. Children can work in groups or individually, respecting their own style and rhythm. Each child uses the material he chose by taking it from the shelf and putting it back in its place so others can use it.

The environment promotes the child's independence in the exploring and learning process. Freedom and self-discipline make possible that each child finds activities that respond to their evolutionary needs.

Montessori classrooms gather children in 3 different ages: younger than 3 years old, from 3 to 6 years old, from 6 to 9 years old and from 9 to 13 years old. These "mixed age classrooms" favour spontaneous cooperation, desire to learn, mutual respect and the acquisition of deep knowledge in the process of teaching others.

iii)The Child

Dr. Montessori believed that every educator should "follow the child", recognizing the evolutionary needs and characteristics of each age, and building a favourable environment, both physical and spiritual, to respond to these needs. Children's development emerges as a need to adapt to his/her environment: the child needs to give a meaning to the world that surrounds him/her, and he/she constructs him/herself in relation to this world.

Maria Montessori observed that the child goes from infancy to adulthood through 4 evolutionary periods called "Planes of Development". Each period presents characteristics that are radically different from the other periods, but each of them constitutes the foundation of the following period. In her book, *The Absorbent Mind*, Montessori explained that: "In the same way, the caterpillar and the butterfly are two creatures very different to look at and in the way they behave, yet the beauty of the butterfly comes from its life in the larval form, and not through any efforts it may make to imitate another butterfly. We serve the future by protecting the present. The more fully the needs of one period are met, the greater will be the success of the next."

The first plane of development that starts at birth and continues until the child is 6 years old is characterized by children's "Absorbent Mind", which takes and absorbs every aspect, good and bad, from the environment that surrounds him/her, its language and its culture. In the second plane, from 6 to 12 years old, the child possesses a "rational mind" to explore the world with imagination and abstract thinking. In the third plane, from 12 to 18 years old, the teenager has a "humanistic mind" which desires to understand humanity and to contribute to society. In the last plane of development, from 18 to 24 years old, the adult explores the world with a "specialist mind", finding his/her place in it.

iv)Tangible Materials

Montessori materials were scientifically designed in an experimental context within the classroom, paying special attention to children's interests based on the evolutionary stage they were going through and with the belief that manipulating concrete objects helps the development of knowledge and abstract thinking.

These materials allow children to investigate and explore in a personal and independent way. They make repetition possible, and this promotes concentration. They have the quality

of "isolating the difficulties", which means each one of these materials introduces a unique variable, only one new concept, isolating it and leaving the other concepts without modification. These materials have a "control of error": the material itself will show the child if he/she used it correctly. This way, children know that errors are part of the learning process; they teach children to establish a positive attitude towards them, making children responsible for their own learning and helping them to develop self-confidence.

v)The Adult

The Montessori teacher, called "directress", observes each child, his/her needs, capabilities and interests, and offers him/her opportunities to work intelligently and with a concrete purpose, to service the care of him/herself and of the small community in the classroom. The directress' final objective is to intervene the minimum possible as the child progresses in his/her development. The directress allows the child to act, want and think for him/herself, helping him/her to develop confidence and inner discipline. The Montessori directress doesn't give awards or punishments. Each child finds inner satisfaction that emerges from his/her personal work.

When the child, based on his/her evolutionary development, is ready for a lesson, the directress introduces the use of new materials and presents activities individually or to a reduced group. With older children, the directress helps each child make a list of objectives at the beginning of the week and then the child administers his/her time during the week in order to achieve them. It is not the directress but the child him/herself who is responsible for his/her own learning and development.

vi)The Montessori Curriculum

The foundations for the child's future development are set during his/her first three years of life. Montessori calls this period the one of a "spiritual embryo", in which the child does in the psychological sphere what the embryo did in the physical sphere. This process is achieved thanks to the child's "absorbent mind", which incorporates experiences, relations, emotions, images, language and culture through his/her senses and by the simple fact of living. These life experiences shape his/her brain, forming networks or neurons that have the potential of staying with the person for all his/her life. In this period from birth to 3 years old, the Montessori education concentrates in the development of speaking, coordinated movement and independence, which gives the child confidence, and allows him/her to discover his/her own potential and his/her place within a community.

The classroom curriculum for children from 3 to 6 years old is divided into four working areas:

Practical Life: These are activities that aim to the care of the person, of others and of the physical environment where they live in. These activities include tasks that are familiar to the child: washing, polishing, setting the table, arranging flowers, etc. They also include activities of "grace and courtesy", which are part of all civilized people. Through these and other activities, children achieve coordination and control of movement and exploration of his/her surroundings. Children learn to complete a task from beginning to end, they develop their will, self-discipline, the capacity of concentration and self-confidence.

Sensorial: Children at this age learn through senses more than through their intellect. The sensorial materials are tools for children to refine each of their senses. Each material isolates a specific quality: smell, size, weight, texture, flavour, colour, etc. In this preschool age, when children are "bombarded" with sensorial information, these materials allow them to find order and meaning to the world, raising his/her capacity of perception, favouring observation and a sense of admiration for everything that surrounds him/her.

Language: When the child enters an environment at age 3, they enrich the language that they had already acquired. They are capable of using it intelligently with precision and beauty, slowly realizing its properties. They learn to write, starting with their senses (hearing and touching), and as a natural consequence they learn to read. As an extension of language activities, children learn about geography, history, art and music. These areas help the child to know his/her surroundings and to realize the place the child occupies in this world. They teach him to respect and love for his/her environment, and they create a sense of solidarity with all humanity and his/her habitat.

Mathematics: The materials help the child to learn and understand mathematical concepts when working with concrete materials that lead him/her intuitively to abstract concepts. They offer him/her sensorial impressions of the numbers and set the foundations for algebra and geometry.

1.4 REAL LIFE PROJECTS





Will a Montessori Education Prepare My Child for the “Real World”?

This is a common question I hear as I meet with prospective parents and take them on a tour through our community at The New School Montessori.

This is a difficult question to answer considering the “real world” is a relative term. Do they mean the “real world” of professional pressures, deadlines, and aggressive competition? Or do they mean the “real world” of emotional intelligence, engaged citizenry, compassion, joy, and relationship to one’s environment? If I were to be honest with myself, I’m pretty sure they’re asking about the former – the “real world” of work. Fortunately, no matter which version of the “real world” they are referring to, my answer is the same, a resounding “Yes!”

Multi-age classrooms and emphasis on time management prepare in “real world” ways.

For those of you who are not familiar with Montessori education let me briefly explain that it is a philosophy and pedagogy based on the scientific research of Dr. Maria Montessori. Children are grouped in multi-aged classrooms, where students are engaged in hands-on, self-paced, collaborative work. Multi-aged classrooms allow older students to be leaders and mentors while providing opportunities for younger students to work with older classmates on group projects. In addition, Montessori teachers do not stand in front of a class giving lectures while asking students to work on the same thing, at the same time, in the same way. Rather, they walk throughout the classroom working one-on-one with students or in small groups. At the core of the Montessori philosophy is the belief that all students have a natural desire to learn, explore, and joyfully work toward independence through knowledge and discipline.

- Now, keeping all of that in mind, I want you to ask yourself:
- In any “real world” job, is everyone the same age?
- Are workers all sitting at their desks working on the same thing at the same time?
- Do workers often need to access memorized facts in a timed setting? Of course not.

In a “real world” job, one is expected to be able to work with people at different levels of experience, work well independently and in a group, set up work, concentrate on it, keep it organized, complete it, and put it away. Workers need to try things to see if they work and then learn from their mistakes. They need to be able to problem solve and to communicate effectively.

The top five types of knowledge and skills employers are looking for in the 21st Century were listed by a Gallup poll in this order and are all skills deeply embedded in the Montessori Method:

- Critical thinking and problem solving,
- Information technology application,
- Teamwork and collaboration,
- Creativity and innovation,
- Diversity training.

Montessori education has been proven to prepare children for the “real world.”

In 2004 Barbara Walters interviewed Google founders Larry Page and Sergey Brin, and asked them if having college professors as parents was the major factor behind their success. Page stated that more influential than having professorial parents was the fact that, “We both went to Montessori school, and I think it was part of the training...being self-motivated, questioning what’s going on in the world, doing things a bit differently.”

In the popular magazine *Science*, Angeline Lillard published a study comparing the educational achievement performance of low-income Milwaukee children who attended Montessori preschools versus children attending a variety of other traditional preschools determined by lottery. Lehrer found that by the end of kindergarten, “Montessori students proved to be significantly better prepared for elementary school in reading and math skills than the non-Montessori children. They also tested better on “executive function,” the ability to adapt to changing and more complex problems, an indicator of future school and life success.”

What about Montessori at a high school level? Clark Montessori (a Cincinnati public Montessori school) provided these results of their 88 graduates in 2010: 100% graduation rate. 100% of the graduates went to college. 33% were first generation in their families to attend college, and 33% came from families in need of free or reduced lunches.

1.5 PROMOTE FIVE MOTOR SKILLS

Physical Development in a Montessori Preschool

Childhood Development

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.

1.6 CONCENTRATION OF MIND

Nurturing Concentration in the Montessori Child in the First Plane of Development



If a child's cycle of activity is interrupted, the results are a deviation of behavior, aimlessness, and loss of interest...So whatever intelligent activity we witness in a child – even if it seems absurd to us...we must not interfere; for the child must be able to finish the cycle of activity on which his heart is set.

Learning, by itself, cannot happen without concentration. Whether we are learning to tie our shoes, write our name, wash a car or solve complex algebraic equations, there is intense concentration specific to the task at hand. Dr. Maria Montessori understood the power of concentration, and her methodology is designed to nurture this power. In this, the first of a two-part article, we explore the importance of concentration in early childhood.

1.7 INDEPENDENT NATURE (TRANSFERRING, SORTING, PERSONAL HYGIENE, GROOMING, DUSTING AND SWEEPING).

Nurturing concentration in the Montessori child in the first plane of development

Montessori observed that the formative stage of concentration occurs from birth to about the age of three. I recently had the pleasure of watching my nine-month old niece

discover a piece of adhesive tape. As she tried to pull it off the fingers of one hand, it stuck to the fingers of the other. As she alternated between hands, her inquisitiveness and delight was apparent to all who observed this new experience. Wisely, her parents did not rush to take it away from her, though they were watchful, fearing she might put it in her mouth. Rather, they sat nearby waiting until the adhesive strength lessened, thus ending her concentration. My niece spent 5-10 minutes in intense concentration to this new sensorial experience.

Concentration in infants is a fragile thing. Well-meaning adults often rush in to “fix” things. A whimper suddenly demands that new toys be offered, a frown means a change of scenery is required. Concentration is broken by the adult trying to shift the focus of the child. Indeed, Montessori said “no one acting from the outside can cause him to concentrate”.



As the child grows and enters the Montessori Children’s House (ages 3-6), concentration and attention span increase. In fact, that is an indirect aim of most Montessori Children’s House activities. Practical Life activities are the cornerstone of the Montessori Children’s House curriculum which serves the purpose of building independence, improving coordination, and following steps in a sequence. All of these build on focus and concentration, with some activities requiring fifteen minutes or more to complete.

In the Montessori classroom and home, there is a deep respect for the child. In the Montessori environment it is rare that a child is interrupted while he is focused on his work. It is understandable that there will be times when a child must be interrupted. However, at these times, it is ideal to let the child know ahead of time, for example: “It’s almost lunch time. We will need to stop playing in the puddle and clean up in 5 minutes.” In five minutes’ time, offer a choice: “Would you like me to help you clean up or would you like to do it yourself?” Or, offer an alternative: “I know you are having fun playing in the puddle. After lunch, we can come back and play some more.”

Our modern culture contains a multitude of distractions: video games, computers, television, and any number of sports- or arts-related extra activities. Combined,

these can create an overabundance of sensory stimulation. Maintaining a calm, controlled, prepared Montessori environment and a clear approach to reducing distractions and sensory overload is an important task of the Montessori caregiver. This directed approach is designed to foster the power of concentration in children, so that they may grow to become happy, independent, and fulfilled adults.

Practical Life: The Soul of the Montessori Classroom

"Any child who is self-sufficient, who can tie his shoes, dress or undress himself, reflects in his joy and sense of achievement the image of human dignity, which is derived from a sense of independence."

While recently visiting a Japanese-immersion Montessori classroom I was impressed by the carefully prepared Practical Life area. The tokkuri (sake pot and cups) and other glassware for pouring were gleaming. Fresh flowers in a large container were ready to be arranged in a small vase. Chopsticks, used daily during lunch, were available for practice, first to pick up cotton balls and later, the more challenging small rubber balls. A four-year old boy sat at a table using the apple corer to cut through a one inch cross section of an apple (the perfect thickness for success). Then he placed the apple pieces on toothpicks and offered them to his classmates on an apple-shaped plate.

The Importance of Practical Life

Children are naturally curious and want to participate in the activities of daily life they see all around them. Maria Montessori developed the Practical Life exercises to give children the opportunity to practice those skills, gain independence, and become fully functional members of their community.

A parent, new to Montessori, once asked me why we were training her daughter to "become a janitor, with all of this sweeping, mopping, and dusting" It's important to educate parents about the crucial role that Practical Life exercises play in their child's social, emotional, and academic development, providing a foundation for confidence and success.

These activities help children develop their motor skills, refining both large and small muscle coordination. A child may repeat a particular exercise over and over, perfecting her movements and developing concentration. Pediatric neuropsychologist Steven Hughes found that children's strongest link to their brains are their hands, noting that repeated motor movements develop the pathways in the brain that help children learn.

The Exercises

In the preliminary exercises, children learn basic life skills such as pouring, cutting, folding, and spooning. In the applied exercises, children learn how to care for

themselves (hand washing, combing hair), as well as the environment (polishing furniture and washing their own snack dishes, for example).

The other two areas of the Practical Life curriculum are Grace and Courtesy, (which include asking for something, letting someone pass, covering a sneeze or yawn), and Control of Movement, (carrying scissors, walking around a rug, the Silence Game).

1.6.6 Spontaneous Contributions

At first the child acts solely for himself, washing a table for the sake of doing the activity. Later he will wash a table because it is dirty. Eventually, what were once exercises become spontaneous and natural expressions of community life? Unprompted, children will often help each other mop up a spill or sweep the dirt from an overturned potted plant.

As his world expands, each child comes to realize that he is an important part of the community, someone with something to give. Children feel trusted and respected when adults provide them with the opportunity to take part in the real work of their family and school. Perhaps this is one reason why Margot Waltuch, who trained with Maria Montessori, said that "Practical Life is the soul of the Montessori classroom.

Role of the Teacher

The teacher must prepare the environment with materials that are real, breakable, child-size, functional, and related to the child's culture. Teachers provide lessons that enable children to cut cheese with a real knife, drill holes with a real (child-size) drill, and dust shelves with a real lambswool duster. New activities are introduced regularly to maintain the children's interest.

When presenting lessons, use as few words as possible. Either move your hands or speak, but don't do both at the same time. The goal is to give the lesson so that children can repeat the activity in their own successful ways. Don't worry if they don't repeat the steps exactly the way you demonstrated. Montessori emphasized, "Our task is to show how the action is done and at the same time destroy the possibility of imitation." (E.M. Standing, Maria Montessori, Her Life and Work)

Practical Life for the 21st Century

Are some of our Practical Life activities outdated? A friend who taught in the 1970s remembers that she often walked around the classroom with only one shoe on because a child was busy polishing her other leather shoe. How many adults today polish shoes or silver? Children, however, continue to delight in the polishing exercises, and these are still valuable life skills to learn.

