

PRIMARY MONTESSORI EDUCATION

Understanding the Theory

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This free eBook is a collection of articles and tutorials that we have written and are available on our website. The primary goal of Montessori Print Shop is to make our printable Montessori materials affordable, and accessible to everyone, regardless of their location or level of education. However, in order to make our printable materials as effective as possible, it's important we educate the adults (teachers and parents) using them, on the basics of Montessori education. We've assembled these articles all together to give you a greater view of Montessori and how you can implement it in your home or in your classroom.

This eBook is in **no way a substitution for Montessori Teacher training for those who wish to teach in an authentic certified Montessori school**. However, it's our strong belief that all teachers and parents will benefit from learning about Montessori education. Even small changes in your current teaching and parenting methods can make a big impact on the children you teach and care for.

What is Montessori?

It is a revolutionary method of observing and supporting the natural development of children. Montessori educational practice helps children develop creativity, problem solving, social, and time-management skills, to contribute to society and the environment, and to become fulfilled persons in their particular time and place on Earth. The basis of Montessori practice in the classroom is respected individual choice of research and work, and uninterrupted concentration rather than group lessons led by an adult. **(International Montessori Index**)



Ten Fundamental Rules

The ten fundamental rules as outlined by Maria Montessori can be found in the front entrance of many Montessori schools. It serves as a reminder to the staff and administration, and as an outline to parents, of what the expectations are when it comes to the care of the children.



1. Never touch the child unless invited by him (in some form or the other).
2. Never speak ill of the child in his presence or absence.
3. Concentrate on strengthening and helping the development of what is good in the child that its presence may leave less and less space for evil.
4. Be active in preparing the environment. Take meticulous and constant care of it. Help the child establish constructive relations with it. Show the proper place where the mean of development are kept and demonstrate their proper use.
5. Be ever ready to answer the call of the child who stands in need of you and always listen and respond to the child who appeals to you.
6. Respect the child who makes a mistake and can then or later correct himself, but stop firmly and immediately any misuse of the environment and any action which endangers the child, his development or others.
7. Respect the child who takes rest or watches others working or ponders over what he himself has done or will do. Neither call him nor force him to other forms of activity.
8. Help those who are in search of activity and cannot find it.
9. Be untiring in repeating presentations to the child who refused them earlier, in helping the child acquire what is not yet his own and overcome imperfections. Do this by animating the environment with care, with restraint and silence, with mild words and loving presence. Make your ready presence felt to the child who searches and hide from the child who has found.
10. Always treat the child with the best of good manners and offer him the best you have in yourself and at your disposal.

The General Principles of a Montessori Environment



Quite often when parents first send their children to a Montessori School for a Casa (Primary) program, they aren't fully aware of the unique principles of the Montessori environment. They have certain expectations that are formed due to their own personal beliefs, previous experiences, and simply a lack of knowledge of the principles of Montessori and how they apply to the classroom environment.

Not all Montessori schools will follow the principles outlined in this article, however you'll find that most accredited Montessori schools will adhere to most of them (with perhaps the exception of the student/teacher ratio - that is dictated by their local Child/Youth Regulations and license).

We have found it beneficial to outline and discuss these general principles to parents during Parent Education nights. It helps to alleviate anxieties and potential misunderstandings that typically occur during the first few weeks when a child is transitioning into the school. Again, each Montessori school has unique circumstances and it's up to the school to educate their parents on their principles and expectations.

The following is information we provide to parents on the Parent Education Night of a new school year:

1. **1:30 ratio** (10 first years, 10 second years, 10 third years to 1 trained Directress and an assistant). Mixed ages of the children is crucial; **they learn from each other, care for each other, and help to eliminate the crutches** that would occur if the children were all the same

age. The children gain more independence and have less dependence on the Directress. [All new schools here in Ontario/Canada at the 3-6yr age group require a 1:8 ratio. Only the 'grandfathered' schools (older schools that opened prior to the new rules) have the ability to maintain a higher ratio. Check your local educational laws for the required ratio for your school district].

2. The classroom is a **prepared environment for children ages 2 1/2 to 6 years of age**. The classroom contains only materials that respond to the developmental stages of a child from 2 1/2 to 6 years of age. There are no toys as the Montessori materials fulfill the various needs of the children at all stages. The classroom is clean, tidy, and encourages independence.

3. Lessons/presentations are given only **when the child is ready**. Generally lessons are given individually, however some lessons are given in a small group setting. Before a lesson is given the child must have successfully completed any preparatory lessons. If the concepts of the preceding lessons have not be absorbed than the probability of success will be minimal.

4. The **lessons are very purposeful**, specifically catering to each stage of the child's development. The children work according to their choice and capability and no comparisons to children of equal age are made.

5. The Montessori environment contains **self-correcting** materials. The child's self-esteem is protected since the adult does not have to do all of the correcting. Self-esteem grows as the children discover they can do things the correct way by themselves.

6. The amount of **paper that goes home is not the emphasis and is in no way any indication of the 'work' that the children have accomplished**. Quite often 'paper work' completed by the child will not be seen until late in their second year of the Casa program when their hand is developed enough to successfully print.

7. Children **freely choose work** in the classroom, **responding to internal needs** and working individually for the most part. Individual work encourages independence; once a child has been presented with a lesson they are free to use it when they desire (if it's not being used by another child).

8. The **children are encouraged to repeat lessons as many times as the child wishes**, so that the concept is completely absorbed. A child will not necessarily receive a new lesson every day, as time and repetition, as well as concentration, observation and discussion, are essential for the complete creation of the child.

9. Children are encouraged to **respect the work of others**; not touching, distracting, or disturbing other children who are working. Having only one of each lesson in the classroom helps the children respect others work, be patient, and to be proud of their own accomplishments.

10. The children are also expected to **respect their environment**. They are shown where lessons are found on the shelf and how to replace them in the correct manner. Older children help with replenishing supplies on the shelves and cleaning up at the end of the day.

11. We are **careful of how we display the children's work in the environment**. It can create bad feelings/competition amongst the children, and encourage children to complete work for the sake of praise and recognition from adults and peers. It's crucial to help children realize that the process is what's important, not the end product.

12. **Work done by the child is for the child and not for the parent**. The Montessori environment is created for the child to work according to their inner needs, for the construction of themselves. There is nothing more painful to watch than a child struggling through a page of printing because "mommy told me I had to bring a page home".

13. Children are encouraged to **dress themselves and be responsible for their own belongings**. Children need to wear clothing that they can manage in order to allow them to be independent.

14. **Asking permission** to go to the washroom, to the water fountain, or to repeat a lesson is not necessary. The environment has been created in a safe manner for the children, and they are aware of their own needs.

15. **Respect for the child. We will allow them to retain their dignity at all times**. Greeting and dismissing the child with a handshake and eye contact encourages the use of grace and courtesy. Showing affection to children is essential to their sense of security and emotional growth. However, as parents you're asked to allow your child the dignity to walk out of the school (their place of work) on their own two feet.

Although the above principles are outlined using a school setting, they can all be applied to a homeschool setting as well - with the exception of the student/teacher ratio - unless you have a very large family including multiples! Most families who are introduced to Montessori find they begin to apply the principles within their home life and family expectations, even if they're not homeschooling their children.

Areas in a Primary Montessori Classroom

The Primary Montessori classroom is comprised of 5 main areas:

1. Practical Life
2. Sensorial
3. Language
4. Math
5. Culture

Practical Life

Most children are passionately interested in **practical life activities** because the activities respond to all the **sensitive periods** (important periods of childhood development). Practical life activities build a foundation on which the children will grow and carry over into the other areas of the classroom, and over into their everyday life. The Montessori Practical Life exercises respond to the need for:

- **Order** of activities (sequences, routine, hierarchy, a cycle or full rotation of an activity)
- **Movement**. All practical life activities involve great movements that are varied and attractive. The variety of movements help the child's self-awareness within the environment and increase the child's acquisition of intelligent movement.
- **Sensorial exploration** (sights, sounds, smells, and eventually language).
- **Needs and tendencies** are responded to, to help the children adapt so that they can actively participate and grown within their environment.
- **A child's love of work**. Practical life activities feed their natural desire to work and play an active role in their environment.



Practical Life Lessons Guide Children

1. Construction and integration of the child's personality through their freedom of choice, and through the variety of their choices. Freedom of choice is necessary for the healthy **development of the will**.

2. A spontaneous, purposeful activity that is only possible when children are allowed to exercise their curiosity through repetition. It is only through repetition that **abstraction** is possible. This abstraction brings about a feeling of completion for the growing child.

3. Development of **co-ordination of movement**. The child thinks of the activity, wills himself to the activity, and then does the activity.

4. **Development of the physical, mental, and emotional aspects** of the child.

5. **Purposeful movement** that helps the development of the mind, and a sense of achievement. The development of the child's mind, movement, and senses will in turn, develop the will.

6. **Concentration**. The child will concentrate on completing an activity as perfectly as possible; all activities are intelligible, logical, sequential, and exact. Children will internalize this and try to repeat the exercises as perfectly as possible; all exercises have a motive for perfection.

