This booklet is designed as a guide to a child's development during the Primary years. In it we present a broad overview of the developmental tasks of this stage of development and how they are supported through the activities in a Montessori Primary classroom. Understanding that each child is unique, we offer this booklet as a point of reference for parents of Primary-aged children.

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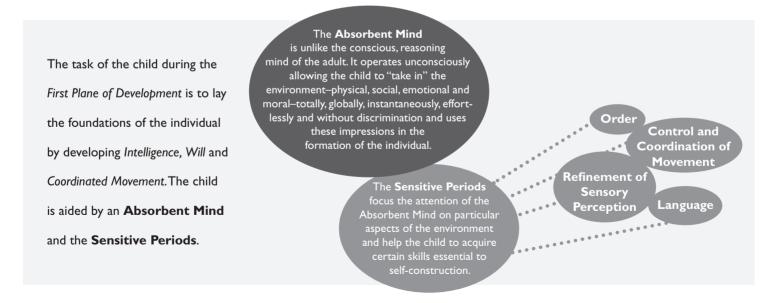
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### the DEVELOPMENTAL CONTINUUM

FIRST PLANE | birth to 6 years

FUNCTIONAL INDEPENDENCE the result of *thinking*, *choosing* and *acting* independently SECOND PLANE 6 to 12 years

The task of the child is the creation of the adult. It is a process of self-construction that results from the child's own efforts and indefatigable activity in the environment. In this task of creation, the child passes through different stages of development which Dr. Montessori called the *Four Planes of Development*. Each Plane comprises specific developmental tasks and at each stage along this continuum the child acquires successively greater independence.



THIRD PLANE 12 to 18 years EMOTIONAL INDEPENDENCE FOURTH PLANE 18 to 24 years ECONOMIC INDEPENDENCE

### the PREPARED ENVIRONMENT

The Primary classroom functions as a Prepared Environment in which the child is free to explore and interact, the result of which is experience. Experience builds *knowledge* of the environment as well as knowledge of activities and their outcomes. Through repeated activity, *skills* become coordinated and controlled and in turn increase the choices available to the child. This leads to a collection of new experiences.

"The lessons of *Practical Life* are those by which the children lay the basis of intelligence, develop orientation to the environment, acquire self-control, and come to see themselves as contributing to the social unit. Their intellects grow as they work with their hands, their personalities become integrated and body and mind work together. They begin to think logically and rationally; their memory is strengthened as they follow a sequence. They come to grips with problems by finding solutions... These lessons provide a key to orderly and natural development of the human being." –*A. Haines, AMI Trainer* 

### the exercises of $PRACTICAL \ LIFE$

The *Exercises of Practical Life* are fundamental to the child's development as an independently functioning individual and because the activities are familiar to the child from birth, they serve as a bridge between home and school. The variety of movements involved in performing these activities is fascinating to the child who is in a sensitive period for the development of control and coordination of movement.

The child is first introduced to a series of *Preliminary Exercises* such as carrying and handling various objects in the environment, spooning, pouring and folding. Fascinated with the movements involved in performing them, the child is engrossed in these simple exercises and develops the skills for more complex activities.



*Care of Self* activities include learning to dress and undress one's self, use a variety of fasteners from buttons to bows, prepare and eat a snack, blow one's nose and wash one's hands.

*Care of the Environment* exercises include dusting, sweeping, mopping, scrubbing and polishing objects which lead to additional activities for beautifying the environment such as flower arranging, gardening exercises and care of pets in the classroom.

*Grace and Courtesy* lessons introduce the actions that prepare the child for social life. The daily practice of polite and courteous interactions with others equips the child for broader social experiences.

Each of the *Practical Life* exercises are carefully sequenced so as to help the child develop the ability to work in an organized manner. The child is able to focus for increasingly longer periods of time, concentrating on an activity and persisting in the face of difficulties. This helps develop life-long habits of attention to detail and the ability to critically evaluate the results of an activity.

The capacity to make choices is strengthened by experiencing the outcomes of each action. Refinement of equilibrium and motor control allow the child to successfully carry out the will of the mind.

At the same time, there is a growing consciousness of how individual actions can impact the environment. Helping a friend tie their shoes, cleaning up a spill or baking a pie for class snack, the child begins to act in response to a perceived need.

By participating in the group activities of *Silence Game* and *Walking on the Line*, the child has the opportunity to use the control and coordination of movement gained in the context of the group. Through *Walking on the Line*, the child purposefully harmonizes walking to the rhythm and pace of the group. In the *Silence Game*, the child exercises the will in order to inhibit all movement so that the group can experience silence. In these activities the needs of the group take precedence. Individual development thus becomes the basis of social cohesion.