We can be creative and add activities from daily life in the 21st century to our Practical Life shelves, like using a soap-pump dispenser, applying sunscreen, wrapping a gift and curling the ribbon, or using a Velcro® dressing frame.

For Older Children

Offer your five- and six-year-olds progressively complex and purposeful activities such as weaving, gardening, grooming a dog, quilting, and embroidery. Introduce advanced cooking projects, using recipes from other cultures, such as making sushi rolls or wrapping tamales in corn husks.

Before becoming a Montessori teacher I worked in the skilled trades, and I was pleased to be able to bring to my kindergarten and elementary students some Practical Life activities based on mechanical and woodworking skills. Children enjoyed fixing a bicycle, building an electrical circuit to make a light bulb light, gapping a spark plug, and building a birdhouse.

Making Sushi

As lunchtime approached in the Japanese-immersion class, the five- and six-year-olds led the way, speaking fluent Japanese. They showed their younger classmates how to make sushi. First they spread a scoop of rice, flavoured with rice vinegar, across a dark green sheet of dried seaweed. Thin strips of cucumber and carrot were added before carefully rolling the seaweed around the rice with the bamboo sushi rolling mat. Most of the older children made recognizable sushi-shaped cylinders. Some of the younger ones had more unusual looking creations. Still, everyone seemed pleased with their work.

The children carried their food to the table, set by classmates with a tablecloth, glass plates, chopsticks, and cloth napkins. After waiting politely until everyone was seated, the children cut their sushi rolls into bite-size pieces and began to eat. Contentment and a sense of belonging shone in their bright faces and animated discussions. The community spirit evident in making and enjoying this lunch exemplifies why Practical Life truly is the soul of the Montessori classroom.

1.8LET US SUMUP

We have come to understand that Life Activity Methods in Montessori Education. Practical life in Montessori is purposeful activity, develops motor control and coordination, and develops independence, concentration, and a sense of responsibility. The exercises in practical life cover two main areas of development: care of self, and care of the environment.

The practical life activities should be taken seriously as children are working diligently to perfect and master specific skills. This fundamental range of work has many layers of purpose that include joyously earning mastery over the "mundane," as well as constructing and practicing core human faculties.

1.9UNIT-END EXERCISES

1. Define Motor Skill
2. What is Personal Hygiene
3. What do you mean by Child Promotes Activities
4. Describe the Child promotes activities in Montessori Education.
5. List out the Motor skills in Montessori Education.

1.10 SUGGESTED READINGS

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UNIT II

LANGUAGE AND MATHEMATICAL LEARNING ACTIVITY METHOD

Structure

- 2.0 Introduction
- 2.1 Objectives
- 2.2 Learning to Recognize
- 2.3 Learning the sound variation and writing
- 2.4 Grammar and etymology
- 2.5 Group work and hand on work
- 2.6 Learn to count the numbers
- 2.7 Decimal System and geometry
- 2.8 Individualized and abstract work
- 2.9 Let us sum up
- 2.10 Unit- end exercises
- 2.11 Suggested Reading

2.0 INTRODUCTION

This area gives the child to verify facts to experience its inner potential. All the Montessori mathematics Equipments are designed with highly hands-on approach to learning.

It encourages the children to develop their five senses

- ❖ Kinetic movement
- ❖ Spatial refinement
- ❖ Large and small motor skills

Concrete knowledge that leads to abstraction. Every activity equipment has its place in the classroom as self-contained and self-correcting (Control of Error). The materials are specific design confirming to exact dimension and scientific precision. Each equipment has both direct and indirect aim. Its activity is well designed for a prepared environment to focus on skill concept and exercise.

The age appropriate equipment is not taught. In fact the Equipments are taught as per the mental feed the child's needs. Thus the Montessori class rooms are mixed age class rooms. They are called "BAMBINI". It means a child's home.

The science of mathematics is one of the most ancient of sciences, extending back to pre-historic times. Man learns to count by intuition and very early in the history of man we learn to enjoyed shapes, sizes etc.

In India itself mathematics has developed the best known contribution form and also the use of zero. Today we find that every Science as it developed become more and more mathematical. The Origins of mathematics and geometry are Prehistoric and long before man had learnt to write. Until 7th century BC we have evidence of the existence of mathematical proofs in ancient Egypt. For example the construction of the pyramids could not have been carried out without knowledge of mathematics.

2.1 OBJECTIVES

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

- Explain the Learning the sound variation and writing
- Discuss the Grammar and etymology
- How to learn to count the numbers.
- Discuss about the Decimal System and geometry.

2.2 LEARNING TO RECOGNIZE

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 maximise 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.

Normalisation

Normalisation 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.

2.3 LEARNING THE SOUND VARIATION AND WRITING

Learning to read and write the Montessori way: sound games

In my last post I talked about how we are laying the foundations for literacy for Frida. Laying this foundation is, in my opinion, very important and absolutely necessary before any sort of formal literacy learning takes place.

Frida is now at a stage in her development where she is ready for work which will have a more direct impact on her reading and writing skills, “keys” to reading and writing. We started this work a couple of months ago and I wanted to tell you a little bit more about it. However, for those accustomed to flash cards, ABCs and alphabet songs, this work may look a little unusual. In the Montessori philosophy, a child’s first reading work does not actually consist of learning any letters. Sound strange? Hopefully this blog post will make things clearer!

“I spy with my little eye...” playing Montessori sound games

These games are the first step towards learning to read and write the Montessori way, and as such are crucial if choosing this method. They are designed to help the child recognise and be aware of the different sounds that make up words. The child uses the skills she develops in these games to help her to sound out the first words she reads and writes.

It is really important that you use the proper sounds when playing these games. You are not naming the letters, eg. The letter ‘a’ is not ‘ay’ but ‘a’ as in apple. The letter ‘b’ is not ‘bee’ or ‘buh’ but ‘b’ as in tub. ‘F’ is not ‘eff’ but ‘fff’. It does take a bit of practice! I would recommend searching online for “Montessori sound charts” or looking in a Montessori book for the correct pronunciation of letters and digraphs (sounds which are created when two letters are combined, such as ‘ai’, ‘ch’, ‘th’ or ‘sh’).

It is suggested that these games are introduced once the child is talking close to fluently, with a strong grasp of language and a wide vocabulary, along with good pronunciation. Another way to know if your child is ready is how they react to the game – if they are not interested then it may well be that they are not ready. I know that I tried to start playing sound games with Frida a month or so before we actually started and she just was not up for it at all. When I introduced them again just a month later she was immediately interested and will now happily play for a long time, which says to me that she is ready whereas she wasn’t before.

I would also stress that it’s important to start with the sound games before introducing materials such as the sandpaper letters, as these build on the skills your child will develop through these games.

How to play?

Level one – Choose one object, for example a pen, hold it out and show it to your child. “I spy with my little eye something in my hand beginning with ‘p’.” Then child will say “pen”. You can repeat this with various objects. When the child appears to be beginning to listen to the sounds, move to level two.

Level two – Choose two objects, with different initial sounds, and play the game. Your child now has to make a choice, affected by how she distinguishes sound. When she has mastered this stage, increase to three, then four, then five. You can be more subtle, introducing similar sounds such as “p” and “b”. When the child has mastered this, move to level three.

Level three (where we are currently with Frida) – Choose a room, garden, or illustration, and a sound which represents more than one object in it. Once your child has offered one object, encourage them to volunteer more. You are not asking your child to search for one object that you are thinking of, but rather any item beginning with that sound. Your child may also take turns to choose the sound for the objects. Use digraphs as well as single letters. Play this game often!

We either play this game using our surroundings as inspiration, or by looking at the pages of a beautiful book. Some of my favourite books for playing sound games include “Grandma’s House” and “Lots: The Diversity of Life on Earth” (both are gorgeous books which I really recommend), although any book with rich illustrations works well and we play it a lot whilst reading.

I have been really encouraged and energised by playing these games with Frida. She also seems to enjoy them and can often be heard talking to herself or to us saying “‘A’ for Albie”! And ‘f’ for fur, and ‘f’ for Frida! ‘M’ for mummy.” I think this is a good sign that she is in the sensitive period for this work.

A note on age: “Montessori Read and Write” suggests introducing the level three sound games around age three to three and a half (following level one around age two and a half, and level two around age two and a half to three). Frida is only 26 months at the time of writing. However, I felt that she was ready as her spoken language is very strong for her age, and she was able to immediately grasp the first two levels with ease. Some children may be ready sooner than the suggested ages, and some may be ready later, preferring to work on other skills. Every child is different!

2.4 GRAMMAR AND ETYMOLOGY



Elementary Grammar

It is our goal to insure that each student understands how language functions in both written and oral formats. Using a variety of concrete materials, we present the nine basic parts of speech and their symbols and functions in the lower elementary classes and the additional extensions of the basic parts of speech in the upper elementary classes. Students use the concrete symbols to identify these parts of speech in sentences. They also learn to do structural analysis of sentences, thus expanding their understanding of how words and phrases function. Older students continue to expand their knowledge of grammar by studying the history of the English language, etymology, affixes, word families, noun classifications, comparative and possessive adjectives, verb conjugations, mood, voice, negatives, auxiliary and linking verbs, transitive and intransitive verbs, infinitives, gerunds and participles. They also study simple, compound and complex sentences, adverbials, attributives, appositives, direct address and the functions of clauses.



Elementary Grammar Chart

Our strong emphasis on the study of grammatical systems facilitates reading and writing competencies.

First and second graders progress through the Spelling Lists which follow phonetic rules with special word lists interspersed throughout the program. The children progress at their own rate of speed and parents are encouraged to help their children move through this program. After a child completes the required spelling lists, a commercial spelling book is introduced. Children work through this series until they are ready to move into a Vocabulary Development Program around 4th or 5th grade.

2.5 GROUP WORK AND HAND ON WORK

Spring 2017 encouraged in most Montessori environments, as it should be, and there are clear benefits in handwork for its own sake. Handwork is fun and people generally enjoy working with their hands. There is great pleasure and satisfaction in creating something—to have an idea in your mind and bring it to fruition. Also, the materials used can be very satisfying. Different materials have different qualities and children (and adults) develop preferences through experience.

Handwork appeals to the social nature of the elementary child. So much of what the children can do is collaborative in nature. Planning and agreeing on the execution of a project is an enormous task—one in which the children revel. If the teacher has been diligent in creating diverse groups for presentations there can also be surprising combinations of children who choose to collaborate with each other. It is so heartening to see two children who are usually not in contact with each other decide to team up to work on a project and to observe this type of culture develop within the prepared environment. Handwork leads to experiences in spatial relationships.

In making something, especially in three dimensions, one is confronted with a picture of an idea that can be quite different than when presented on a surface. An example with which all elementary Montessori practitioners can readily relate is the work with the geometric box of sticks. The three sides of the triangle are readily counted when drawn on a piece of paper, but it is only when we make it with sticks and pick it up and compare it to other polygons made with sticks that we can experience the awesome stability of that triangle. Making it in a way that it becomes an object gives a very different perspective of a triangle than the picture on the paper.

2.6 LEARN TO COUNT THE NUMBERS

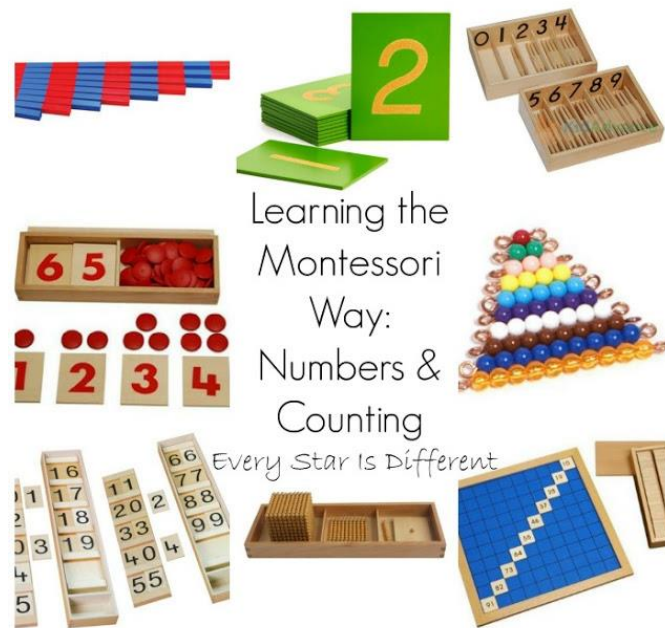
Learning the Montessori Way: Numbers & Counting

Maria Montessori was brilliant in how she went about teaching children their numbers and counting. Her ability to break down tasks into smaller steps and concepts, in order to

help children master all the necessary skills is astounding. Learning the Montessori Way is truly the best way!

But for some, especially home-schooling parents who may not have professional Montessori training, navigating the sequence of lessons and materials can be daunting.

What you see here is a basic outline and explanation of learning numbers and counting the Montessori way. I share the order of materials introduced for the first time, but I do not give much information about variations etc. With each material I've provided a resource for the presentation and lesson.



Technically the concept of quantity starts with Montessori sensorial materials, but for the purpose of this post, I'm focusing on Montessori math materials.

Numerical Rods



Children begin their math journey using the Montessori Numerical Rods . The Montessori Primary Guide offers an explanation and break down of the presentation of the material and several different ways to use it.

Notice how the rods are not numbered. Written numerals are not introduced at this stage of learning. You will see how Montessori introduces written numerals, and then

integrates them with the numerical rods later on. Each step in the process builds upon previously learned material.

2.7 DECIMAL SYSTEM AND GEOMETRY

The Decimal System (Group Two)

The decimal system is a numeral system which organises and classifies numerical quantities into different hierarchies of units. In the Casa it is offered when the child can count to ten with complete understanding; with the knowledge of the symbols 1-9 and can recognise zero. The child is given the total decimal system – clearly, simply, harmoniously and with its unlimited, universal applicability. More knowledge at this stage (such as knowledge of the teens and words used to describe the tens) distracts from the enjoyment of the minimalist aesthetic. At this stage the child knows what is necessary and sufficient to see and apply the laws governing the decimal system (that ten units can be dynamically exchanged for one of the category above etc.) The young child’s Sensitive Period for Order and Classification ensures a greater thrill for handling large quantities at this stage.

Geometrical entities are used by Montessori as Material Abstractions for the decimal system of numeration

- ❖ 1 Golden Bead is a unit (point)
- ❖ 10 Golden Beads make a ‘bar of ten’
- ❖ 10 ‘bars of ten’ make a ‘hundred square’
- ❖ 10 ‘hundred squares’ make a ‘thousand cube’

Laws of the decimal system

- ❖ There are only nine in each category
- ❖ There are three hierarchies in each level
- ❖ The ratio between one category and the next is 1:10
- ❖ The ratio between one level and the next level is 1:1000
- ❖ Introduction to Beads (Quality)
- ❖ This presentation is given in a ‘Three Period Lesson’

Material Description:

A small tray with 1 bead, 1 bar of 10 beads, 1 square of 100 composed of 10 bars of 10 and a cube of 1,000 composed of 10 squares of 100.