7. **Orderly work habits**. The children need to internalize presentations in an orderly manner in order to reproduce it in an orderly manner.

8. The practical life exercises develop **logical thought** through the definite logic in the exercises. There is a beginning, middle, and an end to each exercise.

9. The exercises give the children **a sense of responsibility** from the result of freedom (freedom which is a result of co-ordination of movement and awareness of the environment). Children have the freedom and the ability to exercise their will within their environment.

10. **Social development**. All of the practical life exercises teach the children grace, courtesy, patience, and respect. These elements of social development are re-enforced through the actions of the other children and through the actions of the teacher.

11. **Establish a sense of reality**, rooted in real activities (nothing is make-believe). Exercises are lucid, logical, and realistic. This helps the children pursue reality. If an activity is not meaningful and purposeful than the mind cannot develop or construct itself.

12. **Emotional stability** helps the children become familiar with the real world and their environment. It builds self-esteem, and through that, their dignity will flourish. Materials and activities are therapeutic, meaning the mind and body work together.

The Importance of the Montessori Practical Life Area



It can be a challenge to explain to parents the importance of the Practical Life lessons. There are so many facets of this area that are often overlooked or undervalued. **It's not until a child struggles in the other areas of the Montessori environment that the origins of the struggle can often be traced back to the lack of experience in Practical Life.**

We have written about the Practical Life area and how it responds to the needs of the young child. **It's helpful to review the theory behind the Practical Life lessons so that you can bring new life to this area of your classroom.** New Practical Life lessons spark interest and can be a breath of fresh air to an area that perhaps feels stale.

We've sat through many discussions (and answered many emails) with lower elementary Montessori teachers who are struggling to normalize their classrooms at the beginning of the year and well beyond. They're finding that some children who have transferred from other schools (sometimes Montessori, sometimes not), or have moved up from the Casa, are struggling. The most common behaviors we've heard from these teachers are: loud, clumsy, unorganized, and lack focus. More often than not, they are children who lack the exposure to the Practical Life lessons.

Unfortunately, it's not possible to go back and redo those valuable Practical Life experiences because the children have already passed through those sensitive periods.

If you are with primary aged children, please do not overlook the Practical Life area! The possibilities of the Practical Life lessons are only limited by your own imagination.

We'd like to share with you a blog post written by a Montessori teacher who is currently in the classroom. Her post, **"The Significance of Practical Life",** is very well written, includes some good pictures, and serves as a reminder to us all: **Practical Life is the foundation of Montessori.**

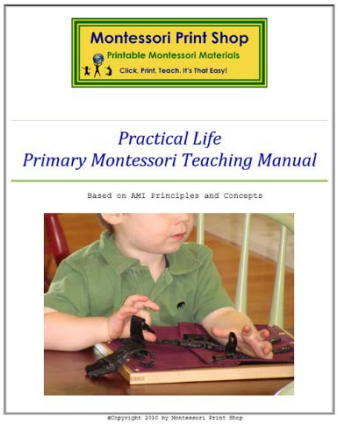
Scope and Sequence of the Montessori Practical Life area

Before beginning you must observe the child, know what kind of activities they are drawn to, and understand their current skills and abilities. Not all children will be capable of each activity in the order it is shown below. **The order below is a guideline only** - not a steadfast rule. It is possible to skip

over certain activities as long as the next activity the child chooses does not require knowledge/skill that the child does not yet have. The key is to follow the child and offer appropriate activities according to their abilities. The goal is always to set the child up for success. That's not to say that the child won't have to work through an activity and repeat it over and over again before being successful. The child needs to be adequately prepared for the activity, physically and mentally. And last, but not least, adults must use their own judgment and decide if an activity is safe for the child.

Many practical life activities do not require expensive 'Montessori materials' to be effective. As well, practical life activities will vary from culture to culture. You can read Practical Life Lessons and Practical Life FAQ's for more information.

If you are homeschooling your child and wish to have a little more theory and direction on the presentation of Practical Life materials you can purchase our Practical Life Teaching Manual.



Preliminary Exercises

- walking
- standing
- sitting down and getting up from the floor
- sitting down and getting up from a chair
- carrying a chair
- carrying a table
- carrying trays or boxes
- carrying a bucket
- carrying a jug (fill and empty it)
- opening and closing drawers
- opening and closing a door

Exercises

- boxes and bottles - fitting lids on to the correct containers
- using tongs (from large food tongs to small ice cube tongs)
- water transfer: using a baster and moving towards and eye dropper
- locks and keys
- nuts and bolts
- using a screwdriver
- washing hand at a tap
- squeezing a sponge
- wringing a cloth
- pouring rice

- pouring water #1 - jug to jug
    - pouring water #2 - jug to glass
    - pouring water #3 - jug to glasses
    - pouring water #4 - jug to glasses at various levels
    - pouring water #5 - jug to tea cup and saucer
- spooning
- whisking
- egg beater
- carrying, rolling, and unrolling mats
- folding cloths
- paper punch
- pin poking
- tweezers

Care of the Environment - Indoors

- sweeping
- brushing mats
- dusting
- sponging up spills
- polishing glass
- polishing wood
- polishing metal
- washing a table
- washing linen
- sewing on a button
- ironing
- folding clothes
- care of plants
- flower arranging
- lighting a match
- cutting snippets
- cutting lined paper
- cutting newsprint
- pasting
- making a cord
- beautifying the environment with Art (endless possibilities for lessons)

Care of the Person

- washing hands and nails
- brushing clothes
- hanging clothes on a hanger
- cleaning shoes

- large button dressing frame
- small button dressing frame
- snap dressing frame
- zipper dressing frame
- hooks and eyes dressing frame
- buckle dressing frame
- bow dressing frame
- safety pin dressing frame
- shoe lacing dressing frame
- skate lacing dressing frame
- buttons with hook
- blowing nose
- food prep
    - cutting
    - spreading
    - peeling (carrots, etc.)
    - juicing

Grace and Courtesy

- greeting and introducing
- offering to a guest
- giving and receiving compliments
- making way for someone to pass
- interrupting someone
- sneezing, yawning, coughing

Movement

- walking on the line
- The Silence Game

Additional Practical Life Activities

There are many other practical life activities that can be added that are not necessarily part of the Montessori Training program. This does not mean the activities won't be a delight to your children. Every teacher/parent brings new ideas to the Montessori environment. There are too many possible activities to count.



Wet Transfer Activities - photo courtesy of To the Lesson!



Dry Transfer Activities - photo courtesy of To the Lesson!

If your child shows an interest in something, you can make an activity out of it! Some more common activities that are not included in the AMI Teacher Training:

- clipping clothes pegs around the top of a bowl/small box or container
- threading beads
- pouring water through a funnel
- using a set of chopsticks for a transfer activity (start with pom-poms)
- sensory tub (can be changed with the seasons)
- transfer water from bowl to bowl using a baster, ladle, or syringe
- using a small grater to make ground cinnamon
- use mortar and pestle to grind food
- rolling pin to flatten dough

Sensorial

Since a child naturally uses all his powers of observation during his early years, Dr. Montessori felt this was the ideal time to give the child equipment which would sharpen his senses and enable him to understand the many impressions he receives through them.

The sensorial materials in the Montessori classroom **help the child to become aware of details by offering her, at first, strongly contrasted sensations such as red and blue, and then variously graded sensations such as shades of blue.** The material enables her to know what is red and what is blue, then to understand the abstraction of blueness, and finally the abstraction of color itself.

Isolation of Quality

Each of the sensorial materials **isolates one defining quality such as color, weight, shape, texture, size, sound, smell**, etc. The equipment emphasizes this one particular quality by eliminating or minimizing other differences. Thus, the sound boxes are all the same size, shape, color, and texture; they differ only in the sounds made when a child shakes them.



Sensorial Impressions

It is possible for adults, as well as children, to receive any number of sensory impressions and be none the richer. Sense impressions are not enough by themselves; the mind needs education and training to be able to discriminate and appreciate. **Montessori materials help the child to distinguish, to categorize, and to relate new information to what he already knows**. Dr. Montessori believed that this process is the beginning of conscious knowledge. It is brought about by the intelligence working in a concentrated way on the impressions given by the senses.

Sensorial materials are **self-correcting** to allow independent use, they **foster muscular development** which lays the foundation for writing skills, and they are produced to **precise metric tolerances**.

Correct terminology (binomial cube, isosceles triangle) and mathematically exact relationships enrich the child's experience so that abstract concepts may attach to familiar reality.

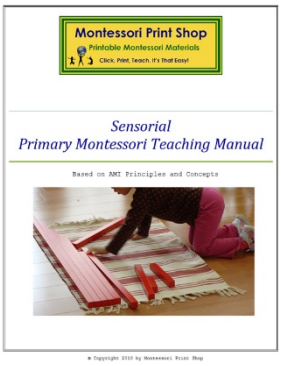


Sequence of Montessori Sensorial Activities

Before beginning you must observe the child, know what kind of activities they are drawn to, what they shy away from, and understand their current skills and abilities. Not all children will be capable of each activity in the order it is shown below. The order below is a guideline only - not a steadfast rule. You might choose to present a cylinder block, color tablets Box 1, and the touch boards within a day or two (depending on your classroom situation), then move on to the pink tower if your child is showing interest. A child may progress more rapidly through one area of the sensorial materials than the others.