The Exercises of Practical Life offer the child purposeful work in the environment. The repeated use of intelligence, will and coordinated movement results in what Dr. Montessori called the "integration of the personality". This harmony of thought, will and action is the true foundation for independence and the ensuing development of greater self-confidence and a solid self-esteem. From birth, the child has taken in impressions of the environment. Now, the child needs to categorize

these impressions and use them to consciously explore the environment. The Sensorial Materials help

the Primary child in this developmental task by providing the "keys" to the environment.

## the SENSORIAL ACTIVITIES

The *Sensorial Materials* are designed to isolate particular qualities. By pairing objects in a series, the child develops a greater consciousness of colors, shapes, dimensions, forms, textures, temperatures, weights, smells, tastes and sounds. The next level of work involves the child placing the objects in a series of gradation, beginning to discern small variations in these qualities that are present in the environment.

The whole world appears anew to the child who has reached this level of consciousness. Dr. Montessori likened this experience to that of a person who comes from the optometrist with a new pair of glasses. As a consequence of the work with the *Sensorial Materials*, the child rediscovers the environment and develops a profound love for it and an appreciation of its beauty.

Memory games and exercises that involve matching and grading objects across a physical distance then help the child to take this consciousness to a level of abstraction. Thinking begins to move from the concrete to the abstract as the child recognizes patterns and sequences and once language is attached to these experiences, these abstract concepts can be communicated and shared. Through these sensory-motor experiences the child lays the foundations for imagination and the reasoning mind, which are critical tools in all future learning.

Working with the *Sensorial Materials* the child develops the ability to discriminate and judge, evaluate and self-correct; movement becomes further refined and the hand becomes a more efficient tool of the mind.

On a fundamental level, the Sensorial Materials lay the basis for all future explorations in the field of human culture–language, math, music, art, science, etc.

Language is basic to human communication. The young child entering the Primary classroom has already mastered the sounds, structure and syntax of the mother tongue. The task now is to develop the ability to use language as an effective tool for communication and to explore language. From the earliest days in the Primary classroom, complementary activities help the child in these two tasks.

## LANGUAGE

#### Spoken Language: The Foundation

In the Primary environment the child experiences the freedom to speak and practices using language. Specific language is offered to the child with every experience in the classroom. The *Three Period Lessons* support enrichment of vocabulary, allowing the child to review or learn the vocabulary for the objects in the environment and attach language to sensorial concepts. Keeping in mind the child's need for categorization, all vocabulary is offered in classifications–fruits, vegetable, animals, etc.–with the classifications becoming finer as the child's perception grows. Through guided conversations and question games, the child learns to communicate thoughts coherently. By participating in these small group activities, the child learns that communication is reciprocal–speaking and listening–and develops the ability to listen and understand. Through stories, songs and poetry the child is introduced to a rich literary heritage.

is a specific technique used in Montessori environments to introduce new vocabulary.

The Three Period Lesson

Sounds of the Letters

- ∧ short as in apple
- 𝑉 as in rub
- ⋆ as in cat
- $\mathcal{A}$  as in red
- ℓ as in eskimo
- 🖌 as in roof
- $\mathcal{A}$  as in bug
- $\,$   $\,$  as in helicopter  $\,$
- $\dot{\mathcal{L}}$  as in igloo
- 🖌 as in jump
- k as in dark
- $\ell$  as in full
- m "mmm" (prolong as in hum)
- $\mathcal{M}$  "nnn" (prolong as in man)
- ⋆ as in octopus
- p as in sip
- as in quick
- ん "rrr" (as in father)
- $\checkmark$  as in kiss
- t as in rest
- ${\cal M}$  as in umbrella
- $\mathcal{N}$  as in vest
- $\mathcal{W}$  as in watch
- $\varkappa$  as in box
- ∧y as in you
- 𝐾 "zzz" (prolong as in buzz)

Simultaneously, the child explores language on the level of sounds. Through small group activities, the child discovers that spoken words are made up of sounds! Over time, this leads to the discovery that every word can be analyzed into component sounds: p-o-p-c-or-n...!

On the foundations of spoken language, the child then builds the capacity for silent communication: writing and reading.

#### Writing and Reading: Unspoken Communication

Writing and reading are a part of the child's cultural adaptation to the environment and they require a greater degree of visual-motor, fine-motor, cognitive and emotional development. In the Montessori classroom writing and reading are the result of the indirect preparations of the hand and the mind through the *Practical Life*, *Sensorial* and *Spoken Language* activities. Reading, which is the interpretation of the unspoken thoughts of another, requires a higher level of cognitive development than writing, which is self-expression. The work of writing and reading, a process that begins in the Primary years, comes to full fruition during the Elementary years.