A large tray with a supply of beads from each category



2.8 INDIVIDUALIZED AND ABSTRACT WORK

Dr. Maria Montessori introduced many new terms and concepts to describe how children grow and learn. These terms are still widely in use today in the Montessori community. You may encounter these terms as you learn about the Montessori Method of education.

Absorbent mind – From birth through approximately age 6, the young child experiences a period of intense mental activity that allows her to “absorb” learning from her environment quickly and easily without conscious effort.

Casa dei Bambini – In Italian, “Children’s House,” and the name of Dr. Montessori’s first school.

Children’s House – In many Montessori schools, this is the name of the classroom for children ages 2.5 (or 3) to 6 years; other schools call the classroom for this age group Casa, preschool, primary, or early childhood.

Concrete to abstract – A logical, developmentally appropriate progression that allows the child to develop an abstract understanding of a concept by first encountering it in a concrete form, such as learning the mathematical concept of the decimal system by working with Golden Beads grouped into units, 10s, 100s, and 1,000s.

Control of error – Montessori materials are designed so that the child receives instant feedback about her progress as she works, allowing her to recognize, correct, and learn from an error without adult assistance. Putting control of the activity in the child’s hands strengthens her self-esteem and self-motivation as well as her learning.

Coordination of movement – Refining large- and fine-motor movements is one of the accomplishments of early childhood development, as the child learns to complete tasks independently. The Montessori classroom offers opportunities for children to refine their movements and children are drawn to these activities, especially to those which require exactitude and precision.

Cosmic education – Maria Montessori urged us to give children a “vision of the universe” to help them discover how all of its parts are interconnected and interdependent, and to help

them understand their place in society and the world. In Montessori schools, children in Elementary programs (between the ages of 6 – 12) learn about the creation of the universe through stories that integrate the studies of astronomy, chemistry, biology, geography, and history. These lessons help children become aware of their own roles and responsibilities as humans and as members of society, and help them explore their “cosmic task”—their unique, meaningful purpose in the world.

Didactic materials – Didactic meaning “designed or intended to teach,” these are the specially-designed instructional materials—many invented by Maria Montessori—that are a hallmark of all Montessori classrooms.

Directress or guide – Historically, the designation for the lead teacher in a Montessori classroom; some schools still refer to the lead teacher as “directress” or “guide,” while others use the more recognizable term, “teacher.” In Montessori education, the role of the teacher is to guide individual children to purposeful activity based upon her observations of each child’s readiness and interests.

Erdkinder – German for “child of the earth,” this term describes a Montessori learning environment for adolescents ages 12 – 15 that connects them with nature and engages them in purposeful, hands-on work in which they contribute to the community. Erdkinder programs are often referred to as “farm schools.”

2.9 LET US SUM UP

We have come to understand that Language and Mathematical Learning Activity Method. Regardless of very harsh criticism of the Montessori Method of teaching and learning, Montessori kindergartens have continued to enjoy considerable popularity worldwide. The Montessori approach is simply that children learn in a unique way, distinct from the way adults learn. Instructors should not ignore the absorbent minds of these unique individuals. Much importance is placed on sensory learning as an effective and efficient means of educating children. Educators cannot ignore Montessori’s spontaneity in the classroom. However, the Montessori concept of learning has not offered yet a harmonious learning condition for our learners.

2.10 UNIT- END EXERCISES

1. Discuss Mathematical Learning Activity Method in Montessori Education.
2. What is Etymology?
3. How to improve Writing Skills.
4. Discuss the Learning the sound variation and writing.
5. How to learn to count the numbers in Montessori Education.

2.11 SUGGESTED READING

- Hogben Lancelot, Mathematics for the Million George Allen and Unwin Ltd., London.
- Joseph Crescimbeni teaching of New Mathematics Parker publishing Co. New York.
- NCERT Brochure on themes relating to Mathematics Education.
- NCTMS year Books 15. Siddhu R.S teaching of Secondary Mathematics Sterling publishers 21 S.M.S.G Books Yale University.

UNIT III

CULTURAL AND MENTAL ACTIVITY METHOD (LEARNING)

Structure

- 3.0 Introduction
- 3.1 Objectives
- 3.2 Geographical
- 3.3 Astronomical
- 3.4 Artistic, musical learning enhance cultural activities
- 3.5 Multicultural activities expressing to the global culture
- 3.6 Develop observation skill
- 3.7 Comparative skill and decision making skill
- 3.8 Visual ability and Visual discrimination
- 3.9 Let us sum up
- 3.10 Unit- end exercises
- 3.11 Suggested Reading

3.0 INTRODUCTION

Learning involves a complicated interplay of factors, importance of focusing on the cultural factors that influence learning. The cultural-historical development of mental processes cannot be understood without analysing the dialectics between the universal and specific laws that govern their formation. Traditionally, researchers studying the historical development of the mind have emphasized universal laws outside of the context of specific cultures or ethnic groups. Clearly, both approaches represent scientific abstraction, while in the actual process of cultural-historical formation, both the universal and specific are inseparably bound.

3.1 OBJECTIVES

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

- Discuss about the Geographical and Astronomical
- Explain the Artistic, musical learning enhance cultural activities
- List out the Multicultural activities expressing to the global culture
- Discuss about Comparative skill and decision making skill
- Discuss about the Visual ability and Visual discrimination

3.2 GEOGRAPHICAL

The Joy of Geography If a child is to keep alive his inborn sense of wonder... he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement, and mystery of the world we live in.

One of the many gifts a Montessori education often brings is a life-long enthusiasm for geography. Geography helps children place themselves on Earth, fostering care for the rivers, forests, oceans, and peoples. Physical geography focuses on the features of Earth's environment. Political geography studies how humans have adapted to the land, emphasizing settlement and activity.

Geography is the most all-encompassing subject in the Montessori "cultural curriculum." It creates the foundation for understanding the oneness of the human family, recognizing the basic needs that all people share while appreciating the diversity of how different cultures satisfy those same needs.

Physical and Political Geography

We begin with physical geography, introducing three- and four-year-olds to the Globe of Land and Water (Sandpaper Globe). The sandpaper land is rough to the touch; the oceans are smooth. "This is how we see Earth from the sky. This is land. This is water."

We also introduce children to Land and Water Forms, a Practical Life exercise in geography. As the child pours water into the forms, she has the sensorial impression of, for example, an island and a lake. Naming the land forms using three-part cards and learning the definitions of land forms follow.

The materials in the primary classroom for political geography include the Globe of the Continents (Painted Globe) and the Puzzle Map of the World (typically introduced as a sensorial work), along with the Continent Maps, outline maps, and the flags.

Introducing Maps

Once children have worked with the globes, we introduce maps. This transition from globe to map is often difficult for a child. You can compare the Globe of the Continents to the Puzzle Map of the World, identifying each continent on the globe, then the map. You could say, "A map is an important tool to show what a big place looks like from up high." Perhaps you could demonstrate how to make a flat map of the spherical world by letting the air out of an inflatable globe to flatten it. Then compare it to the Puzzle Map of the World.

Five- to nine-year-olds might enjoy drawing maps of their school playground, the lizard's terrarium, or the route from home to school. A treasure map leading to a hidden command card or object in the classroom can encourage map-reading skills.

Exploring the Continents

Most teachers spend hours researching and gathering artifacts to present the physical and political geography of each continent in turn. Storytelling and photographs can bring the countries and continents to life as we introduce children to:

- ❖ Three-part cards of the people, landmarks, flora, and fauna.
- ❖ Climates and biomes. Discuss how these affect the clothing people wear and the foods they eat.
- ❖ Languages, songs, stories, religions, holidays, and foods. Invite parents with knowledge of another country to share their culture.
- ❖ Artwork, clothing, and instruments.
- ❖ Physical and political maps.
- ❖ The significance of the colours and symbols on flags. Children can make and colour flags.

Geography and Travel

Invite families who travel to bring back a map, postcard, or souvenir for their child to share with the class. Locate their trip on the appropriate continent map. Tell stories from your own travel adventures to illuminate political and physical geography. Small anecdotes about the roads and rivers on which you travelled, or the cuisines and cultures you encountered, will delight your class. As anthropologist Elizabeth Kapuwailani Lindsey said, "True navigation begins in the human heart. It's the most important map of all."

Different Types of Maps

There is such a depth and richness to the Montessori geography materials and activities for the primary classroom. Working with these materials lays the foundation for more advanced work, such as exploring different types of maps. Maps of the world focus either on political features - countries, cities, people, and products - or on physical features - land regions, climate, plants, and animals. I remember the thrill I felt as a child when I first heard about the Continental Divide. I found it myself on a relief map, running my finger down the bumpy Rocky Mountain range.

Maps can be astonishing. I once showed our 18-year-old Japanese exchange student my map of the world. She looked at it with shock and exclaimed, "But this isn't right! Japan is in the centre of the world! Not over here on the edge." I'm sure I would have been similarly surprised to find the United States on the east edge of a Japanese world map.

Looking from space, is there a top or bottom, up or down to planet Earth? Why should the countries of the global north be depicted on top of the world? Older children and adults

alike are amazed by alternatives such as the "upside-down map," which shows Australia on top and all the continents "upside down."

The Hobo-Dyer Projection map illustrates the world's land masses in more accurate proportion. (For example, Greenland is much smaller and Africa is much larger.) You may feel disoriented looking at it because, like my Japanese friend, it's just not what you're used to seeing!

The Great Nation of Humanity

Using movement, their senses, and intellect, children explore the geography of this amazing planet. They pour the shapes of lakes, learn the names of countries and oceans, taste foods, and sing songs from other cultures. Recognizing the universal needs all people share is an intrinsic part of education for peace.

She holds both primary (ages 3-6) and elementary (ages 6-12) Montessori certifications and has taught at all three levels. For over 15 years, she has served as a Montessori teacher-trainer for both primary and elementary levels and has presented workshops for teachers at schools and AMS national conferences. Her work with both students and teachers is infused with the knowledge she has gained from her passions: history, social justice, non-violent (compassionate) communication, nature, meditation, music, and poetry.

3.3 ASTRONOMICAL

Montessori Elementary: Astronomy

“If the idea of the universe is presented to the child in the right way, it will do more for him than just arouse his interest, for it will create in him admiration and wonder, a feeling loftier than any interest and far more satisfying.”

Maria Montessori

The beginnings of the Montessori Elementary start with the Great Lessons. Quentin's thirst for knowledge led him into these lessons long before he reached the Montessori Lower Elementary 6-9 year old classroom. You can see him here using the Waseca Biome Cosmic Story Mat for the first half of the First Great Lesson which he absolutely loves to this day. And so when Waseca Biomes contacted us to let us know they had graciously slipped their new Solar System Mat into the mail for us, we were thrilled.



It's a massive multi step material. As with any of the Waseca materials, it comes with a well laid out Guide to Presentations. This gives step by step instructions for the teacher to use. It also comes with so much more!



As with all Waseca Biomes materials the paper materials that accompany the vinyl mat and wooden discs are beautiful, filled with information for all different levels of learning and perfectly fit on a Montessori work mat.



Sixty six fact file cards come with this set. So many more than we could fit into these photos! They have information from the objects in the solar system to concepts like orbits. The lessons that can stem from these cards are adaptive and can almost be limitless. There is

also a three level fact finding game set much like with the other Waseca mats. Quentin enjoys moving the space station, meteor and other objects around the mat, researching new ideas and much more.



The paper materials come in a storage box similar to the Tree of Life Mat. Easy to pack everything up and put it back on the shelf when the lesson is over. We are so in love with this set! It is perfect for our space loving child in my classroom, my students have loved aspects of this work as well.

3.4 ART AND MUSICAL LEARNING ENHANCE CULTURAL ACTIVITES

The perception of the Montessori approach to education is often fraught with misconceptions. It is stereotyped as an unstructured place of freedom where undisciplined children run amok and do whatever they want with little thought to academic subjects. This description could not be further from the truth! When I first walked into a local Montessori centre as its music specialist I was transported into a school setting unlike any with which I had previously been acquainted. I met students who were much disciplined and very well-behaved. Their individualized curricula were both organized and structured motivating a freedom to learn and empowering them with individual responsibility for that learning. Music is an integral component of the philosophy of Maria Montessori.



The Montessori Lens

Dr. Maria Montessori (1870-1952) was the first female physician of Italy. As a young intern working with children with special needs she became interested in the study of children's learning behaviors. This interest led to the opening of "Casa dei bambini" ("Children's House") for underprivileged children, aged 3-7, in Rome in 1907. Out of this Children's House the tenets, themes, and unique terminology of the Montessori Method would develop.

- ❖ Tenets
- ❖ Purposeful Scheduling
- ❖ Uninterrupted Work Period
- ❖ Three-year Age Range
- ❖ Instructional Strategies
- ❖ Strategic Guided Lessons
- ❖ Collaborative, Interdisciplinary, and Exploratory Learning
- ❖ Freedom through Self-directed Work
- ❖ Beautiful Hands-on Materials
- ❖ Fostering of Abstract, Creative, and Critical Thinking
- ❖ Qualities of the Children
- ❖ Inquisitive – Love of Learning
- ❖ Development of Responsibility and Confidence
- ❖ Themes
- ❖ Calm, quiet, and peaceful atmosphere
- ❖ affinity with nature

Terminology

Environment: The learning space or classroom. The "Prepared Environment" is a cornerstone of Montessori education. It is considered prepared when materials and instructional aides are ready for student use.

Works: Refers to a student's individualized daily lessons, prepared weekly by the student with a teacher's guidance.

Levels: Refers to grade levels however, levels are very fluid and are not determined by age, but rather by a child's abilities.

Plan Book: The student's lesson agenda which is prepared each week and includes daily works.

The Line: A circle taped on the floor that children walk around to gain self-control, balance, etc. It is also a gathering place for the group.

Hand on Head/Arm: Indicates a child has something to say. Hand on the head is like raising a hand. Hand on the arm indicates child needs your attention while you are busy.

The Floor: Student works take place here – as does teaching.

The Montessori method learning and mastery are considered sufficient rewards. There are no grades, incentives, or prizes. The child is never tested (in the normal sense of the word), but is expected to demonstrate proficiency before moving on to the next level. Parents are kept informed of the child's progress through weekly reports.

Music Education through the Montessori Lens

The idea that every child has musical potential and all children are able to learn and express themselves musically permeates the Montessori Method. Music activities are respected at the same level as any other form of learning. Teachers are supportive and encouraging of the child's musical endeavours. Children learn with music, learn about music, and learn by music. Music is incorporated into the Montessori curriculum in the daily classroom environment as well as through music classes and private lessons.

Music classes, taught by a music specialist, take place in multi-aged, group settings while private lessons in piano and other instruments are offered to the children starting with the second level. Time to practice for these lessons is a part of the children's daily schedule.

The music curriculum embraces the pedagogies of Orff, Kodály, and Dalcroze with an emphasis on music literacy, singing, movement, listening, and the playing of instruments. Ear training is developed beginning in early childhood through sound exploration with Montessori bells.