It is possible to skip over certain activities as long as the next activity the child chooses does not require knowledge/skill that the child does not yet have. The key is to follow the child and offer appropriate activities according to their abilities. The goal is always to set the child up for success. That's not to say that the child won't have to work through an activity and repeat it over and over again before being successful. The child needs to be adequately prepared for the activity, physically and mentally.

If you are homeschooling your child and wish to have a little more theory, direction on the presentation, and suggested age of when to present the Sensorial materials you can purchase our Sensorial Teaching Manual.



Discrimination of Size

- The Cylinder Blocks
- Pink Tower
- Brown Stair (Broad Stair)
- Red Rods (Long Rods)
- Knobless Cylinders
- Binomial Cube
- Trinomial Cube
- Small Metal Insets
- Decanomial Square

Discrimination of Color

- Color Tablets - Box 1
- Color Tablets - Box 2
- Color Tablets - Box 3

Discrimination of Shape

- Geometry Cabinet
- Geometry Cabinet Cards
- Constructive Triangles
    - Rectangular Box A
    - Rectangular Box B
    - Triangular Box
    - Large Hexagonal Box
    - Small Hexagonal Box
- Superimposed Geometric Figures
- Botany Cabinet

Tactile Sense

- Touch Boards
- Touch Tablets
- Fabrics

Baric Sense

- Baric Tablets

Thermic Sense

- Thermic Bottles
- Thermic Tablets

Stereognostic Sense

- Geometric Solids
- Mystery Bag
- Progressive Exercises

Gustatory Sense

- Tasting Bottles

Olfactory Sense

- Smelling Bottles

Auditory Sense

- Sound Boxes
- The Bells
- Writing Music - Green Boards
- Reading Music - White Boards
- Listening to Music
- Musical Instruments
- Rhythm
- Walking on the Line to Music
- Dancing

Language

Language is a vital human phenomenon; it lives, changes and dies. Language is specifically a human expression and it should be a delight! Language is learned, not inborn. The mental capacity for creating language is unique; it allows the child to speak the language (mother tongue) correctly even if it is the most complicated language.

The child has all he needs to prepare for language. Therefore, put in to his environment, **he absorbs completely with little effort, the language of his group/culture**. Until the child is approximately six years of age he absorbs everything with little effort. After age six the child is able to learn a new language but it is only with a conscious effort that this can be done.

It is essential that all language be given to the child within a context. **The child needs to know the names, labels, and the meanings of things in the environment in order for them to have relevancy.** This allows the child to see and understand the greater picture of things and gives things meaning. Once the greater picture is achieved, it can then be broken down to the smaller details.



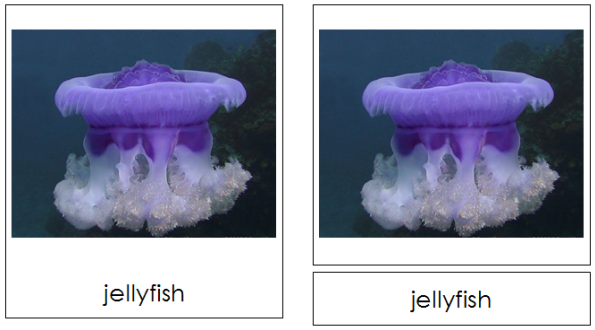
The Montessori language materials **isolate elements of language** and **offer 'keys' to the children** in the exploration of language. The materials are presented to the child in the same manner that they learn to speak; starting with nouns, articles, adverbs, etc. After a new concept is presented to the child there should always be a return to the total language environment using verbal storytelling, poetry, story books and everyday speech. This allows the child to clearly see how the new concept is applied (with context) in our world.



Montessori Preliminary Language

The Montessori preliminary exercises give the child the vocabulary for objects in the immediate environment. It is important to use the correct terminology and clear pronunciation when speaking to the children. During the first year (2 to 3 years of age) in the Casa/Primary class, sound games, classified cards, story books and poetry play a very important role in the development of language. They teach the child to listen carefully to the sounds that make up words, how to enunciate correctly and how to use the words in the correct context.

Example: 3-Part Classified Cards



Language Training in the Montessori Environment

Definition of Language: a systematic means of communicating ideas or feelings by the use of conventionalized signs, sounds, gestures, or marks that have understood meanings.

Language is a vital human phenomenon; it lives, changes, and dies. Language is specifically a human expression and it should be a delight. Language is learned and not inborn. **The mental capacity for creating language is unique; it allows the child to speak the language (mother tongue) correctly even if it is the most complicated language.** The child has all he needs to prepare for language -

therefore, put into his environment, he absorbs completely and with little effort, the language of his group. Until the child is age six he absorbs everything with little effort. After age 6 the child is able to learn a new language but it is only with a conscious effort that this can be done.

It is important to remember that language is a point of departure - not a point of arrival. The world is opened up to the child when he is given rich vocabulary that is rooted in reality. It is a means for understanding the world around him and it drives the child to seek out the truths of the world.

Language Training activities elicit language from the children and **make them aware of the content, meaning, and context** of the language they are hearing and using. There are many activities that can be used in Language Training with young children (2 years and up).

Self-Expression

Conversation

Reading

Singing

Verbal Stories

'Imagine' Stories (**Free Download**)

Question Games (using a book)

Oral Composition

Self-Expression
From the very first meeting with each child you must give them the sense that they can talk to you and that you will listen. When they speak to you, you must be present in thought with them. No day should be so rushed that a child has not had the opportunity to express their thoughts and feelings with you. This exchange of thoughts (however short or simple it may be) will **give a child the opportunity to express themselves, and to be truly heard.** They will learn that even though they are young, their thoughts matter in this world.

Conversation
Throughout the school day be sure to engage the children in conversations. You can spark a conversation with a child regarding recent events (age appropriate content), current lessons or new clothing they are wearing. **Try to talk with the children about things that they are interested in** - they will love to talk to you about these things.

Reading
Reading should be a part of your daily activities. Be sure to have a variety of books to read including picture books, poetry, fantasy and non-fiction. When reading a book always give the name the book, the author and the illustrator. Encourage parents to read to their children at home every day. **As little**

as 10 minutes a day will increase a child's vocabulary and help to instill in them the love of reading and learning.

Singing

Be sure to make time for songs – rhyming songs, silly songs, celebration/holiday songs, traditional songs. Most children **enjoy learning new songs and feel a sense of accomplishment** when they have learned all the words and can sing it by themselves. Give the children an opportunity to teach each other new songs. This is a great way to pass on old songs to the next generation.

Verbal Stories

During appropriate times allow the children **the opportunity to tell you and each other their stories**. It can be about their weekend adventure, their time at home last or a family holiday. They will also find your stories to be especially interesting – "When I was a little girl/boy…."

'Imagine' Stories



Collect a variety of pictures showing people, places, objects and animals from all over the world - you can **download a Free set of Imagine Story Cards** that we've put together. Gather a small group of children and show them one of the pictures you have collected. Ask the children what they think of the picture: Where do they think it was taken? Who do they think is in the picture? What is the picture about? Why did someone take this picture? Be sure to allow each child an opportunity to "imagine" the story behind the picture.

Question Games (using a book)

This activity offers indirect preparation for future reading analysis. It can be done with either a small or large group of children. You will be asking the children to listen while you read and respond to questions throughout the story. After reading a sentence you **ask the children a question related to the information within the sentence** that was just read. i.e.) Read -"It was a dreary day in the small town of Prattville." Your question to the children could be - "What kind of a day was it in Prattville?". The answer – "A dreary day".

Oral Composition

This can be done with a small or large group of children. You begin the story with a few words to get the children started: "Once upon a time there was a …" Then ask a child, "Mary, what was there?" Mary might answer "a black cat". Then ask another child, "And Stephen, where was this black cat?" Stephen might answer "On the roof of a house." You ask another child …."Ronald, what was the cat doing on the roof of a house?" Continue to **elicit parts of the story from the children** by asking them questions and creating the story as you go.

Montessori Writing

Writing is a complex action that requires both the ability of the hand and the ability of the mind. The child must have control and co-ordination of movement to be able to write. However, it is the ability of the child to take something from his mind, analyze each sound, create each word, and make it visible either by using the Moveable Alphabet or by writing it on paper. The exercises in this area prepare both the hand and mind to work together to achieve beautiful and effortless writing.

Writing with the Moveable Alphabet



One of the tutorials included in the "How To..." section on our website is how to make a moveable alphabet. The Moveable Alphabet is a wonderful language material that gives a child the ability to express what is in his mind, without the need for skillful manipulation of a pencil.



The ability to manipulate the letters and create the words a child is thinking of, removes a lot of the frustration that children experience if they have difficulty putting a pencil to paper. You can make an inexpensive and portable paper Moveable Alphabet.

Montessori Reading

Reading on the other hand, does not follow the same process of writing (taking our own thoughts and symbolizing them). Rather, reading is like going towards the unknown. When we read, it is not our language with which we are working with, it is the author's language. Reading is the analysis of the language followed by a synthesis.