#### The Development of Writing

The symbols for the sounds of the language are introduced through the *Sand Paper Letters*. By tracing, feeling and sounding out the symbols, the child prepares the hand and mind for writing.

By matching a symbol for every sound in a word using the *Moveable Alphabet* the child begins to "write". Beginning with lists of words from the extensive spoken vocabulary, the child gradually expands the use of the moveable alphabet to write phrases and sen-

tences which communicate thoughts, feelings and experiences. Simultaneously the hand is being prepared for the physical work of writing by using the *Metal Insets* and the *Chalkboard*. The process allows for the development of both ease of use and control of the writing instrument. Once the hand is physically ready, the child begins to write on paper.

Once the child discovers reading, the phonetic writing of the beginning writer changes. The child becomes aware of the spelling of puzzle words (words that do not follow the rules of spelling), and the many different phonograms (one sound represented by a combination of letters, e.g., sh) in the English language. The focus of writing in the Primary years is self-expression and while the child is helped to become aware of spelling conventions, it is in the Elementary years that the child will consciously explore and understand spelling rules and be expected to use them consistently.

#### The Development of Reading

Reading is to writing as listening is to speaking. Shortly after the child begins "writing" with the *Moveable Alphabet*, comes the realization that these written symbols can be decoded to discover meaning! At this stage the child is given printed labels with the familiar names of objects in the environment and in their lives. Very little is given to this beginning reader that the child does not already know through the spoken language work. The objects and pictures help the child to decode and find meaning in the context of the known. Working with these familiar materials, the child gains confidence and fluency in reading. The environment now provides a range of activities to consolidate this skill.

#### Phonogram Sounds

ai – mail ee-beet ie – pie oa-goat ue-blue ch-chip sh-ship th –thin oo-book ar – car er – mother or – organ oy-boy ou-out qu-quilt au-Australia Reading opens new avenues for the exploration of language. Through simple reading exercises, the child begins to explore the function of words in language. The child discovers these functions by reading a phrase, carrying out the action and answering simple questions such as: "Which word tells you the name of the thing?" "Which word tells you what kind of thing?" "Which word tells you what to do?" The child is then introduced to special grammar symbols which identify each kind of word. As the child symbolizes phrases and sentences, patterns in language emerge and over time the style of the writer.

By reading a simple sentence, acting it out and answering questions such as: "Which is the action word?" "Who is it that does...?", the child also begins to logically analyze the structure of a sentence. By using actions to interpret the emotion in the words, the child develops an awareness of the nuances of language.

The strong foundations of spoken language and the sensorial exploration of language in the Primary years lay the basis for the carefully structured exploration of grammar and syntax that happens in the Elementary years. These activities set the child on the path to becoming a total reader. Beyond decoding and searching for meaning in context, the child begins to appreciate the emotional nuances hidden in the written text. This then leads to a deep love and appreciation for language and literature.

With the acquisition of writing and reading skills, the child reaches another level of independence and learning can happen on a more abstract level.



Mathematics is the language of numbers and their relationship. The Montessori math materials make

many of these typically abstract concepts accessible to the young child. Working with these materials,

the Primary child gains concrete experience that lays the foundation for later abstractions.

# MATHEMATICS

#### Arithmetic

The activities with the *Sensorial Materials*, particularly those with the *Red Rods* help the child build a sensorial basis for the concept of the numbers 1–10 and the relationship between them. The child now attaches a name to the mathematical gradation of 1–10 and then the symbols for the same. At the last stage, the child associates the symbol with the quantity. A variety of work with the numbers 1–10 helps the child build a solid understanding of these numbers and their sequence.

Once the child is able to count and possesses the knowledge of the symbols 1–9 and 0, work with very large numbers can begin. *"These two notions are the foundation and the roots of the whole decimal system." –Dr. Maria Montessori* 

The child is now introduced to the magic of the Decimal System – the basis of our mathematical world. Through the *Golden Bead Material*, and the presentation of the terms "unit", "ten", "hundred" and "thousand", the child is able to count to a thousand and beyond! Working with materials, the child learns to manipulate large numbers within the framework of the Decimal System, adding, subtracting, multiplying and dividing.

Simultaneously, the child is introduced to the traditional names of numbers for combinations of tens and units (teen numbers) and combinations of tens (ten, twenty, thirty...). The child now enjoys using these words to count long chains up to one thousand and to read the large numbers of the Decimal System.