Musical Process in the Montessori Lens

Observed Introduction: The teacher silently models the music work (i.e., activity or concept) while the children observe. "Silently" in the music environment, where sound predominates, means modelling is done without preface, explanation, or discussion allowing

children to observe and form their own idea of how the work can be completed successfully. This modelling may be repeated as necessary.

Reinforcement: Routine and repetition of the work as many times as the child needs for success or wishes for enjoyment.

Performance: “Sharing” the work for the teachers, classmates, or family, in informal or formal settings.

These experiences in the music environment are like learning centers found in many classrooms. In the Montessori setting, these interactive centers – known as “works” – are designed so that students can experience them individually rather than in small groups, and they are predominately hands-on, not worksheet-based.

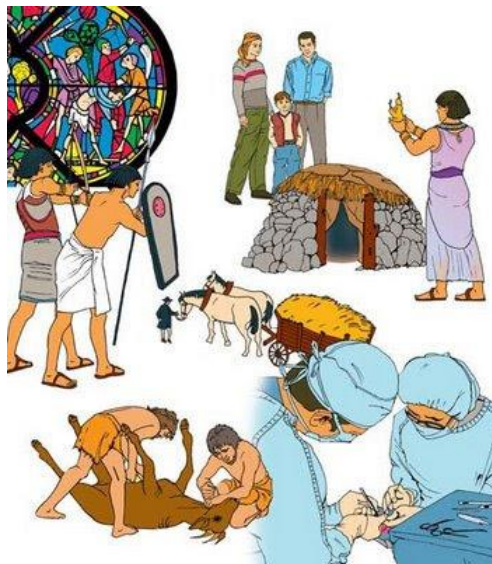
To accomplish this requires several things:

- ❖ Fostering a cooperative, well-organized learning environment
- ❖ Preparing materials, instructions, and self-checks for each work
- ❖ Introducing works to the group then allowing children to work independently
- ❖ Success in having a class of children working individually is dependent upon each of these.

It is helpful to consider the following when creating works:

3.5 MULTICULTURAL ACTIVITIES EXPRESSING TO THE GLOBAL CULTURE

Celebrating Cultural Diversity in the Montessori Classroom - Heritage Survey Activity



Once a Montessori teacher has told the stories of the Five Great Lessons in the lower and upper elementary Montessori classrooms, she will often move on to the presentation of the Common Needs of People (sometimes referred to as the Fundamental Needs of Humans).

This series of lessons is meant to show students that throughout history, humans have demonstrated the same common needs:

Maria Montessori believed it was important to study what humans have in common to instill in the child a greater sense of belonging to the universe. Humans all over the world share the same common needs. By examining the similarities and differences of humans around the globe, we build a sense of connection to all human beings, thus creating a deeper sense of cosmic community.

The Montessori curriculum strives to create a connection between home and school environment. In an effort to make this connection, some Montessori teachers have found that creating a cultural heritage survey helps not only the children to make this connection, but also involves the parents with what is occurring in the Montessori classroom. By explaining that the Montessori curriculum looks at both the Common Needs of People as well as the differences of others, it sends the message that it is okay to be different, along with the need to respect the differences of others. Parents can assist their children in filling in the survey.

Once the information has been returned by the Montessori students, Montessori teachers often display the information using a large world map. Some opt to do this in their own Montessori classroom and others make it a school-wide presentation. Whatever your school or classroom decides, it is a wonderful visual reminder to the students and your Montessori community that we are all a celebration of cultural differences and similarities. The information can be used to involve families throughout the year as you study the different cultures around the world.

3.6 DEVELOP OBSERVATION SKILL

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 centre 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!

3.7 COMPARATIVE SKILL AND DECISION MAKING 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 faire” 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.

In the Montessori school, the educational environment simulates real life. We are preparing children for the world, and there is not always someone who tells you what to do, how to do it, when to do it and with whom. So let's practice in a safe environment!

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!

3.8 VISUAL ABILITY AND VISUAL DISCRIMINATION.



Within the beautiful materials of the Sensorial area, you'll find specific lessons designed to support the child's developing visual discrimination. The ability to discern subtle differences in visual stimuli develops over time and practice. New-borns notice differences between bold strokes of black and white. By adulthood, typical vision can capture about one million distinctive colours. And if you've got the right genes for it, you might see a hundred times more. But even those of us with the capacity to see an extraordinary spectrum need practice to be able to express that capacity. Early lessons in visual discrimination help the developing child to identify differences by sight, and that ability, in turn, opens up endless new ways of understanding the world. Children obviously need nuanced visual discrimination to identify differences between letters for reading and writing, between numerals for mathematics, but acute visual discrimination also supports children as they learn to make scientifically sound observations, and social studies as they learn the differences between cultures, landforms and architecture around the world, and even in social interactions, as they are able to discern subtle visual cues in facial expressions.

3.9 LET US SUM UP

We have come to understand that Cultural and Mental Activity Method (Learning) in Montessori Education. The cultural-historical development of goal-setting is not limited to the stage of ritual behaviour. As culture developed, an ever greater role was played by verbal forms. The verbal expression of object-focused actions that were previously expressed through ritual at first led to the coexistence of these two types of activity, and later to the gradual replacement of ritual behaviour with various folklore correlates.

3.10 UNIT – END EXERCISES

1. What is Musical Learning?

2. Distinguished between Visual Ability and Visual Discrimination in Montessori Education.
3. Discuss Mental Activity Method in Montessori Education.
4. How Musical Learning enhance Cultural Activities in Montessori Education.
5. Explain the cultural and Mental Activity Method in Montessori Education.

3.11 SUGGESTED READINGS

- Piaget, J., and B. Inhelder. 1969. Psychology of the child. New York: Basic Books
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- Bourdieu P. The forms of capital. In: Richardson J, editor. Handbook of Theory and Research for the Sociology Education. New York: Greenwood Press; 1986.
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UNIT IV

MOTOR SKILL - SENSORY SKILL APPROACH

Structure

- 4.0 Introduction
- 4.1 Objectives
- 4.2 Motor skills improve muscular movements
- 4.3 Perceiving the different sounds
- 4.4 Writing - Reading Skills approach
- 4.5 Learn to write (phonetic practices)
- 4.6 Let us sum up
- 4.7 Unit-end exercises
- 4.8 Suggested Readings

4.0 INTRODUCTION

The foundation of growth, development, and learning in a child starts with sensory and motor interaction with the world. The brain is built from the bottom up and this starts with movement and sensory exploration. Sensory stimulation and feedback drive the brain, but the motor system drives sensory stimulation - you can't have one without the other. This is at the core of everything we do at Brain Balance Achievement Centres. It is crucial to improve motor skills, sensory detection, and processing before any higher learning, behavioural or academic changes can truly happen.

4.1 OBJECTIVES

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

- Discuss about the Motor skills improve muscular movements
- Explain the Writing - Reading Skills approach.
- Describe the Learn to write (phonetic practices)

4.2 MOTOR SKILLS IMPROVE MUSCULAR MOVEMENTS

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, stereo gnostic, 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 colour 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.

4.3 PERCEIVING THE DIFFERENT SOUNDS

Reading and writing are one of the most essential milestones in the life of young children. These are two indispensable developmental skills that influence kids' ability to communicate and make their way in the world of advanced learning. Basically, without these skills we wouldn't be able to express ourselves and put our ideas on paper that can be useful to ourselves and other people.

Before children learn to read and write properly, they should develop their ability to speak first. Often kids feel so excited about being able to talk and express their thoughts that they can stutter from time to time. It is a natural stage, when kids start developing their verbal language, and it is when parents should become attentive listeners for their little ones, without focusing on their misword, misspeak or stutter.

In the Montessori Method, language development is supported by a number of activities that stimulate communication skills and vocabulary development. There is a broad range of materials for reading readiness, phonetic analysis as well as fine motor control.

According to Montessori, the literacy process should be based on the following skills:

Physical skills. Small kids get started with learning sounds and letters through eye-hand work, concentration on practical activities as well as when they touch and recognize materials of various shape and size.

Mental skills. Kids make progress in language development, as they get acquainted with sounds that each letter has and divide words into sounds.

Social skills. Children can naturally learn the language, when they are included in conversations with family members and peers.

Montessori Approaches to Literacy Learning

From motor skill activities to sensorial materials

The Montessori Method focuses on training senses as a prerequisite for the acquisition of reading skills. But before kids get started to work with sensorial materials, they get involved in activities that develop their motor skills such as washing dishes, polishing or brushing clothes. The fact is that fine motor activities improve small muscle movements, which enable us to reproduce letters and numbers using our hands and fingers. When children work with sensorial materials, they develop senses for perceiving the sounds of various things.

First write, then read

According to the Montessori approach, writing should precede reading. As children learn to write “phonetically”, they start with sounds that form a basis for reading. Later on, a child is able to relate phonetic sounds to specific letters. In the Montessori classroom, kids learn to form words by picking up colorful paper letters from the Montessori alphabet and putting them on the table. They are encouraged to write whatever they want, even if they misuse letters. As they progress, they will write more correctly even without noticing it. The main aim at an early stage of literacy learning is to make kids able to express their thoughts in the written form, not master spelling or grammar rules.

Experience precedes vocabulary

In the Montessori environment, real experience goes before vocabulary. In such context, Montessori teachers present to kids real actions before verb cards, real nature before pictures with natural landscape, real music piece of music before cards with music instruments and famous composers. Thus, kids can deal with real objects and then learn their names. In such a way, children can grasp connection between the language and the real world.

Storytelling and reading

The basis for reading is formed, when a child sees people around them reading and doing it with pleasure. Children love to be talked to and listen to stories. Reading aloud to children can help them explore new facts, acquire the right word pronunciation as well as get introduced to vocabulary that not always come up in day-to-day conversations. Storytelling is a good way to instil lifelong love of books and reading on their own.

Sandpaper Letters

In the Montessori approach, kids are introduced to sounds of the letters before they get to know the names of these letters. Sandpaper Letters are the letters of the alphabet presented in small pieces of sandpaper. Children first learn to write letters separately and then combine various letters into words. The main objective of this Montessori material is to help kids memorize and recognize the sound and size of various letters.

Montessori Alphabet

Montessori movable alphabet provides kids with outstanding sensorial experience. Children can hold letters in their hands, feel their shape and manipulate them while constructing words. Some variants of the Montessori alphabet are provided with picture cards – a child is expected to make up a word from the picture and pronounce the sound of each letter. Some picture cards are to be clipped on a special board, which stimulates development of fine motor skills and hand muscles necessary for writing.

Materials for matching objects and cards/words and cards

Such materials are based on matching objects and cards. A kid is expected to recognize the object and find the match. As a rule, card pictures can be grouped by topic and illustrate some basic objects/words that a child will certainly know.

Secret words

This is a box of words written on separate pieces of paper and kept folded. Children take cards with a “silent words” from the box, read them to themselves and fold them back up. Such materials are designed to introduce kids to silent reading.

Action cards

It is a small box with verb and noun cards presented to children in a playful manner. Kids are excited to participate in such a game-like activity, as they can both learn and play. When a child takes a verb card, he/she is expected to perform an action and others should guess what verb has been shown. If a kid takes a noun card, he/she should find the right object in the classroom and place a card on it as a label.

Such Montessori materials for literacy learning are indispensable components of the Montessori environment. They help kids consistently make steps towards independent reading and writing and add excitement to this complex process.

4.4 WRITING - READING SKILLS APPROACH

Reading and writing are sometimes taken for granted by adults who have mastered the skills - but looking at them from a child's perspective, they are skills of Herculean difficulty. Literacy is a complicated, integrative process that involves the association of symbols with sounds, sounds with words, and words with ideas. It means learning to fluidly encode ideas into symbols and decode symbols into ideas. And, on top of everything, it involves acquiring complex physical production skills, such as the fine motor skills involved in writing with a pen or pencil.

The Montessori approach uses a distinct set of practices that nurture a positive, natural learning experience to teach reading and writing. The Montessori curriculum is thoughtfully built around teaching children the many elements of reading and writing one by one, in a way accessible to and enjoyable by a child. Here are a few of the steps in the sequence used in a Montessori environment to ensure that children master literacy with joy.

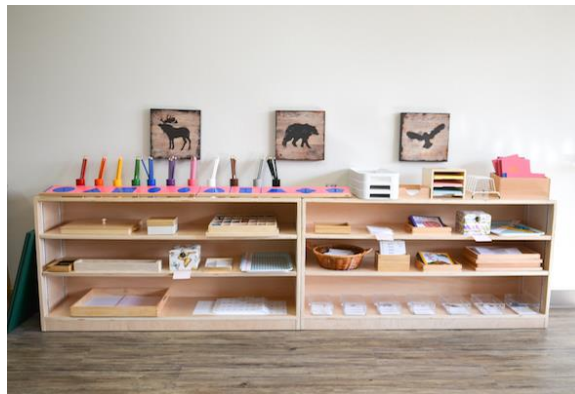


Children in a Montessori environment learn to write first, before they learn to read. This approach is organic, as children are able to put the letters for the sounds they know together into a word before they are ready to interpret and string together the sounds of a word on a page. Children begin learning the letter sounds using sandpaper letters, which

incorporate the sense of touch to further reinforce learning. While the child learns the letter sound, they trace the letter with their fingers on a textured sandpaper inscription of the letter, learning the strokes used eventually to write that letter on paper.

Once a child has mastered the sounds associated with each letter, she'll be shown the moveable alphabet, which will allow her to easily put letters together, sounding them out to spell simple, then progressively more complex, words. Children love to move, and learn by doing. They learn best by physically interacting with the world, so why not take advantage of their natural tendencies to do so? The moveable alphabet allows children to begin “writing”—even before they develop the fine-motor skills to control a pencil.

Writing is a hands-on process, and the Montessori approach fully leverages the fact that children are naturally hands-on learners. In the Montessori classroom, children develop hand strength early on during activities that encourage use of the “pincer grip”, such as the cylinder blocks. The hand position used to pick up the blocks is the same as the one used in holding a pencil!



Once foundational hand strength is developed, we begin direct work with pens and pencils by introducing children to our beautiful collection of coloured pencils and the metal insets. Instead of plodding through tedious handwriting worksheets, they are intrigued by the coloured pencils and start using them to trace shapes, draw parallel lines or make patterns. Children love to colour and create artwork, practicing a skill that they will later use to write letters and words. Through doing this, the child learns to use and control pencils while expressing herself in a creative way. When the child combines this skill with the previously mentioned ones, she joyfully discovers that she is now able to write letters on paper.



At Guidepost, your child will learn to write in cursive first. While cursive letters seem intimidating to most adults, they actually prove to be easier to learn than print letters: while writing in cursive, you don't have to continuously lift the pencil off the page. This makes the act of writing fluid and continuous, without the extra stops and starts associated with print letters. In addition, letters that are easy to confuse in print are distinct in cursive, so children are less likely to reverse these letters.

Once a child has learned how to use the letter sounds to construct words, she progresses towards joining words together into sentences of her own construction, and from there, there is an explosion of writing ability and enthusiasm. After mastering the skills associated with producing written letters and words, reading naturally comes as the next step. She discovers that she is now able to see printed words on a piece of paper and decode their meaning. Children will suddenly show a new, heightened interest in the written word. By learning to read, a whole new world is opened to them. Just watch them start to read the side of a milk carton or the label on their shampoo bottle, and you will see the excitement that can come from learning this essential skill!