Miss Rhonda's Readers – simple phonetic readers that children love to read.



Montessori Function of Words

It is in this area that the children are given the keys for future exploration of the written expression in our world. Each material has one element that can lead the child to further exploration. Symbols are given to each of the function of words lessons to give forceful impressions to the child's mind. The children learn that the placing of a word in a sentence is important to its meaning. Example - "The beautiful lady with the old dog." has a very different meaning than "The old lady with the beautiful dog."

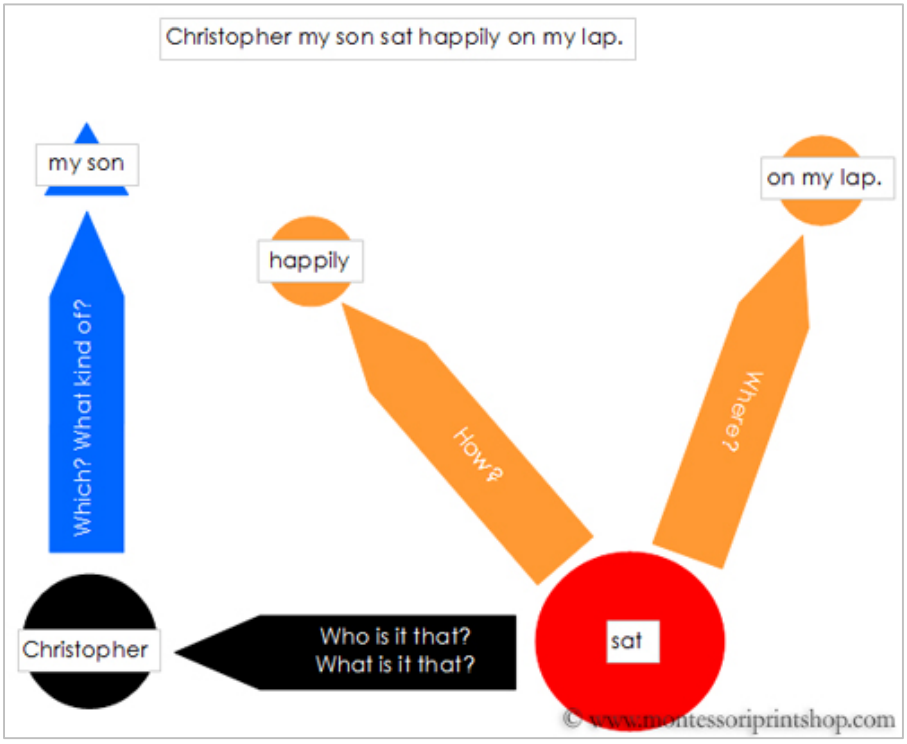
Example - Introduction to the Preposition

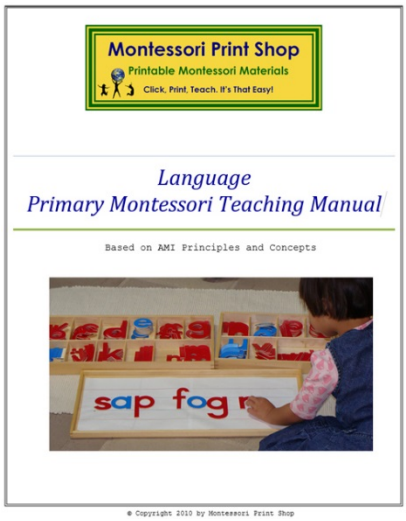


Montessori Reading Analysis

This last section of the language area focuses on the structure of sentences, interpretive reading and punctuation. The child will only be successful with this if all other work in the language area has been ompleted successfully. This material is the bridge between the primary language and elementary language program.

Example - Simple Sentences Analysis





If you are homeschooling your child and wish to have a little more theory, step-by-step direction on the presentation, and suggested age of when to present the Montessori Language materials you can purchase our Language Teaching Manual.

Preliminary Language

- Enrichment of Vocabulary
- Language Training
- Sound Games

Introduction to Writing

- Sandpaper Letters
- Moveable Alphabet
- The Metal Insets - 10 Presentations
- Handwriting

Introduction to Reading

- Phonetic Object Box
- Phonetic Reading Cards
- Phonogram Box
- Phonogram Booklets
- Phonogram Cards
- Puzzle Words
- Reading Classification
    - Objects in the environment
    - Writing
    - Matching Cards and Labels
    - 5-Part Definition Sets
- Word Study
    - singular - plural
    - masculine - feminine
    - compound words
    - word families
    - Antonyms
    - Homonyms
    - Synonyms
    - Comparatives - Superlatives
    - Opposites

Function of Words

- Article
- Adjective
- Logical Adjective Game
- Detective Adjective Game
- Conjunction
- Preposition
- Verb
- Adverb Game
- Logical Adverb Game
- Continuation of Commands

Reading Analysis

- Simple Sentences - Stage 1
- Simple Sentences - Stage 2
- First Analysis Chart
- Second Analysis Chart
- Simple Sentences with Extensions
- Simple Sentences with Extensions, Attributes and Appositions
- Interpretive Reading
- Punctuation

Math

Math is logic, sequence, order, and the extrapolation of truth. In the Montessori philosophy it's stated that **the child has a 'mathematical mind' and an internal drive to understand the environment around them**. It can therefore be said that children have an inborn attraction for math. Their minds are full of energy that propels them to absorb, manipulate, classify, order, sequence, abstract, and repeat. These tendencies are those which help the child to acquire a greater depth to his mathematical knowledge.

It is the **precision of the presentations and the exactness of the math materials** that attract children to this area of the classroom. As well, children in the primary Montessori classroom are in the process (sensitive period) of fine tuning their perceptions. Children are sensitive to minute changes in order, sequence, and size. They will notice a teeny tiny bug in the crack of the sidewalk where as adults will walk by blindly without notice.

The exercises in the math area offer the children the 'keys' that they will need to send them on the road to further exploration and maturation of the mathematical mind. The ways in which the **materials are ordered allows the children to complete full intellectual cycles** that help them to achieve the freedom to become independent.

Math in the primary classroom is made up of many little details that form a whole, but each detail is complete unto itself. All **early math exercises are worked at the sensorial level** so as to ensure that the child relates the quantity to the symbol (example: Spindle Boxes).



Montessori Math - Numbers to Ten

The foundation of math is numbers to ten. The exercises in this section must be firmly rooted in the child before continuing through the math materials. The child learns the names of the numbers and the fact that each number represents a certain quantity. The child learns to associate the language, written symbol, and quantity of each number from 0 to 9. Sensorially he is shown even and odd numbers, as well, the child learns to fix a number in his mind and remember it after a long period of time.

The Decimal System

The Decimal System introduces the child to the bead materials and the associated cards for each category. The child learns that zero can give a greater value to a number, and he also learns the language of the larger numbers. The Collective Exercises show the child how to change (10 units/ones changes for 1 ten), and gives the child a sensorial impression of addition, multiplication, subtraction, division, and the relationship between the operations.

The Teens and Tens

The section on Teens and Tens parallels the work with Association of Beads and Cards. The child learns to associate quantities, names, and symbols of the teens and tens. As well, the child is introduced to the colors of each individual bead bar which is important for future exercises. This section finishes off by consolidating the child's knowledge when he works on the linear and skip counting of the square and cube chains from the bead cabinet.

The Exploration and Memorization of Tables

This section focuses on the exploration and memorization of addition, subtraction, multiplication, and division tables. The tables that the children learn are limited in the fact that any given category of a question is not above the number nine. The materials in this area give the child the opportunity to explore essential number combinations for each mathematical operation and continue to move the child towards less concrete materials.

The Transitional Materials

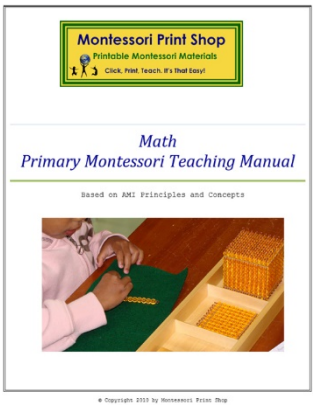
These materials allow the child to re-examine all the concepts he has already learned. The child begins to realize that the materials hinder his efficiency and that he no longer requires the materials to do the operations. When the child reaches this point, he can now think abstractly.

Fractions

The last section of the math area introduces the child to fractions and has the child explore the materials in order to discover the rules of each fraction operation.



If you are homeschooling your child and wish to have a little more theory, step-by-step direction on the presentation, and suggested age of when to present the Montessori Math materials you can purchase our Math Teaching Manual.