In preparation for work on a more abstract level, a variety of activities from the *Snake Game* to the *Finger-boards* entice the child to work with the basic combinations of math operations. One fine day, the child realizes that these facts are known by heart!

This knowledge can now be applied through word problems and other activities. The passage to abstraction begins in the late stages of the Primary years and continues in the Elementary classroom.

#### Geometry

Introduction to the world of shapes begins with the *Geometry Cabinet*, which is a part of the *Sensorial Materials*. Through language, the child learns the names of the shapes and their parts. The child continues to explore the relationships between shapes on a sensorial level through the *Constructive Triangles*, the *Knobless Cylinders* and the *Graded Geometric Figures*.

#### Algebra

Sensorial materials also introduce the child to the concrete foundations of algebra through the *Binomial Cube*, the *Trinomial Cube* and the *Decanomial Square* which are simple puzzles that the child solves by matching colors, shapes and dimensions.

Math materials provide the keys to the world of mathematics, keys that enhance and enrich the exploration of the world around them. They offer the child a precise language to describe objects and events and the relationships among them even as they act as tools for solving problems, analyzing data and making logical arguments.

At the conclusion of the Primary years, the child has a solid sensorial foundation for further explorations in the field of mathematics on a more abstract plane.

The Sensorial Activities are the basis for exploration of other fields of human culture, and the Language

Exercises enrich this exploration.

# CULTURAL EXTENSIONS

#### Geography

Working with the *Puzzle Maps* and the *Land and Water Forms*, the child builds a picture of our world that is given life and reality through stories, pictures and songs that introduce countries of the world. The underlying message is of the unity and oneness of humankind.

#### **Botany**

The introduction to the world of plants begins with caring for the plants in the classroom environment. Work with the *Botany Cabinet* brings the child an awareness of leaf shapes and gardening activities bring the child to the realization of the cycle of seasons and the needs of specific plants. Vocabulary cards introduce the names of the plants in the environment and the parts of a plant (seed, root, flower, fruit, etc.).

#### Zoology

The care of class pets is often the first step in the child's exploration of the world of animals. Stories and pictures help the child to classify animals as mammals, birds, reptiles, amphibians or fish. The child begins to distinguish vertebrates and invertebrates and explore the world of insects, mollusks and other creatures. Through observation and outdoor walks, the child begins to identify the animals that share the environment with people. Through geography work, the child discovers animals in other habitats. The overarching message is that people share this earth with other beings and have a responsibility toward their care and well-being.

#### Art

Various activities introduce the child to different art media. Watercolor, tempera, pencil, craypas, clay and collage work provide the child with further tools for self-expression. Through pictures and stories the child is introduced to the lives and works of different artists.

#### Music

Singing is a daily part of every Primary environment. The *Bells* introduce the child to the notes of the scale while other activities help the child explore rhythm and movement. The child is introduced to composers, musicians and instruments through stories and pictures and by listening to musical works.

#### Science

Through simple experiments which are extensions of the *Practical Life* and *Sensorial Activities*, the child explores the mixing of colors, how a plant grows, what sinks and what floats. These simple exercises in observation become the first steps in scientific study.

# *The Primary Years: a* FOUNDATION *for* SOCIAL LIFE

In the Montessori classroom every child develops as an individual within a larger community. All human life gains meaning in the context of society. The child in the Primary classroom works at individual development in a multi-age community of peers. In the Primary classroom there is often only one of each material. By purposefully limiting the resources of the classroom the child is helped to learn to share, to use the materials with care and to be responsible for the environment. Over time the child learns to work in harmony with others and to make choices that serve not only individual needs but also the needs of the community. In the course of daily life the child learns the reality of give and take, respect, courtesy, empathy and consideration that are essential to social life.





Throughout the years in the Primary classroom, the child's role evolves from being the youngest in the community to being an elder in the classroom; a role model and mentor. As abilities develop, the child's role in the community changes.

The Primary classroom is a *Prepared Environment* that serves the developmental needs of each child. The child is best prepared for working and living in a world which values not only the skills of reading, writing and arithmatic, but also confidence, teamwork and innovation. By supporting the inner growth of every individual, we lay the foundation for a peaceful and just society.

The progress and growth of the individual are very important. Progress is the care of the psyche of the individual in relationship to the environment. It is not a question of doing something for the individual first and then something for society, for it is in society that the root lies. We must see the individual in his place in society because no individual can develop without the influence of society. –Dr. Maria Montessori

### NOTES

We hope that you find this guide helpful as you journey with your child through the Primary years. Celebrate your child in this work of creation!