When teaching early reading skills, we use a beginner series of books titled "The Books to Remember." If a child does not understand a book, they quickly become bored as they lose track of what is happening in the story. The Books to remember only use vocabulary suited for beginning readers, and still tell compelling stories and have engaging illustrations that keep the child's interest. We want the child to experience reading and writing as interesting, fun activities, not as a mechanically learned chore. These beginner books, similarly to the colour pencils and metal insets, are tools designed to captivate the child and help motivate him to develop these early reading and writing skills.

4.5 LEARN TO WRITE (PHONETIC PRACTICES).



Montessori Phonetics by Amber Evans

Phonics is a reading method that allows a child to learn the sounds of letters by developing an understanding of how these sounds are used individually, in groups and whole words. Phonetic instruction is the foundational stepping stone in a Montessori Language Arts program. Learning phonics provides an excellent way for children to have fun and get engaged in what they are learning. When children learn the sounds that letters and groups of letters make, they are able to decode words that they have not encountered before.

Since the English language doesn't always follow predictable rules, the phonics system helps young readers develop logic, reasoning and analysis skills. Phonetics allows the child to understand and apply what they have learned confidently and independently. Additionally, phonics can lead to whole-word recognition, which helps children read faster as they practice. This makes learning to read fluently much easier in the long run.

Montessori phonetics also help develop stronger reading comprehension. As the child become a more fluent reader, they are able to stop focusing on the individual letters of each word. This gives them the opportunity to focus on the meaning of what they are reading.



When implementing phonics in the Montessori classroom, the first thing to consider is the child. The child must be sound conscious, meaning that the child is aware that words are made up of individual sounds and able to discern those sounds. Rather than following the conventional method of teaching from a to z in order of the alphabet, we divide the letters

into manageable groups so that a child can start using the letters to begin making words right from the beginning. If a child can implement what they are learning immediately, it generates more interest and excitement.

Montessori Phonetics in Language Development

Sensitive periods also play a big role when learning phonics. A sensitive period refers to a period in which the child is more aware of and interested in learning a certain thing. If this period is missed, learning will take longer and be more tedious. Montessori, we create a learning environment that fosters language development and our teachers are well-trained to support this sensitive period and guide each child during this time.

4.6 LET US SUM UP

We have come to understand that Motor Skill - Sensory Skill Approach in Montessori Education. The acquisition of fundamental motor skills during childhood are the basis for developing the skills to participate in sports and leisure activities. The success of developing these skills at a young age can have a positive effect on health throughout the lifespan by increasing the participation in physical activity and therefore reducing obesity. The teaching of phonics is an extremely efficient and effective means of teaching our children to read and, ultimately, write. It works on training students to be able to hear the various sounds of English, identify these sounds, and link these sounds to the symbols we call letters.

4.7 UNIT-END EXERCISES

1. What is Sensory Skill Approach?
2. What are the ways to found the Sound Variation?
3. Describe the difference between Motor Skill and Secondary Skill Approach in Montessori Education.
4. List out the types of Reading with example in Montessori Education.
5. How to improve Writing Skills.

4.8 SUGGESTED READINGS

- Francis Soundararaj, F. (1995). Teaching Spoken English and Communication Skills.Chennai:
- Joyce.,& Well., (2004). Models of Teaching. U.K: Prentice hall of India.
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UNIT V

EXPERIENCE- VOCABULARY CUM STORYTELLING - READING APPROACH

Structure

- 5.0 Introduction
- 5.1 Objectives
- 5.2 Performance of Real nature and action before artificial one
- 5.3 Grasping ability
- 5.4 Pleasurable Reading
- 5.5 Narrative Interaction
- 5.6 Reading and Exploration of New facts
- 5.7 Pronunciation and vocabulary
- 5.8 Storytelling and lifelong Reading
- 5.9 Let us sum up
- 5.10 Unit-end exercises
- 5.11 Suggested Readings

5.0 INTRODUCTION

It is the first or introductory unit of Course. Learning how to read is one of the most important things a child will do before the age of 10. That's because everything from vocabulary growth to performance across all major subjects at school is linked to reading ability. Children begin acquiring the skills they need to master reading from the moment they are born. They may enjoy singing the alphabet song and reciting nursery rhymes, which helps them develop an awareness of the different sounds that make-up English words. As fine motor skills advance, so does the ability to write, draw and copy shapes, which eventually can be combined to form letters.

5.1 OBJECTIVES

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

- Discuss the Performance of Real nature and action before artificial one.
- List out the Reading and Exploration of New facts
- Explain the Pronunciation and vocabulary.
- Discuss about Storytelling and lifelong Reading

5.2 PERFORMANCE OF REAL NATURE AND ACTION BEFORE ARTIFICIAL ONE



Traditional Methods that Fall Short

What do we think of when we imagine educating our children about nature? Perhaps a small collection of shells on a windowsill, planting flowers in the spring, or pushing a toddler in a stroller through a park come to mind. While all of these activities have a place and can be enriching in their own way, they fall short of giving children authentic natural experiences. As adults, we have developed habits that keep our interactions with the natural world at a distance. We don't appreciate being stuck out in the rain, or perhaps even the sun for that matter. We find ways to carefully shelter ourselves away from the elements so that we may be safe and comfortable. We likely developed this perspective while we were still children ourselves, at the urging of adults who didn't want us to jump in puddles or ruin our best clothes. Might we step back and reevaluate our own relationship with the natural world?

A collection of shells is lovely, but a child will have internal context if they have actually visited the seashore and collected the shells themselves. As adults, we love flowers, but children react more strongly to plants they can interact with: think a vegetable garden or even just a tomato plant in a pot. Taking our children for a stroll in the park is important but let's give them a bit of freedom so they may move at their own pace and on their own feet. Let them explore and stop to notice the things we so quickly pass by.

Have you ever had a moment - it might have been somewhere on a lake or at the ocean, in the mountains or in the middle of a desert - when an intense, almost indescribable, feeling settled over you? You noticed that something deep within yourself felt connected to the earth and everything on it. You probably felt alive and at peace at the same time. Some of us are lucky enough to have had many of these moments, others, only a few times. Children have the ability to feel this so much more than we do. The world is still so fresh and new to them, and natural experiences can have a lasting impact.

As Dr. Montessori so eloquently stated, “Only poets and little children can feel the fascination of a tiny rivulet of water flowing over pebbles.” Even when we make efforts to take our children on a walk in the woods, it’s easy for us as adults to focus on the walk or the destination. Children are fortunate in that they live in the moment. They see a caterpillar and it calls to their desire to observe. A small fragment of a fallen leaf is a tiny window into a world they are still discovering. Children’s wonder and curiosity have much to teach us, if only we can remember to slow down and follow their lead.

A Burgeoning Movement

While many people have always valued a strong connection to nature, it’s likely fair to say that most of us have experienced at least some level of disconnect. In recent years, however, more and more people seem to be looking for ways to rebuild those connections. We participate in community supported agriculture, hobby farms, and keep chickens in our backyards. We vacation in national parks, participate in hiking challenges, and take up paddle boarding.

We know that something is missing, and while we don’t always articulate it, we are searching for our way back to nature.

Could it be that our children have the ability to both inspire and teach us the way? If we let them slow down and notice the little things - the insects, the toads, the way the sunlight reflects off a shiny rock - maybe we can learn to slow down and notice, too. If we start by considering how we would like our children to eat as healthy as possible, maybe it might lead us to visiting farms or growing our own food (with our kids, of course!).

Practical Ideas

Montessori suggests that it is not the act of going out into a garden that leaves an impression upon a child, but the whole approach of ‘living naturally’. From Japanese ‘forest bathing’ to Norwegian ‘friluftsliv’, cultures around the world have, for centuries, known the importance of our connection to nature. Scientists echo these ideas, reaffirming the notion that spending time outdoors, surrounded by elements of the natural world, is good for us.

So what can we do to apply this knowledge?

Montessori classrooms work to apply natural living on a daily basis. Nature is frequently brought into the classroom in the form of live plants and animals that the children help tend. Even the materials themselves are made of natural materials; plastic is avoided when something made of natural materials can be used. Ideally, a classroom has access to the outdoors so that children may come and go as the space calls to them (and as is appropriate).

As parents, the easiest way to let our children live more natural lives is to lead by example. We can find ways to enjoy the outdoors on a regular basis, in all seasons. Explore the parks, trails, nature preserves, and bodies of water near your home. It can be fun to take up new hobbies together as a family, or to find other like-minded families that you can team up with. Whether you like adventure, taking it easy, or something in between, there are outdoor activities that will put you back in touch with the world around you.

Already love the outdoors? Find ways to make what you love accessible to your kids. Ready to head out for the first time (or the first time in a long time)? Here's one great resource to get you started.

5.3 GRASPING ABILITY



So much of Montessori is about observation, but this is not something that only needs to happen in the classroom. As parents, you are observing your child all the time! Who knows your child better than you do? Many of the works I have put out for L are based on my observations of what she is interested at a particular phase of development. Some of these are traditional Montessori works, while others have been adapted to fit L's individual needs. This grasping/transfer work is one that is tried and true in the Montessori classroom.

When L was younger and first beginning with finger food, I would put her food on sectioned plates. This seemed to make it easier for her to choose pieces to pick up. As she grew older (around 12 months old), I noticed that when she was finished eating, she would begin moving pieces of food from one section to the other, piece by piece. So I made some transfer works for her, and she loved them!

A transfer work needs a tray with two containers and a set of objects to move from one container to the other. For toddlers just starting out, begin with large objects that are easy to grasp with a whole hand, such as pom-poms. As your child's fine motor skills continue to develop, you can use smaller objects that require the pincer grip or even utensils to transfer from one container to the other.

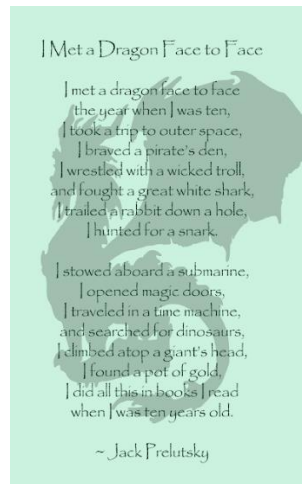


This picture is of a transfer work that I currently have on the shelf because L enjoys putting each object in its place. I used wooden eggs in a bowl, which are then transferred to the separate cups of a muffin tin. The best part is, it's made entirely from materials I already had in my house! Much cheaper than buying toys, and it helps L to develop her fine motor skills as well as focus and concentration through the repetitive motion of transferring each object

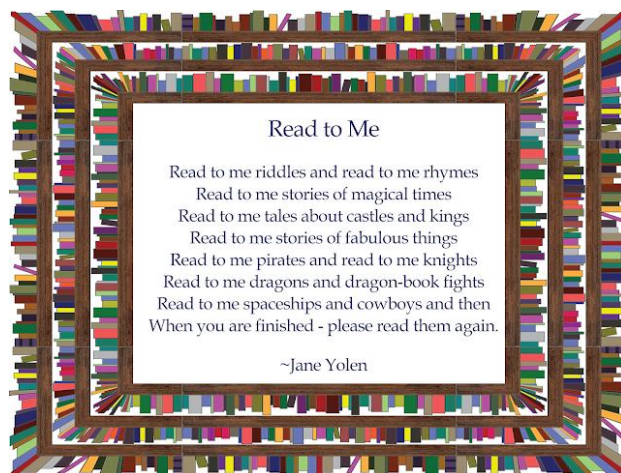
5.4 PLEASURABLE READING



Can you imagine a life without books? A world without getting lost in the pages of some mythical land full of dragons or pirates or hobbits or fairies? Or a world without tales of our ancestors — the mighty heroes and heroines who came before us? Or stories of regular, normal, everyday people whose stories remind us that other people struggle, laugh, love, and hurt just as we do. I certainly cannot, nor would I want to live in a world where I didn't love to read.



I learned to love reading naturally. As an infant, my mother read me the classics of French literature – in French – along with traditional children’s literature. My favourite childhood memories were visits to the local library, where we were free to choose as many books as we could carry. And I couldn’t wait to see what book or series was waiting for me under the Christmas tree. Those Christmas presents introduced me to more new worlds of John D. Fitzgerald’s *The Great Brain*, L. M. Montgomery’s *Anne of Green Gables*, Louisa May Alcott’s *Eight Cousins*, and Irene Hunt’s *Up a Road Slowly*. You may think it strange that I can remember those Christmas presents from so long ago, but you never forget your friends or how you met them.



The love of reading comes from being read to at an early age. Reading together builds a close relationship as you snuggle close and forget everything other than the words and images on the page. Reading together should be a daily habit, and one that isn’t just relegated to bedtime. And don’t think that you have to stop reading together once the child learns to read.

Keep reading together throughout the elementary years as long as you can to continue to build that love of the spoken word, engaging in a story, and sharing time together.

The love of reading can turn to drudgery when adults try to quantify reading. Book logs, book reports, and motivation programs that reward children for reading for a specified amount of time or a certain number of books read are punitive rather than fulfilling. Children read at different rates and at different levels, and they should never be penalized because their reading goals look different from those of others. Asking children to keep track of how many pages are read each night or insisting that they read one book of each type of genre takes away the joy and spontaneity of reading. It turns something pleasurable into a chore. Book logs and charts rely on extrinsic motivation and the idea that children must be rewarded to want to learn. In the Montessori environment we know this isn't the case. We encourage reading for pleasure, building intrinsic motivation for lifelong learning.

5.5 NARRATIVE INTERACTION



Montessori is a global, child-centered educational approach that is over 100 years old. The approach puts positive adult-child interactions at the heart of its philosophy, highlighting the need for educators to use practices that we typically associate with parent-child interaction. It's interesting to consider just how important interactions can be.

Attachment theory is one of the cornerstones of child development courtesy Bowlby (1969). In her book, 'Montessori, The Science Behind the Genius' (2005), Lillard reflects how certain adult-child interaction styles foster positive attachment styles, which in turn relate to better outcomes for children. In Montessori, the emphasis is on 'following the child' — often misinterpreted as 'let children do whatever they want'. Depending on your outlook, this may sound wonderful or disastrous! It is abstract and ultimately hard to put into practice.

As a Montessori trained educator, I'd like to share four key strategies Montessori educators use to support meaningful and empowering adult-child interactions and overall development that parents can use too.

Learning to observe is a big part of a Montessori educator's work. Careful observations allow us to understand, identify, and respond to children's emotional, social, and cognitive needs. Children trust and feel safe with adults who respond appropriately to their needs. Taking the time to observe, not only allows us to suggest activities that will both interest and challenge children, it also means we are less likely to interfere when we are not needed but are on hand to support if needed.

2. Focus on what children can do

As adults, we often find ourselves setting limits and focusing on what children can't do or what shouldn't be done, in a bid to keep them safe. In a Montessori environment, the focus is on what children can do or what they might like to try, providing them with guided choice. Choice builds independence and enables children to feel empowered. When we think of solutions, not barriers, the words we use can encourage children's development. For example, instead of saying 'don't use the big boxes' try saying, 'Let's try the small or medium size boxes, which ones do you want to use this time? Perhaps we can move onto the big boxes soon'.