Numbers to Ten

- Number Rods
- Sandpaper Numbers
- Number Rods and Cards
- Spindle Boxes
- Numbers and counters
- Memory Game of Numbers

Decimal System

- Presentation with Beads
- Presentation with Cards
- Association of Beads and Cards
- Formation of Complex Numbers with Beads
- Changing Exercise - Bank Game
- Addition - Collective Exercise
- Multiplication - Collective Exercise
- Subtraction - Collective Exercise
- Short Division - Collective Exercise
- Long Division with Bows - Collective Exercise
- The Stamp Game - Addition
- The Stamp Game - Multiplication
- The Stamp Game - Subtraction
- The Stamp Game - Division

- The Dot Game

Teens and Tens

- 11 to 19 Beads Only
- Teen Boards
- Teen Boards and Beads
- Ten Boards and Beads
- Linear Counting 100 to 1000 Chains
- Skip Counting

The Exploration and Memorization of Tables

- Snake Game - Addition
- Addition Strip Board with Charts #1 and #2
- Addition Work Chart #3
- Addition Work Chart #4
- Addition Work Chart $5
- Addition Work Chart #6
- Negative Snake Game - Subtraction
- Negative Strip Board with Subtraction Chart #1
- Subtraction Work Chart #2
- Subtraction Work Chart #3
- Multiplication with bead Bars
- Multiplication Board with Control Charts #1 and #2
- Multiplication Work Chart #3
- Multiplication Work Chart #4
- Multiplication Work Chart #5
- Unit Division Board
- Division Charts #1 and #2

Transitional Materials

- Small Bead Frame
- Large Bead Frame
- Short & Long Division with Racks & Tubes

Fractions

- Introduction to Fractions
- Addition of Fractions
- Subtraction of Fractions
- Multiplication of Fractions
- Division of Fractions

Culture

There are several prepared environments that the children are forever being exposed to:

1. The Universe
   - Our prepared environment, the entire world and all that it has to offer, is our home, even though it is as incredibly large as it is.
   - It allows the children to look at the whole world and all its people.
   - The sky (stars and moon), the ground, the oceans, rivers, and lakes are endless sources of joy and information to the children.

2. The Casa dei Bambini (The Casa)
   - All of the exercises implemented in the areas from Practical Life through to Culture, establish a relationship with the environment through concrete information.
   - Brings knowledge of care of environment, of self, others, and plants.
   - Gives the children an attachment to it, the creation of it, and embellishment of it.
   - Introduces the children to different types of culture and patterns of behavior.
   - Provides content, format, and shape to the children at all times.

3. Ourselves
   - We ourselves are prepared environments. We contain life and consciousness. We are vehicles of life, an organic machine.

4. Trained Directress/Director
   - We contain life and consciousness. We have feelings that constantly change and grow.
   - We prepare the environment and take pedagogical responsibility to continuously nourish the children's spirit.

In order for Culture to have genuine meaning for the children, the Directress should be a cultivated person with a bright spirit, intellect and personality. The vital human energy that is brought about from the acquired knowledge of the world and people needs to be shown to the children. This vital energy exists within children from birth, but it needs to be nurtured and allowed to be free and grow. The children should feel the freedom to see, learn about, and belong to all aspects of any culture. And most importantly, they must feel a sense of connection to the universe. This can only be accomplished if the children feel a sense of relationship and protection from within the environment that nurtures their passion to understand the universe, and encourages them to explore that which exists beyond what they already know.

The culture curriculum will vary greatly from school to school, depending on the Directress and her knowledge of the world and desire to share it with the children. The Culture curriculum should encompass geography, art, history, peace education and cultural studies.

The Absorbent Mind



The "**absorbent mind**" refers to the mind's capacity to take in information and sensations from the world that surrounds it.

Young children are a testament to the mind's awesome ability to absorb. A baby is born without language, and with few skills other than their survival instinct. From birth to three years they use their senses (hands, eyes, ears, and nose) to soak in everything that surrounds them. **The child does this naturally, and without thought or choice.** Maria Montessori referred to this period as the 'unconscious creation'.

The information that the child **unconsciously absorbs from his surroundings in the early years is used to construct and create himself.** Within a few short years a child is walking, talking, and able to feed himself. It is this awesome ability to absorb information that allows children to acquire the language, physical skills (walking, control of his hands), and control over his bodily functions that are necessary for future independence.

Around the age of three years, the child moves from the state of the unconscious absorbent mind, to the state of the conscious absorbent mind. **It is during this conscious state of mind that the child begins to intentionally direct and focus his attention on experiences that will develop that which was created during the first three years.**

The fundamental task of the child during this phase of conscious absorption (3-6 years) is intellectual development and freedom. His mind compels him to sort through, order, and make sense of the information he unconsciously absorbed. **It is through this order of his intelligence that the child gains the freedom to move purposely, to concentrate, and to choose his own direction.**

"The 'absorbent mind' welcomes everything, puts its hope in everything, accepts poverty equally with wealth, adopts any religion and the prejudices and habits of its countrymen, incarnating all in itself. This is the child!" Maria Montessori

Circle Time in the Montessori Classroom

To Circle, or not to Circle.... that is the question.

What is Circle time? A time in which the children are gathered (in the shape of a circle) to learn information together (talk about the calendar, the weather, current news, give a demonstration, sing songs, read a book, etc.).

Why a circle shape? To allow the children an equal view of each other and the person conducting the circle, and the person conducting the circle a good view of all the children.

When is Circle time? The timing of the Circle will vary according to each school. Some hold it upon arrival of the children - used to start the work period. Others use it during the work period to give a class lesson on basic rules, demonstration of materials, etc. And other teachers use it to close the work period and say goodbye to the children.



It seems that the various **Montessori organizations hold different opinions on the use of Circle time**. Regardless of the opinions, it is used frequently throughout Montessori schools, but varies greatly from school to school. Some schools have a set time and procedure that is followed each and every day. Other schools allow the teachers the freedom to hold a circle according to the daily needs of the children/teachers.

But the question is - **do the children really need Circle time?** Or is it simply used by the adult/teacher as a method of corralling the children so that information can be delivered to the masses? Do Montessori schools have circle time because parents expect it? Or do they have it because they feel it's valuable?

If you are familiar with Maria Montessori and her work, you would agree that it would seem logical that **Maria Montessori would not be pleased with the idea of 'Circle' time** - regardless of the time of day it's held. She would most likely say that the circle time:

- is directed by the adult and not by the natural desire or curiosity of the child
- interferes with the natural uninterrupted work cycle of the child
- forces the children to sit still when really their whole being is desperate to move & touch things
- does not follow the natural curiosity of each child

If you're obligated by the school to hold Circle time perhaps you can **ask yourself the following questions**:

- Are variations of Circle time even possible?
- Can I make Circle time more child-led?
- Can children opt to not participate in Circle time, remaining at their work instead?
- Is there a time in the day that would be less intrusive on the children's work?
- Can the information given at Circle time be given in another way?

To Circle, or not to Circle.... that is the question.

Extension Lessons

Montessori extension lessons serve many purposes for the child

- Montessori extension lessons offer additional experiences that increasingly become more complex than the baseline concept.
- Extension lessons offer an opportunity for further exploration with the Montessori materials.
- Extension lessons can provoke a spark or a new enthusiasm for a Montessori material that no longer appears interesting to a child.

Extension lessons in each area of the classroom can and will vary from each Montessori affiliation and training course. They are often under used or ignored by Montessori teachers because they feel that by using them they are deviating from the 'real' Montessori curriculum. Or, they're still so new to Montessori that they aren't familiar with them.

There are some wonderful extension lessons that aren't necessarily recognized by any Montessori affiliations, yet **they are very effective and loved by many children**! Our online store at Montessori Print Shop offers hundreds of variations of printable Montessori Extension lessons that will compliment your Montessori materials at school or at home.

The bottom line is that Montessori extension lessons help the child to have further experience with the concepts of the materials. Often times the extension activity **draws the child towards a more abstracted view of the original concrete concept that was introduced**.

Most Montessori materials have extension lessons - in fact, it's hard to think of some that don't! There are many **extension lessons that are shown in the form of 'games'** and do not require any additional materials or 'paper work'. These games are seen mostly in the sensorial area when using the geometric solids, playing matching games with the geometry cabinet and cards, the botany cabinet, the color tablets, combining the pink tower and broad stair, etc. As long as the child shows an interest and desire, the extension lessons made available to the child really are limitless.

Below you will see how the globes and map of the world lead to various extension lessons that can follow a child from their earliest experiences in the Casa (primary) classroom (2½ years) all the way until they are 7 or 8 years old!

Extension Lessons for Montessori Geography Materials – here we will walk you through the process of extending the basic geography materials.



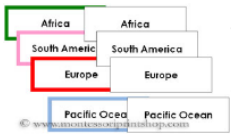
The child is first introduced to the world through the **Sandpaper Globe**. The terms used are 'land' and 'water'.



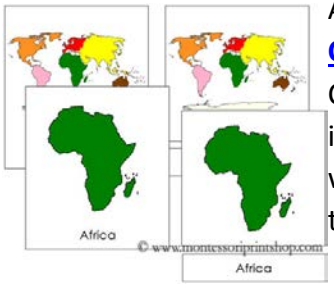
Once the concept of 'land' and 'water' are understood the concept of 'continent' and 'ocean' are introduced using the **Color Globe**.



The child then learns to use the **map of the world** as a puzzle - taking the pieces out and then replacing them.



The child is given the language for the continents; verbally at a young age, then given **geography labels** to read and place on the correct continent at an older age.