3. Build trust and spark curiosity by sharing real-world explanations

It is tempting to save time or protect children from certain realities by avoiding or glossing over the many 'why' questions they have! Seeing children as explorers hungry to understand the world around them, helps us respond to them by answering questions with real answers. Young children are often interested in understanding how things work and can absorb and grasp more than we think. Sharing 'real-world explanations' builds trust, diffuses difficult situations, sparking curiosity to learn and discover.

4. Support strong mind-sets to develop agency

Aligned to Carol Dweck's (1999) work on Growth Mindset, Montessori educators believe even the youngest children can self-correct mistakes and that these are powerful

learning opportunities. They encourage exploration by asking questions and, crucially, by avoiding praise or criticism. The Montessori approach views certain types of praise and criticism as having a detrimental effect when we use language that implies fixed abilities. Well-intentioned statements such as ‘you’re so clever!’ or ‘you’re good at writing’, for example, pass judgment over something that can become a limiting version of reality for the child. This said, concretely recognizing effort and what has been achieved so far, with the emphasis on the possibility for change, supports children to develop agency and a positive outlook about themselves and what they can achieve despite challenges.

5.6 LOUD READING AND EXPLORATION OF NEW FACTS;

Develop Good Reading Habits:



We all want to raise readers. Reading with your child directly impacts his or her academic proficiency. It is also an essential life skill. From books, children learn to communicate and present their ideas. They use it to understand the world. Reading inspires creativity, helps them regulate their emotions and thrive in social situations.

As parents, we use many ways to make our children fall in love with reading. We surround them with beautiful books, stock bestseller lists in our home libraries and continuously encourage them to read with us.

A child’s experience with books begins very early. You can read books to children who are as young as 2! They may not make sense of the words but they still listen and watch eagerly as the parent reads out loud, points, turns the pages or uses the flaps if it is an interactive board book. Babies love to touch, feel, turn and handle board books. By age 4, they learn to decode and make meaning in the simplest sense. They become independent readers at the age of 6 or 7.

The statistics on reading to your child show that reading truly is a life skill with far-reaching outcomes. According to the National Education Association (NEA) in America, the

more students read or are read to for fun on their own time and at home, the higher their reading scores tend to be. In fact, the National Institute for Early Education Research, which is also based in America, the earlier you start, the better. By age 3, roughly 85% of the brain is developed.

Want more interesting facts about reading to your child? A Yale University study showed that 3/4th of students who are poor readers in the 3rd grade will remain poor readers in high school and this can give them a lifelong disadvantage. The MetaMetrics' Lexile mapping across schools in America also showed that a reading gap between expected and actual reading competency noticed in early grades at the beginning of school only grew wider. It became to close this gap over the course of 12 years of schooling. There is no doubt that the benefits of reading to your child are many. As you can see, this is a skill that has a lifelong impact.

Effects of Reading on Child Development

Unlike television or smartphones, books contain many words that children are unlikely to encounter frequently in spoken language. In fact, they contain 50% more words than other media. While speaking to a child is great, reading gives them access to a felicity with words and a wonderful toolkit to communicate to the world.

Montessori reading describes the sensitive period for language – this is right up to 6 years of age. Children in this stage are ripe for language explorations and expressions. They are like sponges, absorbing everything they hear. The beauty of the Montessori Method is that it is a child-led approach and gives children many ways to inspire themselves to read. The effects of not reading to your child are plain and simple. When they do not have access to rich language and reading experiences, they are at a clear disadvantage when it comes to children who do read regularly.

1. Role model the reading habit

When my son was a toddler, the minute my son sees me picking up a book, he would pick one too! Children are constantly looking to us for inspiration. They are role modelling their behaviour on parents and teachers. Make time to read every day and read with them too!

2. Create reading cues

In Montessori, the environment is designed to help children to want to discover the world through reading. You can create a similar environment at home and also set reading cues during the day. The bedtime reading ritual is a wonderful cue and it also doubles as a cue to wind down and sleep.

You can also create little reading nooks where your child can go to explore books. Find other interesting reading cues to take with you on the go. I always read when I am waiting in the airport and one of us always reads out loud when we are traveling. You can even create time slots when you and your child can read your respective books.

3. Read aloud to children!

Reading out loud is a great way to hook a reluctant reader. When you read books out loud to your children, they acquire early language skills and develop sound awareness. They also build key listening skills.



Most importantly, this is such a wonderful way to bond with your children and to really form important connections through reading. Such experiences remain with them throughout their lives.

4. Let children choose books they like

Take your child with you to bookshops and libraries. A library is an incredible way to get your child to love and treasure books. Libraries are reading spaces and cues in themselves.

You must also have noticed that your child wants to read the same books over and over again. My son was obsessed with Eric Carle's, *The Very Hungry Caterpillar* for many months and would demand that I read it a minimum of five times a day! I would oblige him of course. There are so many reasons why they crave this repetition. It is comforting and familiar but on a deeper level, they are connecting to the book's rhythm and its sound patterns. They are also diving into the book and making meaning out of it. Every reading seems different, new and special!

Reading Strategies according to the Child's Age

Infants: If you are an expectant mother, read to your baby in utero. With infants, encourage them to touch the book and turn the pages. Mimic sounds when looking in a mirror. Use nomenclature cards that match objects to the card and also to name feelings and expressions. Use baby sign language.

Toddlers: Use objects and puppet shows to emphasize phonics. Use tracing sandpaper letters with the child’s fingers and say the sounds out loud.

Primary: Match sounds of objects to letters. Work with books that encourage sound blending. Use phonics books with short vowel words. Encourage your child to follow the words with their finger while being read to.

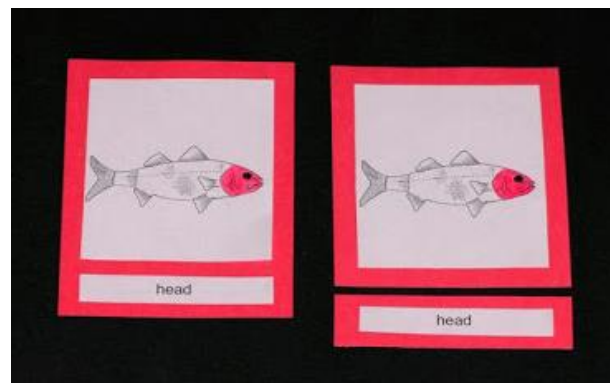
Elementary: Work on diagraphs, long vowels, and vowel blends through tangible objects to achieve muscle memory. Encourage the child to work on book reports. Work on their reading comprehension and target reading fluency by bringing in books with more complex words and long vowels.

5.7 PRONUNCIATION AND VOCABULARY;

Developing Vocabulary for Success across All Montessori Curriculum

Starting in the Montessori early childhood environment, children are given specific vocabulary building materials — nomenclature cards — to learn the precise names of items that they encounter in their environment, as well as the names of items found throughout the Montessori curriculum. It is during this sensitive period for language that the foundation for naming and comprehending takes root.

The importance of building a strong vocabulary must not be overlooked. In 1995, researchers Betty Hart and Todd Risely observed that the amount of language differs significantly between parents and infants. Some parents use as many as 3,000 words per hour with their infant, while others use less than 500 (Hart and Risely, 1995). Researchers discovered that “some children enter preschool at age 4 with oral vocabularies that are up to two years behind their peers. These children simply haven’t been exposed to many words” (Jobrack). Hart and Risely concluded that without direct vocabulary teaching, children can lag behind early in their education and never catch up to their peers.



The use of Montessori nomenclature cards is important for introducing and building vocabulary. However, there is more that can be done to help students actively engage with

new vocabulary, assisting their internalization of the words' meanings. It is said that children who have more encounters and practice with words do better than their peers who have less. In fact, it may take up to 12 instructional encounters to make a difference.

Robert Marzano and Debra Pickering have developed an approach that provides students with the opportunity to increase their instructional encounters with vocabulary. Their learning strategy to help students develop and internalize vocabulary begins with the teacher providing an example and description of the term — similar to Montessori's three-period lesson.

Present the term using a concrete example. If that is not possible, use a model or photograph to represent the word. During the presentation, provide the student with a description, explanation, or example of the term.

5.8 STORYTELLING AND LIFELONG READING.

Storytelling in the Montessori Classroom



Stories captivate children like nothing else, and have been used longer than any other communication tool for passing along important lessons, information, or just simply to entertain. Historically, reading or writing may have never played any part in many cultures, but storytelling has always been central. And for good reason. A good story engages our brains like nothing else can. They're an ancient art and spiritual practice— we're simply built to tell and enjoy stories.

In Montessori curriculum, we use the art of storytelling to introduce ideas, teach new concepts, and to reinforce or extend lessons.

The Brain on Stories

The change in our brains when we listen to a story versus a lecture composed of facts and figures is dramatic.

When listening to a story versus a list of facts, a child uses more of their brain and is able to connect emotionally with the characters. They also build a stronger emotional bond with the storyteller. On top of that, listeners of a story deepen their capacity for empathy and grow their attention span.

Every one of these results is what Montessori education hopes to instill in children, and that's why it's so central to the curriculum.

Stories across Planes of Development

It's not enough to just tell any kind of stories, though, we have to adapt this practice to the needs of the child, through what Maria Montessori called the planes of development.

Children's House:

The best stories for this age group are ones that are true, or at least realistic. Children at this age are rapidly growing in language development, so we use language that's both simple to understand and complex, in order to support their current development, and to expand their vocabulary.

We try to avoid fantasy stories at this stage and instead use stories about things that really happened, or at least really could happen. Having a strong sense of reality is important for the child in the first plane of development, so that's our top priority!

Elementary:

Is the child's mental horizon limited to what he sees? No. He has a type of mind that goes beyond the concrete. He has the great power of imagination. – Maria Montessori

Montessori education uses stories as a vehicle for teaching the most important, foundational lessons. The most popular stories are part of an annual ritual called the Great Lessons, which includes the stories: Coming of the Universe, Coming of Life, Coming of Humans, History of Writing, and History of Numbers.

These stories were developed for elementary classrooms and are meant to introduce concepts to students at the start of every year. The entire elementary curriculum extends out of these stories.

The Great Lessons are designed to inspire wonder and awe through stories about the origins of all things. The stories are intentionally broad to capture the young child's imagination. The teacher also uses scientific demonstrations and impressionistic charts while telling the stories to lay the groundwork for future learning.

Recently, at our Cultural Parent Information Night, our teachers explained the Great Lessons to elementary parents. As our discussion was wrapping up, one dad said, "This is all confirmation that my child is in the right place." We couldn't agree more!

Our elementary classrooms also use novel studies and book clubs as a method of storytelling. Ms. Aliceyn, our upper elementary teacher, is currently reading *Blood on the Water* with the fourth-graders who are starting to study Virginia History. During our

Information Night, she shared how connecting to stories like this help the children to better understand the details of history, rather than just drilling and memorizing facts.

Middle School:

Children in the middle school years are expressive, dramatic, and love to entertain. At this point the listeners become the tellers and tell their true or realistic stories by creating plays, dramatic re-enactments, or simply by speaking to the class.

This year, our middle school class came down and presented the First Great Lesson, The Coming of the Universe, to our lower elementary classroom. They did a fabulous job. It's amazing how they remembered the stories from when they themselves were elementary students!" – Ms. Carmel

Being able to tell stories in this way builds confidence in this typically self-conscious age group, and provides them an opportunity to develop skills in public speaking, communicating with others, and in self-expression.

5.9 LET US SUM UP

We have come to understand that Experience- Vocabulary cum Storytelling - Reading Approach in Montessori Education. There are plenty of ways parents can encourage pre-literacy skills in children, including pointing out letters, providing ample opportunities for playing with language, and fostering an interest in books. It can be helpful to ask a child about their day and talk through routines to assist with the development of narrative skills.

5.10 UNIT –END EXERCISES

1. What is Pleasurable Reading?
2. What is Storytelling Method?
3. Explain about Memorization and Recognition of objects in Montessori Education.
4. Explain Vocabulary cum Storytelling in Montessori Education.
5. Write about Pronunciation and Vocabulary in Montessori Education.

5.11 SUGGESTED READINGS

- Kohli, A. L. (2006). Techniques of Teaching English. New Delhi: DhanpatRai pub.co
- Fletcher F.G Some lessons in mathematics OUP.
- Hogben Lancelot, Mathematics for the Million George Allen and Unwin Ltd., London.
- Joseph Crescimbeni teaching of New Mathematics Parker publishing

UNIT VI

SENSORIAL EXPERIENCE APPROACH

Structure

- 6.0 Introduction
- 6.1 Objectives
- 6.2 Memorization and recognition of objects
- 6.3 Manipulation of letters and constructing words
- 6.4 Recognize and matching the Words
- 6.5 Secret Words
- 6.6 Action Words
- 6.7 Reading
- 6.8 Friendly Environment
- 6.9 Adaptation to Environment
- 6.10 Logical and Perceptual Ability
- 6.11 Enhancement of Visible Sensibility
- 6.12 Let us sum up
- 6.13 Unit-end excises
- 6.14 Suggested Readings

6.0 INTRODUCTION

Sensorial learning is a teaching approach that stimulates the child's five senses; taste, touch, smell, sight, and hearing. This allows children to use their senses to explore and understand the world around them. It includes activities that help them study objects, colours, textures, tastes, numbers, and situations. Sensorial learning builds nerve connections in the brain's pathway by promoting activities that stimulate their senses.

6.1 OBJECTIVES

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

- Discuss about Memorization and recognition of objects
- Explain the Manipulation of letters and constructing words
- Discuss the Recognize and matching the Words
- Describe the Enhancement of Visible Sensibility
- Discuss the Logical and Perceptual Ability.

6.2 MEMORIZATION AND RECOGNITION OF OBJECTS

The Three-Period Lesson

As a parent interested in the Montessori Method, you may have heard about the three-period lesson, a hallmark of Montessori education that helps young children learn vocabulary and concepts.

1. Naming (Introduction) "This is a dog."
2. Recognizing (Identification) "Show me the dog."
3. Remembering (Cognition) "What is this?"

The three-period lesson was developed by Edouard Seguin, a French physician who worked with special needs children in France and the United States during the late 19th century. He discovered ways to increase children's cognitive abilities and believed in the importance of developing their self-reliance and independence. Seguin's writings were a major inspiration to Maria Montessori and the source of many of her practical ideas.

Your role as your child's first teacher is not the same as a trained educator. Quite naturally, you have been using the three-period lesson as you communicate with your baby and toddler. Your use of this "lesson" is much more informal than in a classroom setting. It is a tool to allow you to see your child's knowledge of a particular concept, and a technique to keep in mind throughout his childhood.

When my children were young, my mother sent them postcards of famous artworks. We would briefly talk about the picture, the title, the artist, and then place the card on a small easel on a shelf in their rooms. When she visited, my mother would play games with the children using the postcards. One rainy Sunday afternoon when our family was visiting the Metropolitan Museum of Art, my 3 1/2 year-old daughter suddenly shouted out, "Girls at the Piano," as we entered a gallery. There was Auguste Renoir's painting, bigger than life, and one excited little girl, delighted with her discovery.

The First Period: "This is _____."

You have been naming people, places, and things for your baby from the very beginning. These names are used over and over, clearly isolating and identifying objects with one-word descriptions.

The baby hears the sounds and begins to understand language. Children will not distinguish differences at this early age - for example all people may be "mama" or all animals might be called "dogs." Lots of names are learned before a child learns to speak, and understanding often comes before a child is able to verbalize.

Learning takes place through all the senses, not just by hearing. Babies touch, taste, squeeze, smell, push, and manipulate everything. As you identify concepts such as "hot" or "cold," children not only learn the vocabulary but they also experience the quality. They miraculously internalize the world through all their senses. Montessori refers to this innate ability as the "absorbent mind."

The Second Period: "Show me _____."

This stage of learning is the longest, and your child needs to have many, many experiences hearing the names of things.

You may have noticed that your child looks in the direction of an object you name. She is indeed connecting the word with the object. Later, your little one understands simple instructions. Montessori identified how important movement is for learning, so play games that incorporate movement. For example, ask your child to find the ball and bring it to you. Peek-a-Boo games help children learn during the second period. "Where is Teddy? There he is!" Naming games are fun for children whether reading together, riding in the car, or playing "I Spy" at home. "Where's the horse?" "Find the red balloon." "Where is your excavator?"

Enjoy watching your child absorb information about the world, and recognize objects. There is no reason to hurry on to the third period until your child has fully experienced and learned vocabulary during this second level of learning. This process might continue for months, weeks, or days.

The Third Period: "What is this?"

Although some call the third period "the test," don't ask your child a vocabulary question until you know he will be successful. Recall how delighted you were when your child first said "Mama" or "doggie." When the child can name something, it signals cognition, the third step of learning. If you ask, "What is this?" your child might not know. This tells you that more repetition and experience is needed. Never indicate that your child has failed. Just go back to the second period. Play more naming games, reintroduce vocabulary while you talk about what you see, and then enjoy your child's amazing "absorbent mind."

6.3 MANIPULATION OF LETTERS AND CONSTRUCTING WORDS

I recently decided to bring out the moveable alphabet that I have had sitting in a cupboard upstairs for a while and introduce it to Frida.

If you're not familiar with it, the moveable alphabet is a brilliant Montessori material which recognises that most children will be able to start spelling out words long before they have the fine motor skills to write them. Writing your own words with an alphabet which can

be manipulated is a key part of the Montessori Method of learning to read and write – it is thought of as the “bridge” between the two skills.

In her brilliant book “Montessori Read & Write: A parent’s guide to literacy for children” (which I cannot recommend enough!) Lynne Laurence writes:

“Giving the child letters that have already been prepared divorces the creative and expressive side of writing from the slower and more underdeveloped skill of writing by hand. The development of both of these areas will progress along parallel lines for a while: in this way the actual act of handwriting, which needs practice and repetition, doesn’t hold up her growing ability to use language in its written form to express thought...

“In addition to the other benefits that accrue to your child from being able to write expressively, as she begins to write using the moveable alphabet letters she will directly experience the way in which letters make words, and how print goes from right to left and from top to bottom. It will give her an opportunity to connect writing directly with speech and she will be very quick to make the leap between writing things down and actually being able to read back what she has written.”

I bought a proper wooden moveable alphabet set as we will be home educating and this was one of the materials I felt happy to invest in, but I have seen brilliant moveable alphabets made from laminated card which would be great, especially if your child goes to school or will do in future.

If Frida shows sustained interest in using it, I will try and sew her or buy a spelling mat (like this one here) to use alongside it.



Alongside the moveable alphabet, I gave Frida a selection of sweet three-letter word flashcards which have an image on one side and the word on the other. This means she can pick a card, write the word using the moveable alphabet letters, and then flip the card over to check her spelling. This provides her with the control of error which is key in the Montessori philosophy, allowing her to check her own work independently without me interfering or correcting her which could be quite demotivating.

I liked the idea of using cards as a prompt whilst Frida familiarises herself with the material and starts to understand how to use it and learn where all the letters are. She also had a go at writing a couple of words which weren't on cards, and I imagine that as she feels more confident working with the moveable alphabet she will gravitate towards writing more of her own messages. I just plan to leave this work out for her and see where she decides to take her learning.

6.4 RECOGNIZE AND MATCHING THE WORDS

Montessori language materials are designed primarily to teach children the intricacies of written and spoken language. A firm grasp of writing and speaking will allow students to progress with their learning. Students use language materials to explore letters, sounds, handwriting, and eventually spelling and writing.

The Montessori language materials develop along with these learners, to help them reach the final stages of writing on their own. There are a host of activities in the Early Childhood timeframe that build towards these language activities. The foundational skills of Early Childhood are already in place and developing when language-specific work is intertwined.

Below you'll find a collection of Montessori language-learning materials, with information on how each is used in the Montessori classroom.

SANDPAPER LETTERS



From the earliest levels, students are introduced to letters and sounds, and begin differentiating between consonants, vowels, and key sounds that are not covered by single letters. Each letter of the alphabet is formed from sandpaper and mounted on a square tile. Consonants and vowels are mounted on different color tiles, and key sounds (that can't be conveyed with a single letter) are mounted on a third color. Students begin to internalize the shapes of the letters, the sounds, and the differences between the groups.

METAL INSETS

Metal insets are used to build the dexterity needed to write letters.



The insets come in a number of different shapes, and are used to trace different shapes, building the hand strength needed to create those shapes. Students interact with the insets in a number of ways—tracing the interior, exterior, and using different shapes and writing utensils to create new designs.

Vocabulary CARDS

Montessori vocabulary cards, sometimes referred to as three-part matching cards, are used during the early stages of "reading" in the Montessori classroom. After developing mastery with identifying letters and their sounds, students move on to matching pictures with the words that describe them. Three part matching cards consist of an image card, a matching word card, and a third card that shows the proper word/image combination for the student to check against.

Pre-Selected Sound Boxes



The pre-selected sound boxes consist of objects (figurines) or pictures of objects, along with a set of movable letters. Students place the letters on their work station, and then select the objects that start with that letter and place them underneath. Students also progress to selecting the objects that end with a given letter. As students' progress, they can begin to spell out entire words with their movable alphabets; and then practice writing those words out on their own.

Movable Alphabets



The movable alphabet builds on the themes of the sandpaper letters and sound boxes. Multiple representations of each letter are stored for children to recognize from their earlier work, and piece together into words. The color coding of consonants and vowels remains, but the student is now required to combine the letters on their own to form words. The movable alphabet is commonly combined with other materials or props to give students new spelling challenges.

Rhyme Cards

Rhyme cards are a good example of a wide set of Montessori materials that use words written on cards to explore the relationships between words. In the early stages, children use rhyme cards to arrange words into rhyming groups. As their skills increase, they move on to arranging words in new ways. Each set contains the exact number of each piece needed, so that students can self-correct, if they, for example, realize that one group is too large.

Sentence-Building Cards

As students' skills increase, they move on to more complex matching cards. The sentence-building cards use color-coding to indicate different parts of speech (black represents a punctuation mark). Students arrange words into sentences, using a color-coded template by matching the colors on their word cards to the colors on the template. This way, students begin to understand the importance of sentence structure, syntax, and parts of speech.

6.5 SECRET WORDS

Freedom of Choice



The child must acquire physical independence by being sufficient unto himself.

Maria Montessori understood that all children, indeed all people, have different strengths and interests. The Montessori Method offers children the “freedom of choice” in order to maximize the learning process through these individual differences. Some people misunderstand “freedom of choice” to mean that children just do whatever they please and/or there is no such thing as discipline in a Montessori classroom. This is actually far from accurate.

In the Montessori classroom, children are given the freedom to choose activities from a carefully prepared environment. This prepared environment is key! Through careful observation of the child, teachers (and parents) can provide the right activities for the child’s development.

The child must acquire physical independence by being sufficient unto himself. Independence of will by choosing alone and freely, independence of thought by working alone and uninterrupted. ~Maria Montessori



Why is freedom of choice so important?

For example, each morning the child comes into the classroom (home or school), and begins the lesson of her choice. She is free to select from prepared lessons on low shelving or other child-accessible locations. She may choose a lesson that she is already familiar with, or she may ask for new lessons. If she chooses a new lesson, the teacher can demonstrate how this new lesson works, or she might observe another child working through the lesson. She

may work by herself or with a friend. She may stick with one lesson or (after putting the items away in the proper location) she may move on to something else. All the while, teachers observe the child's progress, offer help only when needed, and make note of which lessons or activities to introduce next.

As you can see from the example above, the child experiences free choice, not a free-for-all. But why is freedom of choice so important? Because every child has his or her unique gifts and talents. One child might be quick to learn to read, another is a natural when it comes to numbers. This child is very athletic and coordinated, while that one has a flare for music and art.



Though they may be similar in age, no two children are the same...

Have you ever noticed that when you're among a group of children, though they may be similar in age, no two children are the same? They are different heights and weights. There are vastly different activity levels. Some are shy and stay near a parent, while others seem to be fearless risk takers. There are early and late bloomers, visual, auditory and tactile learners, and even big differences depending on external factors such as how much sleep they got last night or how much sugar was (or wasn't) in their breakfast cereal. What is the balance?

Now, imagine trying to put these very different children together and offer them all the same lesson at the same time. What's going to happen? You're likely to have some children that are interested and ready to learn that particular lesson. But what about those for whom the lesson is too difficult or too easy? What about the children who are simply not in that developmental stage right now, but will be a few months from now? This one-size-fits-all technique is almost hit or miss. Maybe the child will benefit from this lesson, and maybe they won't. How do you know?

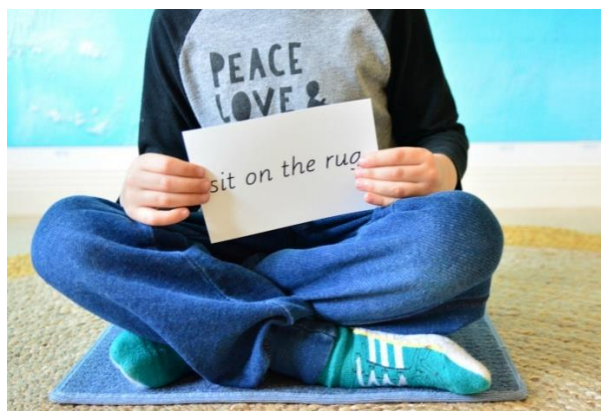
We ourselves have lost this deep and vital sensitiveness, and in the presence of children in whom we see it reviving, we feel as if we were watching a mystery being unfolded. It shows itself in the delicate act of free choice, which a teacher untrained in observation can

trample on before she even discerns it, much as an elephant tramples the budding flower about to blossom in its path. ~ Maria Montessori

Maria Montessori understood all these learning differences and created an environment for children where they come in each day and choose what they are developmentally ready to work on. When the child chooses his own lessons, he is genuinely interested in learning. And this is how the child learns to follow his own “inner teacher.”

If you would like to learn more about your child’s freedom of choice and following his/her inner teacher, please enjoy this free on-line webinar replay entitled: “Help Your Child Access Their Inner Teacher.”

6.6 ACTION WORDS



Montessori 'Action' or 'Command' Card are really easy to use at home. They are simple to make; they can be hand-written or printed. They can be adapted to your child's level of reading, from simple consonant-vowel-consonant words to complex phrases.

Otis is still learning some of his phonograms, and he knows some sight words (such as 'the'), so I know I can mix up the cards and include some that are easy and some that are more challenging. Unlike other Montessori activities, I think this one is really good to do at home; it doesn't take away or duplicate any work done at school. You also know that if your child isn't engaged or having fun, then it's not a good activity for them at that time.

Montessori Action Cards contain action verbs. The child reads the word or phrase and then acts out the action. It makes learning to read fun; there are lots of ways to be silly! You can show your child the card and do the action together. Alternatively, you can put the cards in a pile and take turns reading the cards and performing the actions. There really isn't a wrong way to do it. So simple!

Using the Montessori Action Cards is a fantastic way to do some reading work in short bursts, it's an easy five-minute game that you can play together.

Montessori Tides School has a brief description for parents on how to use the cards with 3-5-year-olds. The Helpful Garden has some free printables and further explanation which you might find useful. You know I love Miss Rhonda's Readers, and she also has action cards, (a pack of 32 phonetic cards and 32 phonogram cards) which makes it easy to find suitable words for your child, and if you have other sets of hers, you can start to make phrases.

If you are using the Montessori Action Cards, I hope you are having some fun!



6.7 READING

Montessori Approaches to Literacy Learning

- **From motor skill activities to sensorial materials**

The Montessori Method focuses on training senses as a prerequisite for the acquisition of reading skills. But before kids get started to work with sensorial materials, they get involved in activities that develop their motor skills such as washing dishes, polishing or brushing clothes. The fact is that fine motor activities improve small muscle movements, which enable us to reproduce letters and numbers using our hands and fingers. When children work with sensorial materials, they develop senses for perceiving the sounds of various things.

- **First write, then read**

According to the Montessori approach, writing should precede reading. As children learn to write “phonetically”, they start with sounds that form a basis for reading. Later on, a child is able to relate phonetic sounds to specific letters. In the Montessori classroom, kids learn to form words by picking up colorful paper letters from the Montessori alphabet and putting them on the table. They are encouraged to write whatever they want, even if they misuse letters. As they progress, they will write more correctly even without noticing it. The main aim at an early stage of literacy learning is to make kids able to express their thoughts in the written form, not master spelling or grammar rules.

- **Experience precedes vocabulary**

In the Montessori environment, real experience goes before vocabulary. In such context, Montessori teachers present to kids real actions before verb cards, real nature before pictures with natural landscape, real music piece of music before cards with music instruments and famous composers. Thus, kids can deal with real objects and then learn their names. In such a way, children can grasp connection between the language and the real world.

- **Storytelling and reading**

The basis for reading is formed, when a child sees people around them reading and doing it with pleasure. Children love to be talked to and listen to stories. Reading aloud to children can help them explore new facts, acquire the right word pronunciation as well as get introduced to vocabulary that not always come up in day-to-day conversations. Storytelling is a good way to instil lifelong love of books and reading on their own.

6.8 FRIENDLY ENVIRONMENT

Developed more than 100 years ago by Italian physician Maria Montessori, the Montessori Method of teaching and learning centres around the belief that children are capable of initiating their own learning experiences. If you're in a Montessori School or environment of any kind, you'll find a compelling mixture of materials and activities specifically geared toward developing a well-rounded learner — meaning students are challenged physically, cognitively, emotionally and socially.

Most people have heard of Montessori education programs, but many don't realize that Montessori's theories are also concepts you can successfully incorporate at home. In fact, Dr. Montessori first began developing her ideas about the way children learn when she was working with children who lived in low-income apartments.

Why should a parent consider implementing Montessori principles at home? Many reasons exist, but the biggest is that it's a great way to recognize and develop your child's inherent ability to learn about the world around them through meaningful play. By making a few changes to your home environment, you can actually help encourage your child's natural curiosity and ability to learn for years to come. [Incorporating Montessori Principles At Home](#)

When it comes to implementing Montessori principles in the home, most parents are intrigued by the idea, but they aren't sure where to start. But, it starts with a change in mind-set. As a parent, you have to start by understanding that children - even the littlest ones - are

capable of more than you realize. Once you acknowledge this, then you can make some changes around your home to set yourself and your child up for Montessori success.