An extension lesson that can be used along with the puzzle map is the **Continent 3-Part Cards** (or other 'world' materials). The child can use the Continent 3-Part Cards to practice the names of the continents; matching the individual pictures with labels and using the control cards to check their own work. The child does not require an adult to sit with them and give the names of the continents, unless of course, the child is not yet able to read.

Continent Boxes - The children can taste various foods, and plays musical instruments from each continent. **This brings the continent, its people, and their culture closer to the children.** It helps to give the children a greater understanding of the similarities and differences around the world. Some things that can be included in the experience: musical instruments, pieces of clothing, tasting foods, reading books, watching a videos, looking at post cards, handling money, listening to music, learning which animals live on each continent, etc. Most of these items can be stored in a small box (shoe box) and decorated to reflect the continent.



Other extension lessons that do not require adult intervention are the **Continent Folders** (found throughout our Geography section). These photographic images are usually in the form of a 3-Part Card and cover topics such as animals, landmarks, food, musical instruments, and daily life. These are an excellent addition to your continent boxes and give children a sensorial impression of life around the world.

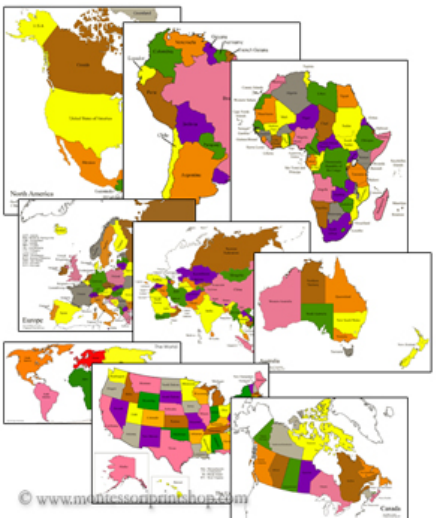


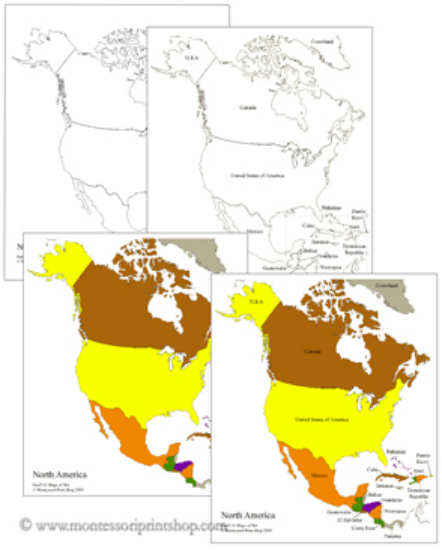
Children can **create their own map** using a round hard plastic circle the same size as the hemispheres on the world map (as seen in the picture). The child traces two circles on to a large sheet of paper. Then they trace around each of the continents on to a corresponding color of construction paper. The child pin pokes along the line of the shape using a stylus or sharp push pin.

When all of the continent shapes have been poked out, the child places them on the correct hemispheres they traced on to the large sheet of paper. The child then glues the continents in place, print out the labels (or ask for assistance if they are not yet capable) and glues them as well.

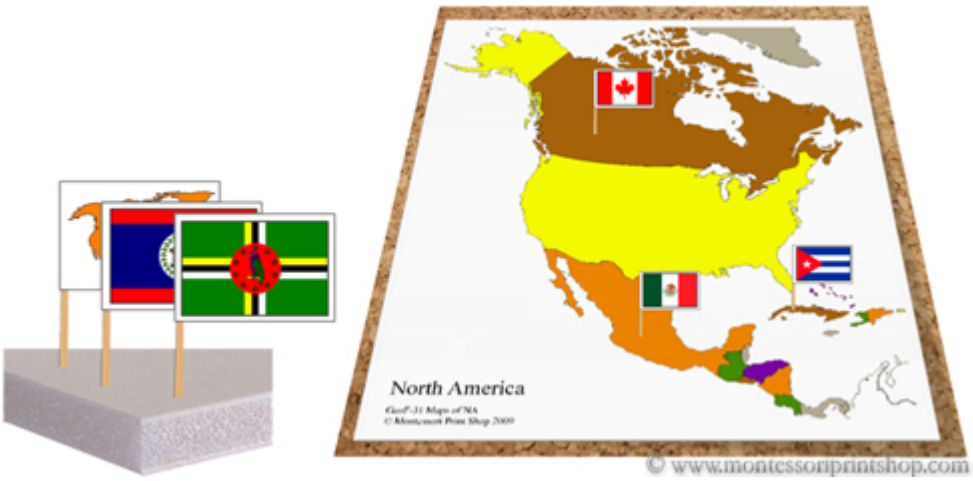


After the world map is complete then the child can choose their 'home' continent to begin further exploration using the puzzle map first and following all of the above extension lessons to gain further knowledge (**names of countries, states, provinces, capitals, flags**, etc.). Instead of pin poking each part of the map, the child can color in a blank map, then add labels, learn the flags of the country (make a pin map), add labels for lakes, rivers, mountains, etc.





Pin Maps using flags and country labels are fun independent work.



The most important thing to remember when using or creating an extension lesson is to follow the child! If we pay close attention to the children they will lead us to places we've never been. Enjoy the journey!

Goals of a Primary Montessori Program

Whether you teach in a Montessori school or use Montessori materials in a homeschool environment, it is important to take time to outline the goals of the program. These **goals should encompass the core of Montessori**, and not the specific details of the prepared environment or the 'themes' you wish to cover.

The prepared environment is an important aspect of the Montessori program - but only if it supports the goals. As you gain experience teaching, and as the children mature, the prepared environment and the themes you wish to introduce will change. But the overall **goals of the program should remain stable and should be the focus**.

Here is an example of some goals that a primary Montessori program might include:

Possible Goals of a Primary Montessori Program

- introduce the children to the joy of learning
- foster inner security and curiosity
- promote self-confidence
- develop initiative, concentration, and persistence
- encourage a positive attitude towards learning
- build a strong foundation for future growth
- sustain positive interaction, and compassion for others

Have you taken the time to write down the goals of the program? If not, you must make it a priority. **If you don't know what the goals are, it's impossible to determine if the program is successful.**

Montessori isn't just about the materials. A child's ability to read and write will be of little value if they lack self-confidence, a positive attitude, or simply don't enjoy learning. You can fill each area with the most perfect materials, but fail to give the children a true Montessori education.

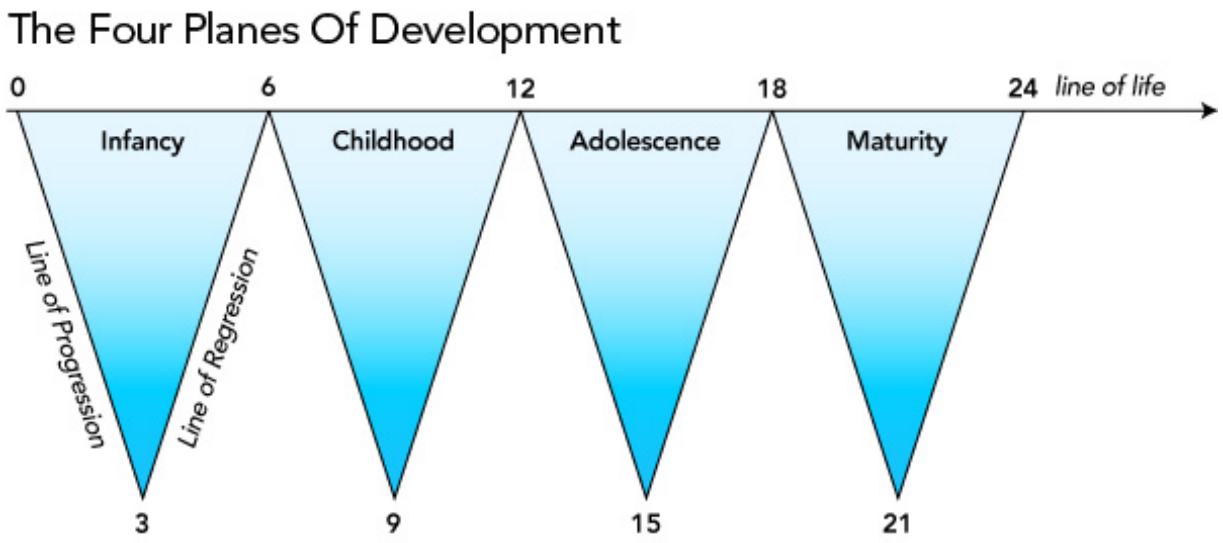
Questions you may ask about a Primary Montessori Program

- What are the goals of this Montessori program?
- Does the prepared environment support the goals of the program?
- Do the adults involved in the program (teachers, assistants, and support staff) understand the goals, and have the capacity to support them?

Human Tendencies

There are basic human tendencies that assist the natural development of all human beings. Knowing and understanding these human tendencies helps guide parents and teachers in preparing both the home and/or learning environment for their children.

Children who have been raised in environments prepared according to the basic human tendencies, tend to be secure, healthy, and happy children who pursue activities and life with little hesitation and lots of energy.



*The **Line of Progression** illustrates the progression and peak of sensitive periods.*
*The **Line of Regression** indicates the passage into the acquisitive stage when assimilation, refinement and acquisition of skills occur.*
***Maturation** implies a finality in the system of rebirths although individuals continue to grow throughout their lives.*

Consider the following basic human tendencies when preparing the environment for your children.

- **Orientation**: People want to know their place in the world. They want to know how the people and things in it compare to themselves, to understand where they fit in.

- **Order**: Chaos and confusion are unsettling. Therefore humans try to find patterns and classification systems so that they can make sense of the world.

- **Exploration**: Human beings are naturally curious. Through exploration and investigation they learn from their discoveries.

- **Communication**: There is a natural desire to communicate. Regardless of the culture or time period, human beings have shared experiences and exchanged information.

- **Work**: Throughout history humans have shown the ability and willingness to work and strive for not only survival, but improvement in life.

- **Activity**: Active involvement with the surrounding environment allows people to learn and further their self-development.

- **Exactness**: Humans perceive when things don't fit together. When this happens, they adjust, refine, and improve.

- **Repetition**: All humans learn through practice. This repetition allows them to reach closer to perfection.

- **Manipulation**: There is a connection between learning and doing. Humans work with their hands to establish the connection between their mind and their hands.

- **Abstraction & Creativity**: Humans have an ability to draw conclusions, conceptualize, synthesize & imagine from experiences in the real world. They can imagine that which does not exist, and can think beyond the concrete and real.

- **Self-perfection**: Healthy human beings have a natural desire to improve. They find satisfaction in their own personal growth and want to perfect themselves.

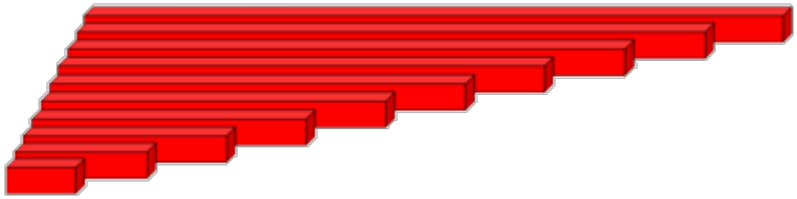
Materialized Abstractions

One of the most beautiful aspects of Montessori is that it brings **abstract concepts to life** so that children can truly understand what the concepts mean.

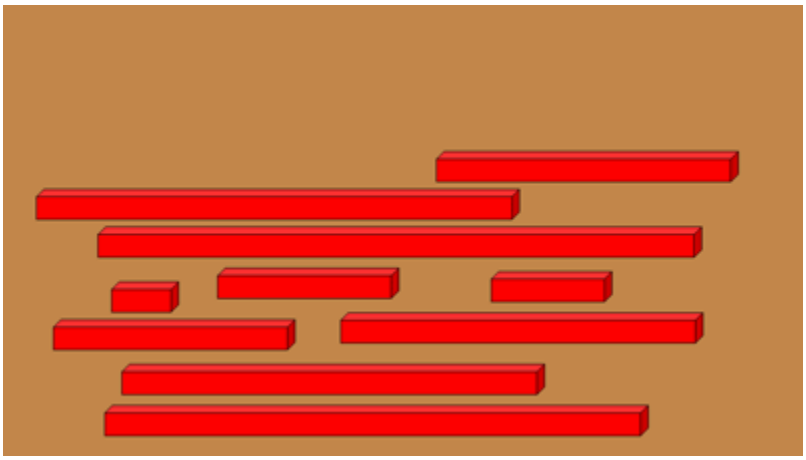
A concept is a **cognitive unit of meaning that has been named by humans**. It is an idea that is formed in the mind, which is usually abstract in quality. Abstract concepts are usually difficult to understand because they cannot be referenced to a specific concrete material or object.

Concrete materials convey abstract qualities

Montessori however, provides the children with **concrete materials that convey the abstracted qualities from what has been perceived and named by humans**. From these concrete materials the children can understand the abstract concepts and the characteristics of them.



Using the **Red Rods** as an example, the abstract concept of **length** is introduced to the child.



From the moment the child first touches the red rods they are beginning the sensorial journey to understanding of the abstract concept of 'length'. They are shown how to carry the rods one by one (starting with the shortest rod) to their work mat. They feel in their hand how each rod becomes longer. The last few rods become so long that they have to carry them vertically with two hands, to avoid hitting others with them as they walk to their work mat!

When all of the rods have been placed randomly on their work mat, the teacher begins the process of placing the rods according to their length. The teacher visually locates the longest red rod and places

it horizontally at the top of the work mat. She places her fingers tips from her left hand on the left edge of the rod. Using her right pointer and middle fingers, she slowly slides them along the rod from the far left to the right end of the rod: making sure her left fingers remain on the left of the rod.

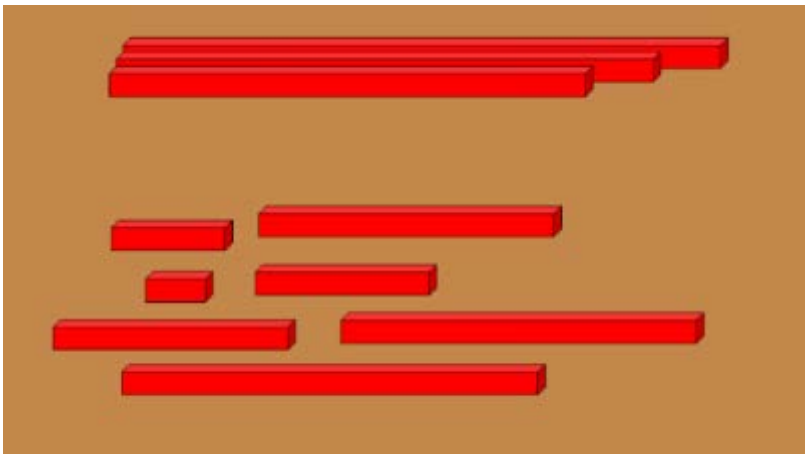


start of the finger slide on each rod



end of the finger slide on each rod

Clearly she has to reach her arms quite far to stretch the length of the entire rod. The teacher has **felt the concept of length**. From the rods that remain randomly placed on the mat, the teacher once again selects the longest rod and butts it up against the rod she just slide her fingers along. She repeats the process of feeling the length by sliding her fingers across the rod. She continues this process for a few rods and then invites the child to continue to build the red rods and slide their fingers along each rod, until all of the rods have been placed in the correct order.



After the children have had a lot of practice with the red rods and they are able to build them correctly, **the language of length is introduced**. In order to establish the quality, the words long and short are given. If the child grasps the language and concept then the comparative of longer and shorter, and the superlative of longest and shortest are also introduced. This gives the child the language they require to verbally express their understanding of the abstract quality of length.



Materialized abstractions liberate the child

There are many other examples of materialized abstractions in the Montessori environment, specifically in the Sensorial area. **The materialized abstractions liberate the child to become a free thinker.** The child will not take things on blind faith if he is allowed to make his own discoveries through the use of the materials; the child will always seek out basic principles for himself.

Normalization

Normalization refers to the focus, concentration, and independence of the children, by their own choice. It means they have acquired the internal freedom to initiate work, be independent, and adhere (by choice) to the rules of the environment.

A well prepared Montessori environment facilitates the process of normalization by offering engaging, hands-on materials, three hour work cycles, and minimizing the disruption of concentration.

The process of normalization is a journey. It begins when the children first enter the primary classroom and are introduced to the practical life materials. These materials help the child to develop their motor skills, acquire a sense of order, and begin the process of extending their ability, and desire for concentrated work.

As the children work their way through the 3 year primary program, they are introduced to work that requires a greater order, refinement of movement, and lengthy concentration.

Maria Montessori felt that a child's **troublesome behaviors disappeared when they experienced concentration on meaningful activities**. This is why the youngest children are started off with the Practical Life activities.

"All we have to do is set [the child's developmental] energy free. It is as simple as that. This is not giving freedom to children in the common sense. What is the use of freedom to children, if it is freedom to develop their deviations? When we speak of freedom in education we mean freedom for the creative energy which is the urge of life towards the development of the individual. This in not casual energy like the energy of a bomb that explodes. It has a guiding principle, a very fine, but unconscious directive, the aim of which is to develop a normal person. When we speak of free children we are thinking of this energy which must be free in order to construct these children well." Maria Montessori (1989, p.12)

It will take time and much effort on the part of the Directress (teacher) to ensure a suitable environment is prepared for the children. It is only **through the prepared environment that the children will flourish and the process of normalization will begin**.

Normalized Children are Joyful

In a normalized classroom you will see the following in the children:

- love of work
- concentration
- self-discipline
- joy

Observation

Observation is a **tool that is used by the adult to follow the child** (to assess their abilities and readiness for materials), and **developed within the child (during their early years) to help him classify, store, order, and work towards his inner needs**.

The adult goal of observation is to **learn about the child from a scientific and objective perspective**. This can be a greater challenge to homeschooling parents as their connection to their own children tends to be more passionate and emotional than perhaps a teacher in a school setting might have for their students. As Montessori educators (either at home or in a school setting) we must keep on top of our observation skills and use them regularly.