1. Organize Your Environment, "A place for everything and everything in its place" is one of the critical principles of Montessori at home. When you designate a place for everything, your child will quickly learn where everything goes. This is an essential tool in teaching them to be responsible for their belongings and clean up messes they may make. To effectively order your environment, the most significant change you'll want to make is to make things more accessible for your child.

Keep beverages in small pitchers located on the lower shelf in the fridge, with child-friendly cups nearby. When your child is thirsty, allow them to help themselves — just be sure to keep a sponge nearby so they can clean up any messes they make, too.

In the Montessori approach, parents are also encouraged to rotate their children's toys and books every few weeks. The goal of this is to keep their curiosity fresh and prevent boredom. This may seem overwhelming to some parents, but the best way to do it is to rotate the items on your shelves based on the seasons and your child's current interests. Do they get excited about dinosaurs? Then include a basket of dinosaurs, as well as a few age-appropriate books on the shelves. Whatever topics interest your children, the key is to encourage exploration and creativity.

2. Emphasize Life Skills, Even young children are capable of pitching in around the house. By teaching them to take care of themselves and the space around them at a young age, you will set your child up to be a considerate, capable adult later on. This will mean that, as a parent, you may have to stop and take the time to teach your child how to properly wipe the table after a meal or which cabinet to place their cups in, but their minds are so absorbent that it won't be long before they can do it independently.

Remember to match their tasks with their age and abilities. For example, younger children are perfectly capable of learning to water plants, feed pets, wipe the table after a meal and pick up their toys. Older children can incorporate more complex tasks into their routine, like taking out the trash, meal preparation and basic home maintenance. You can also have them teach the younger children in your home, as well.

3. Teach Concentration, A lot of adults don't think young children can concentrate, and it's true that children cannot focus on something for the same timespan as adults. But, under the Montessori Method of thought, this is a skill you can start cultivating in your child when they are young. You can do this by identifying what they are interested in and setting them up with the materials and space they need to explore it more thoroughly.

When people first start out, many times they incorrectly assume giving their child space means they have to have an isolated area away from the rest of the family. This is not true. While some children do need more solitude than others, it's important to figure out how your child works best and then encourage that. Some children like to work at the kitchen table in the middle of the house. Others prefer the solitude of their bedroom or a quiet corner of a playroom.

4. Focus on Inner Motivation, Not Rewardsthe Montessori Method isn't big on giving children extrinsic rewards for behaviour, such as stickers or candy. Verbal praise is valued, although it's important to make sure it is given in moderation. The key is that you should teach your children to enjoy and seek the feelings of pleasure and pride that come with learning something new or completing a task.

6.9 ADAPTATION TO ENVIRONMENT;

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'.

6.10 LOGICAL AND PERCEPTUAL ABILITY



The journey to our never-ending learning begins at birth. A new-born child starts to study his surroundings through his senses. As soon as they are born, they naturally start to observe. That is why your baby seems to be drawn to specific colours and sounds. Sensorial learning is a natural way to gain knowledge of our environment; hence it is one of the best ways to fully immerse our children in their education. It is a natural brain process that can be developed by using Montessori sensorial materials.

Confucius, the great Chinese philosopher, said: “I hear, and I forget, I see, and I remember, I do, and I understand.” This holds true even at the beginning of the learning stage in early childhood. Ages 0 – 6 years is a critical learning stage for our young ones. Children are like sponges; they absorb information incredibly. However, it takes more than a simple tell approach to grab and hold their attention. We believe that “doing” and allowing our children to engage in sensorial activities is how they learn best. They need to be encouraged to try something new to gain knowledge. They need to be instilled with the confidence to take part in their learning activities. These abilities should be developed as early as possible.

Sensorial learning is a teaching approach that stimulates the child’s five senses; taste, touch, smell, sight, and hearing. This allows children to use their senses to explore and understand the world around them. It includes activities that help them study objects, colors, textures, tastes, numbers, and situations.

In Montessori Academy, we believe that every child needs an education that fosters a life-long love for learning. We must introduce them to a teaching technique that is both fun and beneficial. Sensorial development will help them build necessary skills that include cognition and logic.

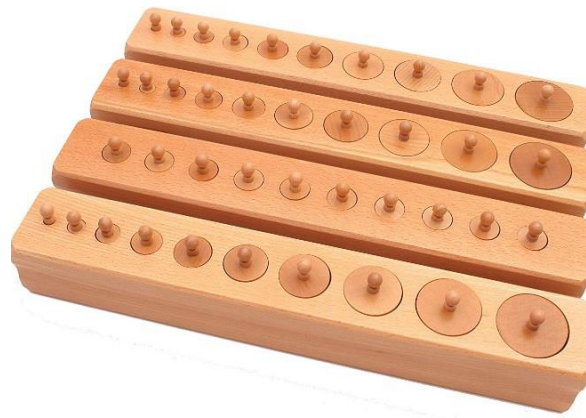
What are Montessori Sensorial Materials?

Montessori Sensorial Materials are creative tools or toys used in a Montessori classroom that boost the child’s five senses, enabling them to learn better. There are different kinds of sensorial materials designed to rouse a child’s interest to learn.

Some examples of sensorial materials are:



The Pink Tower – The pink tower consists of 10 pink cubes in varying sizes. By stacking the cubes on top of the other, the kids will start from the biggest hub and then add the second biggest cube on top of it.



Knobbed Cylinder blocks – The very first sense lesson in the sensorial area of the classroom. Consist of ten wooden cylinders has different dimensions. Just remove the cylinders from the block and put it back from where it is placed at first.



Baric Tablets – Made of wooden tablets with a different weight that helps the kids to determine the difference between the weight of the woods.



Trinomial Cube – The main activity is to let the child make a three-dimensional puzzle that consists of 27 wooden blocks. This activity will lead the child to learn algebra.



Colour Tablets – Consists of three color boxes. The first box has the three primary colors inside, the second one has 12 various colors, and the last box has nine colors.



Brown Stair(Broad Stair)– The brown stair is made of a wooden prism with the same length but with different width and height. The faces at the end represent one to ten. This will help your child develop his/her mathematical mind.



Sound Cylinders – Compose of two boxes with six cylinders inside. The first set is in color blue, and the other set in color red. Every cylinder in the same color can will make a different sound when it shook by the child.

Red Rods (Long Stair)- Consist of 10 wooden rods with different lengths and dimensions. The primary purpose of this sensorial material is to advance the child’s muscular perception of distance and visual.



Thermic Tablets – The tablets consist of various natural materials that can be found in our surroundings. The goal here is to let the child sense the difference by using temperature. Identify which of the tablets match.



Touch Boards – It used to verify the child’s tactile sense that helps them to determine the difference between smooth and rough. The activity will be completed when the child correctly organizes the boards from rough and smooth and match the pairs of a tablet perfectly.



Fabrics – There should be six pairs of fabric in each box that has a different color or pattern. These Fabric boxes are a great way to clarify the tactile sense and increase in their vocabulary.



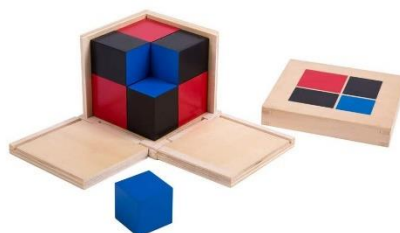
Pressure Cylinders – Pressure Cylinder consists of wooden holiday tray, six cylinders with black colored pistons, and six cylinders with a wood colored piston in a total of 12 cylinders. The objective is to pair the wood colored piston to the black colored piston with the same pressure and align them to make it into six pairs of tubes.



Stereognostic Bag – The purpose of this activity is to put an object inside the bag and guess what the object is inside the bag. This activity will help to develop the child's senses.



Geometry Cabinet – Consists of a wooden tray section with six wood squares. One triangle, circle, and a square and three of the squares are wooden insets.



Binomial Cube – The binomial cube is consists of three black and red prisms, three black and blue prisms, one blue cube, one red cube at it has corresponding elements. The pieces will be at the box with an opening side each.



Constructive Triangles – The triangles are constructed with rectilinear shapes. It is designed to help the child to be aware of the size and shapes that are represented to the Geometric Cabinet.

These materials are intended to match the difficulty level of everyday life. Montessori sensorial materials have what is called “control of error,” which means that the child’s learning doesn’t end with working with the material. They also provided a way to check or scrutinize their work rather than seeking out the teacher whether or not they did it right. It helps promote the child’s independence and problem-solving skills.

With a lot of different toys being introduced in the market today, we must have an understanding of which will benefit our child the best.

6.11 ENHANCEMENT OF VISIBLE SENSIBILITY.

Montessori School of Shanghai provides highly trained, credentialed Montessori Teachers and exceptional classroom environments. Mixed age groups are found in our Infant, Toddler, Early Childhood classes.

Creativity flourishes in an atmosphere of acceptance and trust. Our teachers establish such an atmosphere in their classrooms. Treating each child with love and respect enables the child to trust their teachers. This relationship is the foundation of the learning process. The three-year cycle enables the child, the family and the teacher time to really know one another and work together. Strong bonds are made, and many relationships are long lasting.

For any great accomplishment, the foundation has to be strong, solid and long lasting. That is the opportunity a Montessori education provides. Birth to age six is the most important time of education. It is here that the foundation is firmly established. We build good people!

Multi-Age Grouping

The Montessori School of Shanghai has classrooms of multi-age children. They are “Multi-Age Learning Communities.” Montessori practice has shown that children in multi-year age groupings progress academically while building important social, learning, and character skills.

The multi-age grouping accommodates the child's individualized “biological clock”, rather than relying on age as the primary indicator for readiness with lessons. Peer cooperation and peer tutoring increases achievement and self-esteem in both the older and younger child.

The multi-age classroom is a ground-breaking concept for developing community and supporting students of varying levels of academic and social development. By creating a bond between parents, teachers, and children, Dr. Montessori sought to create a closely-knit community where individuals could learn to be empowered; where children could learn to become contributing, sharing members of their school-family; where students could learn to care for younger children, learn from older people, and trust one another; and where children could find ways to be acceptably assertive rather than being aggressive.

Prepared Environment

Montessori’s idea of the prepared environment was that everything the child came in contact with would facilitate and maximize independent learning and exploration. This calm, well-ordered environment has a lot of movement and activity. Children are free to choose and work on activities at their own pace. Here, they experience a combination of freedom and self-discipline, as guided by the environment and the teacher.

There are generally seven aspects, or principles, to the Prepared Environment: Freedom; Structure and Order; Beauty; Nature and Reality; Social Environment; Intellectual Environment; Montessori materials.

Freedom: A child must be free to explore and follow his own natural impulses, thus developing his potential and increasing his knowledge of the world around him. Within the prepared environment, the child must experience freedom of movement, freedom of exploration, freedom to interact socially, and freedom from interference from others. This freedom ultimately leads to a greater freedom: freedom of choice.

Structure and Order: While Structure and Order seem counter-intuitive to the aforementioned freedom, nothing could be further from the truth. Structure and Order in the Montessori classroom accurately reflect the sense of structure and order in the universe. By

using the Montessori classroom environment as a microcosm of the universe, the child begins to internalize the order surrounding him, thus making sense of the world in which he lives.

Beauty: Montessori environments should be beautiful. The environment should suggest a simple harmony. Uncluttered and well maintained, the environment should reflect peace and tranquility. The environment should invite the learner to come in and work. This atmosphere is easily seen through the attitude of those working there, both child and adult.

Nature and Reality: Montessori had a deep respect and reverence for nature. She believed that we should use nature to inspire children. She continually suggested that Montessori teachers take the children out into nature, rather than keeping them confined in the classroom. This is why natural materials are preferred in the prepared environment. Real wood, reeds, bamboo, metal, cotton, and glass are preferred to synthetics or plastics.

Social Environment: Where there is freedom to interact, children learn to encourage and develop a sense of compassion and empathy for others. As children develop, they become more socially aware, preparing to work and play in groups. This social interaction is supported throughout the environment and is encouraged by the multi-age classroom settings.

Intellectual Environment: If the above aspects are not recognized, the intellectual environment will not reach its purpose. The purpose of the Montessori environment is to develop the whole personality of the child, not merely his intellect. By guiding the child through the five areas of the Montessori curriculum (Practical Life, Sensorial, Language, Mathematics, and Cultural subjects), the child has the structure, which is at the forefront of the creative work in a Montessori classroom.

Montessori Materials: Each classroom at the Montessori School of Shanghai is equipped with the full range of Montessori materials. These unique and specialized materials are often imported from Europe or the United States to ensure authenticity and quality. In addition MSS classrooms are rich with colorful extensions and individualized teacher-made materials that complement and enhance the Montessori materials.

Teachers' Role

In Montessori education we believe in the importance of three things, that all work together: the child, teacher, and materials, where each part is important. We believe that each child has many gifts and talents to be discovered, and not that a child is an empty container waiting to be filled up by the teacher. The teacher is an observer, follower, and guide bringing wisdom, thoughtfulness, and experience to the child's academic, social, and intellectual exploration. The Montessori approach demands special professionals who are confident and skilled enough to allow children to be active participants in their learning. It

also means that all school decisions are driven by what is best for the child. The authentic and beautiful Montessori materials provide activities that are cherished by the children and that help them learn with joy and understanding.

The teacher establishes guidelines for work and behavior, showing children how to be successful within the structure of the curriculum and the community. As a result, a pattern of good work habits and a sense of responsibility and cooperation are established in the classroom.

Sensitive Periods of Learning

Maria Montessori believed in children having “sensitive periods” for learning. From birth to 6, the child shows a strong interest on particular things he wants to master. This leads to the child doing a task repeatedly, with great interest, until the child has reached his goal of mastery.

The purpose of each sensitive period, which is actually an inner sensibility possessed by children, is to help them acquire a certain skill or characteristic necessary for their growth. As they acquire the skill or characteristic, their sensitivity for it decreases and another sensitivity increases.

Absorbent Mind

Dr. Montessori observed that the first six years of children's lives are directed by their absorbent minds. She divided this six- year time span into two three-year periods. The first three years she calls “unconscious learning” and the second three years, “conscious learning”. During the first three years of life children absorb and take in all that is around them in their environment. They absorb impressions from the environment, “creating themselves”. Dr. Montessori said, "The child takes in his whole environment, not with his mind but with his life". The task of adults around the child in this stage of development is not to intervene but to provide a safe, rich environment for the child.

6.12 LET US SUM UP

In this digital age, more and more young ones are exposed to computer games that lack the essential use of all senses. It is our responsibility to act, as parents and educators, and to provide them with a solid foreground for schooling. It is vital right now to instill physical and mental engagement in their education. Montessori sensorial learning is a type of training that your kids will love. It is incredibly beneficial for them.

6.13 UNIT-ENDEXERCISES

1. How to construct the Words.
2. What is Logical Ability?

3. Explain the sensorial Experience Approach in Montessori Education.
4. Define the Logical and Perceptual ability in Montessori Education.
5. How to improve Writing Skills.

6.14 SUGGESTED READING

- Joyce.,& Well., (2004). Models of Teaching. U.K: Prentice hall of India.
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