Skills Required to Observe

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

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

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

Record your Observations

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

Allow for the Possibility of Change

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

Principles

Montessori is not just about Montessori materials ... it's a way of life. It's about who you are, how you think, and what you feel. It's about allowing yourself to think freely, to love learning, to solve problems, to care for and respect others, to value the Earth.



Even if you're not offering your children a pure Montessori environment filled with Montessori materials, the following 8 principles can be applied to your life and home.

1. Movement and cognition are closely entwined, and movement can enhance thinking and learning.
2. Learning and well-being are improved when people have a sense of control over their lives.
3. People learn better when they are **interested in what they are learning**.
4. Tying extrinsic rewards to an activity (money for high grades) negatively **impacts motivation** to engage in that activity when the reward is withdrawn.
5. Collaborative arrangements can be very conducive to learning.
6. Learning situated in meaningful contexts is often deeper and richer than learning in abstract contexts.
7. Particular forms of adult interaction are associated with more optimal child outcomes.
8. Order in the environment is beneficial to children.

Read more about the general **principles of the Montessori Environment**

Ratio

In the Primary Montessori classroom we strive for a **3 year age mix (ages 3, 4, and 5)**, and a high ratio of children to 1 trained Directress and an assistant: 23-25 children to 2 adults is ideal. The age mix must be as equal as possible, (i.e. 8 three year olds, 8 four year olds, 8 five year olds) with each child staying in the same class for 3 years. Therefore the only new children brought into the class at the beginning of the year are those who are three years old - the other 16 or so children are returning back to the same classroom for their second and third year. **Note**: Historically the ratio was 30:2, which is now hard, or next to impossible to achieve with all the Child and Youth Services regulations.

The 3 year mixed age group and the high ratio are key components of the Montessori philosophy. **The mixed ages of the children is crucial**; the children learn from each other, care for each other, and help to eliminate the crutches that would otherwise occur if the children were all the same age.

The children **gain independence** because there are other children who require the time and attention of the teacher. As well, they have the **freedom to be guided by their inner drive** and are **less likely to be directed through the curriculum at the desire of the adult**.

Is one-on-one time with parents crucial to a child's development? Absolutely! There is nothing better than reading together, cuddling and talking, playing, enjoying the outdoors, and so many other important day to day activities. But in the Montessori environment is it clearly best to have a high number of children and few adults present.

P.S - We still firmly believe that it's possible to use Montessori at home, even with a low ratio - as we wrote here. But it's definitely much more challenging as the ratio lowers.

Sensitive Periods

Montessori theory talks a lot about '**sensitive periods**' and how the **child is guided by inner forces that shape their developmental needs**. Children pass through sensitive periods for language, movement, order, writing, reading, etc.

It is during these sensitive periods that there is a great **need for total focus, sensorial exploration, and a need for repeating activities** in order to master skills. Sometimes these sensitive periods are characterized by overpowering (sometimes obsessive) and intense activity.

Interrupting a child while they are in the middle of an intense sensitive period can result in a powerful emotional response (i.e. tantrum). Break a routine that a child is attempting to understand and master (i.e. getting dressed, bath time, bedtime) and some children will literally fall apart as they are most likely in a sensitive period and their intense "work" is being interrupted.

"A child learns to adjust himself and make acquisitions in his sensitive periods. These are like a beam that lights interiorly or a battery that furnishes energy. It is this sensibility which enables a child to come in contact with the external world in a particularly intense manner. At such a time everything is easy; all is life and enthusiasm. Every effort marks an increase in power. Only when the goal has been obtained does fatigue and the weight of indifference come on.

When one of these psychic passions is exhausted another area is enkindled. Childhood thus passes from conquest to conquest in a constant rhythm that constitutes its joy and happiness."

Maria Montessori

The Secret of Childhood

Children can **profit from various stimuli that are made available to them during a sensitive period**. This is one of the reasons why Montessori materials are clearly set on low shelves and made available to the children. It allows them to **choose the work that will help them 'construct themselves'**

- master a skill and aid in their development and adaptation.

Parents and teachers can capitalize on these sensitive periods by ensuring adequate time and materials are available, and by **respecting the individual interests and passions of each child**. It is through observation that the needs of the child are revealed.

As always, follow the child. And tuck some extra patience away for the days they want to repeat the same activity over, and over, and over again.

The Materials

The materials play an important role and have the following characteristics:

Isolate a concept – all characteristics are uniform except for the one concept being highlighted.

Control of error built in – allows for the child to self-correct, leads to independent work; gives the Directress the clues to move the child along to the next lesson.

Attractive – colors are vivid and proportions are accurate.

Repetition – occurs spontaneously, observed by Directress and children. Child is active and experiences the concept physically (i.e. The Long Rods – foster muscular development for "length"). Preparation for writing (i.e. pincher grip with the cylinder blocks).

Mathematical basis – offering a series of 10 as a base.

Limited Scope – the materials offer keys to exploration. The child is in a sensitive period for order and the natural sequence of lessons helps him to establish a clear order. As well, a solid concept is given and absorbed before the abstract is introduced.

The Silence Game



Nurturing Quiet

This world we live in is full of electronics that ring, ping and spew loud music. It has cars, buses, trucks and construction vehicles that beep, bang and screech. It's full of people who hardly ever 'unplug' from the electronics or stop speaking long enough, in order to hear a bird chirp, a drop of water drip, or the sound of a baby breathing. It's no wonder the children speak so loudly these days - they're competing against the 'noise' in the world, begging to be heard and not knowing how to be silent or enjoy the silence.

We need to take time each day to speak with them quietly. We need to bring the idea of 'quiet' to their consciousness and then give them an opportunity to become quiet. If they respond in a loud voice, simply make your voice quieter. Keep making your voice quieter until the light bulb goes off and the child has that 'aha' moment. We must show them how to be still and listen to the silence.

We must allow them to gain an internal understanding of how their own movements and their own voice can make or break the silence. It is only then that they will learn to control their movements and voice and understand the impact they have on the world around them. Read how one primary Montessori classroom is shown how to nurture quiet.

"One day I came into class holding in my arms a baby four months old, which I had taken from the arms of its mother in the courtyard. ... The silence of the little creature struck me, and I wanted the children to share my feeling. ... To my amazement I saw an extraordinary tension in the children who watched me. **It seemed as though they were hanging on my lips, and felt deeply all I was saying.** "Then its breathing," I went on, "how soft it is. None of you could breathe as it does, without making a sound..." **The children, surprised and motionless, held their breath. In that moment there was an extraordinary silence**; the tick of the clock, which generally could not be heard, became perceptible. It seemed as if the baby had brought with it an atmosphere of silence such as does not exist in ordinary life. This was because no one was making the smallest movement. **And from this came the wish to listen to the silence, and hence to reproduce it.**" Maria Montessori (The Secret of Childhood)

The Silence Game is played in Montessori classrooms to help the children develop a higher level of self-discipline. In turn, this will help to normalize the classroom.

The Silence Game

· Read: The Secret of Childhood, pages 131-133

· Silence is a "point of arrival".

· The Silence Game should not be attempted until there is certainty of basic success.

· All of the exercises that have movement are indirect preparation for The Silence Game.

· The children must have control over their will, they need to be able to inhibit movement, concentrate, and must have a sense of ease about oneself and their body.

· The silence game should bring a sense of joy, of achievement, and self-reliance.

· The silence game is a measure of normalization of the class.

· The silence game is the summation of all that is necessary in the development of the individual to bring about that integrity, which is the wholeness of the personality.

· If all the sensitive periods are allowed to develop, the capabilities and capacities all integrate and normalize the child; the result is the whole personality is formed.

Preparation

- All preparation exercises help the child achieve control and the children can then participate in the silence game.
- Teach the children to sit quietly and still.
- Show them how to arrange themselves comfortably on the chair or floor; if using a chair center yourself on the chair (important that the children have chairs which allow their feet to touch the floor).
- Children need the opportunity to hear the silence and the sounds of silence
- Ask a small group of children to sit quietly and see what they can really hear … ask them to listen to rain on the window panes, birds chirping, the snow falling, the sound of nature, and the sound of traffic).
- Allow the children to experience the silence without you (the teacher) calling forth things for them to be aware of (don't ask them what they smell, hear, or feel, just let them be).
- Once the children are a cohesive unit working towards a common goal for the good of all (collective will), the silence game can be played.

Directions to play The Silence Game

- tell the children that together you are going to make silence
- ask the children to sit on the floor comfortably, sitting somewhere that they can get up easily
- tell the children to sit with their eyes closed and listen for their name; when they hear their name they are to come over quietly and sit down

- quietly, the teacher walks outside the classroom (or to the other side of the room) and allows for a minute or so of silence
- then gently, quietly, the teacher whispers a child's name
- when a child's name has been called the child gets up from where they are sitting, and quietly walks over to the teacher and takes a seat on the floor
- after the last child has joined the new group everyone can enjoy a final moment of silence together

The Importance and the Nature of the Silence Game, 1930 was written by Maria Montessori. You can read it through the link, or read it here.